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Cultural Resources Investigations of the Vista Ridge Regional Water Supply Project in Burleson, Lee, Bastrop, Caldwell, Guadalupe, Comal and Bexar Counties, Texas

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January 2016

Texas Antiquities Annual Permit No. 7295

PREPARED FOR

Central Texas Regional Water Supply Corporation
and
VRRSP Consultants, LLC

PREPARED BY

SWCA Environmental Consultants

Redacted

CULTURAL RESOURCES INVESTIGATIONS OF THE VISTA RIDGE REGIONAL WATER SUPPLY PROJECT IN BURLESON, LEE, BASTROP, CALDWELL, GUADALUPE, COMAL AND BEXAR COUNTIES, TEXAS

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SWCA Cultural Resources Report No. 15-548

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ABSTRACT

On behalf of VRRSP Consultants, LLC and Central Texas Regional Water Supply Corporation (CTRWSC), SWCA Environmental Consultants (SWCA) conducted cultural resources investigations of the Vista Ridge Regional Water Supply (Vista Ridge) Project in Burleson, Lee, Bastrop, Caldwell, Guadalupe, Comal, and Bexar Counties. The work will involve installation of a 139.45-mile-long, 60-inch-diameter water pipeline from north-central San Antonio, Bexar County, Texas, to Deanville, Burleson County, Texas. The report details the findings of investigations from June 2015 to December 2015, on the alignment dated December 8, 2015 (December 8th). The Vista Ridge Project is subject to review under Section 106 of the National Historic Preservation Act (54 USC 306108) and its implementing regulations (36 CFR 800), in anticipation of a Nationwide Permit 12 from the U.S. Army Corps of Engineers in accordance with Section 404 of the Clean Water Act. In addition, the work is subject to compliance with the Antiquities Code of Texas under Permit Number 7295, as the Vista Ridge Project will be ultimately owned by a political subdivision of the State of Texas.

The cultural resources investigations included a background review and intensive field survey. The background review identified previous investigations, recorded archaeological sites, National Register of Historic Places (NRHP) properties, cemeteries, standing structures, and other known cultural resources within a 0.50-mile radius of the project area. The field investigations conducted from June 2015 through December 2015 assessed all accessible portions of the proposed December 8th alignment as of December 25, 2015. Approximately 101.8 miles of the 139.45-mile alignment has been surveyed. Approximately 24.42 miles were not surveyed based on the results of the background review and extensive disturbances as confirmed by vehicular survey. The remaining 13.23 miles that require survey were either unavailable due to landowner restrictions or part of a newly adopted reroute. SWCA also surveyed additional mileage, which includes rerouted areas that are no longer part of the December 8th alignment.

The inventory identified 59 cultural resources, including 52 archaeological sites and seven isolated finds. In addition to newly recorded resources, two previously recorded archaeological sites were revisited, and two cemeteries were documented. Of the 52 newly recorded archaeological sites, seven are recommended for further work or avoidance. Of the two revisited archeological sites, one is recommended for further work or avoidance within the project area. Avoidance is recommended for both documented cemeteries. The resources with undetermined eligibility require additional testing or other avenues of research before SWCA can make a firm recommendation about their eligibility for nomination to the NRHP and designation as State Antiquities Landmarks (SALs). As part of a management strategy, the resources with undetermined eligibility may also be avoided by reroute or boring beneath. The remaining 45 cultural resources are recommended not eligible for inclusion to the NRHP or for designation as SALs and no further cultural resources investigations or avoidance strategies are recommended.

ACKNOWLEDGEMENTS

The successful completion of an archaeological survey on a project as large and complex as the Vista Ridge Regional Water Supply (Vista Ridge) Project requires the support and dedication of a great many individuals. SWCA Environmental Consultants (SWCA) would like to thank several individuals associated with VRRSP Consultants, LLC who assisted us in innumerable ways. VRRSP Project Managers Valerie Collins and Jerry Berry ably oversaw much of our operations. Right of Way Lead, Lisa Gittens, continuously assisted us and helped coordinate landowner access during all field activities. GIS Project Manager, Mike Garza, assisted SWCA in obtaining the most up to date data regarding the project.

The Vista Ridge survey immeasurably benefited from the hard work of countless individuals who participated in the administration, fieldwork, and reporting phases for this project. Laura I. Acuña, Brandon S. Young, and Kevin Miller served as Principal Investigators overseeing all aspects of the project, including fieldwork, agency and client coordination, write-up, and project administration. Laura I. Acuña and Rhiana D. Ward, serving as Project Archaeologists, performed the challenging job of overseeing the daily management of the fieldwork, logistics, field operations, and general coordination. In addition, Ms. Acuña and Mrs. Ward contributed to the majority of this report. Rhiana D. Ward, Matthew Stotts, Dan Rodriguez, and Mercedes Cody served as Crew Chiefs, superbly managing the field crews and collection of field data, as well as contributing to this report. Rhiana D. Ward also served as field data administrator, performing admirably by reviewing and submitting all field documentation and assisting with all field logistics.

We are truly indebted to the individuals of the field crews who alphabetically include: Amy Goldstien, Stephanie Mueller, Mary Noell, and Katie Sloan. These individuals all conducted themselves professionally and performed in a commendable fashion with nary a complaint regardless of the numerous difficulties encountered during the project. Similarly, office personnel, Kendall Duncan and Lauri Logan, contributed significantly to the coordination of field efforts and compilation and production of this report, respectively. Christian Hartnett expertly managed all GPS data and GIS requests for the field investigations and reporting efforts. Carole Carpenter performed as the graphics specialist, assisting with the collection of our field GPS data and weathered the abundant changes and additions for the figures in this report. Combined, their work enhances this report exponentially. We are obliged to each of these individuals and are extremely grateful for their assistance.

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Chapter 1

Introduction

Laura I. Acuña

On behalf of VRRSP Consultants, LLC and Central Texas Regional Water Supply Corporation (CTRWSC), SWCA Environmental Consultants (SWCA) conducted intensive cultural resources investigations for the Vista Ridge Regional Water Supply (Vista Ridge) Project in Burleson, Lee, Bastrop, Caldwell, Guadalupe, Comal, and Bexar Counties (Figure 1.1). The project will involve installation of a 139.45-mile-long, 60-inch-diameter water pipeline from Deanville, Burleson County, Texas to north-central San Antonio, Bexar County, Texas.

Investigations were conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) (54 United States Code [USC] 306108) and its implementing regulations (36 Code of Federal Regulations [CFR] 800), in anticipation of a Nationwide Permit 12 from the U.S. Army Corps of Engineers (USACE) in accordance with Section 404 of the Clean Water Act. In addition, the work is subject to compliance with the Antiquities Code of Texas (ACT) under Texas Antiquities Permit Number 7295, as the Vista Ridge Project will be ultimately owned by CTRWSC, a political-subdivision of the State of Texas.

Project Setting

The Vista Ridge Project begins in western Burleson County and extends roughly 4–miles west before crossing the Burleson–Lee County line. The alignment extends southwest across Lee County for before redirecting south-southwest into Bastrop County. The alignment more-or-less parallels the Interstate Highway (IH) 35 corridor across the northwestern boundaries of Bastrop, Caldwell, and Guadalupe Counties, intersecting State Highway (SH) 80, U.S. Route (US) 183, SH 21, SH 71, SH 95, and US 290. After the alignment crosses the Guadalupe River, it shifts to a western direction, crossing IH 35 into Comal County. The alignment continues west through southern Comal County before crossing into northeastern Bexar County. The southwestern terminus of the Vista Ridge Project is roughly 2 miles west of SH 281 in northwestern Bexar County. The western end of the Vista Ridge Project, in northern Bexar County, is within an upland setting surrounded by residential and commercial development. As the alignment extends east from US 281, it crosses undeveloped parcels of land and large tracts of upland agricultural fields interspersed with single-family residences in Comal, Guadalupe, Lee, and Burleson Counties. Large sections of the proposed alignment parallel existing transmission lines and other existing utility corridors (Figures 1.2a and 1.2b).

The Vista Ridge Project will also include three pump station locations in Guadalupe, Bastrop, and Burleson Counties. The majority of the alignment will follow existing utilities and traverse undeveloped, agricultural parcels in a rural setting. The area of potential effects (APE) will consist of the proposed centerline alignment and a 100-foot corridor (50 feet on either side of centerline) for temporary and permanent construction easements. The size of the proposed pump station locations has not been determined.

Report Structure

This report is organized to facilitate the presentation and review of the survey investigations of the Vista Ridge Project. Chapter 2 provides an overview of the environmental setting of the Vista Ridge Project, discussing the general geology and soils of the overall project area. In addition, Chapter 2 provides a synthesis of the vegetation and fauna of the region, as well as an overview of the hydrology. Chapter 3 provides an in-depth cultural history for the project area. Chapter 4 presents the basic methods SWCA used in the cultural resources investigations. Chapter 5 presents the results of the background review and the overall survey results of the intensive pedestrian survey and backhoe trenching operations. Chapter 6 provides detail on the cultural resources encountered during the course of the investigations. Chapter 7 provides a summary of the investigations with management recommendations for the cultural resources documented during the investigations.

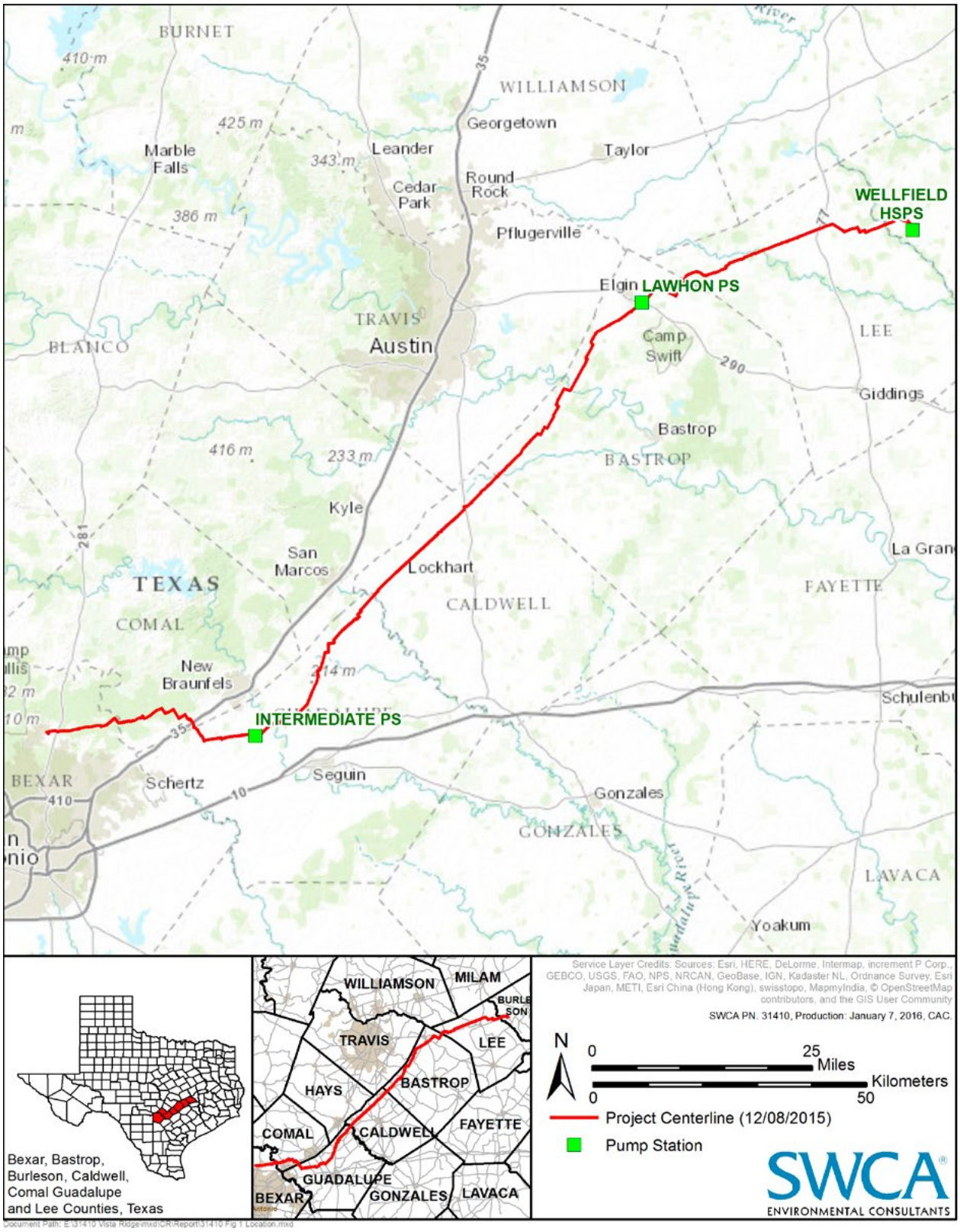

Figure 1.1. General project area location.

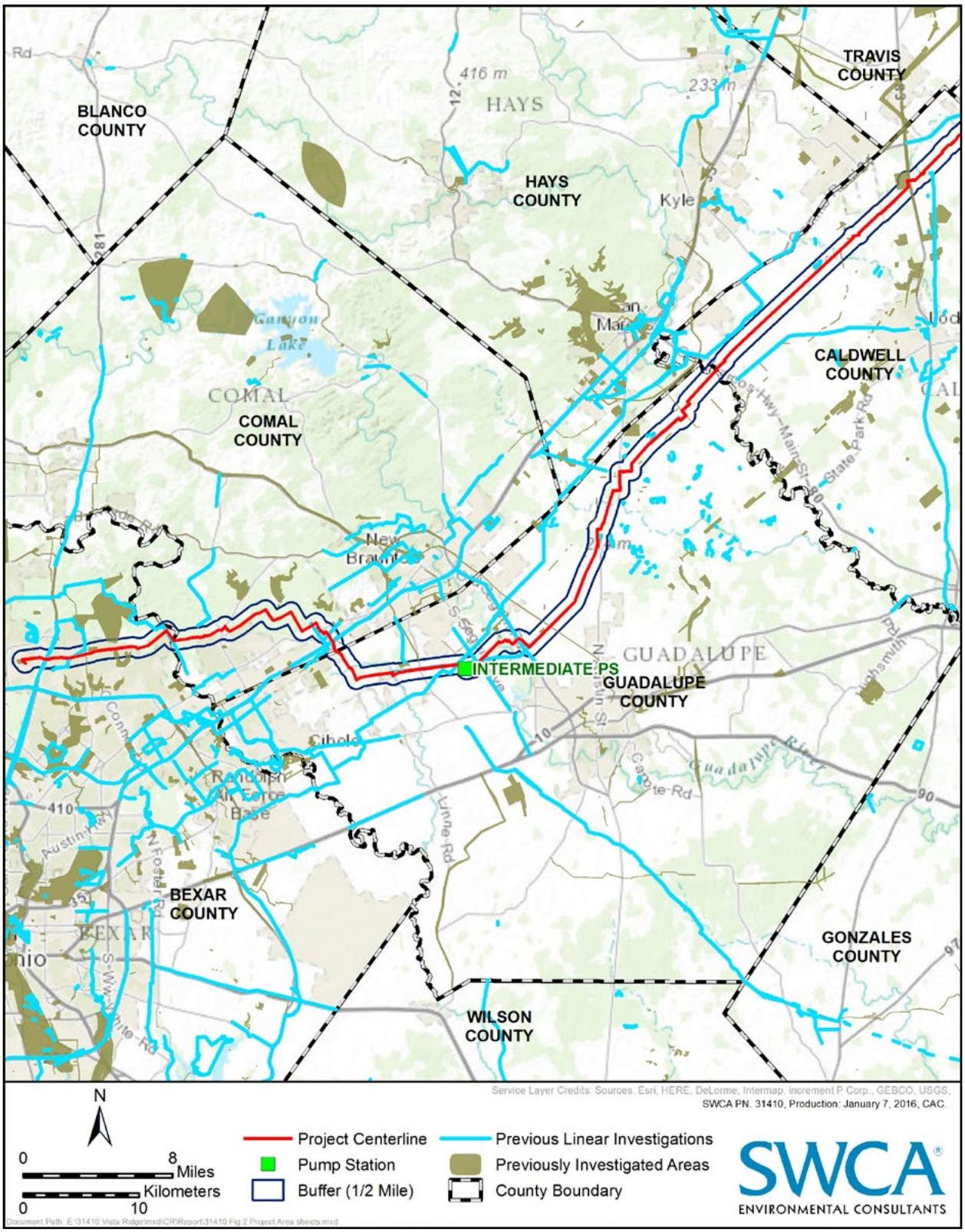

Figure 1.2a. Project area map southern half.

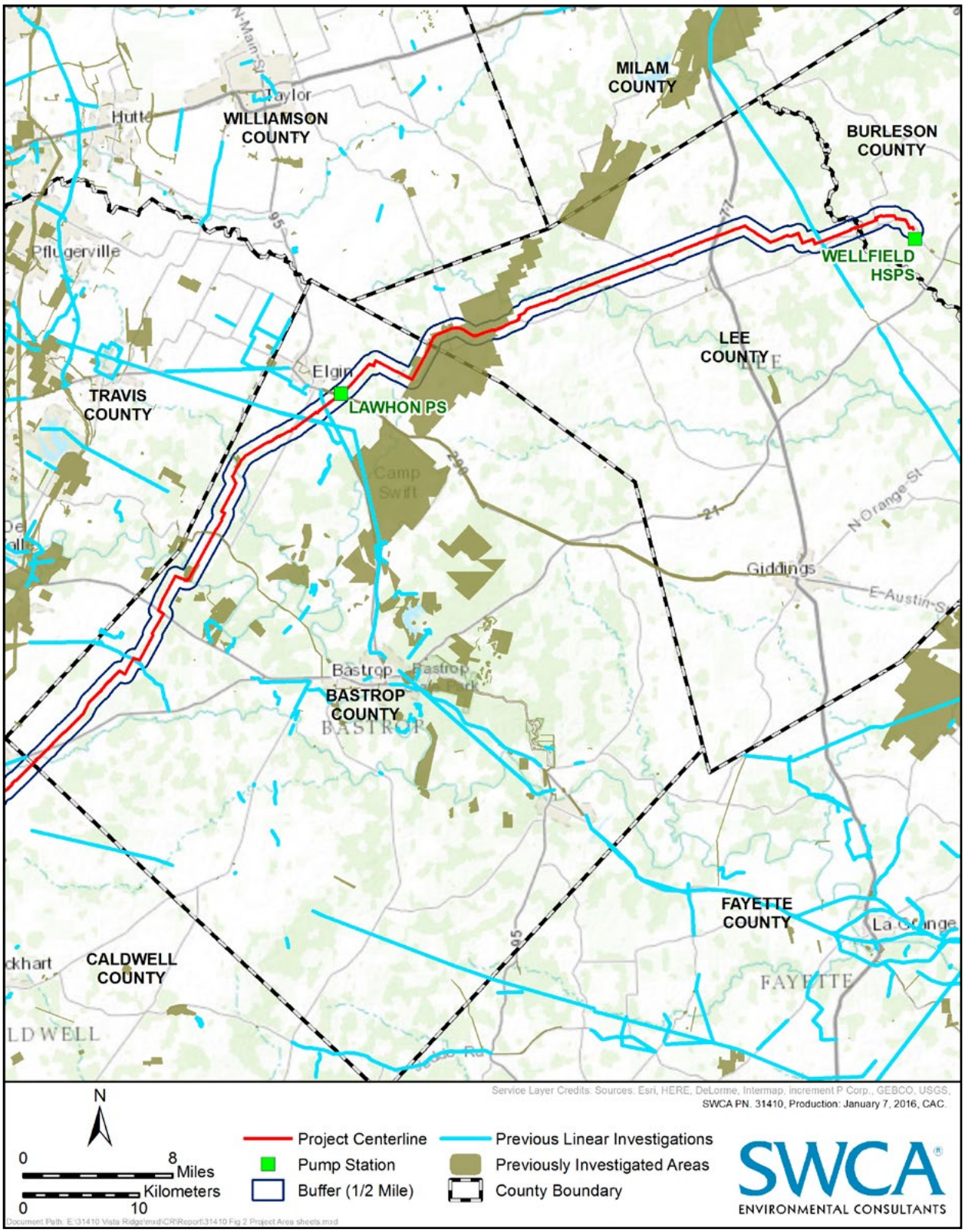

Figure 1.2b. Project area map northern half.

Chapter 2

Environmental Setting

Laura I. Acuña and Ken Lawrence

Introduction

The Vista Ridge Project extends across seven counties and a variety of geological, soil, and ecological settings. The following chapter outlines the overall environmental setting of the project.

Geology

The project area spans several geologic settings, beginning in the west on the Edwards Plateau then extending east and north into the Blackland Prairie (Figures 2.1a–2.1c). In Bexar and Comal Counties, the project area is mapped as Edwards Limestone, with a small segment mapped as Leona Formation within adjacent Comal County.

Guadalupe County is primarily mapped as Navarro Group and Marlbrook Marl, undivided, followed by Leona Formation, with small sections mapped as Edwards Limestone at the western end of the county and Alluvial terrace deposits along the Guadalupe River (Barnes 1983). The Guadalupe-Caldwell county line along the San Marcos River is mapped as Alluvial terrace deposits. Caldwell County is also primarily mapped as Navarro Group and Marlbrook Marl, undivided, followed by Leona Formation (Barnes 1974b).

Within Bastrop County, the alignment crosses High Gravel deposits near the Caldwell-Bastrop county line, followed by Midway Group, undivided, Hooper Formation, and interspersed with areas mapped as Alluvial terrace deposits and Simsboro Formation (Barnes 1974a). Lee County is primarily mapped as Calvert Bluff Formation within the western half of the alignment and Queen City Sand within its eastern half. Small segments are mapped as Alluvial terrace deposits. Finally, the eastern project terminus within Burleson County is mapped as Queen City Sand and Sparta Sand (Barnes 1974a).

In terms of the potential for the geologic formations crossed by the proposed pipeline to contain intact buried cultural materials, those areas along the rivers and larger creeks mapped as containing Alluvial terrace deposits represent the best locations for the occurrence of intact, deeply buried cultural deposits.

Soils

The proposed pipeline alignment crosses diverse landscapes and settings and, consequently, contains a wide variety of soil deposits (Figures 2.2a and 2.2b). The southern extent of the proposed alignment begins in the rocky uplands of the Edwards Plateau physiographic region and, as it trends northward, drops onto the Blackland Prairies where the alignment eventually terminates. As a consequence, the proposed alignment begins in rocky hill country (Edwards Plateau) and crosses the Balcones Escarpment onto gently undulating prairies (Blackland Prairies) that are intersected by waterways of varying magnitude that drain the uplands to the west-northwest.

The Blackland Prairies region traversed by most of the alignment is the transition where the waterways that have drained the Edwards Plateau uplands spill out into the broad prairies and become noticeably more sinuous. The Blackland Prairies region is described as having a gently rolling to nearly level, relatively flat topography, which ranges between 300–800 feet above mean sea level (amsl) elevation (Correll and Johnston 1979; Kutac and Caran 1994). The dark clayey soils derived from the underlying soft limestones and marls of the down-fault Upper Cretaceous compose the Blackland Prairie.

Broadly defined, the proposed alignment within the Edwards Plateau contains soils of the Tarrant-Brackett and Crawford-Bexar associations that are described as shallow, rocky soils overlying limestone bedrock (Taylor et al. 1991). With the exception of some of the larger waterways (e.g., Guadalupe River, San Marcos River, and Colorado River) the prairies contain deeper soils of the Houston Black-Heiden, Branyon-Barbarosa-Lewisville, Trinity, Behring-Crockett-Heiden, and Crockett-Wilson associations (Baker 1979; Lowther and Werchan 1978; Ramsey and Bade 1977). These deposits are broadly characterized as deep, calcareous, loamy and clayey soils with some

gravels and cobbles in proximity to waterways. The deposits along the various waterways crossed by the proposed alignment contain soils of the Sunev-Seguin and Bosque-Smithville-Norwood associations (Baker 1979; Lowther and Werchan 1978; Ramsey and Bade 1977). These alluvial deposits are generally described as deep, very deep calcareous loams over clays; these alluvial soils have a potential to contain intact buried cultural deposits.

Vegetation

The project area falls within two distinct ecoregions defined for Texas (Griffith et al. 2004): the Edwards Plateau or Balcones Canyon lands and the Blackland Prairie lands. The Edwards Plateau forms a sharp boundary in floral distribution between the thin-soiled limestone uplands and the wide coastal plains with deep soils. Upland areas are dominated by a mixed live oak (*Quercus virginiana*) and Ashe juniper (*Juniperus ashei*) woodland with an understory of agrito (*Berberis trifoliata*) and redbud (*Cercis canadensis*) interspersed with occasional grassy openings (Kricher and Morrison 1993; Peterson 1977). Other tree species present in low densities throughout these areas include cedar elm (*Ulmus crassifolia*) and Texas oak (*Quercus fusiformis*). Shrub density varies between low to dense in upland areas. Species occurring in low densities include Texas persimmon (*Diospyros texana*) and prickly pear (*Opuntia*) with thick, mixed grasses in areas (Van Auken 1988). Originally, the uplands of the Edwards Plateau sustained short grasses and the alluvial valleys had deciduous forests (Black 1989:12). The lower elevation areas along the riparian zone often include a dense understory of acacia (*acacia sp)*, prickly pear, and other brushy species (Petrides 1988; Simpson 1988).

The Blackland Prairie has rolling topography that supports a diverse assemblage including southern hackberry (*Celtis laevigata*), cedar elm (*Ulmus crassifolia*), bur oak (*Quercus macrocarpa*), post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*) with an understory of bunch grasses, shrubs, laurel greenbriar (*Smilax laurifolia*), yaupon holly (*Ilex vomitoria*), American beautyberry (*Callicarpa Americana*), and coralbean (*Erythrina herbacea*) (Kutac and Caran 1994; Petrides 1988; Simpson 1988). Originally, the Blackland Prairie region supported a tall grass prairie (Gould 1969).

Fauna

The project area is entirely within the Tamaulipan biotic region of Texas as defined by Blair (1950). The Tamaulipan zone extends into southern Texas from eastern Mexico (Blair 1950). A wide variety of species of mammals, birds, reptiles, and amphibians occupy, or historically occupied, this biotic province. Their distribution and densities vary considerably and are mainly dependent upon the local vegetation community and available resources.

According to Davis and Schmidly (1994), some common small mammals found within the Tamaulipan biotic region include the pocket mouse (*Perognathus hispidus*), white-footed mouse (*Peromyscus leucopus*), southern plains woodrat (*Neotoma micropus*), desert cottontail (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*). Large mammal species that occur or have the potential to occur within the project area include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), and javelina (*Tayassu tajacu*) (Burt and Grossenheider 1976: Schmidly 1983). In addition, bison (*Bison bison*), mountain lion (*Felis concolor*), and black bear (*Ursus americanus*) would have been prehistorically present (Davis and Schmidly 1994).

Bird species present in the Tamaulipan biotic region are typical of the brush and scrub vegetation community. Common resident species include the mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), olive sparrow (*Arremonops rufivigatus*), the northern bobwhite (*Colinus virginianus*), red-tailed hawk (*Buteo jamaicensis*), and the long-billed thrasher (*Toxostoma longirostre*) (Kutac and Caran 1994).

Various species of amphibians within the Tamaulipan biotic region include smallmouth salamander (*Ambystoma texanum*), Couch's spadefoot (*Scaphiopus couchi*), Hurter's spadefoot (*Scaphiopus holbrookii hurterii*), Blanchard's cricket frog (*Acris crepitans blanchardi*), eastern green toad (*Bufo debilis debilis*), Texas toad (*Bufo speciosus*), bullfrog (*Rana catesbeiana*), and the southern leopard frog (*Rana utricularia utricularia*) (Kutac and Caran 1994).

The reptiles of Tamaulipan biotic region include yellow mud turtle (*Kinosternon flavescens flavescens*), common mush turtle (*Sternotherus odoratus*), Texas river cooter (*Pseudemys texana*), ornate box turtle, red-eared slider (*Trachemys scripta elegans*), Guadalupe spiny

softshell (*Apalone spinifera guadalupensis*), Texas glossy snake (*Arizona elegans arenicola*), eastern yellowbelly racer (*Coluber constrictor flaviventri*), Great Plains rat snake (*Elaphe guttata emoryi*), Texas rat snake (*Elaphe obsolete lindheimeri*), Texas corral snake (*Micrurus fulvius tener*), broad banded copperhead (*Agkistrodon contortrix contortrix*), western cottonmouth (*Agkistrodon piscivorus leucostoma*), and the western diamondback rattlesnake (*Crotalus atrox*) (Kutac and Caran 1994).

Hydrology

The proposed alignment crosses an assortment of topographic settings as it trends northeastward from Bexar County to its terminus in Burleson County. The route predominantly crosses lowlands of the Blackland Prairie consisting of numerous narrow tributary streams that empty into drainage valleys of varying size. Along its course, the proposed alignment ranges in elevation from a low of 300 feet amsl at the southern end to a high of 700 feet amsl near its northern terminus.

Hydrologically, the Vista Ridge route is situated within two Texas River basins (i.e., Colorado and Guadalupe basins). Briefly, a river basin is composed of land that contains a drainage and all of its contributing waterways. The approximate first half of the proposed route at the southern end is within the Guadalupe River basin while the remaining half of the alignment is within the Colorado River basin.

Some other waterways along the Vista Ridge project alignment include the San Marcos River, Wilbarger Creek, Maha Creek, Pin Oak Branch, Middle Yegua Creek, and East Yegua Creek. In addition to these waterways, sources of water in the uplands are also available through natural springs. The culmination of these two physiographic features would have supported abundant flora and fauna that would have assuredly attracted prehistoric inhabitants.

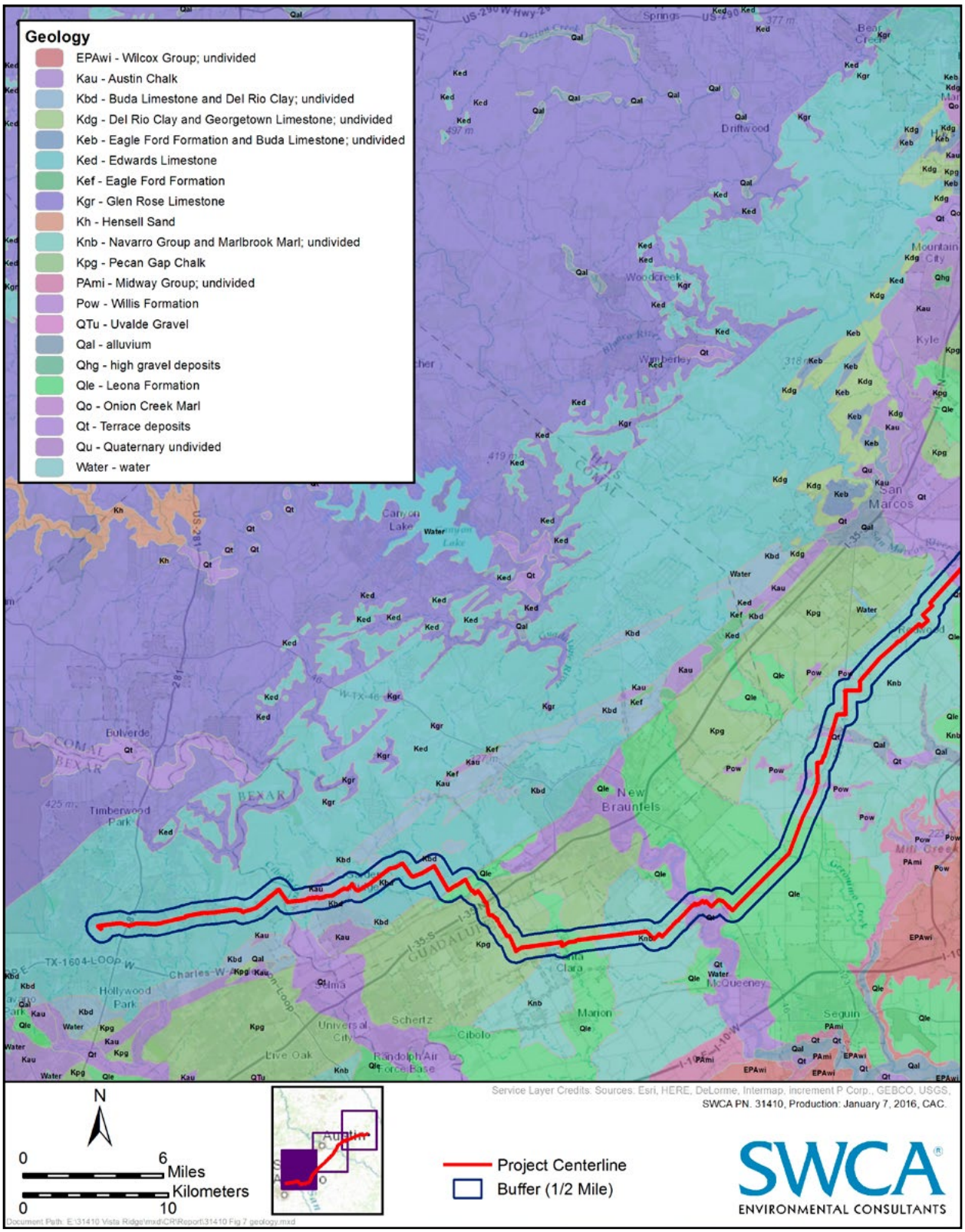

Figure 2.1a. Project area geology, southern portion.

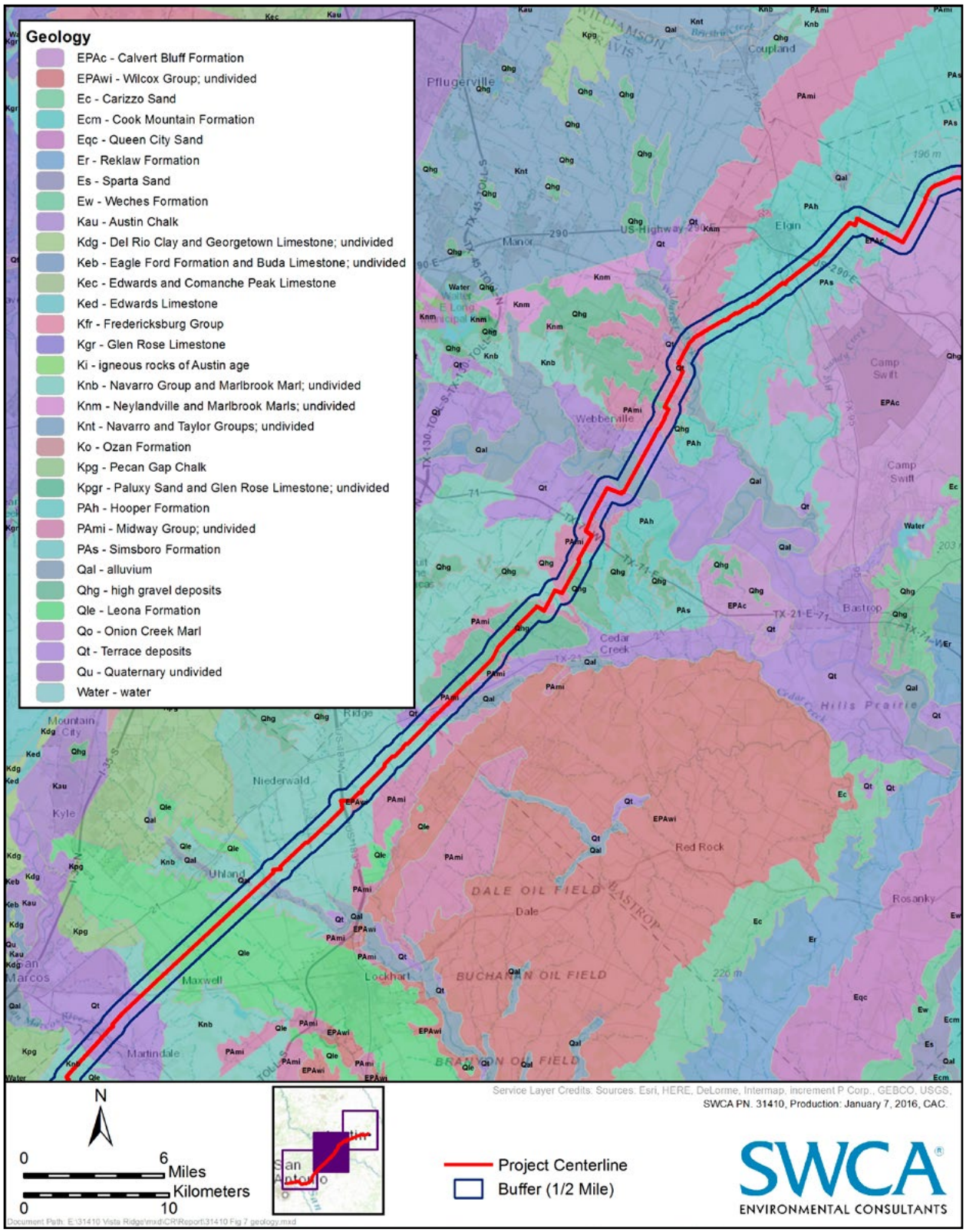

Figure 2.1b. Project area geology, central portion.

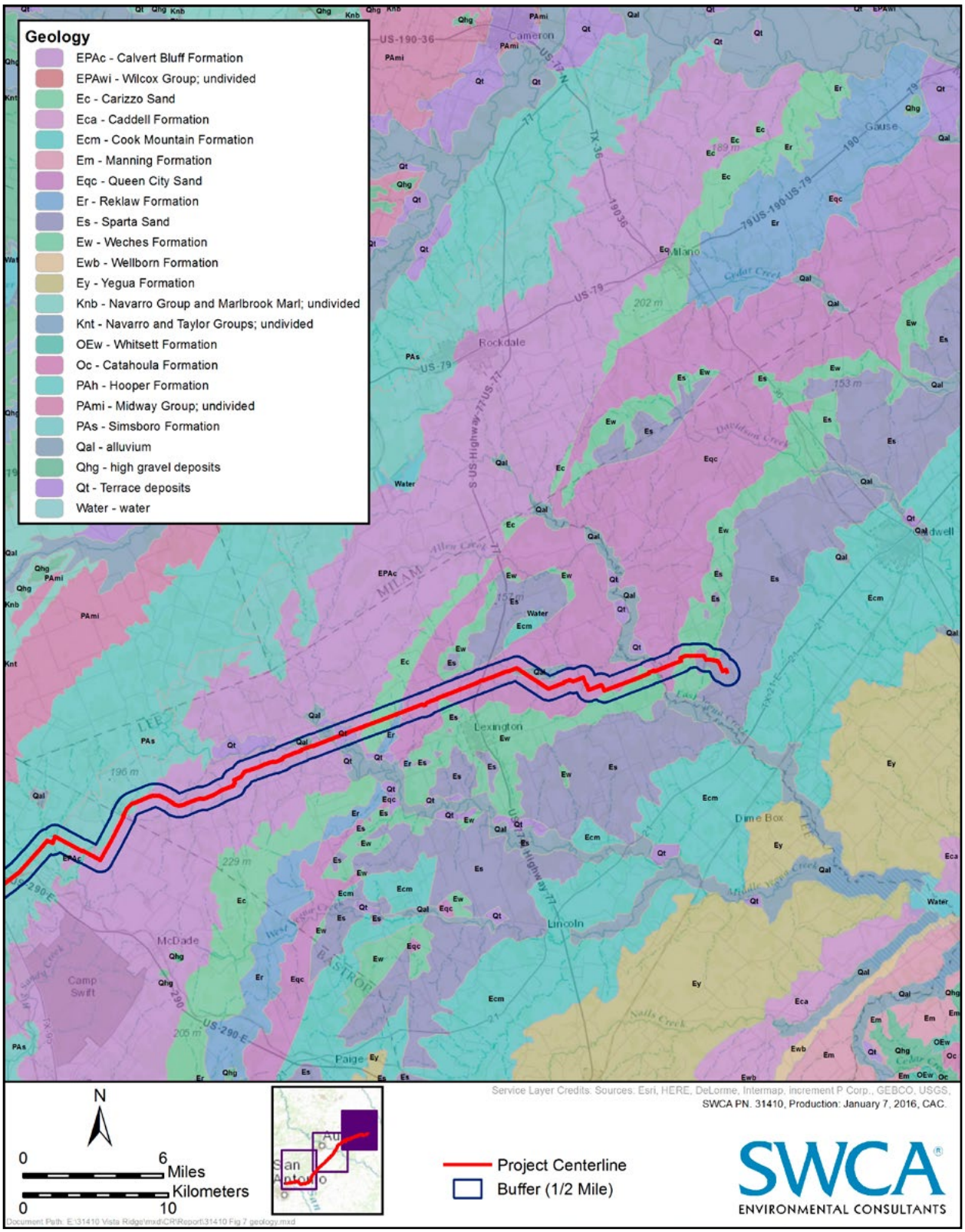

Figure 2.1c. Project area geology, northern portion.

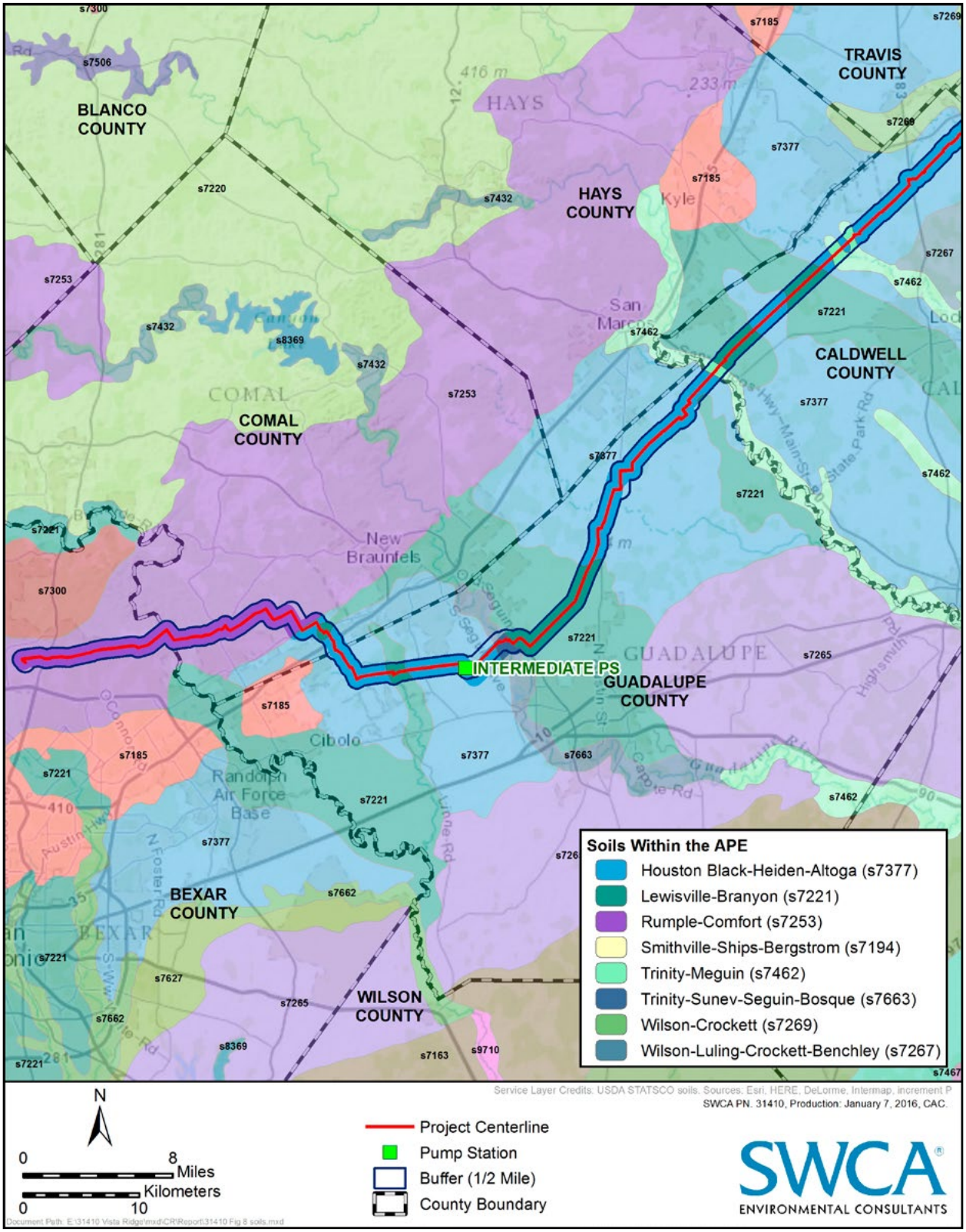

Figure 2.2a. Project area soils, southern half.

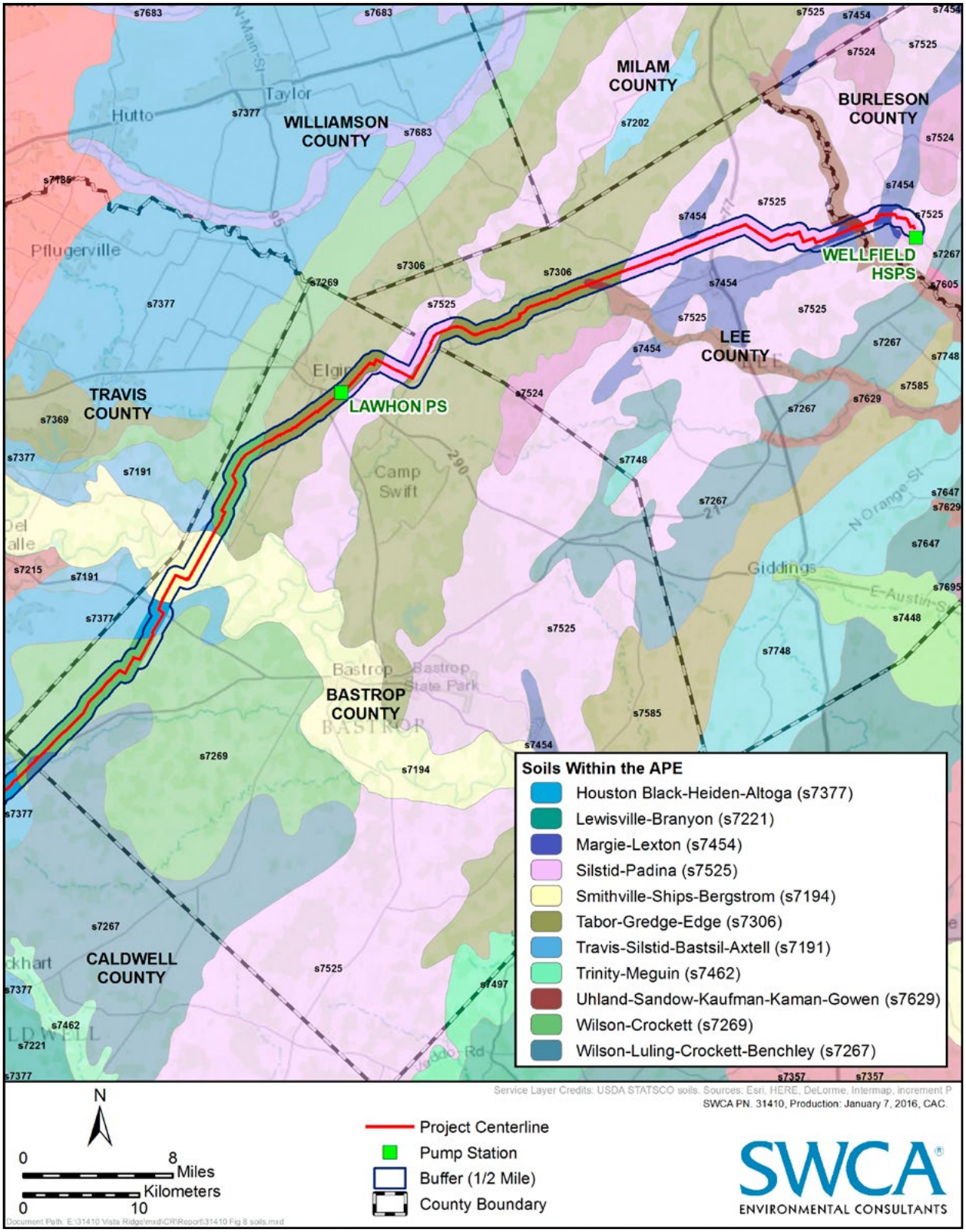

Figure 2.2b. Project area soils, northern half.

Chapter 3

Cultural Context

Rhiana D. Ward, with contributions by Steve Carpenter

The following prehistoric cultural history derives its information from several central Texas regional chronologies: Black (1989), Collins (1995, 2004), Johnson and Goode (1994), which build upon the seminal efforts of Suhm (1960) and Prewitt (1981, 1985). Furthermore, significant archaeological sites within the Central Texas archaeological region and the Edwards Plateau have contributed important information to understanding prehistory.

The following prehistoric cultural sequence is divided into three periods: Paleoindian, Archaic, and Late Prehistoric. The Historic period follows the Late Prehistoric, heralding the arrival of Europeans to central Texas. The Archaic period is subdivided into four subperiods: Early, Middle, Late, and Transitional. The historic context focuses on overall history of central Texas with general histories of the individual counties.

Paleoindian Period

Human occupation of the Central Texas archaeological region is thought to have begun approximately 11,000 years ago. This period correlates with the end of the late Pleistocene, the last ice age in North America. These early Texans are characterized by small but highly mobile bands of foragers who were specialized hunters of Pleistocene megafauna; however, Paleoindians probably used a much wider array of resources including small fauna and plant foods (Bousman et al. 2002; Bousman et al. 2004; Bever and Meltzer 2007; Dering 2007; Meltzer and Bever 1995). Faunal remains from Kincaid Rockshelter and the Wilson-Leonard site (41WM235) support this view (Collins 1998; Collins et al. 1989). Longstanding ideas about Paleoindian technologies also are being challenged.

Surficial and deeply buried sites, rockshelter sites, and isolated artifacts represent Paleoindian occupations in the central Texas region. Although Paleoindian site types are not well documented in the region, they can be generally classified according to broad site type categories extrapolated from nearby regions. Both open and protected (rockshelter) types are known. Usually these sites are near permanent sources of water such as tributary creeks or springs. Bison kill sites, open and protected campsites, and non-occupation lithic sites are known from the Paleoindian period in Texas. Intra-site features include hearths and isolated burials. The Wilson-Leonard site (41WM235), 41BX52, and 41BX229 contain stratified Paleoindian deposits (Hester 1980). The lower component at the Wilson-Leonard site contained a Paleoindian burial (Collins et al. 1998).

Collins (2004) divides the Paleoindian period into early and late subperiods. Two projectile point styles, Clovis and Folsom, are included in the early subperiod. Clovis chipped stone artifact assemblages, including the diagnostic fluted lanceolate Clovis point, were produced by bifacial, flake, and prismatic-blade techniques on high-quality and oftentimes exotic lithic materials (Collins 1990). Along with chipped stone artifacts, Clovis assemblages include engraved stones, bone and ivory points, stone bolas, and ochre (Collins 1995:381; Collins et al. 1992). Clovis points are found evenly distributed along the eastern edge of the Edwards Plateau, where the presence of springs and outcrops of chert-bearing limestone are common (Meltzer and Bever 1995:58). Sites within the area yielding Clovis points and Clovis-age materials include Kincaid Rockshelter (Collins et al. 1989) and San Macros Springs (Takac 1991). Analyses of Clovis artifacts and site types suggest that Clovis peoples were well-adapted, generalized hunter-gatherers with the technology to hunt larger game but not solely rely on it.

In contrast, Folsom tool kits—consisting of fluted Folsom points, thin unfluted (Midland) points, large thin bifaces, and end scrapers—are more indicative of specialized hunting, particularly of bison (Collins 2004:117). Folsom point distributions, both their frequency and spatial patterning, differ from the Clovis patterns, suggesting a shift in adaptation patterns (Bever and Meltzer 2007; Meltzer and Bever 1995:60 and 74). Folsom points appear more frequently in the coastal plain as well as the South Texas plain, located to the south and southeast of San Saba and Lampasas Counties. As Folsom points are almost exclusively found in plains settings (they are conspicuously lack-

ing in the Edwards Plateau), the technology perhaps marks a more specialized adaptation, likely to a more intensive reliance on *Bison antiquus*.

Postdating Clovis and Folsom points in the archaeological record are a series of dart point styles (primarily unfluted lanceolate darts) for which the temporal, technological, or cultural significance is unclear. Often, the Plainview type name is assigned these dart points, but Collins (2004:117) has noted that many of these points typed as Plainview do not resemble Plainview type-site points in thinness and flaking technology. Recent investigations at the Wilson-Leonard site (see Bousman 1998) and a statistical analysis of a large sample of unfluted lanceolate points by Kerr and Dial (1998) have shed some light on this issue. At Wilson-Leonard, the Paleoindian projectile point sequence includes an expanding-stem dart point termed Wilson, which dates to ca. 10,000–9500 B.P. Postdating the Wilson component is a series of unfluted lanceolate points referred to as Golondrina-Barber, St. Mary's Hall, and Angostura, but their chronological sequence is poorly understood. Nonetheless, it has become clear that the artifact and feature assemblages of the later Paleoindian subperiod appear to be Archaic-like in nature and in many ways may represent a transition between the early Paleoindian and succeeding Archaic periods (Collins 2004:118).

Archaic Period

The Archaic period for the Central Texas archaeological region dates from ca. 8800 B.P. to 1300–1200 B.P. (Collins 2004) and generally is believed to represent a shift toward hunting and gathering of a wider array of animal and plant resources and a decrease in group mobility (Willey and Phillips 1958:107–108). In the eastern and southwestern United States and on the Great Plains, development of horticultural-based, semi-sedentary to sedentary societies succeeded the Archaic period. In these areas, the Archaic truly represents a developmental stage of adaptation as Willey and Phillips (1958) define it. For central Texas, this notion of the Archaic is somewhat problematic. An increasing amount of evidence suggests that Archaic-like adaptations were in place before the Archaic (Bousman et al. 2002; Collins 2004:117–118, 1998; Collins et al. 1989) and that these practices continued into the succeeding Late Prehistoric period (Collins 2004:118–119; Prewitt 1981:74). In a real sense, the Archaic period of central Texas is not a developmental stage, but an arbitrary chronological construct and projectile point style sequence. Establishment of this sequence is based on several decades of archaeological investigations at stratified Archaic sites along the eastern and southern margins of the Edwards Plateau. Collins (2004) and Johnson and Goode (1994) have divided this sequence into three parts—early, middle, and late—based on perceived (though not fully agreed upon by all scholars) technological, environmental, and adaptive changes. However, Turner and Hester (1999) and Black (1989) have designated another period at the end of the Archaic, referred to as Transitional Archaic or Terminal Archaic.

Early Archaic

The Early Archaic period (8800–6000 B.P.) is better documented than the Paleoindian period, however a complete understanding of cultural patterns does not yet exist. Early Archaic sites are small, and their tool assemblages are diverse (Weir 1976:115–122), suggesting that populations were highly mobile and densities low (Prewitt 1985:217). It has been noted that Early Archaic sites are concentrated along the eastern and southern margins of the Edwards Plateau (Johnson and Goode 1994; McKinney 1981). This distribution may indicate climatic conditions at the time, given that these environments have more reliable water sources and a more diverse resource base than other parts of the region.

Artifact assemblages of the Early Archaic include projectile points styles such as Hoxie, Bulverde, Gower, Wells, Martindale, and Uvalde, as well as early split stem projectile points. A variety of choppers and gouges, such as the triangular, concave based bifaces known as Guadalupe tools, and the distally beveled Clear Fork unifaces are present in the archaeological record. A variety of expediency tools, often nothing more than utilized flakes, are increasingly present in the Early Archaic (Black 1989).

The construction and use of rock hearths and ovens, which had been limited during the Paleoindian period, become commonplace in the Early Archaic. The use of rock features suggests that retaining heat and releasing it slowly over an extended period were important in food processing and cooking and reflects a specialized subsistence strategy. Such a practice probably was related to cooking plant foods, particularly roots and bulbs, many of which must be subjected to prolonged periods of cooking to render them consumable and di-

gestible (Black et al. 1997:257; Wandsnider 1997; Wilson 1930). Botanical remains, as well as other organic materials, are often poorly preserved in Early Archaic sites, so the range of plant foods exploited and their level of importance in the overall subsistence strategy are poorly understood. But recovery of charred wild hyacinth (*Camassia scilloides*) bulbs from an Early Archaic feature at the Wilson-Leonard site provides some insights into the types of plant foods used and their importance in the Early Archaic diet (Collins 1998). At the Gatlin Site (41KR621) in Kerr County, the researchers interpreted two types of cooking based upon the encountered burned rock features (Houk et al. 2008). The first type is small-scale grilling/smoking of fauna and flora resources while the second type attributed to the earth ovens was large scale baking of flora and possibly fauna (Houk et al. 2008:13-17–13-18). The Gatlin researchers examined similar features from other Early Archaic sites in the region and noted that there is a wide variety concerning the occurrence of small and large burned rock features. Some Early Archaic sites solely contained large earth ovens while others had a ratio as high as 3:1 small to large features (Houk et al. 2008:13-18). Ultimately, the researchers concluded that supplementary data should be considered to garner a more complete interpretation of Early Archaic activities.

Significant Early Archaic sites include the Icehouse Site in Hays County (Oksanen 2008), Richard Beene site in Bexar County (Thoms and Mandel 2007), the Camp Pearl Wheat and Gatlin sites in Kerr County (Collins et al. 1990; Houk et al. 2008), and the Jetta Court site in Travis County (Wesolowsky et al. 1976).

Middle Archaic

Cultural patterns during the Middle Archaic period (6000–4000 B.P.), point toward an increased sedentary population intensively harvesting acorns, prickly pear "tuna," and pecans, and hunting small and medium-size game such as deer and turkey. The increase in the number of Middle Archaic sites and burials supports the concept of a larger, more sedentary population (Black and McGraw 1985; Prewitt 1981:73; Weir 1976:124, 135). Large bands may have formed at least seasonally to occupy a single area, or small groups may have used the same sites for longer periods (Weir 1976:130–131).

Sites of the Middle Archaic are numerous and often large in size. Burned rock middens are found at many sites with Middle and Late Archaic components in the Central Texas archaeological region. The development of burned rock middens toward the end of the Middle Archaic suggests a greater reliance on plant foods, although tool kits still imply a considerable dependence on hunting (Prewitt 1985:222–226). Middle Archaic projectile point styles include Bell, Andice, Calf Creek, Taylor, Nolan, and Travis. Other artifacts from the Middle Archaic are choppers, gouges, and expediency tools such as the small, bifacial and unifacial Clear Fork tools. Grinding stones and bases, referred to as manos and metates, show up in Middle Archaic artifact assemblages as well as a number of perforators, drills and awls. Chipped, polished, and ground stone artifacts are common in central Texas and surrounding regions. Less frequently encountered artifacts include tools and ornaments of bone, antler, and marine shell (Turner and Hester 1999).

Bell and Andice points reflect a shift in lithic technology from the preceding Early Archaic Martindale and Uvalde point styles (Collins 2004:120). Johnson and Goode (1994:25) suggest that the Bell and Andice darts are parts of a specialized bison-hunting tool kit. They also believe that an influx of bison and bison-hunting groups from the Eastern Woodland margins during a slightly more mesic period marked the beginning of the Middle Archaic. Though no bison remains were recovered, Bell and Andice points and associated radiocarbon ages were recovered from the Gatlin site (Houk et al. 2008), Cibolo Crossing (Kibler and Scott 2000), Panther Springs Creek, and Granberg II (Black and McGraw 1985) sites in Bexar County.

Bison populations disappeared as more-xeric conditions returned during the latter part of the Middle Archaic. Later Middle Archaic projectile point styles (Nolan and Travis) represent another shift in lithic technology (Collins 2004:120–121; Johnson and Goode 1994:27). At the same time, this shift to drier conditions saw the burned rock middens develop, probably because intensified use of geophytic or xerophytic plants meant the debris from multiple rock ovens and hearths accumulated as middens on stable to slowly aggrading surfaces, as Kelley and Campbell (1942) suggested many years ago. Johnson and Goode (1994:26) believe that the dry conditions promoted the spread of yuccas and sotols, and that it was these plants that Middle Archaic peoples collected and cooked in large rock ovens.

Late Archaic

During the succeeding Late Archaic period (4000 B.P. to 1300–1200 B.P.), populations continued to increase (Prewitt 1985:217). As evidenced by stratified Archaic sites such as Loeve-Fox, Cibolo Crossing, and Panther Springs Creek, the Late Archaic components contain the densest concentrations of cultural materials of all the Archaic periods. Establishment of large cemeteries along drainages also suggests certain groups had strong territorial ties (Story 1985:40).

Middle Archaic subsistence technology, including the use of rock and earth ovens, continues into the Late Archaic period. Collins (2004:121) states that, at the beginning of the Late Archaic period, the use of rock ovens and the resultant formation of burned rock middens reached its zenith and that the use of rock and earth ovens declined during the latter half of the Late Archaic. There is, however, mounting chronological data that midden formation culminated much later and that this high level of rock and earth oven use continued into the early Late Prehistoric period (Black et al. 1997:270–284; Kleinbach et al. 1995:795). A picture of prevalent burned rock midden development in the eastern part of the Central Texas archaeological region after 2000 B.P. is gradually becoming clear. This scenario parallels the widely recognized occurrence of post-2000 B.P. middens in the western reaches of the Edwards Plateau (Goode 1991).

The use of rock and earth ovens (and the formation of burned rock middens) for processing and cooking plant foods suggests that this technology was part of a generalized foraging strategy. Considering the amount of energy involved in collecting plants, constructing hot rock cooking appliances, and gathering fuel, the caloric return of most plant foods is relatively low (Dering 1999). This suggests that plant foods were part of a broad-based diet (Kibler and Scott 2000:134) or part of a generalized foraging strategy, an idea Prewitt (1981) put forth earlier. At times during the Late Archaic, this generalized foraging strategy appears to have been marked by shifts to a specialized economy focused on bison hunting (Kibler and Scott 2000:125–137). Castroville, Montell, and Marcos dart points are elements of tool kits often associated with bison hunting (Collins 1968). Archaeological evidence of this association is seen at Bonfire Shelter in Val Verde County (Dibble and Lorrain 1968), Jonas Terrace in Medina County (Johnson 1995), Oblate Rockshelter in Comal County (Johnson et al. 1962:116), John Ischy in Williamson County (Sorrow 1969), and Panther Springs Creek in Bexar County (Black and McGraw 1985).

Transitional Archaic

As Collins (2004:122–123) notes, diverse and comparatively complex archaeological manifestations toward the end of the Late Archaic attest to the emergence of kinds of human conduct without precedent in the area. This period (2250–1250 B.P.), referred to as the Transitional Archaic (Turner and Hester 1999) or Terminal Archaic (Black 1989), is not recognized by all researchers. Other chronologies terminate the Late Archaic at around 1200–1250 B.P. (Collins 2004; Johnson and Goode 1994) to encompass this later subperiod. Johnson et al. (1962) originally designated the Transitional Archaic as a subperiod of the Archaic because of the similarities between the latest dart point types and the earliest arrow point types. Since then, however, the designation has failed to be universally accepted by researchers. In two recent chronologies for central Texas, Collins (2004) does not include the Transitional as a subperiod of the Archaic, and Johnson and Goode (1994) separate the Late Archaic into two subperiods designated Late Archaic I and Late Archaic II. The Transitional Archaic, as it is used here, closely corresponds to Johnson and Goode's (1994) Late Archaic II, but begins after the appearance of Marcos points, not with it. In this scheme, the Transitional Archaic coincides with the last two style intervals recognized by Collins (2004) for the Late Archaic subperiod.

During the Transitional Archaic, smaller dart point forms such as Darl, Ensor, Fairland, and Frio were developed (Turner and Hester 1999). These points were probably ancestral to the first Late Prehistoric arrow point types and may have overlapped temporally with them (Carpenter et al. 2006; Hester 1995; Houk and Lohse 1993).

Several researchers believe that the increased interaction between groups at the end of the Late Archaic was an important catalyst for cultural change (Collins 2004; Johnson and Goode 1994). This change may have included increased regional stress and conflict between groups as interaction became more frequent (Houk et al. 1997). In Bexar County, for instance, researchers noted a distinct shift in settlement patterns during this period (Houk et al. 1997). Groups began to use hilltops as camps rather than just lithic procurement locations. These elevated locations would have provided points from which to observe game and other groups of hu-

mans as they moved through the surrounding creek valleys and upland prairies (Houk et al. 1997).

Overall, the Archaic period represents a hunting and gathering way of life that was successful and remained virtually unchanged for more than 7,500 years. This notion is based in part on fairly consistent artifact and tool assemblages through time and place and on resource patches that were used continually for several millennia, as the formation of burned rock middens show. This pattern of generalized foraging, though marked by brief shifts to a heavy reliance on bison, continued almost unchanged into the succeeding Late Prehistoric period.

Late Prehistoric Period

Introduction of the bow and arrow and, later, ceramics into the Central Texas archaeological region marks the Late Prehistoric period (1250–350 B.P.). Population densities dropped considerably from their Late Archaic peak (Prewitt 1985:217). Subsistence strategies did not differ greatly from the preceding period, although bison again became an important economic resource during the latter part of the Late Prehistoric period (Prewitt 1981:74). Rock and earth ovens were utilized for plant food processing (Black et al. 1997; Kleinbach et al. 1995:795). Horticulture came into play very late in the region but was of seemingly minor importance to overall subsistence strategies (Collins 1995:385).

Artifact assemblages include Scallorn, Perdiz, and Edwards projectile points, worked stone, thermally altered stone, hematite, bone, and shell. The points are associated with the use of the bow and arrow in the region, probably introduced sometime around 1350–1150 B.P.

The earlier Austin phase (identified by Scallorn and Edwards points) and the later Toyah phase (defined through Perdiz points) divide the Late Prehistoric period throughout central Texas (Black 1989; Story 1990). These divisions were originally recognized by Suhm (1960) and Jelks (1962), and remain an accepted separation of the period. Although a distinct change in the material culture between the two phases can be seen in the archaeological record, there is some debate over the cultural underpinnings that prompted the change. The different arrow point styles (and other associated artifacts in the assemblage) may represent distinct cultural groups (Johnson 1994), but others challenge this view (e.g., Black and Creel 1997), and attribute the change to a spread of new technological ideas in response to the increase of a different economic resource in bison populations (Ricklis 1992). Nevertheless, prehistoric communities traced through cultural remains assigned to the Austin phase (1250–650 B.P.), like many of the Archaic period cultures before them, relied on a hunting and gathering subsistence with more of an emphasis on gathering (Prewitt 1981:83). Communities attributed to the Toyah phase (650–200 B.P.) relied more on bison procurement (Prewitt 1981:84).

Around 1000–750 B.P., slightly more-xeric or drought-prone climatic conditions returned to the region, and bison came back in large numbers (Huebner 1991; Toomey 1993). Using this vast resource, Toyah peoples were equipped with Perdiz point-tipped arrows, end scrapers, four-beveled-edge knives, and plain bone-tempered ceramics. Toyah technology and subsistence strategies represent a completely different tradition from the preceding Austin phase. Collins (1995:388) states that formation of burned rock middens ceased as bison hunting and group mobility obtained a level of importance not witnessed since Folsom times. Although the importance of bison hunting and high group mobility hardly can be disputed, the argument that burned rock midden development ceased during the Toyah phase is tenuous. A recent examination of Toyah-age radiocarbon assays and assemblages by Black et al. (1997) suggest that their association with burned rock middens represents more than a "thin veneer" capping Archaic-age features. Black et al. (1997) claim that burned rock midden formations, although not as prevalent as in earlier periods, was part of the adaptive strategies of Toyah peoples.

Historic Culture Setting

Landscape features have dictated human movement and subsistence patterns for thousands of years. Specifically, geographical influences during the Historic Period (A.D. 1630 to present) confined settlements to riparian zones and limited farming to these areas. The larger rugged landscape was used for sheep, goat and cattle ranching. These practices were introduced and promoted by the Spanish as part of their colonial agenda and many were carried through to the twentieth century, giving Texas a strong agricultural history dominating economic, social and cultural patterns over the years (Freeman 1994).

Accordingly, the following historic context emphasizes the changes to rural Texas in terms of its agricultural and economic history. These developments in effect

dictate the social and political development of Central Texas as seen against the backdrop of broader Texas history.

Spanish Colonial Period (A.D. 1630 – 1820)

Spanish exploration, spurred on by political ambition and a strong rivalry with France, established contact with the native populations in the area from the early to mid-1500s. Álvar Núñez Cabeza de Vaca first crossed Texas in 1535 (Chipman 2011; Nightengale 1982). Although his exact path is not clear, his journey opened the door for future Spanish expeditions or *entradas,* which followed established Native American trade routes (Chipman 2011; Krieger 2002; Peyton et al. 2010).

The Bexar County area was first explored in 1691 by the Governor of the Spanish Province of Texas, Domingo Terán de los Ríos, and Father Damián Massenet. Further Spanish exploration was conducted in 1709 by Father Antonio de San Buenaventura y Olivares. Father Olivares was the first to express interest in setting up a mission in the San Antonio area (Fehrenbach 2012; Johnston 1947). In 1718 the first settlement by Spanish rule was established with the construction of Mission San Antonio de Valero, followed by the San Antonio de Béxar Presidio and the civil settlement, Villa de Béxar.

The location of Mission San Antonio de Valero was a convenient stopping point on El Camino Real de los Tejas (Camino Real), the newly established highway founded in 1691 by the previously mentioned Domingo Terán de Los Ríos and Father Damián Massenet to connect Mexico City with the Kingdom of Tejas (Caddo) and then eastward to the Spanish colonial capital at Los Adaes (now in Louisiana). By linking colonial capitals, it was known as a royal road, a "camino real." The route was first used as a colonial road by the Spanish during the establishment of missions in East Texas by Alonso de Leon and Fray Massanet in 1690. The following year, the route was formally established as a royal road by Domingo Teran de los Rios. By many accounts, the route followed well-traveled routes that likely extended far back into prehistory. However, the road or trail was not a single route, but instead, comprised several trails that would vary based upon weather condition and factors in the cultural landscape. The four main routes were known as the El Camino Real de los Tejas proper, the Lower Road, the Old San Antonio Road, and the Laredo Road. Consequently, the trail covers a 550-mile-long corridor in Texas and Louisiana, but within this corridor the trail consists of an estimated 2,600 miles of known trail alignments that resemble a braided stream. Extensions of the Camino Real, also known as the Old San Antonio Road and the San Antonio–Nacogdoches Road, more-or-less parallel the VRRSP project area through Bexar, Comal, Caldwell, Bastrop, Lee, and Burleson Counties (McGraw et al. 1991).

In 1719 war between France and Spain resulted in the withdrawal of the Spanish from the east Texas missions, who reestablished their mission communities near the settlement along the San Antonio River. In addition to Mission San Antonio de Valero (the Alamo), the four additional Spanish missions, from north to south, are Mission Nuestra Señora de la Purisma Concepcion de Acuña (1731), Mission San José y San Miguel de Aguayo (1720), Mission San Juan Capistrano (1731), and Mission San Francisco de la Espada (1741) (Fehrenbach 2012).

Establishment of the mission system in the first half of the eighteenth century to its ultimate demise around 1800 brought the peaceful movement of some indigenous groups into mission life, but others were forced or moved in to escape the increasing hostilities of southward-moving Apaches and Comanches. By the end of the mission period, European expansion, disease, and intrusions by other Native American peoples had decimated many Native American groups.

Spanish expeditions throughout the seventeenth and eighteenth centuries established not only the mission system in the Bexar County area, but also introduced livestock and ranching practices that would influence generations of Texans. Sheep, goats, cattle, and hogs were shipped in to create mission and private ranches. These ranches were developed as a means to create an autonomous settlement system in a relatively hostile environment prone to attacks by the Comanche, Apache, and Norteños.

By the end of the eighteenth century, ranching practices were on the rise. Spurred on by demands from eastern markets, Texas ranches flourished. Further, Texas missions were secularized in 1794, creating a greater need for meat and other goods (Freeman 1994). As a result of the changing economic and political environment, the proliferation of private ranches increased over time. Eighteenth century Spanish ranching practices were carried into the nineteenth century, having an

influence on European and American settlers moving into Texas from both Europe and the older states of the southeast. This influence included the introduction of: twice-a-year breeding, the choice of specific breeds, the establishment of specific ranching methods, terminology, and organization (Freeman 1994: 10).

Mexico and the Republic of Texas (1821 – 1845)

The beginning of the nineteenth century proved difficult for Spain. The Napoleonic wars left the country in an economic and political crisis, which was greatly felt in the territories of New Spain. After years of struggle, threats from the United States to the north and east, and the breakdown of government organization, Mexico finally gained its independence in 1821 (de la Teja 2011).

Ranching practices began to shift even more during this time with an influx of new settlers from the southern United States and Europe. Under Spanish law, foreigners were initially forbidden to settle in Spanish lands. However, due to a dearth of settlers willing to travel into the dangerous northern regions of New Spain, the government made allowances. By 1820, Texas was opened and settlers arrived in waves under the authority of men like Stephen F. Austin, taking advantage of cheap land and liberal laws under Spain and then Mexico (Henson 2011). Their influences added to methods of breeding and herding practices in the area, building on established Spanish colonial traditions. The colonists also brought new crops and farming practices with them. In fact, the anti-slavery ideals of Mexico were set aside by Mexican officials in Texas to lure Anglo settlers with much desired agricultural practices from southern states. Settlers also moved to Texas with the idea that the area would soon be annexed by the United States and would be a worthy investment as more people moved west. Further, Texas functioned as a safe-haven from debt, granting debt-laden families and individuals a clean start (Henson 2011).

In the early years of the Mexican republic, the new government made every attempt to live up to the *Plan de Iguala,* created in 1821 as Mexico pushed for independence. This plan called for the preservation and importance of the Catholic Church, for the equality of Mexican citizens, and for Mexican independence as a constitutional monarchy (de la Teja 2011). The Mexican Constitution of 1824 further established these goals. Modeled after the United States Constitution in format, and the Spanish Constitution of 1812 in spirit, the document established an American-style judicial, legislative and executive branch system with the publicly funded Catholic Church as the official faith. Texas was represented by José María Erasmo Seguín at the constitutional assembly, however, the diverse population of Texas was not fully represented at the assembly and the document was it not ratified by public vote (McKay 2011).

By 1835, Texans were growing unhappy and restless. The Mexican government had failed to provide the liberal and democratic environment that many European and American settlers had envisioned. The republican ideals established in the Constitution of 1824 were pushed aside and replaced by a growing dictatorship lead by Antonio López de Santa Anna. Texans decided to handle the crisis swiftly by creating a series of assemblies and a provisional government. Wrought with internal strife, the Texans did not fully organize until a convention meeting was held at Washington-on-the-Brazos on March 1, 1836. The convention appointed Sam Houston as Commander in chief of the new Revolutionary Army and made rapid decisions about a new government, a new constitution, and the possibility of war (Nance 2011).

The next several months would prove challenging to the new government and Texas settlers. News of the fall of the Alamo in early March 1836, reached settlers quickly. South Central Texas was one of the first areas affected by the news due to close proximity to San Antonio. As Sam Houston retreated in late March, settlers followed, creating a large-scale exodus out of Texas. Known as the Runaway Scrape, the flight out of Texas continued at a steady pace until the decisive Battle of San Jacinto in late April. After Houston's victory at San Jacinto, settlers began to slowly make their way back to their farms and ranches only to find missing cattle and damaged property (Covington 2011).

By late 1836, Texas had defeated Mexico, created a new constitution, and elected a new executive, judicial, and legislative staff. Sam Houston led the new Republic of Texas as president and Stephen F. Austin acted as secretary of state. The new government worked quickly to create the Texas postal system, create an organized militia, and establish the Republic of Texas boundaries.

Sam Houston also worked with land grant issues and settlers rights. Colonies, such as the Green DeWitts Colony (which encompasses what is now part of

Caldwell County) and the Stephen F. Austin Mina Municipality (which encompasses all of Bastrop County), previously granted by the Mexican government were in the early stages of being settled and thriving (Marks 2010; Smyrl 2010a). However, by the end of the Texas Revolution, Texas had over 251,000,000 acres of land as public domain. This land was not only used to support public works in the new Republic of Texas, but also to encourage further settlement. Generous grants were provided to veterans of the war. Land grants of 1,280 acres for head of families and 640 acres for single men were offered to settlers arriving in Texas in 1836–1837. New settlers were required to live in Texas at least three years to receive their land title (Nance 2011). Texas also attempted to sell land to new settlers well below the going rate at the time. Running into organizational trouble with grants and sales, the first homestead laws went into effect in 1839. This law granted 50 acres or one town lot to every citizen or head of family (Nance 2011).

The Republic of Texas also encouraged larger settlements of new immigrants through land grants and colonization contracts. One of the most notable of these was the Adelsverein (also known as the Mainzer Verein or the German Emigration Company). Organized in 1842 by noblemen, the company was established to provide protection of and access to available lands for the German working class. At the same time, they wanted to establish a German maritime presence and increase access to new resources (Brister 2011). The Adelsverein focused their attention on Texas due to reports of rich, fertile, and plentiful lands with few laws to threaten personal liberties. After several unfruitful attempts to purchase viable land, the organization was able to buy colonization rights from speculators Henry Francis Fisher and Burchard Miller. The Fisher-Miller Land Grant, created in 1842, was comprised of more than three million acres located between the Llano and Colorado Rivers. Comal and Guadalupe Counties, first settled in the 1840s by the Prince Carl of Solms-Branfels colonization efforts, would later be created from portions of the Adelsverein (Greene 2010; Smyrl 2010b). Additionally, settlements such as the Robertson's Colony and the Precinct of Viesca (in what is now Burleson County) took root in the wake of the Texas Revolutionary War (Jackson 2010).

Antebellum Texas and the United States (1845 – 1861)

In December 1845, Texas became part of the United States. The offer was generous. Texas would become a slave state instead of a territory and also retain the ability to keep public lands and debts. Texas would also have the capability to divide into four additional states if needed and the United States Navy would offer protection along the Gulf coast. New statehood created a flurry of activity and settlement. New counties were established in the area including: Burleson (1846), Bastrop (1837, formally known as Mina County), and Guadalupe (1846) (Jackson 2010; Marks 2010; Smyrl 2010b).

Despite a constant threat of Indian raids and the occasional threat of starvation, settlers continued to arrive in the area, taking advantage of available land under the Pre-emption Act of 1845 and the Homestead Act of 1845 (Curtis 1943). Scouting trips to the area also reported an abundance and variety of wild game, picturesque hills and streams, and ideal country for livestock grazing (Batson 1928).

As the antebellum period in Texas progressed, the population of freed and enslaved blacks was at a rapid increase due to immigration of settlers from the southern United States. White populations nearly tripled in the 1850s in Burleson County, and the slave population quadrupled to 2,003 (Jackson 2010). The establishment of many large plantations, especially along the fertile alluvial soils of major drainages, such as the Brazos River in Burleson County, increase crop production in central Texas (Jackson 2010). Cotton, corn, and wheat dominated harvests. In 1850, 70,000 bushels of corn and 1,010 bales of cotton were harvested from 5,182 acres in Burleson County alone (Jackson 2010). Although large-scale plantation farming along major river sources boosted the agricultural economy, the overall occupation of central Texans consisted small-scale, family farms (Smyl 2010b). For example, in 1861 in Bexar County only one farm was larger than 1,000 acres (Long 2010a). In the uplands of central Texas, livestock husbandry was also at an increase. Cattle and swine ranching dominated the economy in Caldwell County, with more than 33,000 heads of cattle and 11,480 heads of swine in 1860 (Smyrl 2010a). Lumber production also formed a niche in the economy of central Texas, with lumber mills in Bastrop County supplying lumber to Austin, San Antonio, Houston, and other settlements. The leading pioneering lumber

producer in central Texas, the Bastrop Steam Mill Company, initiated its Los Pines lumbering operations in the early 1840s (Marks 2010).

German and Anglo-American settlers adapted quickly to the new landscape. Breeding experiments with native and imported goats and sheep produced hybrid animals suited to central Texas and the Hill Country environment. Capitalizing on their successful breeding experiments, German families often built mills to produce cloth. This effort was timed perfectly to meet an increased demand for wool cloth over cotton within the larger context of the United States. Wool manufacturing techniques were also becoming more streamlined, enabling faster production. Further, low land prices and a favorable climate lured ranchers from other parts of the United States. These factors, in conjunction with George Wilkins Kendall's wool promotion campaign activities, created the first "sheep boom" in Texas. Cattle numbers were also on the rise and by the onset of the Civil War; Texas had more than 3.5 million head, outnumbering all other states (Freeman 1994).

Until the early twentieth century, transportation and circulation routes in Texas remained rudimentary and fairly disconnected. Spanish Colonial roads took advantage of existing Native American trails initially to access interior portions of the territory. Later, settlers from the United States and other European countries continued to use established trails, such as the Camino Real, and created new ones as they entered the region. By the early to mid- nineteenth century, most of the roads in Texas were created by sustained use and ease of access rather than by design (Wallace 2008).

Efforts to create a coherent transportation system began in the first years of the Republic of Texas. The young Republic of Texas created a Commissioner of Roads and Revenue along with the Texas Rail Road Navigation and Banking Company (Wallace 2008; Werner 2011). Lack of funds plagued both, leaving existing roads in poor condition with no hope for the establishment of new circulation systems. Road development and maintenance responsibility primarily fell to the counties, which appointed a local overseer and crew. This group of selected men, usually comprised of local land owners, rotated every few months. Therefore, road building in the early years of the Republic of Texas and through the rest of the nineteenth century, was primarily a local endeavor, shared by the community.

True progress for roads came about through the California Gold Rush (ca. 1850). During that time, Texas functioned as a staging ground for thousands heading west to California on the news of the discovery of gold. Routes also existed through Arkansas and Missouri but Texas offered warmer weather and thus an earlier start date. Texas also had an established trail system which was mapped during the Mexican American War, and a recently created military route running from San Antonio to El Paso (Wallace 2008). Due to the influx and movement of people across the state, new webs of connection were established linking town sites and settlements. The condition of these trails and roads would remain in poor condition for years to come with upkeep in the hands of local governments (Wallace 2008). The first rail system in Texas was built in the 1850s, connecting Houston to Cypress. However, true progress on this front would not be seen until the reconstruction years (Werner 2011).

The Civil War (1861 – 1865)

Texas was a divided state as the Civil War began in 1861. The new state had fought hard to be granted admission to the Union, however, ties to the older states of the south, including slavery and agricultural practices, were strong. In fact, the majority of the established and growing Anglo population came from southern states. This group saw the Civil War and the election of President Abraham Lincoln as a threat to the State of Texas and its southern heritage and institutions (Campbell 2011).

Central Texas counties were even more divided with narrow margins winning in favor of secession. Bexar, Comal, Guadalupe, Caldwell, Lee and Burleson all voted in favor of succession, while a large number of German settlers in Bastrop, Kerr, Gillespie and Kendall voted against (Greene 2010; Jackson 2015; Long 2010a; Long 2010b; Marks 2010; Smyrl 2010a; Smyrl 2010b). Kerr, Gillespie, and Kendall Counties created the Union League to create organized groups to fight against local native raids and Confederate threats. Seen as an act of rebellion against the State of Texas and the Confederacy, troops were called in to quell the group. Finding themselves in a dangerous situation, the Unionists decided to flee to Mexico. They were intercepted and attacked by Confederate troops on the Nueces River in Kinney County in what is now known as the Battle of the Nueces. While the division over succession and the outcome of the Battle of Nueces (seen by many German settlers as a massacre)

created tensions between Anglo and Germans even after the Civil War was over, the counties in central Texas recovered from the war quickly with successful agriculture and ranching practices in place for future growth (Odintz 2011).

Reconstruction and Growth (1865 – 1899)

Central Texas recovered quickly from the Civil War. An agricultural-based economy allowed for a moderate transition from cotton production to cotton textile production. During the Civil War, John F. Torrey of Comal County imported machinery and looms to manufacture cotton textiles. In quick succession, George Weber, also of Comal County, established the first cottonseed press in the state (Greene 2010). In addition to cotton and cotton textile production, goat and sheep ranching increase throughout Texas and the United States. The industry survived the war and went on to create a second wool or sheep boom through the mid-1880s. Key factors influencing the success of sheep ranching at this time included the influx of both northern and southern ranchers to the area, the removal and destruction of the buffalo herds along with Native populations to the west (allowing for new, open pastureland), and higher wool prices (Freeman 1994).

Cattle ranching and the great cattle drives also helped to revive central Texas economies from the aftermath of the Civil War (Long 2010a; Smyrl 2010a). Long cattle drives from the south passed through central Texas to northern markets. A branch of the Chisholm Trail passed through the Deanville area in western Burleson County, where cattle numbers peaked at 30,765 in 1890 (Jackson 2010). However, the arrival of the railroads reduced the number of cattle drives in late nineteenth century. The Galveston, Harrisburg and San Antonio Railway reached Caldwell County by 1876, and Guadalupe and Bexar County by 1877 (Marks 2010). In 1894 the Missouri, Kansas and Texas Railroad was established, selecting Smithville, Bastrop County, Texas as its headquarters (Marks 2010). Burleson County received the Gulf, Colorado and Santa Fe Railway in 1880 (Jackson 2010). The onset of railroad construction gave central Texas freight outlets, access to wider markets, and prompted the growth of new towns, such as Cibolo, Somerville, Elgin, Maxwell, and Schertz (Jackson 2010; Long 2010a; Marks 2010; Smyrl 2010a).

By the mid-1880s to early 1890s, the wool boom and the cattle industry were in decline brought on by overgrazed grasslands; extreme weather conditions including drought and harsh winters; and the introduction of barbed wire. In addition, the Texas economy was heavily impacted by the Panic of 1893, which was a severe economic depression brought on by bank failures and over speculation in railroad construction. Sheep and cattle ranchers generally pulled through, reorganizing ranching practices and creating support systems and organizations for protection and promotion (Freeman 1994). Diversification of ranching and farming also became more popular. Ranchers focused their attention specifically on mohair production and Angora goats, setting the stage for the growth and boom of that industry into the twentieth century (Freeman 1994).

The Early Twentieth Century (1900-1940).

Smaller, adept, diversified farms and ranches dominated the landscape of the central Texas by 1900. The "ranching triumvirate" of cattle, sheep and Angora goats set Texas at the national forefront of ranching production (Freeman 1994: 18). Agricultural crops, such as cotton, corn, wheat, oats, and various grasses for hay production further diversified output, strengthening independent farms and ranches (Freeman 1994). This success led to greater numbers of smaller ranches and by 1910 (Freeman 1994). However, after World War I, black populations began to shift and agricultural labor became acute.

To rectify a labor shortage, Mexican workers migrated and settled in central Texas counties (Jackson 2010). Hispanic migrants became tenant farmers or sharecroppers, while others made up a migratory labor force (Smyrl 2010a). By 1930, Hispanics composed 10 percent of the Burleson County population, and a third of Caldwell County's population (Jackson 2010 Smyrl 2010b). Additionally, central Texas counties experienced a gradual incline in German, Czech, Moravian, Polish, French, Swiss, and Danish immigrants in the late nineteenth and early twentieth centuries (Long 2010b).

As railways continued to be built well into the twentieth century, new roads followed, creating a linked network. Rails functioned as the "main arteries of travel" and roads as "the veins" (Pratt 1910: 106). Railroad companies soon realized that a good road system could greatly aid their business and they became one of the most ardent supporters of the good roads movement (Wallace 2008). Road systems also benefitted from the arrival of post offices. The Rural Free Delivery of

Mail system (RFD) brought mail to isolated ranches and farms. Postmen refused to use roads in poor conditions and consistently reported conditions to the proper authorities when they could not make their deliveries. This system united rural roads and post routes engaging federal and state government interests. This new level of involvement with roads and their development stretched significantly beyond the previous scope of county court control (Wallace 2008).

The fate of road improvement and system expansion was sealed with the introduction of the automobile and the Federal Highway Act of 1916 and 1917. The new acts provided matching funding to states and a regulatory partnership to assist with building plans (location, design, and cost estimates). In response to these Acts, the Texas Highway Department was established in 1917. Not soon after, the Highway Department would become the largest agency in the state (Wallace 2008). By 1917, Texas was well on its way to creating a new and complete highway system. The system included several national marked highway routes including the nascent Old Spanish Trail Transcontinental Highway (American Highway Association 1917; Luther 2010).

The Old Spanish Trail Transcontinental Highway (OST) had a starting point in St. Augustine, Florida, and a terminus at San Diego, California. Named for the historic landscape that the road traversed, it was created by a committee in Mobile, Alabama, in 1915. By 1919, it was headquartered in the Gunter Hotel in San Antonio and by the time the highly publicized road was fully completed in 1929, it was touted as the finest transcontinental road in the United States, costing an unprecedented $80,000,000 (Luther 2010). The route was a major feat for the good roads movement and national travel at the time. Cornelius Vanderbilt, Jr. drove the OST in the late 1920s, stating that it was "the best overland route in the country" (Travers 1929: 24). It was also promoted as the "greatest way of travel" and the "way of the Nation" (National Headquarters Old Spanish Trail 1923). It was partially funded by the War Department, supported by the American Automobile Association, the United States Bureau of Education, and was one of the first highways to promote roadside beautification (National Headquarters Old Spanish Trail 1923). The portion of the OST within the Texas Hill Country ran through from San Antonio to Comfort then wound northwest to Kerrville, on to Mountain Home, Segovia, and then Junction. Currently, IH 10; US 290 and SH 27 are laid along a portion of the historic road bed or use a similar alignment.

While the primary industry of central Texas continued to be farming and ranching through the first half of the twentieth century, oil and gas production began to emerge. In 1922, Edgar B. David discovered the Lulling oilfield in Caldwell County, triggering a booming oil industry that rapidly spread throughout the area (Smyrl 2010a). Petroleum was also discovered in Guadalupe County in the 1920s, and in Burleson County in 1938 (Jackson 2010; Smyrl 2010b). The onset of World War II also prompted an increase central Texas economies with increased lumber milling, cattle production, and textile manufacturing (Greene 2010; Marks 2010; Smyrl 2010a). The presence of Bryan Air Field in Burleson County, Camp Swift in Bastrop County, and Kelly Air Force Base in Bexar County also accelerated economic growth during the 1920s and 1930s (Jackson 2010; Long 2010a; Marks 2010)

Despite advancements made in infrastructure technology and funding, ranching, and the nascent tourism industry, the depression took its toll on the towns, farms, and ranches of the Texas Hill Country. Because the area was primarily rural, the effects of the depression were not felt initially. However, by the early 1930s, changes began to occur in local economies. The Texas legislature responded, and in 1931 all state agencies were required to use only American-made materials and machinery in all new construction projects. The Texas Highway Department worked together with the legislature to make sure Texas firms and material suppliers received all of the contracts for road and bridge work. As the depression advanced, the state legislature and the Texas Highway Department looked for other ways to increase the number of jobs for out-of-work Texans. In 1932, the Texas Highway Department mandated that machines should be used as a last result and all construction should be built by hand when at all possible. In that same year, Texas began to receive federal aid under the Emergency Relief and Construction Act. Funding continued under Roosevelt's New Deal Programs, which covered 100 percent of the costs and aided in economic recovery throughout the state (Wallace 2008).

Farms and ranches also suffered during the depression. A severe drought in the early 1930s left many farms and ranches in decline. The number of unemployed residents in the area also jumped, more than doubling between 1930 and 1936 (Thompson 2011). Smaller

towns and less-populated counties, such as Schleicher, also saw a dramatic population decrease and people moved to larger towns in the area to look for work (Smyrl 2011b). Despite the difficulties of the depression, many ranches and farms survived with lands and livestock intact. This is partly due to the push for smaller, more diversified practices which began in the early years of the twentieth century.

The Mid-Twentieth Century 1940s – 1960s.

Cattle ranching and diversified agricultural crops remained in the forefront of central Texas commerce well into the mid-twentieth century. Agricultural crop production of cotton, corn, hay, sorghum, watermelons, peanuts, and pecans continued on farms and ranches (Marks 2010). Beef-Cattle raising also increased, prompting farmers to set aside more and more land for pasture towards the latter half of the twentieth century (Marks 2010).

New commercial opportunities rose in the oil and gas businesses throughout the region while road and electrical infrastructure steadily improved. 1941 and early 1942 were boom years for highway construction. While World War II hampered efforts due to a decrease in supplies, man power, and revenue from automobile registration, plans were made for the future. As a result, delegates from the Texas Good Road Association asked Washington for $768 million for road repair due to neglect during the years of the war. Congress responded with a $1.5 billion dollar post-war highway bill. Texas received the largest percentage of these funds. Due to this, by the late 1940s, most of the roads in Texas were paved and new construction projects were completed in record time (Wallace 2008).

Ultimately, central Texas economies were sustained by diversifying crop agriculture, large-scale cattle ranching, and oil production (Jackson 2010; Marks 2010; Symrl 2010a). However, tourism has also become a primary industry of Bexar, Comal, and Guadalupe Counties. The Interstate Highway 35 “corridor” between San Antonio and Austin has become home to a surge of residential and commercial growth prompted by major attractions, such as the San Antonio Missions, Schlitterbahn, and Natural Bridge Caverns and Wildlife Park. Historic trails and a diverse heritage background further encourage a strong tourism economy for the central Texas area.

Chapter 4

Methods

Rhiana D. Ward and Laura I. Acuña

Introduction

The investigations were designed to identify cultural resources in the project area and, to the extent possible, recover sufficient information to evaluate the significance of recorded prehistoric and historic sites. SWCA's investigations included background research and an intensive field surveys. The methods and the level of effort used in these investigations were developed in consultation with the Texas Historical Commission (THC), and in accordance with the Council of Texas Archaeologists (CTA) survey standards.

Background Literature Review

SWCA performed a cultural resources records review on the Vista Ridge Project with a goal of determining whether previously conducted surveys or any cultural resources have been recorded within or near the project area. During the course of the project, as the alignment changed to accommodate reroutes, the project area was reassessed for cultural resources. To conduct this review, an SWCA archaeologist reviewed approximately 23 Texas U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps on the THC's Texas Archeological Sites Atlas (Atlas). This source provided information on the nature and location of previously conducted archaeological surveys, previously recorded cultural resources, locations of National Register of Historic Places (NRHP) properties, sites designated as SALs, Official Texas Historical Markers, Recorded Texas Historic Landmarks, cemeteries, and local neighborhood surveys. As a part of the review, an SWCA archaeologist also reviewed the Texas Department of Transportation (TxDOT) Historic Overlay, a mapping/geographic information system (GIS) database with historic maps and resource information covering most portions of the state.

Field Methods

The project area traverses both urban and rural settings with varying degrees of archaeological potential. While several river and large stream drainages with high potential to contain cultural resources are traversed, a large portion of the project spans expansive tracts of agricultural fields that have been frequently plowed and terraced or developed urban/utility areas. Based on the soils and these disturbances, portions of the project area within the Blackland Prairie in Guadalupe and Caldwell Counties, for instance, have a very low potential to contain buried stratified cultural resources with sites typically limited to surface manifestations of prehistoric artifact scatters and historic materials associated with the late-nineteenth- to mid-twentieth-century settlement. Recent investigations conducted by SWCA within Guadalupe County in similar settings suggest that in many areas much of the upper 30 to 40 centimeters (cm) of the surface have been disturbed by significant land clearing and plowing (Acuña and Sloan 2014; Ward 2015). The majority of the soils within the project area in Guadalupe and Caldwell Counties are primarily Houston Black clay or Branyon clay. As these soils developed in place from clayey residuum from mudstone and clayey alluvium from mudstone, respectively, they possess limited potential to contain intact buried cultural deposits, particularly prehistoric cultural materials. These soils typically contain cultural resources (prehistoric and historic) that primarily are surface scatters of artifacts with little to no research value due to poor horizontal integrity and a general lack of cultural features and buried components.

Considering the overall mixed archaeological potential of the project area, SWCA executed a flexible approach where intensive archaeological investigations were tailored to the specific settings encountered across the alignment. River drainages, stream settings and terraces, existing archaeological sites, and moderate probability settings were thoroughly explored with subsurface investigations (shovel test and backhoe trenching) to THC survey standards. In disturbed and/or upland settings with little to no subsurface potential, SWCA minimized subsurface explorations or excluded survey all together. This also applied to those areas that have been previously surveyed by archaeologists in the last 10 years per the Texas Archeological Sites Atlas. Initially, roughly 20 miles were identified as previously surveyed, heavily disturbed, or within high upland,

agricultural settings. Portions of the project area were ground-truthed due to adjacent previously recorded sites and/or potential historic-age structures identified during the background review. Ultimately, after subsequent alignment changes and reroutes, the total mileage that was not surveyed or limited to ground-truthing was approximately 24.42 miles. SWCA's Principal Investigators and Field Directors made decisions in the field and thoroughly documented in the resulting report all areas where survey standards were reduced or survey was not performed.

Subsurface Investigations

SWCA used two methods of subsurface exploration during the survey: shovel testing and backhoe trenching. SWCA keyed the use of methods to the level of disturbances of the project and the nature of the soils, geology, and topography in a given area. Survey investigations were of sufficient intensity to determine the nature, extent, and, if possible, significance of cultural resources discovered within the proposed project area. Survey efforts met all THC-minimum archaeological survey standards for such projects with exceptions thoroughly documented. THC survey standards include a sliding scale of shovel tests per acre or linear mile (16 shovel tests per linear mile within a 100-foot-wide corridor) and backhoe trenches per acre dependent on project size/acreage—the larger the survey area, the less frequent the testing intervals. The field survey consisted of teams of SWCA archaeologists walking all of the proposed cultural resources survey areas for the project. During the survey, archaeologists examined the ground surface and erosional profiles for cultural resources.

Shovel Testing

SWCA primarily used shovel testing when the project crossed upland topography with low potential for deeply buried sites. Archaeologists excavated shovel tests in 20-cm arbitrary levels to 1 meter (m) in depth unless soil characteristics or bedrock precluded reaching that depth. The matrix was screened through ¼-inch mesh. SWCA plotted the location of each shovel test using a Trimble sub-meter accurate hand-held Global Positioning System (GPS) receiver and recorded each test in the field using SWCA's tablets. Areas with previously recorded sites or other cultural resources identified during the archival research required additional shovel testing to explore the nature of the cultural deposits. THC survey standards call for 16 shovel tests per mile of linear project area within a 100-foot wide corridor. However, as previously mentioned, these standards may be reduced in broad upland areas with shallow soils. If sites were encountered, a minimum of six shovel tests were excavated per site to determine horizontal and vertical extent. If shovel testing could not adequately explore project impacts in soils with potential to contain buried archaeological materials, backhoe trenches were utilized.

Backhoe Trenching

Through desktop analysis, SWCA initially identified seven stream crossings and associated floodplains on the proposed alignment with a potential for deeply buried archaeological sites. The stream crossings include from south to north, the Guadalupe River, San Marcos River, Colorado River, Wilbarger Creek, Pin Oak Branch, Middle Yegua Creek, and East Yegua Creek. These areas are mainly second order or higher creek and river drainages with floodplain and/or alluvial terraces. In these areas, trenches were placed approximately 200–300 m apart. In larger floodplains, such as those associated with the Guadalupe and Colorado Rivers, backhoe trench intervals were widened. Trench placement was based on the level of disturbance within the project area, the location of buried utilities, the locations of any previously impacted areas, landowner concerns, and the preservation potential for archaeological sites. If a river or stream will be directionally drilled, trenches were placed at drill locations and floodplain areas outside the bore ingress/egress locations. Trenches were limited or not excavated between the entry and exit points of the drill. During pedestrian survey, if investigations identified additional areas with the potential for deeply buried deposits, SWCA added the areas to the backhoe trench program. Conversely, through the course of the investigations, some areas were not backhoe trenched based on the results of the initial survey investigations.

Backhoe trenches were excavated to a depth sufficient to determine the presence/absence of buried cultural materials and allow the complete recording of all cultural features and geomorphic information to depths of project impacts. To differentiate the backhoe trenches excavated at different drainages across the project area over an extended period of time, the trenches were given a prefix name followed by a number. For example, those trenches excavated at the Colorado River were designated CO and San Marcos River SM

followed by the sequential number it was excavated (e.g., CO2 and SM4).

Generally, trenches were 1.8 m deep, 7 m long, and 1.5 m wide. An experienced archaeologist monitored all trenching while excavations were underway. Trench documentation included stratigraphic descriptions for each excavated trench with soil descriptions for each trench containing cultural materials. When applicable, archaeologists mapped and photographed all cultural features encountered during trenching. To quantify artifact density and recover, a column of soil was excavated and screened down one side of select trenches that contained cultural materials. The columns were roughly 30- by 30-cm in size, extending from the ground surface to the base of the trench or until soil characteristics or bedrock precluded reaching that depth. Soil from the column were removed in 20-cm levels and screened through ¼-inch hardware screen mesh.

All Occupational Safety and Health Standards (OSHA) safety protocols were used during backhoe trenching, with SWCA planning to shore and/or step back trenches as appropriate based on depth of excavations, soil characteristics, and field conditions. SWCA thoroughly photograph the entire process. All trenches were backfilled and leveled upon completion of excavation and recording.

SWCA archaeologists defined and recorded all discovered cultural resource sites following standard federal and state guidelines. All sites were mapped in detail with a Trimble hand-held sub-meter accurate GPS unit and plotted on USGS 7.5-minute topographic maps and appropriate project maps for planning purposes.

Historic and Archival Studies

SWCA identified approximately 106 potential historic-age resources during the historic map review. In addition, two routes of the El Camino Real de los Tejas National Historic Trail and two historic trails intersect the project area. Of the 106 locales, 18 are within the project area and 88 are adjacent to the project area boundaries. As many of these locales are solely based on maps and may not contain actual resources, the focus of initial pedestrian investigations was determining the presence/absence of potential historic-age resources within the project area. Such resources include ranches, towns, homesteads, and evidence of historic trails.

SWCA recorded all historic-age resources and historic architectural remnants in the project area. To the degree feasible in the field, SWCA's archaeologists recorded the approximate date of construction and rationale for the date assigned, architectural styles and function, building materials, techniques of construction, and construction sequence. Additionally, SWCA's field staff photographed each structure or structural remnant on-site. Photographs were taken to illustrate the setting and relationship of buildings, structures, and foundations or remains to each other and to the site as a whole. SWCA did not photograph structures or buildings less than 45 years of age within the survey area.

As archaeologists identified historic-age resources, archival research was conducted using the TxDOT historic overlay, historic aerial photography, and other available county-specific resources—such as the Stoner System Maps of Bexar County—to determine date of construction. Archaeologists used the results from the archival research to determine if the resources should be included in the historic resources survey and whether additional in-depth research—such as an examination of county deed records—was needed to adequately assess the resource for significance.

Historic Resources Survey

A qualified architectural historian, specifically one that meets the Secretary of the Interior's Professional Qualifications Guidelines (36 CFR 61), reviewed the above-ground cultural resources identified within the survey area. This historian conducted the architectural assessment of resources primarily through the review of field data and photographs taken by the cultural resources specialists during survey investigations. With historic-age resources, the criterion for evaluation considers the resource as part of a contributing architectural or historic component to any adjacent or associated historic-age building complexes. As such, some of the surrounding building complexes associated with resources were reviewed through vehicular and pedestrian reconnaissance.

The assessment included recording the approximate date of construction and rationale for the date assigned, architectural styles and functions, building materials, techniques of construction, and construction sequence. Documentation may have included a sketched floor plan drawn to-scale of the major buildings, structures, or remnants that are readily visible. SWCA conducted additional archival review at relevant county court-

houses and other repositories to further document the surveyed resources. The survey was of sufficient intensity to locate any historic properties with architectural and/or historic significance within the APE, assess the integrity of each property, document the property, determine if the property was potentially eligible for inclusion on the NRHP, and evaluate the potential effects of the project on the property's significance.

Site Evaluations

All newly documented archaeological sites were evaluated according to the National Register Criteria for Evaluation (Criteria) as codified in 36 CFR 60.4, which states:

> 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, materials, 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.

Additional evaluations will be made under the ACT 13.26 Rule 26.10 to determine State Archaeological Landmark designation eligibility. The ACT criteria states:

> The commission shall use one or more of the following criteria when assessing the appropriateness of official landmark designation, and/or the need for further investigations under the permit process:
>
> (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; and
>
> (5) there is a 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.

If a historic structure need be evaluated under the ACT, the following criteria must be applied:

> Buildings, structures, cultural landscapes, and non-archeological sites, objects, and districts may be designated as landmarks, provided that the following conditions are met:
>
> (1) the property fits within at least one of the following criteria:
>
> (A) the property is associated with events that have made a significant contribution to the broad patterns of our history, including importance to a particular cultural or ethnic group;
>
> (B) the property is associated with the lives of persons significant in our past;
>
> (C) the property embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose

components may lack individual distinction;

(D) the property has yielded, or may be likely to yield, information important in Texas culture or history;

(2) the property retains integrity at the time of the nomination, as determined by the executive director of the commission; and

(3) for buildings and structures only, the property must be listed in the National Register of Historic Places, either individually, or as a contributing property within a historic district. Contributing status may be determined by the Keeper of the National Register or the executive director of the commission.

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Chapter 5

Results: General

Laura I. Acuña

Introduction

The following section addresses the general results of investigations from June 2015 to December 2015. The final alignment as of December 8th includes new reroutes that were implemented after June 2015. The alignment sheets of the project area are presented in Appendix A of the report. The alignment sheets depict the areas that were reviewed by pedestrian survey, as well as parcels that were not surveyed based on previous survey investigations or extensive disturbances and confirmed via vehicular survey. Parcels not available for survey investigations due to access restrictions are also depicted as such.

Previous Investigations and Recorded Sites

A general background literature review was completed for the initial Vista Ridge Project alignment proposed in June 2015 and is detailed below. The following review does not include background literature searches for any rerouted alignments proposed after June 2015. SWCA completed individual background spot-checks for rerouted alignments prior to field investigations.

Previous surveys examined approximately 11.57 miles of the alignment and there are five previously recorded sites, three cemeteries, a National Historic Trail and approximately 106 historic-age resources within or adjacent to the project area. Additionally, there are 93 previously recorded sites, 11 cemeteries, and four historic markers within a 0.50-mile radius of the project.

Thirty-three previously investigated cultural resources survey areas overlap or are within a 0.5-mile radius of the 139.45-mile-long project area. Table 5.1 lists the investigations by county and USGS topographic quadrangle. Of the 33 investigations, 22 overlap or intersect the project area. The majority of the previous project areas that intersect the APE are linear and include projects such as transmission lines, new roadway and road improvement projects, and water and sewer utility line projects. The previous projects include: 1) small area surveys that encompass a total of 3.16 miles of the alignment that were conducted for a private development project, an independent school district, a transmission substation project, and a park; 2) five linear projects that parallel the APE and overlap 3.53 miles of the corridor and centerline; and 3) one large area survey within a lignite mine that includes 4.88 miles of the project alignment. Although much of the project alignment is collocated along existing transmission lines within Bexar, Comal, Caldwell, and Bastrop Counties, as well as a buried utility line within Lee County, many of these transmission lines and the utility line were not surveyed according to the Texas Archeological Sites Atlas (2015).

Projects associated with existing utilities were either constructed prior to cultural resources regulations requiring investigations or survey results have not been submitted to the THC. A majority of the alignment parallels Lower Colorado River Authority (LCRA) transmission line corridors. Although most of the corridors were not initially surveyed for cultural resources prior to the construction activities for the transmission line and towers, portions of the LCRA corridors have been subsequently investigated during maintenance activities and easement clearing projects. A review of LCRA Annual Report documents received from LCRA after the initial background review determined that approximately 45 miles of LCRA corridors adjacent to the alignment were surveyed for cultural resources. In 2004, several transmission lines were surveyed through Guadalupe, Caldwell, and Bastrop Counties that parallel the current alignment (Hixson et al. 2004). No cultural resources were identified during the 2004 survey. However, two high probability areas were identified for buried cultural resources along the transmission line, specifically the towers on either side of the San Marcos River and those on either side of Plum Creek. These areas were not visited by LCRA but were noted as having a high potential of containing buried cultural resources (Hixson et al. 2004). In 2006, LCRA surveyed a transmission line within Bastrop County that also parallels portions of the current alignment. Sites 41GU98 and 41BP812 were identified adjacent and within the corridor during the investigations. The

Table 5.1. Previous Investigations within the Project Area

Project Name	Texas Antiquities Permit No.	Project Date	Project Type	County	7.5 Topographic Quad	Proximity to/ Overlap with APE (acres or miles)	Agency/ Company	Comments	General Location
Encino Park Development	n/a	Survey 5/1977	Area Survey	Bexar	Bulverde	1.76 miles	UTSA	-	Noted as archaeological line rather than polygon.
Encino Rio	n/a	Survey 07/2005	Area Survey	Bexar	Bulverde	Intersecting	Pape-Dawson	Revisit of 41BX91, determined site was destroyed.	-
US 281 Survey	n/a	Survey 12/1987	Linear Survey	Bexar	Bulverde	Intersecting	FHWA/TxDOT	-	-
US 281 Survey	6784	Survey 2/5/2014; Report 2/21/2014	Linear Survey	Bexar	Bulverde	Intersecting	TxDOT	-	-
Five Northside ISD Campuses	5619	Survey 6/1/2010; Report 9/3/2010	Area Survey	Bexar	Bulverde	0.70 mile	UTSA	-	Two areas: One area adjacent; one area include 0.22 miles of APE
Bulverde Road Improvement Project	5304	Survey 7/31/2009; Report 12/17/2009	Linear Survey	Bexar	Bulverde	Intersecting	SWCA	-	-
Green Mountain-Stonegate Transmission Line	3242	Survey 11/3/2003; Report 3/15/2004	Linear Survey	Bexar	Bat Cave	Intersecting	PBS&J	-	Parallels corridor for about 0.33 mile
Survey for USACE-FW District	n/a	Survey 02/1999	Linear Survey	Comal	New Braunfels West	Intersecting	Not reported on Atlas	No project name listed on Atlas.	-
Interstate Highway 35 Widening	n/a	Survey 10/1991	Linear Survey	Comal	New Braunfels West	Intersecting	FHWA/TxDOT	-	-
Unknown - Guadalupe-Blanco River Authority agency	n/a	Survey 02/1999	Linear Survey	Guadalupe	Marion	3.00 miles	Not reported on Atlas	-	Includes and parallels corridor
Unknown-next to GBRA survey	n/a	no date	Linear Survey	Guadalupe	Marion	Parallel	Not reported on Atlas	-	Includes and parallels corridor
Unknown-next to GBRA survey	n/a	no date	Linear Survey	Guadalupe	New Braunfels East and McQueeney	Parallel	Not reported on Atlas	-	Includes and parallels corridor
Texas Water Development Board Survey	2539	Survey 6/1/2001; Report 6/1/2002	Linear Survey	Guadalupe	New Braunfels East and McQueeney	Intersecting	TWDB	Permit number only lists survey in McCulloch County	-
LCRA Schumansville Project	1288	Survey 08/1993	Linear Survey	Guadalupe	McQueeney	Intersecting	Espey, Huston, & Associates, Inc.	-	-

Table 5.1. - continued: Previous Investigations within the Project Area

Project Name	Texas Antiquities Permit No.	Project Date	Project Type	County	7.5 Topographic Quad	Proximity to/ Overlap with APE (acres or miles)	Agency/ Company	Comments	General Location
State Highway 46	n/a	Survey 06/1989	Linear Survey	Guadalupe	New Braunfels East and McQueeney	Intersecting	TxDOT	-	-
LCRA Clear Springs Substation Survey	2308	Survey 05/2000	Area Survey	Guadalupe	New Braunfels East and McQueeney	0.20 mile	LCRA	Substation survey with sites 41GU60-61 outside project APE	-
LCRA 2005-2006 Surveys - Annual Report	4013	Survey 3/5/2005; Report 4/25/2005	Linear Survey	Guadalupe	Geronimo	Intersecting	LCRA	Per Atlas, report includes 2005	-
Soil Conservation Service Site 8 Reservoir	n/a	Survey 12/1984	Linear Survey	Guadalupe	Geronimo	Adjacent	SCS	Possibly part of York Creek Watershed Survey	-
LCRA 2005-2006 Surveys - Annual Report	4013	Survey 2007	Linear Survey	Guadalupe Bastrop	San Marcos South	Intersecting Adjacent	LCRA	Recorded 41GU98; Per Atlas, report includes 2006; Recorded 41BP812; Per 2006 Report; Parallels Corridor	-
Soil Conservation Service Site 14 or 15	n/a	Survey 10/1985	Linear Survey	Guadalupe	San Marcos South	Intersecting	SCS	Possibly part of York Creek Watershed Survey	-
Crystal Clear Water Supply Corporation Pipeline	6586	Survey 7/06/2013; Report 08/20/2013	Linear Survey	Guadalupe	San Marcos South	0.43 mile	Tierras Antiguas	Parallels corridor	-
LCRA 2004 Survey - Annual Report	3325	Survey 2004	Linear Survey	Guadalupe Caldwell Bastrop	Multiple	Adjacent	LCRA	Parallels corridor	-
US 183 and Toll Road 130	4706	Survey 3/12/2008; Report 5/8/2008	Linear Survey	Caldwell	Lockhart North	Intersecting	aci Consulting	-	-
US 183 and Toll Road 130	4706	Survey 8/1/2009; Report 2/8/2011	Linear Survey	Caldwell	Lockhart North	Intersecting	aci Consulting	FINAL report	-
TxDOT Survey FM 353	n/a	Survey Date 10/1/1996	Linear Survey	Bastrop	Webberville	Intersecting	TxDOT	-	TXDOT-East of line along FM535
Travis County Southeast Metropolitan Park	2018	07/01/1988, Report Date 1/1/1998	Area Survey	Bastrop	Utely	0.5 mile	Hicks & Company	-	-

Table 5.1. - continued: Previous Investigations within the Project Area

Project Name	Texas Antiquities Permit No.	Project Date	Project Type	County	7.5 Topographic Quad	Proximity to/ Overlap with APE (acres or miles)	Agency/ Company	Comments	General Location
Surveys and Impacts evaluation in TxDOT's Austing, Bryan, and Yoakum Districts	4239	Survey Date 01/26/2007, Report Date 6/1/2009	Linear Survey	Bastrop	Utely	0.10 mile	PBS&J	Additional survey, archival research, or NRHP testing recommended for five sites within project area.	Parallels corridor adjacent to Hill Cemetery
TxDOT Survey	n/a	Survey Date 8/1/1987	Linear Survey	Bastrop	Elgin West	Intersecting	TxDOT	-	FMHA near Monkey road
McNeil Bastrop 138 kV Transmission Line Rebuild Project	1487	Survey Date 02/01/1995, Report Date 03/01/1995	Linear Survey	Bastrop	Elgin East	Intersecting	Espy Huston Associates Inc.	Avoidance and/or further testing of sites 41BP197, 41BP386, 41BP387, 41BP388, 41BP389, 41TV1208, which are potentially eligible as NRHP properties or SALS.	-
Austin and Waco Districts-2000-2002	2437	Survey Date 01/01/01, Report Date 09/01/2002	Linear Survey	Bastrop	Elgin East	Intersecting	Prewitt and Associates, Inc.	-	-
US 290 Paige to Giddings	4283	Survey Date 10/01/2006, Report Date 03/01/2007	Linear Survey	Bastrop	Elgin East	Intersecting	Hicks & Company	Marked as linear area on Atlas, but is a polygon survey area.	-
Three Oaks Survey	2188	Survey Date 6/1/2000, Report Date 04/05/2004	Area Survey	Bastrop/Lee	Elgin East/ Structure/ McDade/ Beaukiss	4.88 miles overlaps, 0.52 is adjacent or parallels	Alcoa, Inc	-	Large polygon survey that overlaps in four sections.
Unknown - Not reported on Atlas	n/a	Survey Date 4/1/1988	Linear Survey	Lee	Tanglewood	Intersects	Not reported on Atlas	-	BLM/AAP, near Lee-Burleson county line

prehistoric campsite consists of burned rock, debitage, and two grinding stones within a disturbed, cleared upland setting. No further work was recommended on the sites due to the disturbances and lack of intact cultural buried deposits (Hixson et al. 2007).

Five previously recorded cultural resource sites, three cemeteries, and two routes of a National Historic Trail are within or adjacent to the project area boundaries (Table 5.2). The previously recorded sites include three prehistoric archaeological sites (41BX91, 41BP812 and 41BP818), a multi-component prehistoric and historic artifact scatter (41GU98), and a historic farmstead (41LE299). Each of the sites were recommended as not eligible for listing on the NRHP or for SAL designation.

Two cemeteries (Redwood and Perryville Cemeteries) are located adjacent to the current alignment, while a third cemetery (Hill Cemetery) is within the currently proposed corridor. The Redwood Cemetery is located in Guadalupe County and is an active cemetery with internments dating to 1899 (Atlas 2015). The Perryville Cemetery—also known as Hog Eye, Moon, Old Moon, Moon Family, and Baptist Cemetery—is in Bastrop County and was designated as Texas Historic Cemetery in June 2011. The Hill Cemetery is located in Bastrop County; however, no additional information on the cemetery was reported on Atlas (2015).

Historic Map Review

SWCA reviewed several historic maps from TxDOT's Historic Overlay (Foster et al. 2006) to determine if any potential historic-age buildings or structures are within or adjacent to the project corridor (Foster et al. 2006). The review determined that the El Camino Real de los Tejas National Historic Trail intersects the project area in two areas. In addition, two historic roads that correlate with existing modern highway corridors are mapped intersecting the project area and there are 106 potential historic-age resources within or adjacent to the project area.

Based on National Park Service maps and TxDOT overlay data, two routes of the El Camino Real del los Tejas National Historic Trail intersect the project area (Figure 5.1). One route correlates with IH 35 and intersects the project area in Comal County near New Braunfels, Texas. The second route, correlating with SH 21, also known as the Old San Antonio Road, intersects the project area in Bastrop County, approximately 6.5 miles southeast of Cedar Creek, Texas. Maps reviewed on the historic overlay dating to 1827, 1839, 1846, and 1922 depict the historic route under different names such as Camino a Nacogdoches, Road from San Antonio de Bexar to Nacogdoches, Road to Austin and Nacogdoches, and the Camino Real, respectively (Foster et al. 2006).

The El Camino Real de los Tejas National Historic Trail was added to the National Trails system in 2004. The historic trail, with origins dating back to the seventeenth century, linked Mexico City with the Kingdom of Tejas (Caddo) in east Texas and then eastward to the Spanish colonial capital at Los Adaes (now in Louisiana). By linking colonial capitals, it was known as a royal road, a "camino real." The Spanish first used the route during the establishment of missions in east Texas by Alonso de Leon and Fray Massanet in 1690. The following year, the route was formally established as a royal road by Domingo Teran de los Rios. By many accounts, the road followed well-traveled routes that likely extended far back into prehistory. However, the road or trail was not a single route, but instead, consisted of several trails that would vary based upon weather conditions and factors in the cultural landscape. Consequently, the trail covers a 550-mile-long corridor in Texas and Louisiana, but within this corridor, the trail consists of an estimated 2,600 miles of known trail alignments that resemble a braided stream. While the map review identified these sections in the APE, they are along well-established and highly developed modern transportation corridors and any traces of the original road have most likely been destroyed.

As mentioned, during a review of historic topographic maps from the historic overlay, SWCA identified approximately 106 historic-age resources within or adjacent to the project area. Eighteen resources are mapped within the project area corridor and the remaining 88 are depicted adjacent to the project area boundaries. The identified resources include buildings or outbuildings noted on USACE and Army Map Service historic topographic maps for the various counties dating from 1904 to 1964 (Foster et al. 2006). In addition, two historic roads depicted on maps dating to 1851, 1867, and 1888 are mapped within the project area and correlate with the modern alignments of SH 71 and SH 95.

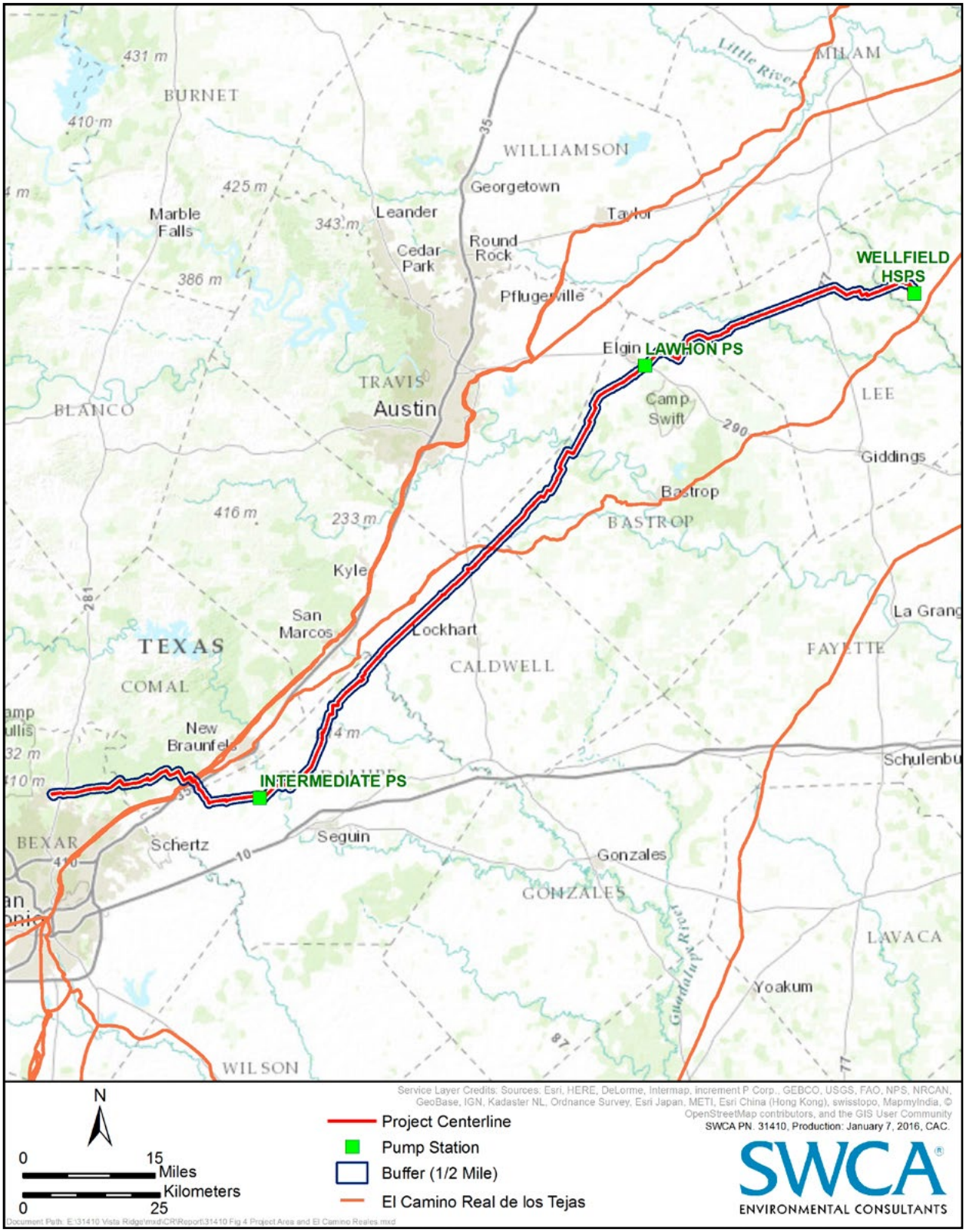

Figure 5.1. Project area and El Camino Real de los Tejas.

Table 5.2. Previously Recorded Sites within or Adjacent to the Project Area

Resource Name or Trinomial	Resource Type	Resource Description	County	7.5 Topographic Quad	Proximity to/Overlap with APE	Temporal Affiliation	Eligibility Status	Recommendations	Comments
41BX91	Arch Site	Quarry site	Bexar	Bulverde	Centerline	Prehistoric	2009 undetermined; 2012 not eligible	No further work; No evidence encountered during 2012 private development survey	Recorded in 1977; revisited in 2009 for US 281 survey; revisited in 2012 for private development survey
41GU98	Arch Site	Lithic and historic scatter	Guadalupe	San Marcos South	Centerline	Multi-component	Ineligible, THC 2007	No further work recommended	LCRA 2006 Report, TAC Permit No. 4013 per Atlas
Redwood Cemetery (GU-C107)	Cemetery	Active cemetery with historic-age burials; 93 known internments	Guadalupe	San Marcos South	Corridor	Historic to present	Undetermined	Avoidance	Oldest internment dates to 1899: Richard Schilder b. July 13, 1876 d. May 23, 1899
El Camino Real de los Tejas; Camino a Nacogdoches; Road from San Antonio de Bexar to Nacogdoches; Road to Austin and Nacogdoches; Camino Real	National Historic Trail - Historic routes	Spanish-Colonial route; Currently IH 35 and SH 21.	Bexar, Comal	New Braunfels West and Lytton Springs	Intersects	Spanish-Colonial to present	Undetermined	No further work or avoidance based on existing disturbances	-
Austin to La Grange, SH 71 Austin to Bastrop, US 290 and SH 95	Historic trails	Historic road/trails	Bastrop	Webberville and Elgin West	Intersects	19th century to present	Undetermined	N/A	1867 H. Holtz Map of Texas
41BP812	Archaeological Site	Few pieces of lithic debitage and 2 grinding stones along edges of plowed field from 0-30 cm below surface.	Bastrop	Elgin East	Center Line	Unknown Prehistoric	Ineligible (2007 THC determination)	N/A	LCRA, T-181 Maintenance Project, Kiker 2006, TAC Permit No. 4013.
Hill Cemetery (BP-C054)	Cemetery	Not reported	Bastrop	Utley	Center Line	Historic	Undetermined	Avoidance	No additional information reported on Atlas.
41BP818	Archaeological Site	Prehistoric lithic quarry on upper terrace of Colorado River with deposits form 0-90 cm below surface.	Bastrop	Utley	Center Line	Prehistoric	Ineligible (2007 and 2009 THC determinations)	No further work within TxDOT ROW recommended	PBS&J, Surveys and Impact Evaluations in TxDOT's Austin, Bryan, and Yoakum Districts, Ellis et al. 2009, TAC Permit No. 4239

Table 5.2. - continued: Previously Recorded Sites within or Adjacent to the Project Area

Resource Name or Trinomial	Resource Type	Resource Description	County	7.5 Topographic Quad	Proximity to/Overlap with APE	Temporal Affiliation	Eligibility Status	Recommendations	Comments
Perryville Cemetery (BP-C069)	Cemetery	Cemetery with 72 graves	Bastrop	Elgin West	Center Line	1864 to Present	Designated as Texas Historic Cemetery on 06/23/2011	N/A	Also known as the Moon Cemetery, Old Moon Cemetery, Moon Family Cemetery, Baptist Cemetery, and Hog Eye Cemetery
41LE299 (Turner-Doss-Clark Site)	Archaeological Site	Farmstead	Lee	Beaukiss	Corridor	Historic	Ineligible (2001 THC determination)	No further work recommended	Alcor, Three Oaks Mine, Turpin and Sundborg, TAC Permit No. 2188

Notice: Information on the location of archeological sites may not be disclosed to the general public and is protected by State and Federal Law

Results of the Cultural Resources Investigations

Of the 139.45 miles of proposed pipeline, approximately 24.42 miles was not surveyed based on previous investigations and extensive agricultural and land clearing disturbances in upland settings. Of the remaining 115.03 miles, approximately 13.23 miles is not available for survey access due to landowner restrictions or are newly adopted reroutes that have not been surveyed. Overall approximately 101.8 miles of the December 8th alignment was investigated via pedestrian survey with shovel testing, with backhoe trenching investigations in select areas (Appendix A). The investigations resulted in the recording of 52 new archaeological sites and seven isolated finds, detailed in Chapter 6. In addition, two previously recorded archaeological sites were revisited, and two cemeteries were documented.

SWCA's recent investigations determined that the majority of the project area is within a rural setting consisting of large, undeveloped parcels of land and agricultural fields with isolated single-family residences or farm/ranch complexes. Beginning in Burleson County, the alignment traverses across a mixture of heavily vegetated, undeveloped parcels; open pastureland; and some agricultural fields. Within Lee County, the alignment intersects a large lignite mine as it parallels FM 696. As the alignment continues southwest through Bastrop County southwest of Elgin, Texas, residential development increases, consisting of large-acre, single-family dwelling parcels and subdivisions. Large-scale agricultural fields are located within the floodplain of the Colorado River and Cedar Creek up to Caldwell County. Within Caldwell County and Guadalupe County, the alignment intersects primarily large-scale agricultural parcels and pasture land in various states of harvest. As the project area enters Comal County, the setting shifts from agricultural tracts to undeveloped, heavily vegetated uplands interspersed with residential parcels. In Bexar County, the alignment begins within a rural, undeveloped setting that is rapidly transitioning to residential and commercial development as it traverses west towards the western project terminus in northern San Antonio.

Results of Pedestrian Survey Investigations

SWCA excavated approximately 1,792 shovel tests during the investigations (Appendix B). The THC standards require 16 shovel tests per mile within a 100-foot corridor, or approximately 2,231 shovel tests for a project this size. The investigations deviated from the standards due to the level of existing disturbances within the project area and the previously surveyed portions of the alignment. Table 5.3 lists the total mileage within the individual counties, miles surveyed, number of shovel tests, and number of encountered cultural resources. Additionally, shovel tests and backhoe trenching occurred in select areas with the potential for deeply buried cultural deposits.

Fifty-nine cultural resources were identified and recorded during the Vista Ridge Project as of December 25, 2015. Of the 59 resources, seven were isolated finds that did not warrant formal site recording or require additional investigations. The remaining 52 cultural resources included 34 prehistoric sites, 13 historic sites, and five multi-component sites with prehistoric and historic materials. All archaeological sites are discussed in detail in Chapter 6. Of the 52 sites, 45 are recommended as not eligible for inclusion to the NRHP, or for SAL designation. The remaining seven sites are recommended as having undetermined eligibility and warrant additional investigations to determine their significance. The two previously recorded sites revisited during field investigations consists of one prehistoric lithic scatter, and one multiple component site with a historic-age cemetery. Only one of the revisited sites is recommended as not eligible for listing as a NRHP. Both documented cemeteries warrant avoidance strategies or additional investigations.

Results of Backhoe Trench Investigations

Prior to the survey investigations, SWCA identified seven stream channel crossings that had characteristics suggesting the potential for containing deeply buried Holocene-aged deposits. These characteristics varied for each of the drainages, but typically included position on the floodplain, previously documented buried soils (i.e., paleosols), and integrity. These identified drainages were selected for deeper mechanical investigation with backhoe trench excavations.

The stream crossings identified during desktop review of soils and settings from south to north included the Guadalupe River, San Marcos River, Colorado River, Wilbarger Creek, Pin Oak Branch, Middle Yegua Creek, and East Yegua Creek (Table 5.4). Subsequent to pedestrian investigations, the Pin Oak Branch and East Yegua Creek encountered very narrow floodplains with shallow terraces (<3 feet) and determined to not warrant mechanical investigations. Conversely, the pedestrian investigations determined that the Maha Creek crossing would also require backhoe trench investigations. However, investigations at this drainage encountered shallowly buried gravels and cobbles overlying indurated clays (see Table 5.4).

The soils and geology for the overall project are discussed elsewhere in the report. Soils specific to the more prominent drainages (i.e., Guadalupe, San Marcos, and Colorado Rivers) are discussed briefly here

Table 5.3. Survey Overview by County

County	Total Mileage	Desktop/ Windshield Review	Surveyed Mileage	No. of Sites	No. of Isolated Finds	No. of Shovel Tests	No. of BHTs.
Burleson	3.62	0	0.72	1	0	-	-
Lee	26.17	2.72	14.83	4	1	-	-
Bastrop	34.43	3.08	19.35	9	0	-	-
Caldwell	19.69	2.74	14.32	6	2	-	-
Guadalupe	32.24	12.04	16.77	2	1	-	-
Comal	11.57	0.51	10.49	11	1	-	-
Bexar	8.7	1.5	5.95	11	0	-	-
Totals	136.42	22.59	82.43	44	5	0	0

from south to north. The soils along the Guadalupe River banks, within the APE, are predominately the Sunev series, followed by Lewisville and Barbarosa series. The Sunev loam is a very deep, well-drained soil formed in loamy alluvium. The Sunev series is located on nearly level to moderately steep stream terraces or foot slopes of valleys and ridges. Within the Project area this soil is found on slopes ranging from 1 to 5 percent (Natural Resources Conservation Service [NRCS] 2015). The Lewisville silty clay is a very deep, moderately permeable soil formed in ancient loamy and clayey calcareous sediments. This silty clay is found in uplands with slopes from 0 to 3 percent within the Project area (NRCS 2015). The Barbarosa silty clay is a deep, well-drained soil formed in clayey sediments located on nearly level to gently sloping uplands. Slopes within the Project area range from 0 to 1 percent (NRCS 2015).

The soils along the San Marcos River are predominately the aforementioned Lewisville and Barbarosa series followed by Tinn, Bosque, Queeny series, and the Ferris-Heiden Complex. The Tinn clay consists of a very deep soil formed in calcareous clayey alluvium situated on floodplains of dissected plains that drain in the Blackland Prairies. Slopes within the Project area range from 0 to 2 percent (NRCS 2015). The Bosque loam consists of very deep, well-drained soils formed in loamy calcareous alluvial sediments. The Bosque series is located on nearly level floodplains with slopes ranging from 0 to 1 percent (NRCS 2015). The Queeny series gravelly loam is characterized as a very shallow soil on top of a petrocalcic horizon formed in loamy sediments over sand and gravel deposits. The Queeny series is found on uplands with slopes ranging from 1 to 5 percent within the Project area (NRCS 2015). The Ferris-Heiden Complex is composed of deep clay soils formed in clayey residuum weathered from calcareous mudstone. This complex is found on backslopes and side slopes of dissected plains. Slopes range from 5 to 20 percent within the Project area (NRCS 2015).

Finally, the soils along the Colorado River banks, are predominately the Bosque series, followed by Weswood, Shep, and Bastrop series. The Bosque loam consists of very deep, well-drained soils formed in loamy calcareous alluvial sediments. The Bosque series is located on nearly level floodplains with slopes ranging from 0 to 1 percent (NRCS 2015). The Weswood silt loam consists of very deep soils formed in calcareous loamy alluvium. Weswood soils are located on nearly level to moderately sloping floodplains with slopes less than 1 percent (NRCS 2015). Within the Project area the Weswood series is situated along both banks of the Colorado River. Shep loam is a very deep soil formed in calcareous, loamy, colluvial and alluvial foot slope sediments. This loam is found on gently sloping to strongly sloping uplands with slopes ranging from 3

Table 5.4. Backhoe Trench Areas Identified Within Project Area

BHT AREA	Drainage/ Crossing	Proposed Work	Excavations Completed	Cultural Resources Encountered
Area 1	Guadalupe River - right bank	4-5 trenches	Complete	41GU177
	Guadalupe River - left bank	4-5 trenches	Pending	Pending
Area 2	San Marcos River - right bank	3-4 trenches	Partially complete	Pending
	San Marcos River - left bank	3 trenches	Complete	None
Area 3	Colorado River - right bank	12-13 trenches	Complete	IFs CO2 and CO10
	Colorado River - left bank	10-13 trenches	Pending	Pending
Area 4	Wilbarger Creek - right bank	Pending trenches on 30310	Pending	Pending
	Wilbarger Creek - left bank	3-4 trenches	Pending	Pending
Area 5	Middle Yegua Creek	3 trenches	Pending	Pending
Area 6	East Yegua Creek - right bank	2 trenches	Pending	Pending
Area 7	Pin Oak Creek	None based on survey investigations	N/A	N/A
Area 8	Maha Creek - left bank	3 trenches	Complete	None

to 8 percent within the Project area (NRCS 2015). The Bastrop series is a fine sandy loam formed in loamy alluvium derived from Quaternary age sandstone and shale. This fine sandy loam is located on nearly level to moderately sloping stream terraces with slopes ranging from 1 to 3 percent within the Project area (NRCS 2015).

In October 2015, SWCA archaeologists conducted backhoe trenching excavations at four of the seven stream crossings (Guadalupe River, San Marcos River, Maha Creek, and Colorado River). Investigations at Maha Creek and San Marcos River are complete; however, investigations at the Guadalupe and Colorado River crossings are only partially complete due to land access restrictions and reroutes. The results of any additional mechanical excavations performed after December 25, 2015 will be reported in a subsequent interim report.

A total of 21 backhoe trenches were excavated within the above-mentioned crossing locations. Differing stratigraphy was encountered at each of backhoe trench investigation areas The predominance of these investigations (n=13) were placed along the broad Colorado River floodplain while three were excavated at the Guadalupe River, four were excavated along the San Marcos River and one was excavated at Maha Creek (Table 5.5). Column sampling was selectively conducted on several of these backhoe trenches. Specifically, this sampling was utilized when in proximity to a previously recorded site, when cultural materials were observed during the pedestrian survey, or when cultural materials were observed during profile inspection.

The trenches were typically 1.8 m deep, 7 m long, and 1.5 m wide. The backhoe trenches at each crossing contained 3 to 5 stratigraphic layers that were observed. In general, the backhoe trench profiles exhibited successive horizons of gradually lighter colored silt loam deposits that graded into clay loam or clay with clear-gradual lower boundaries. At the Colorado River, the horizons had a friable consistency and subangular blocky structure, which graded into a massive, structureless horizon with increasing calcium carbonate inclusions and an extremely firm consistency (see Table 5.5). In contrast, at the Guadalupe River, San Marcos River, and Maha Creek crossings, the horizons had a friable to firm consistency and subangular blocky structure, which graded into a fine, weak, structureless horizon with increasing limestone gravel and pebble inclusions and a friable to loose consistency.

Broadly defined, the deposits observed during the backhoe trenching along the project corridor varied from south to north. The drainages at the southern end including the Guadalupe and San Marcos Rivers had broad floodplains with alluvial terraces composed of deep, calcareous clay loams and clays. These deposits appeared to have more evident input from the limestone dominated uplands of the Edwards Plateau that is positioned upstream from the project area. North of the San Marcos River as the project area shifts northeastward away from the Edwards Plateau, the deposits become more silty with more evident calcium carbonate development. Accordingly, the deposits at the southern end appear to contain younger, more recent soil development while the deposits further north are older and exhibit more soil development.

Overall, three of the trenches (G2, CO2, and CO10) encountered cultural materials. BHT G2, located on the right bank of the Guadalupe River, was excavated within the boundary of newly recorded site 41GU177. Lithic debitage, burned rock, and a blade and were initially observed in the trench wall profiles. Artifacts were concentrated at roughly 0–65 cmbs and 90–180 cmbs. A column sample was excavated off the north wall, revealing a possible burned rock feature as well as additional lithic debitage, two bone fragments, and one mussel shell fragment. A detailed summary of the backhoe trench results near site 41GU177 are presented in Chapter 6.

BHT CO2 and CO10 were excavated on the right bank of the Colorado River. In CO2, a total of five chert flakes and one core fragment were encountered in Strat III from roughly 60–100 cmbs (Figure 5.2; see Table 5.5). Three backhoe trenches (CO1, CO3, and CO5) were excavated adjacent to CO2 to determine the presence of cultural materials. Due to the absence of cultural materials and other factors (e.g., plow zone and shrink-swell soils) these materials were considered isolated (i.e., IFs CO2 and CO10).

Roughly 1.1 km southwest of CO2 another backhoe trench on the right bank of the Colorado River contained cultural materials. Specifically, one projectile point was encountered at 40 cmbs in Strat II of BHT CO10 (Figure 5.3). The projectile point consists of a proximal-midsection of brown chert and is morphologically similar to a Transitional Archaic Edgewood point (Turner et al. 2011). Due to the absence of other cultural materials and the position of the artifact at the

base of the plow zone, this artifact was interpreted to be isolated and not part of a larger archaeological site.

No additional cultural materials or cultural features were observed within any of the other 11 trenches excavated on the right bank of the Colorado River. As such, these artifacts are considered isolated finds and were not designated as an archaeological site.

Investigations of Rerouted Alignments

As of June 2015, multiple rerouted alignments were adopted for the Vista Ridge Project area. SWCA investigations included survey investigations of multiple rerouted alignments that resulted in the documentation of three new archaeological sites (41BP917, 41BP919, and 41CM395), which are discussed in detail in Chapter 6.

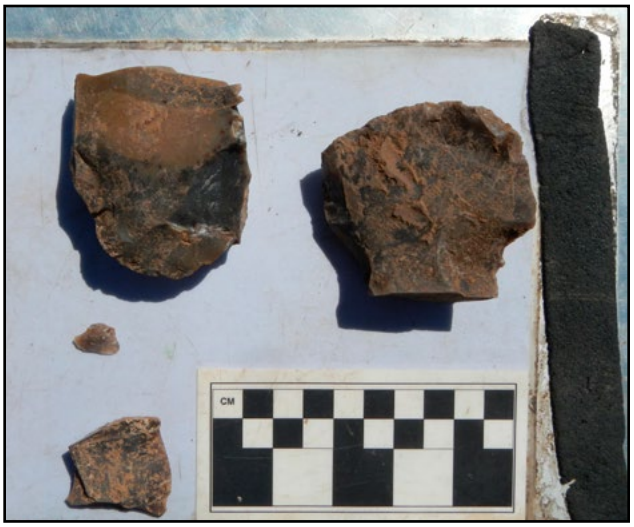

Figure 5.2. BHT CO2 artifacts

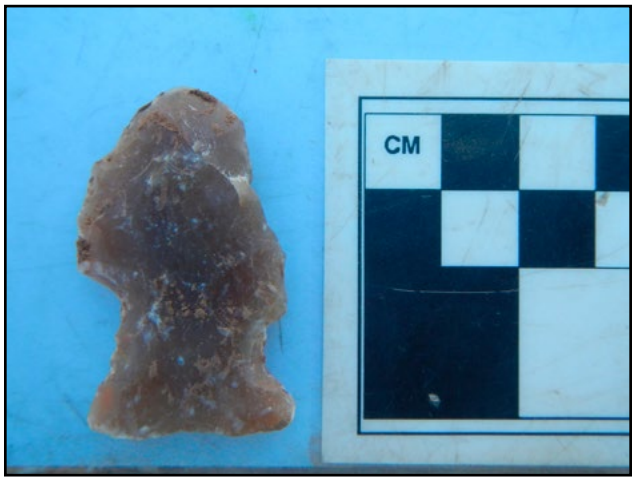

Figure 5.3. Edgewood BHT CO10.

Table 5.5. Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
G1	41GU177	0–16	10YR5/3	brown	silty loam	friable to firm, subangular blocky, fine – medium, weak	roots 5, rootlets 5%, gravel (limestone) 5%, rare snail shells	clear–irregular	No cultural materials encountered.
		16–118	10YR6/4	light yellowish brown	silty loam	friable, crumby weak, subangular blocky crumb, fine, weak to moderate	25% gravel (limestone), 1% roots, 1% rootlets	gradual–smooth	No cultural materials encountered.
		118–155	10YR7/4	very pale brown	silty loam	friable, platy, fine, weak to moderate	20% gravel (limestone), 1% rootlets	unobserved	No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
G2	41GU177	0–35	10YR3/2	very dark grayish brown	silty loam	friable, subangular blocky, fine, weak to moderate	1–5% snail shell frag & whole, 25% roots & rootlets	clear–irregular	Large flake seen on profile and surface, extends deeper on north wall, burned rock exposed.
		35–62	10YR4/3	brown	silty loam	subangular blocky, fine, weak	2% CaCO3 filaments, 5% snail shell whole and frag, 15% roots and rootlets	clear–smooth	Flakes in profile, charcoal piece, >1 cm diameter burned rock.
		62–75	10YR5/3	brown	silty loam	loose to friable, prismatic, fine, weak	3% snail shell, 3% rootlets, 1% Roots, rare worm casts	abrupt–smooth	fairly thin strat, no cultural material exposed in profile, possible flood deposit.
		75–88	10YR4/2	dark grayish brown	silty loam	loose to friable, prismatic, fine, weak	5% snail shell & frag, 5% root and rootlets, 2% CaCO3	abrupt–smooth	Fairly thin strat, no cultural material exposed in profile.
		88–180	10YR4/2	dark grayish brown	silty loam	friable, subangular blocky, fine, weak to moderate	3%, snail shell whole & frag, rare rootlets	unobserved	Several large flakes, tertiary flakes, and blade.
G3		0–26	10YR5/3	brown	silty clay loam	friable to firm, subangular and blocky, medium, moderate	5% roots, 5% rootlets, rare gravels, rare insect casts, 10% CaCo3 filament	clear–irregular	No cultural materials encountered.
		26–149	10YR6/4	light yellowish brown	silty loam	friable, subangular – crumb, fine, weak to moderate	5% CaCo3 filaments – decrease with depth starting at 70 cmbs, 1% roots, 1% rootlets, 25% limestone gravels, rare insect casts	gradual–smooth	No cultural materials encountered.
		149–170+	10YR7/4	very pale brown	silty loam	friable, platy, fine, weak to moderate	>1% rootlets, 20% limestone gravels, 1% CaCO3	unobserved	No cultural materials encountered.
S1		0–28	10YR3/2	very dark grayish brown	silty clay loam	friable to extra firm, subangular–blocky, fine to medium, moderate	15% roots and rootlets, 1% limestone gravels 2 cm diameter	gradual–irregular	Very dry matrix. No cultural materials encountered.
		28–45	10YR3/3	dark brown	silty clay loam	friable to firm, subangular—blocky, fine to medium, moderate	rare rootlets, 5–10% gravels 5–10 cm diameter (limestone),	abrupt–irregular	No cultural materials encountered. Less dry, more crumbly than strat 1.
		45–55	10YR3/3	dark brown	gravel	friable, structureless, fine, weak	50% gravels of varying sizes, bedrock	unobserved	Mostly gravels on top of bedrock, little matrix between rock.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
S2		0–23	10YR2/2	very dark brown	silty clay loam	firm, subangular–blocky, fine to medium, moderate	15% roots and rootlets, 1% gravels 2 cm diameter (limestone)	gradual–irregular	No cultural materials encountered.
		23–33	10YR2/2	very dark brown	silty clay loam	friable, structureless, fine, weak	50% gravels of varying sizes, 40% pebbles, bedrock	abrupt–irregular	No cultural materials encountered.
		33–36	N/A	N/A	N/A	N/A	N/A	N/A	bedrock
S3		0–30	10YR3/2	very dark grayish brown	silty clay loam	friable, subangular–blocky, fine to medium, moderate	5% rootlets, rare rabdotus, coarse sand grains (10YR5/3–6/3)	gradual–irregular	No cultural materials encountered.
		30–65	10YR4/3	brown	silty clay loam	friable, subangular–blocky, fine to medium, moderate, fine, faint	common coarse grain sands (10YR6/3), 15% snail shell frags, 15% worm casts, rare CaCO3	gradual–irregular	No cultural materials encountered.
		65–96	10YR5/3	brown	silty clay loam	friable, subangular–blocky, fine, moderate, fine, faint	20–30% CaCO3, common 10YR6/3 mottles, 15% snail shell frags, 15% worm casts, rare roots; CaCo3 mostly filaments – very rare nodules	gradual–smooth	No cultural materials encountered.
		96–147	10YR6/4	light yellowish brown	silty clay loam	friable, subangular–blocky, fine, weak, fine, faint	30–40% CaCO3 filaments, snail shell and fragments, insect casts & worm casts, rare 10YR4/3 mottles	unobserved	Becoming more firm with depth. Mottles tracking down from Strat II. Gravel lens at 7 ft. No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
S4		0–10	10YR3/2	very dark grayish brown	silty clay loam	friable, subangular–blocky, fine to medium, moderate	Vertical cracking, 1% CaCO3 filaments, rare rabdotus fragments	gradual–irregular	No cultural materials encountered.
		10–45	10YR4/3	brown	silty clay loam	friable, subangular–blocky, fine to medium, moderate, fine, faint	Worm casts, 1% CaCO3 filaments, rare rootlets	gradual–irregular	No cultural materials encountered.
		45–110	10YR5/3	brown	silty clay loam	friable, subangular–blocky, fine, moderate, fine, faint	1% CaCO3 filaments and nodules, rare rootlets	gradual–smooth	No cultural materials encountered.
		110–120	10YR5/8	yellowish brown	clay loam	loose, structureless, fine, weak	75% angular limestone gravels (approx. 20% pebbles)	unobserved	On top of larger limestone gravels and cobbles. No cultural materials encountered.
CO1		0–21	10YR5/4	yellowish brown	silt loam	friable to firm, subangular blocky, medium, moderate	roots, rootlets, 2% snail shell fragments, 5% insect burrows	irregular–smooth	In root plow zone. No cultural materials encountered.
		21–41	10YR4/2	dark grayish brown	silt loam	friable to firm, angular to subangular, fine to medium, moderate	10% rootlets, 5% vertical insect burrows, 5% worm burrows	gradual–smooth	No cultural materials encountered.
		41–137	10YR4/2	dark grayish brown	silt loam	friable, prismatic to angular, medium to coarse, evident	35% CaCO3 filaments (increases with depth)	clear–smooth	No cultural materials encountered.
		137–170+	10YR5/6	yellowish brown	silty clay loam	friable to firm, angular, medium, moderate	rare rootlets, 20% CaCO3 filaments, 20% pinhole burrows, 2% CaCO3 nodules	unobserved	No cultural materials encountered.
CO2	IF CO2	0–25	10YR5/4	yellowish brown	silt loam	friable to firm, subangular blocky, medium, moderate	roots, rootlets, 2% snail shell fragments, 5% insect burrows	irregular–smooth	No cultural materials encountered.
		25–62	10YR4/2	dark grayish brown	silt loam	friable to firm, angular to subangular, fine to medium, moderate	10% rootlets, 5% vertical insect burrows, 5% worm burrows	gradual–smooth	No cultural materials encountered.
		62–138	10YR4/2	dark grayish brown	silt loam	friable, prismatic to angular, medium to coarse, evident	35% CaCO3 filaments (increases with depth)	clear–smooth	60 cmbs: flake; 70 cmbs: 2 flakes; 78 cmbs: flake; 74–80 cmbs: core fragment; 97 cmbs: flake
		138–150	10YR5/6	yellowish brown	silty clay loam	friable to firm, angular, medium, moderate	rare rootlets, 20% CaCO3 filaments, 20% pinhole burrows, 2% CaCO3 nodules	unobserved	No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
CO3		0–21	10YR5/4	yellowish brown	silt loam	friable to firm, subangular blocky, medium, moderate	roots, rootlets, 2% snail shell fragments, 5% insect burrows	irregular–smooth	No cultural materials encountered.
		21–50	10YR4/2	dark grayish brown	silt loam	friable to firm, angular to subangular, fine to medium, moderate	10% rootlets, 5% vertical insect burrows, 5% worm burrows	gradual–smooth	No cultural materials encountered.
		50–129	10YR4/2	dark grayish brown	silt loam	friable, prismatic to angular, medium to coarse, evident	35% CaCO3 filaments (increases with depth), 2% snail shell	clear–smooth	No cultural materials encountered.
		129–160+	10YR5/6	yellowish brown	silty clay loam	friable to firm, angular, medium, moderate	rare rootlets, 20% CaCO3 filaments, 20% pinhole burrows, 2% CaCO3 nodules	unobserved	No cultural materials encountered.
CO4		0–20	10YR5/4	yellowish brown	silt loam	friable to firm, subangular blocky, medium, moderate	thick roots, rootlets, 2% snail shell fragments, 5% insect burrows, vertical roots	irregular–smooth	No cultural materials encountered.
		20–72	10YR4/2	dark grayish brown	silt loam	friable to firm, angular to subangular, fine to medium, moderate	10% rootlets, 5% vertical insect burrows, 5% worm burrows, vertical roots	gradual–smooth	No cultural materials encountered.
		72–113	10YR4/2	dark grayish brown	silt loam	friable, prismatic to angular, medium to coarse, evident	35% CaCO3 filaments (increases with depth), 5% snail shell, vertical roots	clear–smooth	No cultural materials encountered.
		113–155+	10YR5/6	yellowish brown	silty clay loam	friable to firm, angular, medium, moderate	rare rootlets, 20% CaCO3 filaments, 20% pinhole burrows, 2% CaCO3 nodules, vertical roots	unobserved	No cultural materials encountered.
CO5		0–20	10YR5/4	yellowish brown	silt loam	friable to firm, subangular blocky, medium, moderate	thick roots, rootlets, 2% snail shell fragments, 5% insect burrows, vertical roots	irregular–smooth	No cultural materials encountered.
		20–47	10YR4/2	dark yellowish brown	silt loam	friable to firm, angular to subangular, fine to medium, moderate	10% rootlets, 5% vertical insect burrows, 5% worm burrows, vertical roots	gradual–smooth	No cultural materials encountered.
		47–109	10YR4/2	dark grayish brown	silt loam	friable, prismatic to angular, medium to coarse, evident	35% CaCO3 filaments (increases with depth), 5% snail shell, vertical roots	clear–smooth	54cmbs: mussel shell
		109–145+	10YR5/6	yellowish brown	silty clay loam	friable to firm, angular, medium, moderate	rare rootlets, 20% CaCO3 filaments, 20% pinhole burrows, 2% CaCO3 nodules, vertical roots, 5% rabdotus	unobserved	No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
CO6		0–35	10YR4/3	brown	silt loam	friable, subangular–blocky, medium, moderate	10% roots and rootlets	clear–irregular	No cultural materials encountered.
		35–57	10YR4/2	dark grayish brown	silt loam	friable, angular to subangular, fine to medium, moderate	5% insect burrows	gradual–smooth	No cultural materials encountered.
		57–170	7.5YR5/4	brown	silt loam	angular to prismatic, medium, moderate	30% CaCO3 filaments – increase with depth	unobserved	No cultural materials encountered.
CO7		0–21	10YR4/3	brown	silt loam	friable, subangular–blocky, medium, moderate	5% roots and rootlets, insect burrows	clear–irregular	No cultural materials encountered.
		21–61	10YR4/2	dark grayish brown	silt loam	friable, angular to subangular, fine to medium, moderate	infilled root casts, 5% snail fragments	gradual–smooth	No cultural materials encountered.
		61–180+	7.5YR5/4	brown	silt loam	angular to prismatic, medium, moderate	35% CaCO3 filaments – increase with depth	unobserved	No cultural materials encountered.
CO8		0–22	10YR4/3	brown	silt loam	friable, subangular–blocky, medium, moderate	10% snail shell fragments	clear–irregular	No cultural materials encountered.
		22–58	10YR4/2	dark grayish brown	silt loam	friable, angular to subangular, fine to medium, moderate	infilled burrow, earthworm burrows and feces, 5% snail shell fragments	gradual–smooth	No cultural materials encountered.
		58–180+	7.5YR5/4	brown	silt loam	angular to prismatic, medium, moderate	35% CaCO3 filaments – increase with depth; few whole rabdotus shells	unobserved	No cultural materials encountered.
CO9		0–23	10YR4/3	brown	silt loam	friable, subangular–blocky, medium, moderate	large roots, insect burrows, ash, charcoal (recent)	clear–irregular	No cultural materials encountered.
		23–68	10YR4/2	dark grayish brown	silt loam	friable, angular to subangular, fine to medium, moderate	infilled burrow, earthworm burrows and feces, 5% snail shell fragments	gradual–diffuse	No cultural materials encountered.
		68–165+	7.5YR5/4	brown	silt loam	angular to prismatic, medium, moderate	20% CaCO3 filaments – increase with depth; few whole rabdotus shells	unobserved	No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
CO10	IF CO10	0–24	10YR4/3	brown	silt loam	friable to firm, subangular—blocky, medium, moderate	roots, rootlets, insect burrows, 5% fine snail shell fragments	clear–irregular	Root plow zone. No cultural materials encountered.
		24–71	10YR4/4	dark yellowish brown	silty clay loam	friable, angular–blocky to subangular, medium, weak to moderate	10% rootlets, 10% insect burrows, 10% snail shell, 3% CaCO3	clear–smooth	40 cmbs: projectile point
		71–150+	10YR5/4	yellowish brown	clay	firm, massive	20% CaCO3 nodules	unobserved	No cultural materials encountered.
CO11		0–23	10YR4/3	brown	silt loam	friable to firm, subangular—blocky, medium, moderate	20% large roots, rootlets, insect burrows, 5% fine snail shell fragments	clear–irregular	No cultural materials encountered.
		23–81	10YR4/4	dark yellowish brown	silty clay loam	friable, angular–blocky to subangular, medium, weak to moderate	10% rootlets, 10% insect burrows, 10% snail shell, 3% CaCO3	clear–smooth	No cultural materials encountered.
		81–135+	10YR5/4	yellowish brown	clay	firm, massive	20% CaCO3 nodules	unobserved	No cultural materials encountered.
CO12		0–15	10YR4/3	brown	silt loam	friable to firm, subangular—blocky, medium, moderate	20% large roots, rootlets, insect burrows	clear–irregular	No cultural materials encountered.
		15–59	10YR4/4	dark yellowish brown	silty clay loam	friable, angular–blocky to subangular, medium, weak to moderate	10% rootlets, 10% insect burrows, 3% CaCO3	clear–smooth	No cultural materials encountered.
		59–135+	10YR5/6	yellowish brown	sandy clay	firm, massive	20% CaCO3 filaments, 10% subrounded gravels and pebbles	unobserved	No cultural materials encountered.
CO13		0–21	10YR4/2	dark grayish brown	clay loam	friable to firm, subangular–blocky, medium, strong	20% large roots, rootlets, insect burrows	clear–irregular	No cultural materials encountered.
		21–49	10YR3/2	very dark grayish brown	clay loam	friable to firm, subangular–blocky, medium, moderate	15% insect and worm burrows, 20–30% roots and rootlets, rare snail shell fragments	gradual–smooth	No cultural materials encountered.
		49–160+	10YR3/2	very dark grayish brown	clay	extra firm (compact), prismatic to massive, coarse, strong	5% rootlets, prominent snail shell, vertical cracks, 5% CaCO3 nodules	unobserved	No cultural materials encountered.

Table 5.5. - continued: Backhoe Trench Results

Trench	Site	Depth (cmbs)	Munsell*	Soil Color	Soil Texture Description	Soil Consistency and Structure	Inclusions	Lower Boundary	Comments
MAHA1		0–21	10YR4/2	dark grayish brown	silty clay loam	friable to firm, subangular–blocky, medium, moderate	10% roots and rootlets, 5% subrounded gravels	clear–irregular	
		21–29	10YR3/3	dark brown	silty clay loam	friable to firm, subangular–blocky, medium, moderate	5% rootlets, 20% subrounded gravels and pebbles	gradual–irregular	Two relic stream channels bisect this strat. Channel matrix is 10YR3/2 clay loam, 30–50% gravels and pebbles, with abrupt lower boundary. No cultural materials encountered.
		29–47	10YR4/6	dark yellowish brown	clay loam	extra firm, subangular–blocky to prismatic, medium, moderate	30% gravels and pebbles	gradual–smooth	Two relic stream channels bisect this strat. Channel matrix is 10YR3/2 clay loam, 30–50% gravels and pebbles, with abrupt lower boundary. No cultural materials encountered.
		47–62	10YR3/6	dark yellowish brown	clay	extra firm, prismatic, coarse, moderate	30% gravels and pebbles	abrupt–smooth	No cultural materials encountered.
		62–80+	5Y5/2	olive gray	clay	structureless	50% subrounded gravels and pebbles	unobserved	No cultural materials encountered.

*all colors recorded dry unless otherwise noted

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Chapter 6

Results: Site Descriptions

Rhiana D. Ward, Katie A. Sloan, Stephanie Mueller and Bruce Darnell

Introduction

Beginning June 2015 and continuing through December 2015, SWCA conducted an intensive cultural resources survey of all accessible portions of the 139.45-mile project area. The results reported in this chapter are organized by county, beginning in Burleson County and concluding in Bexar County in northern San Antonio, Texas.

Fifty-nine newly recorded cultural resources were identified during the Vista Ridge Project as of December 25, 2015. Of the 64 resources, seven were isolated finds that did not warrant formal site recording or require additional investigations. The remaining 52 cultural resources included 34 prehistoric sites, 13 historic sites, and five multi-component sites with prehistoric and historic materials (Table 6.1). In addition to newly recorded resources, two previously recorded archaeological sites were revisited, and two cemeteries were documented.

Burleson County

One cultural resource site was delineated in Burleson County (Figure 6.1). Site 41BU115 is a historic sites

Table 6.1. Cultural Resources Recorded During the VRRSP Investigations

County	Site No.	USGS 7.5' Quadrangle	Parcel(s)	Site Type	Eligibility Recommendation	Additional Work Recommendations
Burleson	41BU115	Deanville (3096-234)	10056	Historic Building	Not Eligible	No avoidance or further work recommended.
Lee	41LE332	Beaukiss (3097-143)	20285 and 20290	Prehistoric Lithic Scatter	Eligibility Unknown	Avoidance or significance testing recommended.
	41LE333	Beaukiss (3097-143)	20290	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41LE334	Tanglewood (3097-143)	20010	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41LE335	Tanglewood (3097-143)	20090	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended.
	41LE336	Tanglewood (3097-143)	20025	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
Bastrop	41BP915	Lytton Springs (3097-211)	30425	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BP916	Lytton Springs (3097-211)	30510	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BP917	Utley (3097-123)	30340	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended.
	41BP918	Lytton Springs (3097-211)	30405	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BP919	Elgin East (3097-131)	30061	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BP920	Elgin East (3097-131)	30280	Multiple Component Site	Eligibility Unknown	Avoidance or significance testing recommended.
	41BP921	Elgin East (3097-131)	30050	Historic artifact Scatter	Not Eligible	No avoidance or further survey recommended.
	41BP922	Elgin West (3097-132)	30280	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BP923	Elgin East (3097-131)	30060	Multiple Component Site	Not Eligible	No avoidance or further survey recommended.

Table 6.1. - continued

County	Site No.	USGS 7.5' Quadrangle	Parcel(s)	Site Type	Eligibility Recommendation	Additional Work Recommendations
Caldwell	41CW162	Uhland (2997-334)	40260	Historic Building	Not Eligible	No avoidance or further work recommended.
	41CW163	Uhland (2997-334)	40310 and 40315	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41CW164	Uhland (2997-334)	40240	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41CW165	Lockhart North (2997-343)	40235	Historic artifact Scatter	Not Eligible	No avoidance or further survey recommended.
	41CW166	Lockhart North (2997-343)	40210	Multiple Component Site	Not Eligible	No avoidance or further survey recommended.
	41CW167	Creedmoor (3097-212)	40095 and 40100	Historic artifact Scatter	Not Eligible	No avoidance or further survey recommended.
	41CW168	Lockhart North (2997-343)	40206	Multiple Component Site	Not Eligible	No avoidance or further survey recommended.
	41CW169	Uhland (2997-334)	40305	Historic artifact Scatter	Not Eligible	No avoidance or further survey recommended.
Guadalupe	41GU176	McQueeney (2998-411)	50425	Historic Well	Not Eligible	No avoidance or further survey recommended but.
	41GU177	New Braunfels West (2998-413)	50360	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended.
	41GU178	New Braunfels West (2998-413)	50540	Historic artifact Scatter	Not Eligible	No avoidance or further survey recommended.
	41GU179	San Marcos South (2997-332)	50020	Historic Well	Not Eligible	No avoidance or further survey recommended.
	41GU180	McQueeney (2998-411)	50400	Historic House/ Farm Complex	Eligibility Unknown	Avoidance or significance testing recommended, as well as archival research
	41GU181	New Braunfels West (2998-413)	50320	Historic House/ Farm Complex	Not Eligible	No avoidance or further survey recommended.
Comal	41CM391	Bat Cave (2998-424)	60210	Historic Limestone Rock Wall	Not Eligible	No avoidance or further survey recommended.
	41CM392	Bat Cave (2998-424)	60190	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41CM393	Bat Cave (2998-424)	60190	Historic Limestone Rock Wall	Not Eligible	No avoidance or further survey recommended.
	41CM394	New Braunfels West (2998-413)	60125, 60120, 60115, 60110, and 60105	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41CM395	Bat Cave (2998-424)	60160	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended.
	41CM396	Bat Cave (2998-424)	60145	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41CM397	Bat Cave (2998-424)	60140	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41CM398	Bat Cave (2998-424)	60130	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41CM399	New Braunfels West (2998-413)	60045 and 60055	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41CM400	Bat Cave (2998-424)	60135 and 60130	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41CM401	New Braunfels West (2998-413)	60105	Multiple Component Site	Not Eligible	No avoidance or further survey recommended.
	41CM404	Bat Cave (2998-424)	60160	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.

Table 6.1. - continued

County	Site No.	USGS 7.5' Quadrangle	Parcel(s)	Site Type	Eligibility Recommendation	Additional Work Recommendations
Bexar	41BX2096	Bulverde (2998-423)	70120	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BX2097	Bulverde (2998-423)	70055	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41BX2098	Bulverde (2998-423)	70055	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41BX2099	Bulverde (2998-423)	70055	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41BX2100	Bulverde (2998-423)	70055	Prehistoric Lithic Procurement	Not Eligible	No avoidance or further work recommended.
	41BX2101	Bulverde (2998-423)	70222	Multiple Component Site	Eligibility Unknown	Avoidance or significance testing recommended, as well as archival research
	41BX2102	Bulverde (2998-423)	70120	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BX2103	Bat Cave (2998-424)	70001	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BX2104	Bat Cave (2998-424)	70001	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BX2105	Bat Cave (2998-424)	70015	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BX2106	Bat Cave (2998-424)	70010	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.

and is not recommended eligible for listing as a NRHP property or as an SAL.

41BU115

Site 41BU115 is a historic building in western Burleson County. The site is on a generally level upland formation surrounded by a moderately dense, mixed hardwood forest, short grasses, shrubs, and cacti (Figure 6.2). Ground surface visibility ranges from 20 to 50 percent. An unnamed tributary of East Yegua Creek is the nearest natural water source, situated 540 m to the northwest. Soils on site consist of reddish yellow brown to strong brown sandy loam. Soil deposits ranged from 10 to 15 cm deep and terminated at clay subsoil.

Site 41BU115 measures 20 m east to west by 15 m north to south and consists of an existing building with minimal subsurface deposits (Figure 6.3). Six shovel tests (MN289–MN291 and MCC06–MCC08) were excavated, only one of which (MCC08) was positive for cultural materials (Table 6.2). Subsurface materials extended to a maximum depth of 10 cm below ground surface (cmbs) and consisted of one clear glass bottle fragment. Site boundaries were determined by shovel testing, ground surface inspection, and project area boundaries.

The existing building is constructed of vertical wooden slats with one interior room. The exterior of the building is adorned with one door on the northeast elevation, and one window each on the northeastern and southwestern elevations. One metal stovepipe for a metal heating stove was also documented on the southeastern elevation of the building (Figure 6.4). Overall, the building is in good condition and still habitable, indicated by modern beds and miscellaneous items observed within the interior of the building. The building is likely utilized for hunting/recreation activities.

Site 41BU115 is located on privately owned land used for cattle ranching and hunting. Vegetation clearing and land modifications for stock tanks and erosion control were observed in the form of earthen berms and brush piles throughout the site area. Additional disturbances include a two-track road that parallels the southern boundary of the site (Figure 6.5)

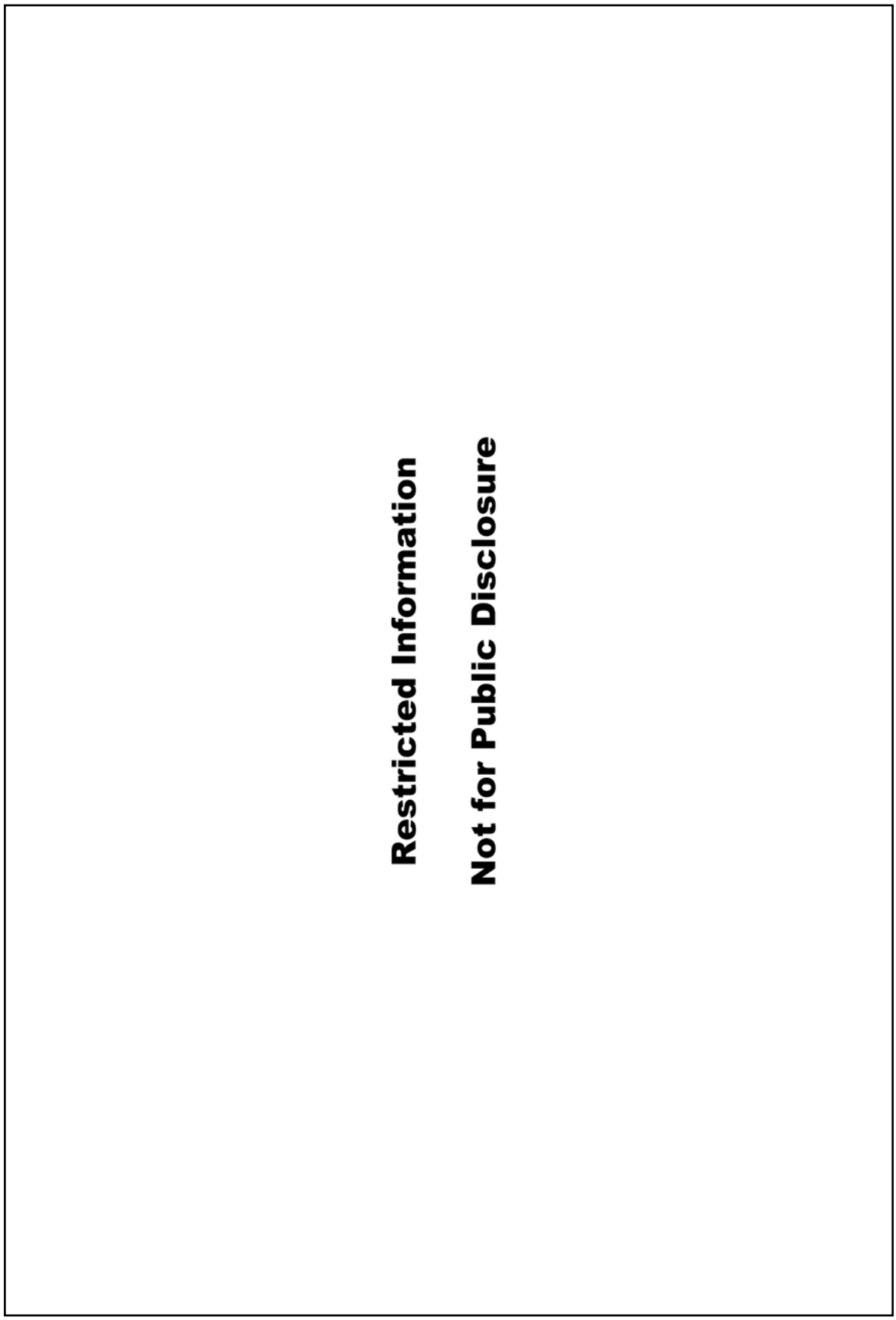

Figure 6.1. Burleson County map.

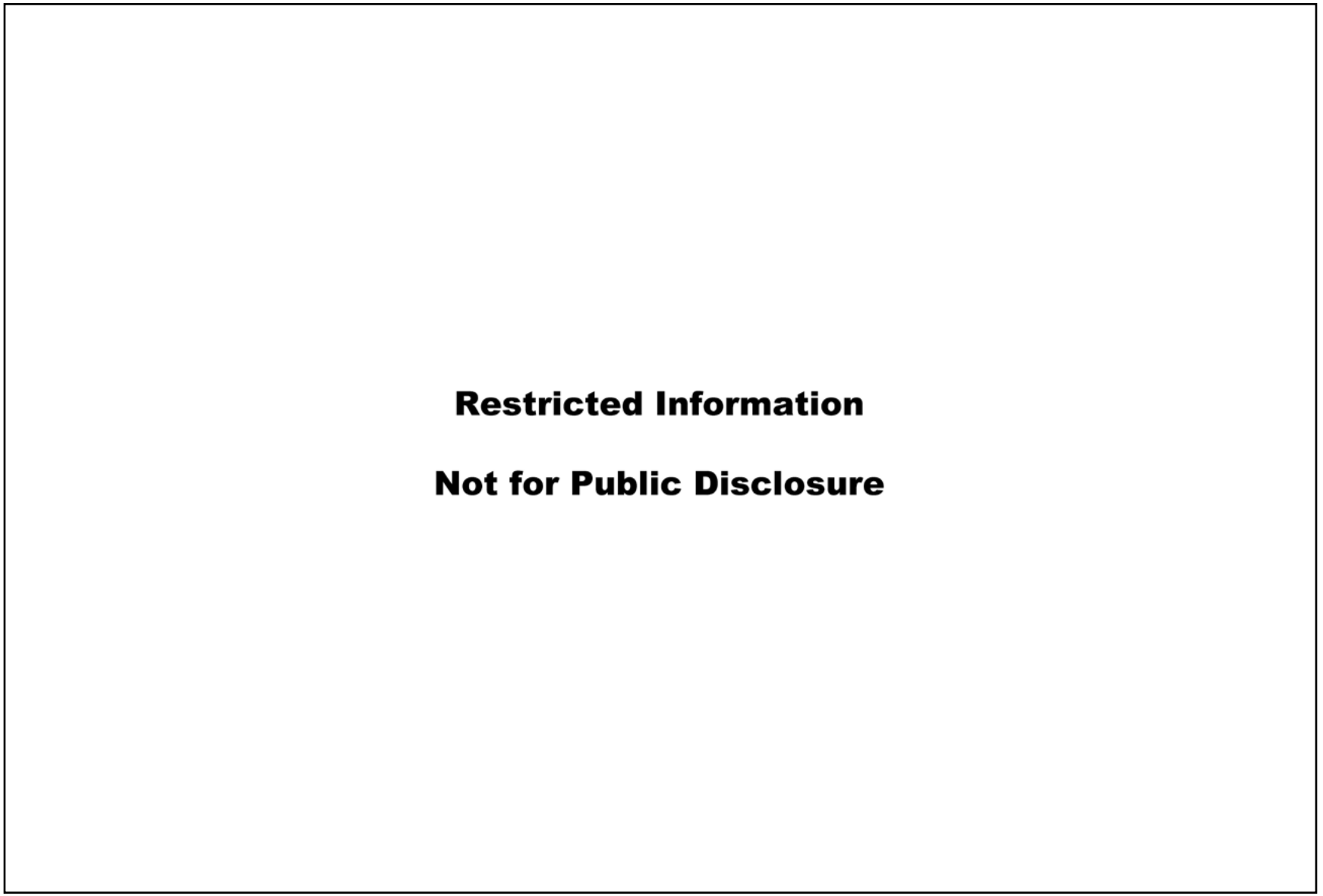

Figure 6.2. Map of 41BU115.

Table 6.2. Shovel Test Data for 41BU115

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MCC06	0-10	7.5YR6/8	Reddish yellow	Clay	10-20% Cobbles, Gravels, and Pebbles	Negative	-	Terminated at basal clay.
MCC07	0-10	7.5YR6/8	Reddish yellow	Clay	10-20% Cobbles, Gravels, and Pebbles	Negative	-	Terminated at basal clay.
MCC08	0-15	7.5YR5/8	Strong brown	Sandy Loam	10-20% Cobbles, Gravels, and Pebbles	Positive	1 clear glass bottle	Terminated at basal clay.
MN289	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	N/A	N/A	Terminated at basal clay.
MN290	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	N/A	N/A	Terminated at basal clay.
MN291	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	N/A	N/A	Terminated at basal clay.

Figure 6.3. Overview of buildings on 41BU115, northeast elevation facing southwest.

Figure 6.4. Overview of buildings on 41BU115, southeastern elevation, facing northwest.

Archival Research

A review of the TxDOT historic overlay found that one historic-age building is depicted on a 1960 USGS map of Deanville, Texas, within the area of the existing structure. The 1960 map illustrates one outbuilding within the site boundary, and one outbuilding and one residential building 160 m southeast of the site boundary. No other historic maps illustrate any buildings or structures within or adjacent to the site boundary.

Archival research at the Burleson County Clerk's office was conducted for the land parcel associated with site 41BU115. According to deed records, the land was owned by Gus, Will, and Fritz Hahn from 1947 to 1978, when the building at site 41BU115 was likely constructed. A chain of title from 1947 to present is detailed in Table 6.3.

Figure 6.5. Example of two-track disturbance south of 41BU115 site boundary, facing southwest.

41BU115 Summary

It is the opinion of SWCA that site 41BU115 is not eligible for inclusion on the NRHP under Criteria A or B. As such, SWCA evaluated the site for eligibility under Criterion C, which considers a building's distinctive characteristics to represent a type, periods, or method of construction, and under Criterion D, which considers its ability to yield information important in prehistory or history.

Site 41BU115 is a mid-twentieth-century historic building in good condition, but lacks outstanding design, history, or integrity. Additionally, the site lacks a substantial subsurface deposit and artifact assemblage. Due to its lack of integrity and generally low research value, 41BU115 is not recommended eligible for listing

Table 6.3. Chain of Title for Site 41BU115

Grantee	Grantor	Date	Record No.	Comments
Alph Perry, Sr. and Alph E. Perry (Current Landowners)	Eugene O. Jarman, Trustee for Clark J. Bradley and wife, Virginia Belle Bradley	December 15, 1992	Burleson County Deed Records Vol. 441, Page 612-614, Doc. No. 416-Release of Lien	106.5 acres out of the Horatio Griffith Survey, Abstract No. 138.
Alph Perry, Sr. and Alph E. Perry	Clark J. Bradley Sr. and Wife Virginia Belle Bradley, and Eugene O. Jarman, Trustee	November 15, 1978	Travis County Deed Records Vol. 251, Page 233-236-Warranty Deed with Vendor's Lien	Tract 3 description
Clark J. Bradley et ux Virginia B. Bradley	Fritz Hahn et ux Erna Hahn	November 13, 1978	Burleson County Deed Records Vol. 251, Page 229-230-Warranty Deed	
Gus Hahn, Will Hahn, and Fritz Hahn	Annie Woythe and husband, Paul Woythe, Gertrude Hannes and husband, Willie Hannes, Albert Hahn, Alfred Hahn, Elizabeth Spitzenberger and husband, George Spitenberger, Ella Parliament, and Arthur Hahn	September 15, 1947	Lee County, Deed, Vol. 99, Page 452-454	Tract 3 description

in the NRHP. As per the ACT, because the structure is not recommend eligible for the NRHP, SAL designation is not possible and no further work or avoidance strategy is recommended for the site within the project area.

Lee County

Five cultural resource sites and one isolated find were delineated in Lee County (Figure 6.6). The sites consisted of four prehistoric lithic scatters (41LE332–334 and 41LE336) and one prehistoric campsite (41LE335). The isolated find is a single projectile point not recorded as an archaeological site. Of the five recorded cultural resource sites, one is recommended for avoidance or further testing (41LE332), and the remaining four are recommended as not eligible for listing in the NRHP or SAL designation with no further work warranted.

41LE332

Site 41LE332 is a prehistoric lithic scatter in northwestern Lee County. The site is on an upland slope overlooking the confluence of Pin Oak Branch and Middle Yegua Creek (Figure 6.7). Vegetation on site consists of moderately dense oak trees with a light to moderate grass and shrub undergrowth (Figure 6.8). Ground surface visibility ranges from 35 to 100 percent. Middle Yegua Creek is the nearest natural water source, situated 400 m to the northeast. Soils of the site range from gray, grayish brown, and yellowish brown sands, sandy loams, and sandy clays with 1 to 20 percent gravel and large rock fragment inclusions. Soil deposits range from 10 to beyond 100 cmbs.

Site 41LE332 measures 240 m southwest to northeast by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project boundary. Site boundaries were determined by shovel testing and project area boundaries. Six shovel tests (MN175–178 and MS144–145) were excavated, three of which (MN175–176 and MS144) were positive for cultural materials (Table 6.4). Subsurface materials ranged from ground surface to beyond 100 cmbs and consisted of tertiary flakes. Materials observed during ground surface inspection consisted of one fragment of reddish–gray quartzite with ground facets on one face, approximately 10 tertiary chert flakes, and one tabular slab (10×15×4 cm) of brown chert with a smooth, uniform cortex. Figure 6.9 provides a representative sample of chipped-stone artifacts observed on site. No diagnostic materials or cultural features were observed.

Site 41LE332 is on private property used for hunting recreation activities. Disturbances include an existing underground water line and a network of two-track access roads.

41LE332 Summary

Site 41LE332 is a prehistoric lithic procurement site with deep subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage consists primarily of tertiary flakes from ground surface to 100 cmbs. Disturbances to the site include an existing underground water line and a

Table 6.4. Shovel Test Data for 41LE332

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN175	0-100	10YR5/2	Grayish brown	Sand	1-5% gravels	Positive	3 tertiary flakes	Terminated at depth.
MN176	0-60	10YR5/2	Grayish brown	Sand	1-5% gravels	Positive	1 tertiary flake	-
MN176	60-70	7.5YR6/8	Reddish Yellow	Sandy Clay	-	Negative	-	Terminated at basal clay.
MN177	0-33	10YR5/1	Gray	Sandy Loam	1-5% gravels	Negative	-	Terminated at basal clay.
MN178	0-100	10YR5/1	Gray	Sand	-	Negative	-	Terminated at basal clay.
MS144	0-100	10YR5/4	Yellowish brown	Sand	1-5% gravels	Positive	1 tertiary flake	Terminated at depth
MS145	0-10	10YR5/4	Yellowish brown	Sand	10-20% gravels, large rock fragments	Negative	-	Terminated at bedrock.

Figure 6.6. Lee County map.

Figure 6.7. Map of 41LE332.

Figure 6.8. Overview of 41LE332, facing northeast.

Figure 6.9. Example of lithic materials from 41LE332.

two-track road utilized for hunting recreation access. The site has the potential for deep, intact cultural deposits, evidenced by the deep sands throughout the site. Site 41LE332 is recommended as having undetermined edibility for listing in the NRHP or for SAL designation. As such, SWCA recommends that the site should be avoided or subject to significance testing.

41LE333

Site 41LE333 is a prehistoric lithic scatter site in northwestern Lee County. The site is situated on a ridge top that gently slopes to the north and northwest (Figure 6.10). Vegetation consists of a mixed hardwoods and secondary growth on the southern portion of the site and cleared grassy areas to the north (Figure 6.11). Ground surface visibility ranges from 0 to 60 percent with concentrations of sandstone bedrock at ground surface. Burns Branch is the nearest natural water source, situated 230 m to the northwest. Soils of the site consisted of light brownish gray and brown sand and sandy loams with 1 to 5 percent gravel inclusions. Soil deposits ranged from 85 to beyond 100 cmbs.

Site 41LE333 measures 144 m southwest to northeast by 35 m northwest to southeast. Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Four shovel tests (MN181–MN183 and MS148) were excavated, three of which (MN181–182 and MS148) were positive for cultural materials (Table 6.5). Subsurface materials ranged from ground surface to 100 cmbs and consisted of tertiary flakes. No materials were observed during ground surface inspection. All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41LE333 is located within privately owned land used for ranching. Vegetation clearing and land modifications in the form of a stock pond for ranching and general brush clearing for a waterline right-of-way were observed on the northern portion of the site (Figure 6.12). Additional disturbances include erosion and

Table 6.5. Shovel Test Data for 41LE333

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN181	41LE333	0-100	10YR 5/3	brown	Sand	1-5%, Gravels	Positive	9 tertiary flakes	Terminated at depth.
MN182	41LE333	0-100	10YR 6/2	light brownish gray	Sandy Loam	1-5%, Gravels	Positive	2 tertiary flakes	Terminated at depth.
MS148	41LE333	0-85	10YR 6/3	pale brown	Sand	1-5%, Gravels	Positive	2 tertiary flakes	Terminated at tree root.
MN183	41LE333	0-100	10YR 5/1	gray	Sandy Loam	5-10%, 7.5YR 6/8 Mottles	Negative	-	Terminated at depth.

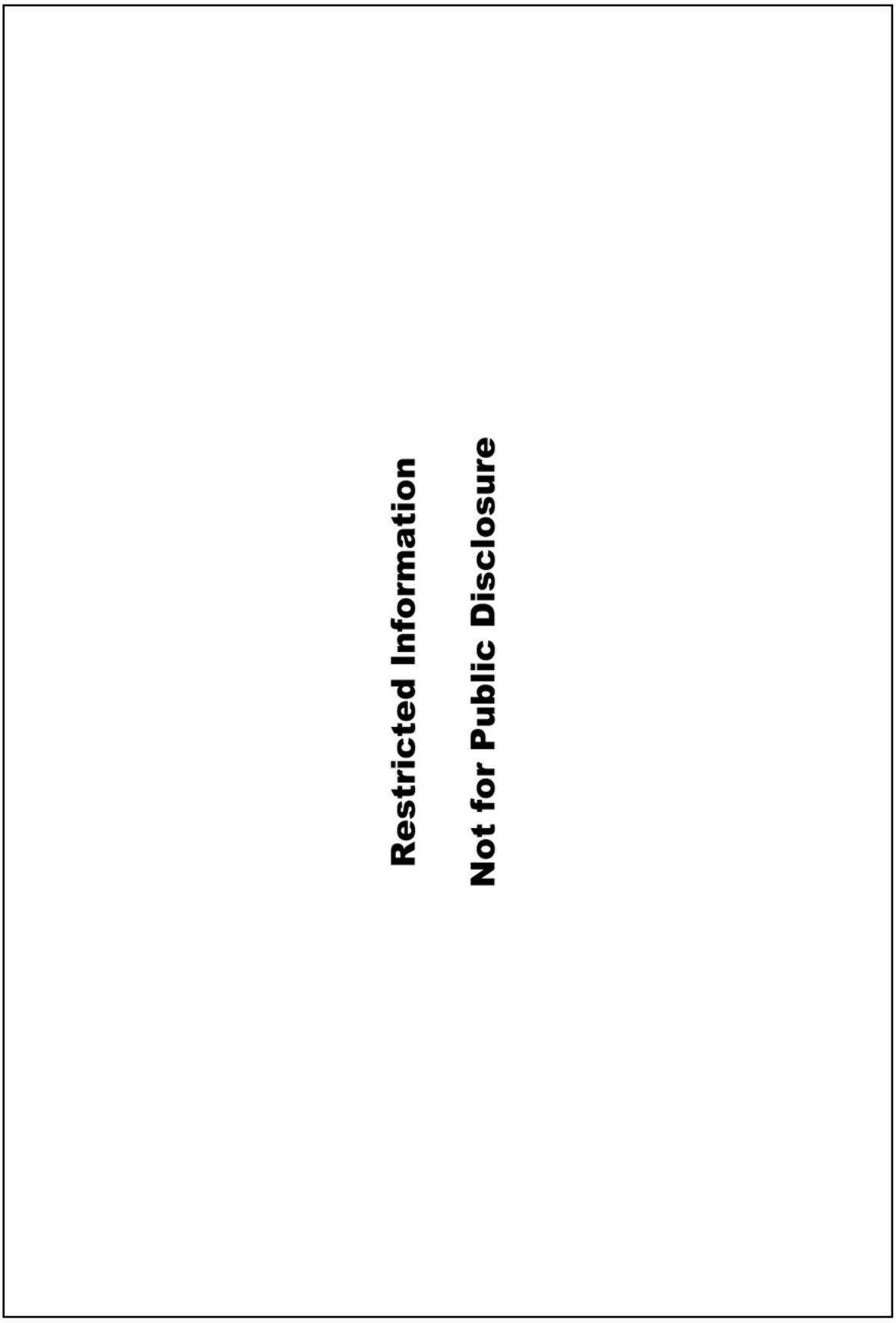

Figure 6.10. Map of 41LE333.

Figure 6.11. Overview of 41LE333.

Figure 6.12. Overview of existing utility disturbance within 41LE333.

bioturbation that were observed throughout the general area of the site.

41LE333 Summary

Site 41LE333 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely subsurface in nature, consisting primarily of chert flakes. However, given the sandy soils on site, the cultural materials are floating in the soil profile with no discernible concentrations suggesting a buried living surface or cultural feature. Additionally, disturbances to the site include erosion, bioturbation, and general vegetation and land modification for ranching operations and a waterline right-of-way. Overall, site 41LE333 does not have sufficient vertical integrity to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits (as the debitage exhibited no vertical concentrations indicative of a living surface or cultural feature), a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41LE333 is recommended not eligible for listing in the NRHP or for SAL designation. No further work or avoidance strategy is recommended for the site within the project area.

41LE334

Site 41LE334 is a prehistoric lithic scatter in northern Lee County. The site is situated on an upland formation with a 0 to 5 percent slope to the northeast (Figure 6.13). Vegetation consists of short to medium planted grasses in an open field with sporadic patches of hardwood trees (Figure 6.14). Ground surface visibility is zero percent with dense vegetation at ground surface. East Yegua Creek is the nearest natural water source, situated 0.43 mile to the north and east. Soils of the site consists of very pale brown, reddish-yellow, yellowish-red, and grayish-brown loamy sands, sandy loams, sandy clays, silty loams, and clay loam with 1 to 10 percent pebble inclusions and mottles. Soil deposits range from 20 to 55 cm deep and terminated at sterile clay subsoil.

Site 41LE334 measures 38 m east to west by 20 m north to south; however, the site likely extends to the east and south beyond the project boundaries. Site boundaries were determined by shovel testing for subsurface and surface cultural deposits and project area boundaries. Nine shovel tests (DR240–243 and MN203–207) were excavated, five of which (DR240–241 and MN203–205) were positive for subsurface cultural materials (Table 6.6). Subsurface materials ranged from 10 to 50 cmbs and consisted primarily of 6 tertiary flakes (Figure 6.15). No cultural materials were observed at ground surface. All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41LE334 is located within privately owned land used for agricultural purposes. Vegetation clearing and land modifications for agricultural activities and a pipeline right-of-way were observed in the form of fence lines and large cleared areas with planted grasses throughout the general area of the site. Additional disturbances include erosion throughout the general area of the site.

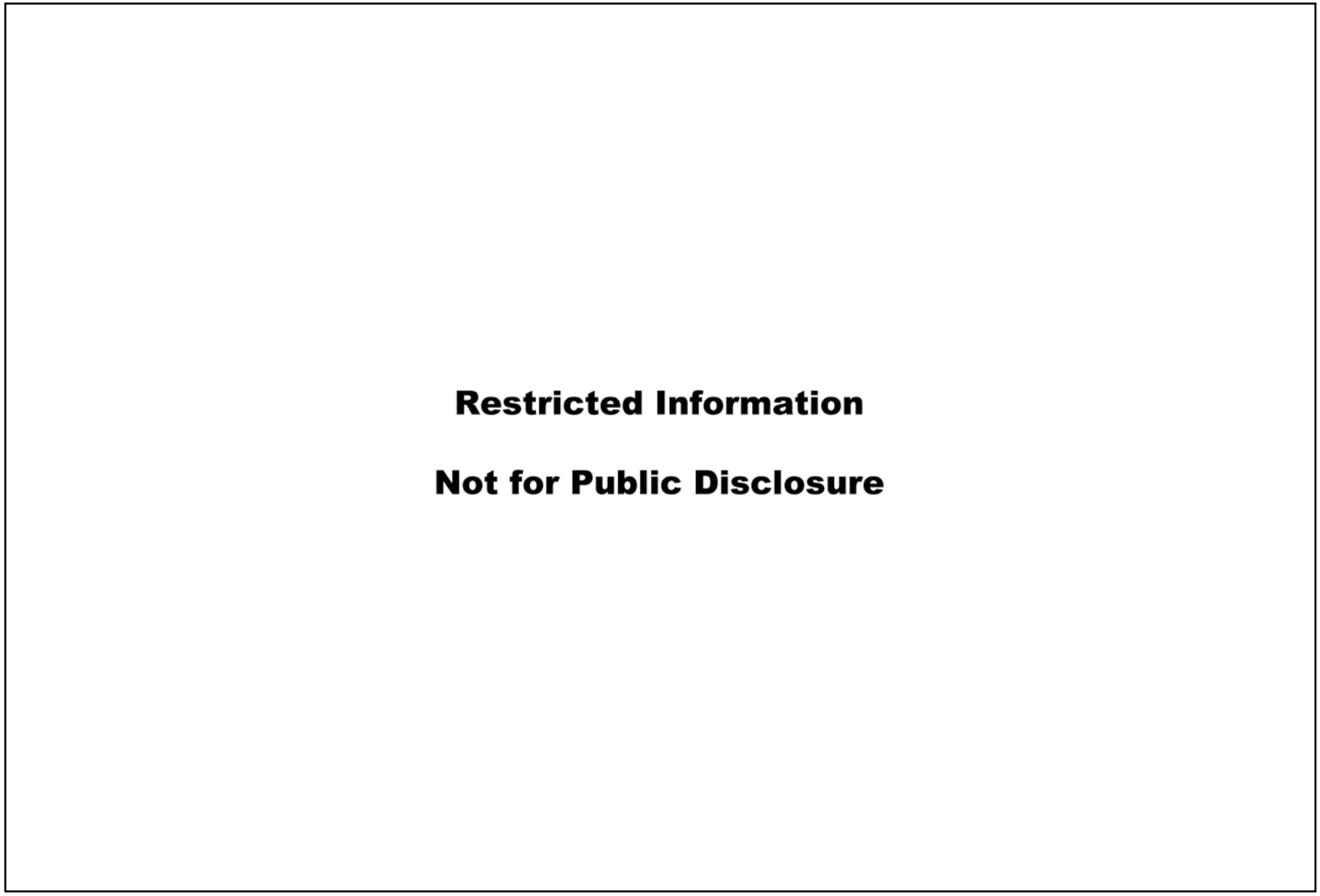

Figure 6.13. Map of 41LE334.

Table 6.6. Shovel Test Data for 41LE334

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR240	0-15	10YR 7/3	very pale brown	Sandy Loam	0%, no inclusions	Positive	1 tertiary flake	
	15-20	5YR 6/8	reddish yellow	Sandy Clay	0%, no inclusions	Negative	-	Terminated at basal clay
DR241	0-50	10YR 7/3	very pale brown	Sandy Loam	1-5%, Pebbles	Positive	1 tertiary flake	
	50-55	5YR 5/6	yellowish red	Sandy Clay	0%, no inclusions	Negative	-	Terminated at basal clay
DR242	0-30	10YR 5/4	yellowish brown	Sandy Loam	5-10%, charcoal fragments	Negative	-	
	30-50	10YR 7/3	very pale brown	Sandy Loam	1-5%, Pebbles	Negative	-	
	50-55	5YR 6/6	reddish yellow	Clay Loam	0%, no inclusions	Negative	-	Terminated at basal clay
DR243	0-40	10YR 7/3	very pale brown	Sandy Loam	1-5%, Pebbles	Negative	-	
	40-45	5YR 6/6	reddish yellow	Sandy Clay Loam	0%, no inclusions	Negative	-	Terminated at basal clay
MN203	0-30	10YR 5/2	grayish brown	Silt Loam	0%, no inclusions	Positive	2 tertiary flakes	
	30-40	10YR 5/6	yellowish brown	Clay Loam	5-10%, mottles	Negative	-	Terminated at basal clay
MN204	0-40	10YR 5/2	grayish brown	Loamy Sand	0%, no inclusions	Positive	1 tertiary flake	
	40-50	7.5YR 6/8	reddish yellow	Sandy Clay	0%, no inclusions	Negative	-	Terminated at basal clay
MN205	0-50	10YR 5/2	grayish brown	Loamy Sand	0%, no inclusions	Positive	1 tertiary flake	Terminated at basal clay
MN206	0	10YR 5/6	yellowish brown	Clay Loam	0%, no inclusions	Negative	-	Basal clay at surface
MN207	0-15	10YR 5/2	grayish brown	Loamy Sand	1-5%, Gravels	Negative	-	
	15-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%, 10YR 5/6 Mottles	Negative	-	Terminated at basal clay

Figure 6.14. Overview of 41LE334, facing southwest.

Figure 6.15. Example of subsurface cultural materials from DR240.

41LE334 Summary

Site 41LE334 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely subsurface in nature, consisting primarily of six tertiary flakes. Disturbances to the site include general vegetation and land modification for ranching activities and pipeline right-of-way. Overall, site 41LE334 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41LE334 is not recommended eligible for listing in the NRHP or designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends east and south beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41LE335

Site 41LE335 is a prehistoric campsite in northern Lee County. The site is situated on an undulating and gradually sloping terrace of Brushy Creek (Figure 6.16). Vegetation consists of thick grasses within an open cattle pasture (Figure 6.17). Ground surface visibility ranges from 0 to 5 percent with exposed bedrock and dense concentrations of gravels and cobble at ground surface. Brushy Creek is the nearest natural water source, situated 100 m to the south. The confluence of Brushy Creek and an unnamed drainage is 170 m southwest of the site boundary. Soils of the site consisted of very dark grayish brown, dark brown, and brown sand and sandy loams with 1 to 20 percent rootlet, iron ore, and mottle inclusions. Soil deposits range from 55 to beyond 100 cmbs.

Site 41LE335 measures 140 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the northeast and southwest beyond the project boundaries. Site boundaries were determined by shovel testing, ground surface inspection, and project boundaries. Ten shovel tests (AG12–14 and MS190–196) were excavated within the site boundaries, seven of which (AG12–14 and MS192–195) were positive for cultural materials (Table 6.7). Subsurface materials range from ground surface to beyond 100 cmbs and consisted of primary, secondary, and tertiary flakes, burned sandstone fragments, and one red ochre fragment (Figure 6.18). Materials observed during ground surface inspection consisted of tertiary chert flakes and burned sandstone fragments. No diagnostic materials or cultural features were observed.

Site 41LE335 is located within a privately owned agricultural field use for hay cultivation. Land clearing and cultivation associated with agricultural activities have heavily impacted the site, along with two-track road, fence, and a man-made stock pond construction to the southwest. Additionally, personal communication with the land owner determined that extensive point collecting/looting has taken place over the site for many years. Overall, the site has been heavily impacted from agricultural and land management activities, as well as extensive looting.

41LE335 Summary

Site 41LE335 is a prehistoric campsite with deep subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no intact cultural features were observed. The assemblage consists of primary, secondary, and tertiary flakes, along with burned rock fragments and one red ochre fragment. Disturbances to the site include extensive land clearing and agricultural activities associated with hay cultivation and the construction of a man-made stock. Overall, site 41LE335 has been heavily impacted from existing disturbances and does not have the potential to yield information important to the prehistory of the region. Site 41LE335 is not recommended for listing in the NRHP or for SAL designation. An avoidance strategy or additional significance testing is not recommended for the site within the project area.

41LE336

Site 41LE336 is a prehistoric lithic scatter in northeast Lee County. The site is situated on an upland colluvium terrace formation, within a fallow agricultural field (Figure 6.19). Vegetation consists of grasses, weeds, and small shrubs mixed with sporadic hardwood trees. Ground surface visibility is zero percent. East Yegua Creek is the nearest natural water source, situated 1.6 miles east of the site boundary. Soils of the site range from dark brown to very pale brown sandy loam and sandy clay loams over deposits of reddish yellow sandy clay and sandy clay loams. Soil deposits ranged from.

Table 6.7. Shovel Test Data for 41LE335

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
AG12	0-40	10YR 5/3	brown	Sand	5-10% Mottles, Rootlets	Negative	-	Terminated at depth.
	40-100	10YR 3/3	dark brown	Sand	1-5% Iron	Positive	11 primary, secondary, and tertiary flakes starting at 65 cmbs	
	100-110	10YR 3/3	dark brown	Sand	5-10% Mottles	Negative	-	
AG13	0-55	10YR 6/3	pale brown	Sand	1-5% Rootlets, Iron Ore	Positive	2 secondary flakes	Terminated at depth.
	55-110	10YR 4/3	brown	Sand	1-5% Iron Ore	Positive	4 secondary flakes, 1 petrified wood, 1 burned nut shell	
AG14	0-60	10YR 6/3	pale brown	Sand	1-5% Pebbles, Rootlets	Negative	-	Terminated at depth.
	60-100	10YR 4/3	brown	Sand	1-5% Iron Ore	Positive	4 secondary flakes	
MS190	0-70	10YR 5/4	yellowish brown	Sandy Loam	>20%, Pebbles	Negative	-	Terminated at basal clay.
	70-72	5YR 5/6	yellowish red	Sandy Clay	-	Negative	-	
MS191	0-90	10YR 5/4	yellowish brown	Sandy Loam	5-10% Mottles	Negative	-	Terminated at depth.
	90-100	10YR 4/2	dark grayish brown	Sandy Loam	-	Negative	-	
MS192	0-100	10YR 4/2	dark grayish brown	Sandy Loam	-	Positive	7 tertiary flakes, 1 red ochre	Terminated at depth.
MS193	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20% Mottles	Positive	2 flakes at 50-60 cmbs	Terminated at depth.
MS194	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20% Mottles	Positive	1 tertiary flake	Terminated at depth.
MS195	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20% Mottles	Positive	9 tertiary flakes, 11 burned sandstone fragments	Terminated at depth.
MS196	0-50	10YR 5/4	yellowish brown	Sandy Loam	>20%, Pebbles	Negative	-	Terminated at basal clay.
	50-55	5YR 5/6	yellowish red	Sandy Clay	-	Negative	-	

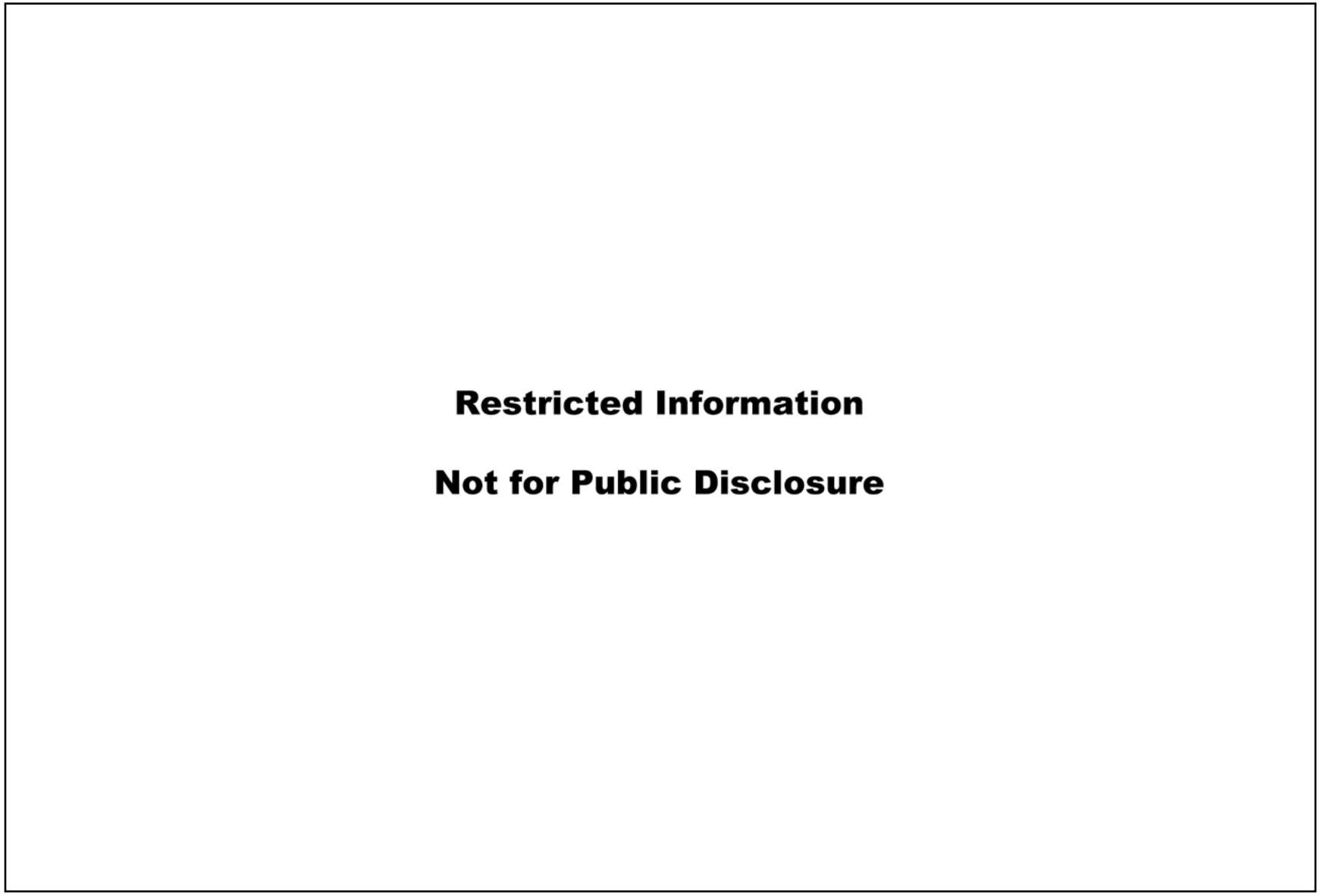

Figure 6.16. Map of 41LE335.

Figure 6.17. Overview of 41LE335, facing northwest.

Figure 6.18. Example of subsurface cultural materials, chert flakes and fragments of burned sandstone.

45 to beyond 100 cmbs and terminate at sterile clay subsoil.

Site 41LE336 measures 56 m east to west by 26 m north to south; however, the site likely extends to the north beyond project boundary. Site boundaries were determined by shovel testing for subsurface cultural deposits and project boundaries. Fourteen shovel tests (AY08–AY15 and DR407–412) were excavated, seven of which (AY08–09, AY12, and DR410) were positive for subsurface cultural materials (Table 6.8). Subsurface materials ranged from 10 to 80 cmbs and consisted of tertiary flakes, secondary flakes, one heat-treated tertiary flake and flecks of charcoal (Figure 6.20). No surficial materials were documented. All lithic materials observed were composed of chert material types. No diagnostic materials or defined cultural features were observed.

Site 41LE336 is within privately owned land used for agricultural practice. Disturbances include land clearing, property fence construction, an artificial depression, and a possible buried pipeline. The artificial depression on the southwestern end of the site measures approximately 20 m in diameter and contained modern construction debris, such as wood posts, cut stones, fencing wiring, and wire nails. The origin of the depression is unclear, but may have been a borrow pit now utilized as a trash pit. The possible underground utility is south of the site, within a cleared corridor, but no above ground markers were observed.

41LE336 Summary

Site 41LE336 is a prehistoric lithic scatter with subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during shovel testing investigations, and no defined cultural features were observed. The assemblage consists of tertiary flakes, secondary flakes, and multiple flecks of charcoal that ranged from 10 to 80 cmbs. Disturbances to the site include land clearing, property fence construction, and a possible buried utility. Overall, site 41LE336 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks intact subsurface deposits, as the recovered debitage exhibited no concentrations suggestive of a living surface or cultural feature, rather the materials are "floating" randomly in the soil profile. Due to its lack of potential research value, SWCA recommends that 41LE336 is not eligible for listing in the NRHP under Criterion D or for SAL designation. As such, no further work or avoidance strategy is recommended. However, as the site likely extends north beyond the project area, should the alignment be shifted into that area additional investigations would be necessary.

Bastrop County

Nine cultural resource sites were delineated in Bastrop County, and one isolated find (IF07) was documented (Figure 6.21). Newly recorded archaeological sites include two prehistoric lithic scatters (41BP915 and 41BP919), four prehistoric campsites (41BP916,

Table 6.8. Shovel Test Data for 41LE336

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
	0-55	7.5YR 5/4	brown	Sandy Loam	10-20%	Positive	1 tertiary flake from 10 to 20 cmbs	
AY08	55-60	7.5YR 5/8	strong brown	Sandy Clay Loam	1-5% Rootlets	Negative	-	Terminated at basal clay.
AY09	0-100	7.5YR 5/4	brown	Sandy Loam	5-10% Roots	Positive	1 tertiary flake from 55 to 65 cmbs	Terminated at depth.
	0-45	7.5YR 5/4	brown	Sandy Loam	5-10% Roots	Negative	-	
AY10	45-50	7.5YR 5/8	strong brown	Sandy Clay	1-5% Rootlets	Negative	-	Terminated at basal clay.
	0-70	7.5YR 5/4	brown	Sandy Loam	1-5% Rootlets	Negative	-	
AY11	70-75	7.5YR 7/8	reddish yellow	Sandy Clay Loam	1-5% Rootlets	Negative	-	Terminated at basal clay.
	0-75	7.5YR 5/4	brown	Sandy Loam	10-20% Roots	Positive	3 tertiary flakes from 35 to 75 cmbs	
AY12	75-80	7.5YR 5/8	strong brown	Clay Loam	-	Negative	-	Terminated at basal clay.
	0-65	7.5YR 5/4	brown	Sandy Loam	1-5% Pebbles and Roots	Negative	-	
AY13	65-70	7.5YR 7/6	reddish yellow	Sandy Clay Loam	-	Negative	-	Terminated at basal clay.
	0-40	7.5YR 3/4	dark brown	Sandy Loam	1-5% Pebbles and Roots	Negative	-	
AY14	40-45	7.5YR 7/8	reddish yellow	Sandy Clay Loam	1-5% Rootlets	Negative	-	Terminated at basal clay.
	0-55	7.5YR 3/4	dark brown	Sandy Loam	1-5% Roots	Negative	-	
AY15	55-60	7.5YR 7/8	reddish yellow	Sandy Clay	10-20% Mottles and Rootlets	Negative	-	Terminated at basal clay.
DR407	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5% Pebbles	Positive	1 tertiary flakes at 40 to 50 cmbs; 1 heat treated tertiary flake at 50 to 60 cmbs.	Terminated at depth.
DR408	0-100	10YR 7/3	very pale brown	Sandy Loam	-	Positive	2 flecks of charcoal from 75 to 85 cmbs	Terminated at depth.
	0-80	10YR 7/3	very pale brown	Sandy Loam	-	Positive	1 secondary flake from 70 to 80 cmbs	
DR409	80-90	10YR 8/3	very pale brown	Clay Loam	-	Negative	-	Terminated at basal clay.
DR410	0-100	10YR 7/3	very pale brown	Sandy Loam	-	Positive	1 tertiary flake from 50 to 60 cmbs; charcoal fleck lens at 50 to 60 cmbs	Terminated at depth.
	0-50	10YR 7/3	very pale brown	Sandy Loam	-	Negative	-	
	50-60	10YR 4/4	dark yellowish brown	Sandy Loam	1-5% Plant detritus and red clay	Negative	-	
DR411	60-100	10YR 7/3	very pale brown	Sandy Loam	-	Negative	-	Terminated at depth.
DR412	0-40	10YR 4/4	dark yellowish brown	Sandy Clay Loam	>20% mottles, clay loam chunks	Negative	-	Terminated at extremely disturbed soils.

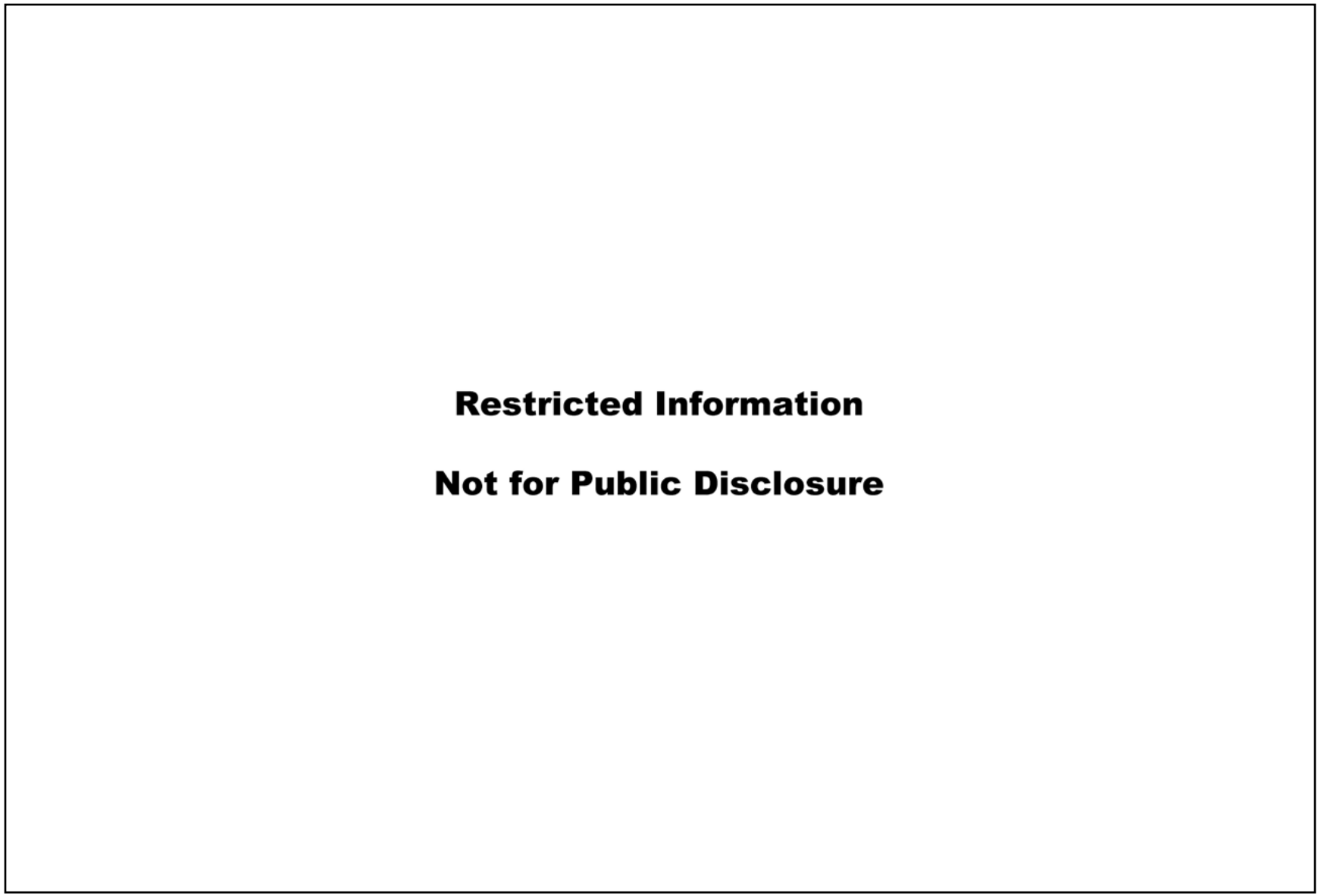

Figure 6.19. Site map of 41LE336.

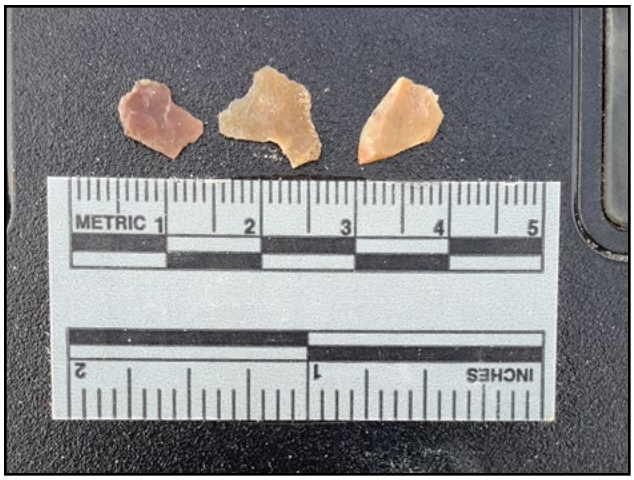

Figure 6.20. Example of subsurface artifacts from Shovel Test AY12.

41BP917, 41BP918, and 41BP922), one historic artifact scatter (41BP921), and two multiple component site with both prehistoric and historic components (41BP920 and 41BP923). Two sites, 41BP917 and 41BP920, are recommended as having unknown eligibility for listing on the NRHP or for SAL designation and require an avoidance or significance testing. The remaining seven newly recorded archaeological sites in Bastrop County are recommended as not eligible for listing on the NRHP, and no further work is required within the project area.

41BP915

Site 41BP915 is a prehistoric lithic scatter in western Bastrop County. The site is situated on an upper terrace formation that gently slopes to the southwest (Figure 6.22). Vegetation consists of moderately dense mixed hardwood forests at the edge of a cleared two-track road to the northwest. Ground surface visibility is 20 percent. An unnamed tributary of Cedar Creek is the nearest natural water source, situated 378 m southwest. Soils of the site consist of dark grayish brown to strong brown sandy loams, clay loams, and clays that ranged from 5 to 30 cmbs. Soil deposits terminate at dense cobble and gravel deposits.

Site 41BP915 measures 60 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area. Site boundaries were determined by shovel testing for subsurface cultural deposits, ground surface inspection, and project area boundaries. Six shovel tests (MS11–12 and DR136–166) were excavated, four of which (MS11–12 and DR163–164) were positive for subsurface cultural materials (Table 6.9). Subsurface materials ranged from ground surface to 30 cmbs and consisted of primary, secondary, and tertiary flakes, and cultural shatter. Materials observed during ground surface inspection consisted of: 20–40 tertiary flakes; 10–25 primary flakes; 20–40 cultural shatter;

Table 6.9. Shovel Test Data for 41BP915

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MS11	41BP915	0-30	10YR 4/2	dark grayish brown	Clay	>20% cobbles and gravels	Positive	15 primary, 4 secondary, and 16 tertiary flakes	Terminated at dense gravel and cobbles.
MS12	41BP915	0-25	10YR 4/2	dark grayish brown	Clay Loam	>20% cobbles and gravels	Positive	23 tertiary flakes and 1 primary flake	Terminated at dense gravel and cobbles.
DR163	41BP915	0-30	7.5YR 4/6	strong brown	Clay Loam	10-20% cobbles, gravels, and pebbles	Positive	1 primary flake, 1 tertiary microflake, 1 cultural shatter	Terminated at large cobbles.
DR164	41BP915	0-20	10YR 4/6	dark yellowish brown	Loam	>20% cobbles, gravels, and pebbles	Positive	4 shatter, 1 tertiary flake, 1 primary flake, 2 shatter	Terminated at large cobbles.
DR165	41BP915	0-5	7.5YR 5/6	strong brown	Sandy Loam	>20% cobbles, pebbles and gravels	Negative	No cultural material encountered	Terminated at large cobbles.
DR166	41BP915	0-10	7.5YR 5/6	strong brown	Sandy Loam	>20% cobbles, pebbles and gravels	Negative	No cultural material encountered	Terminated at large cobbles.

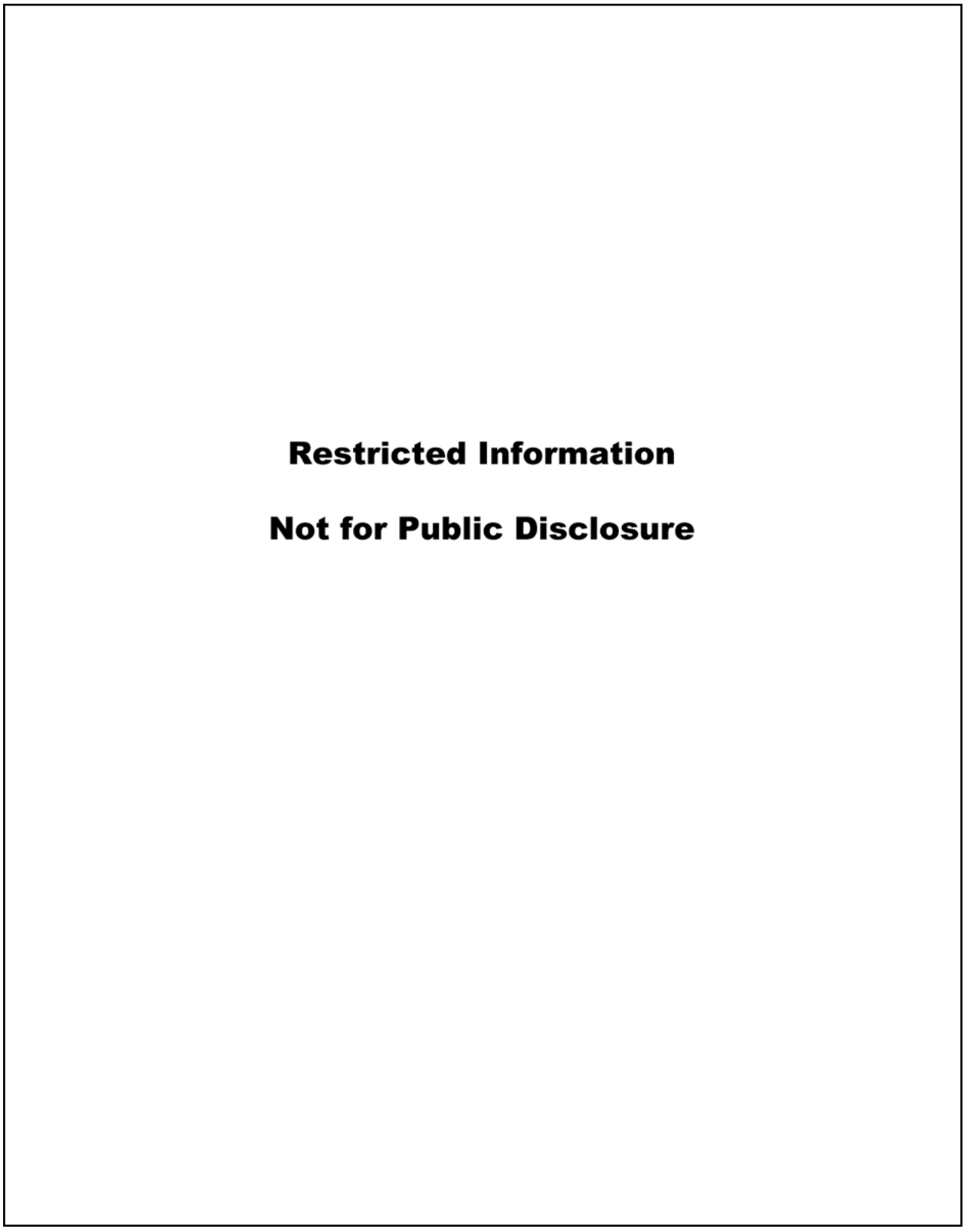

Figure 6.21. Bastrop County map.

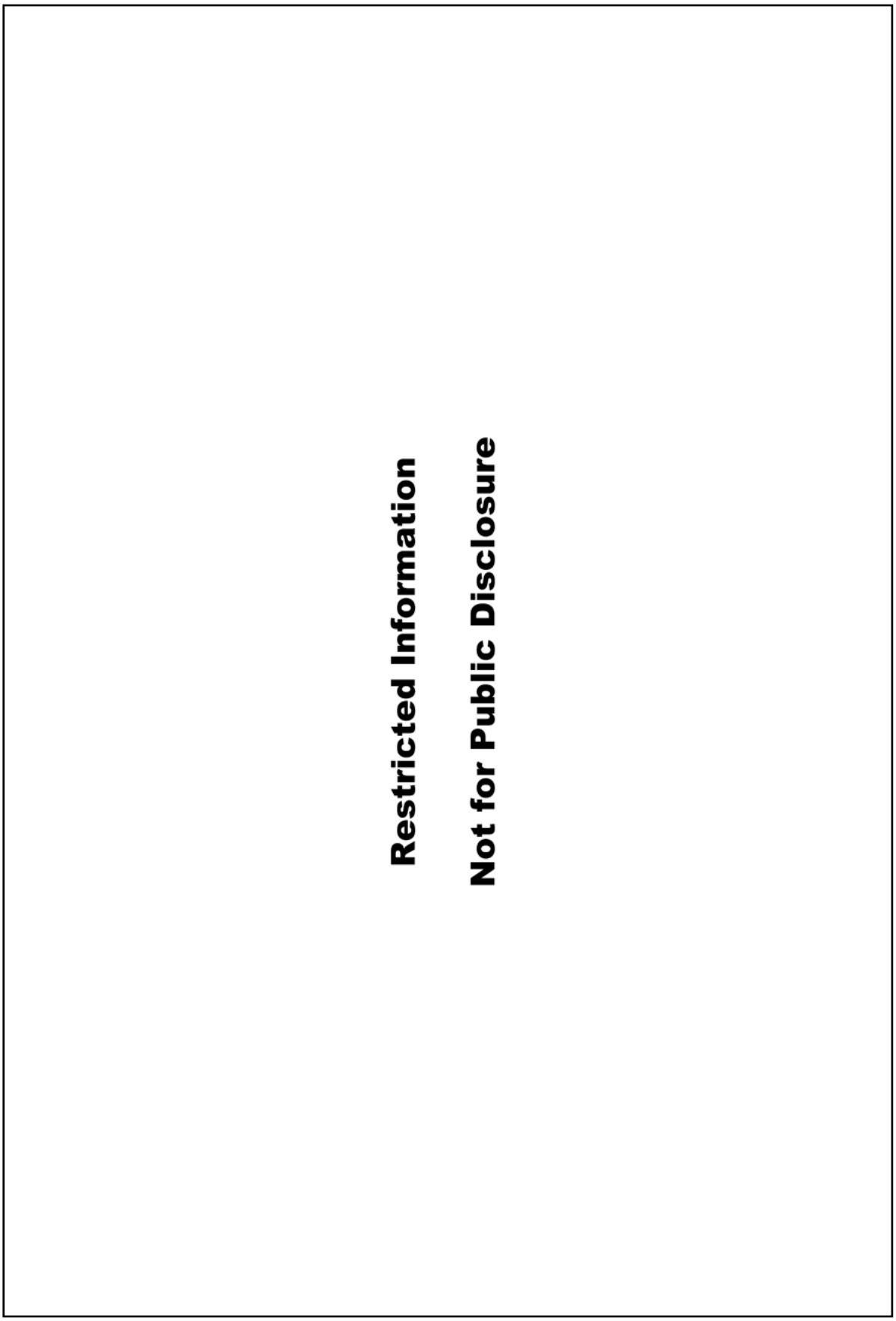

Figure 6.22. Map of 41BP915.

and 10–20 secondary flakes (Figure 6.23). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BP915 is on privately owned open-range cattle land. Vegetation clearing and land modifications for stock ponds were observed north of the right-of-way. Additional disturbances include an existing overhead transmission line that parallels the northern site boundary, as well as natural erosion along a drainage area that transects the southernmost portion of the site.

41BP915 Summary

Site 41BP915 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of unmodified chert flakes and shatter. Disturbances to the site include an existing transmission line, a stock pond to the north, natural erosion along a drainage to the south, and general vegetation and land modification for cattle ranching operations. Based on these data, it is the opinion of SWCA that site 41BP915 does not have the potential to yield information important to regional prehistory as the site lacks intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41BP915 is not recommended eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

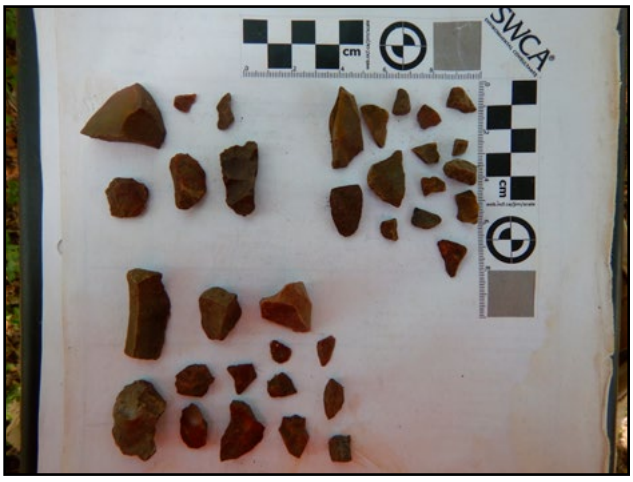

Figure 6.23. Example of cultural artifacts from 41BP915.

41BP916

Site 41BP916 is a prehistoric camp site in eastern Bastrop County. The site is situated on an upland formation that gently slopes to the south and west (Figure 6.24). Vegetation consists mainly of a maintained grass field for a commercial business to the east (Figure 6.25). The maintained field transitions to tall grasses, mesquite trees, and other mixed hardwoods on the western end of the site boundary. Ground surface visibility is zero percent with thick grasses at ground surface. An unnamed tributary of Cedar Creek is the nearest natural water source, situated 440 m to the west. Soils of the site range from black to yellowish brown clay and clay loams with gravel, pebble, and cobble inclusions. Soils range from 30 to 50 cmbs and terminate at compact clay subsoils.

Site 41BP916 measures 78 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area. Site boundaries were determined by shovel testing for subsurface cultural deposits. Six shovel tests (DR182–185 and MS24–25) were excavated, four of which (DR182–183 and MS24–25) were positive for cultural materials (Table 6.10). Subsurface materials ranged from ground surface to 40 cmbs and consisted of dense concentrations of cultural shatter, burned rock fragments, and primary and tertiary flakes. Materials observed consisted of: 50–100 primary flakes; one modified flake; 70–120 tertiary flakes; 50–120 burned rock fragments; and 200–300 cultural shatter (Figure 6.26). All lithic materials observed were composed of chert material types with the exception of the burned rock fragments. No diagnostic materials or cultural features were observed.

Site 41BP916 is on privately owned land used for commercial purposes. Vegetation clearing for commercial use was observed in the form of a maintained grass field along the eastern portion of the site.

41BP916 Summary

Site 41BP916 is a prehistoric camp with minimal subsurface deposits of an unknown age. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage

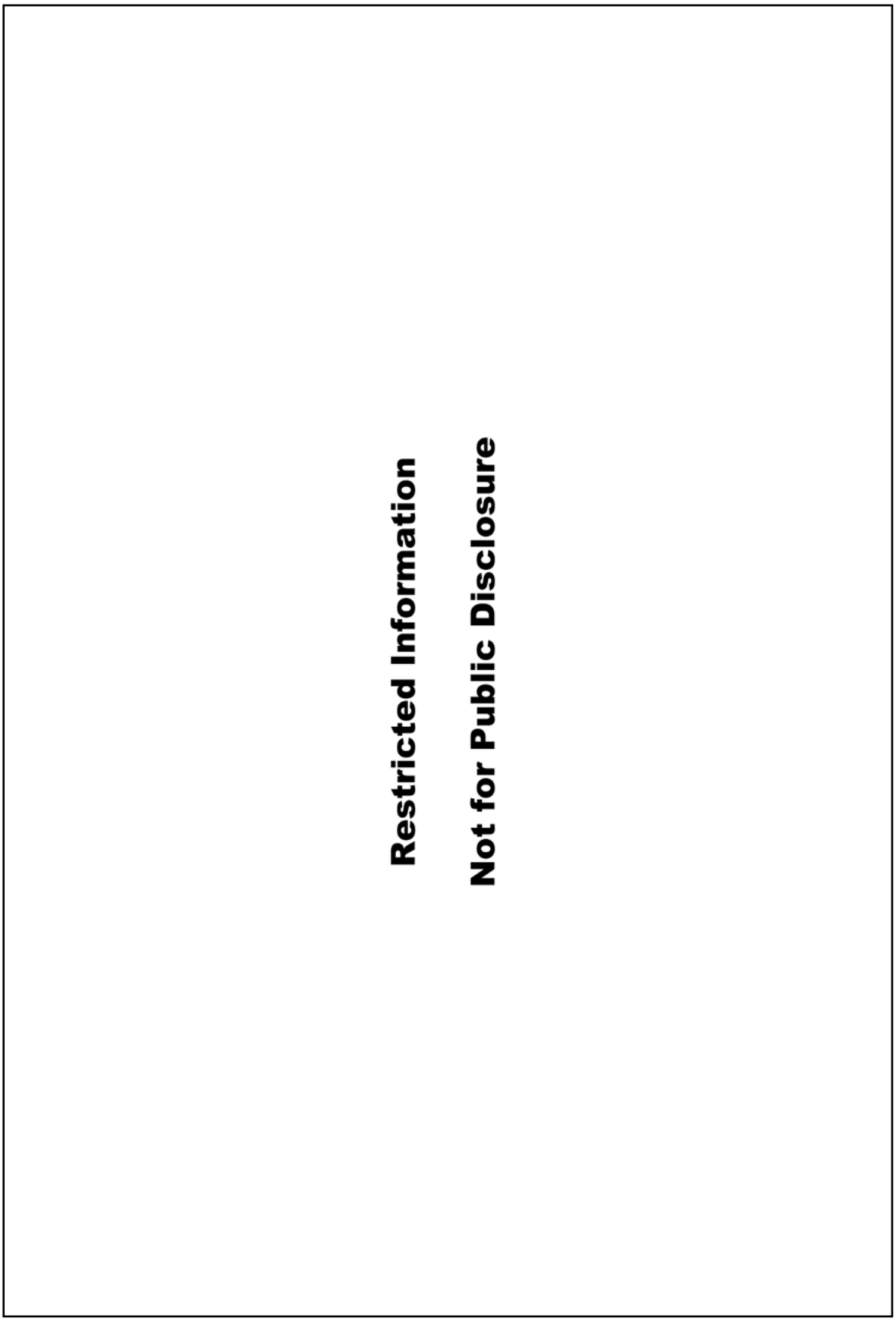

Figure 6.24. Map of 41BP916.

Table 6.10. Shovel Test Data for 41BP916

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR182	0-40	10YR 5/4	yellowish brown	Clay Loam	cobbles and pebbles	Positive	5 shatter, 1 tertiary flake, 2 burned rock, 1 primary flake	
	40-50	10YR 3/1	very dark gray	Clay Loam	1-5%, cobbles and pebbles	Negative	-	Terminated at compact soil.
DR183	0-35	10YR 5/2	grayish brown	Clay Loam	5-10%, cobbles and pebbles	Positive	108 flakes and chert shatter	
	35-45	10YR 3/2	very dark grayish brown	Clay Loam	1-5%, cobbles	Negative	-	Terminated at compact soil.
DR184	0-35	10YR 5/2	grayish brown	Clay Loam	10-20% gravels and pebbles	Negative	-	Terminated at compact soil.
DR185	0-30	10YR 5/2	grayish brown	Clay Loam	>20% cobbles, gravels, and pebbles	Negative	-	Terminated at compact soil.
MS24	0-40	10YR 3/1	very dark gray	Clay Loam	>20% gravels, pebbles, burned rock, charred wood, midden debris	Positive	241 chert debitage and fire cracked rock; 1 modified flake; 40 rounded cobbles, some cracked	
	40-50	7.5YR 2.5/1	black	Clay	1-5%, gravels	Negative	-	Terminated at sterile clay.
MS25	0-30	10YR 3/1	very dark gray	Clay Loam	>20, cobbles and gravels	Positive	1 primary and 2 tertiary flakes	
	20-30	7.5YR 2/1	reddish black	Clay	1-5%, gravels	Negative	-	Terminated at sterile clay.

Figure 6.25. Overview of 41BP916, facing southwest.

Figure 6.26. Example of cultural materials from 41BP916.

is largely surficial in nature, consisting primarily of unmodified flakes and burned rock fragments. Disturbances to the site include a manicured lawn along the eastern portion of the site, a large manufacturing facility to the east, and general vegetation and land modification (e.g., grading) for commercial operations. Based on these data, it is the opinion of SWCA that site 41BP916 does not have the potential to yield information important to regional prehistory as the site lacks intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41BP916 is not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41BP917

Site 41BP917 is a prehistoric campsite in northwest Bastrop County within a rerouted alignment that is no longer within the December 8, 2015 alignment. The site is located on the upper terrace of an unnamed ephemeral tributary of the Colorado River, located 30 m to the south (Figure 6.27). Vegetation consists of mesquite, cactus, and grass and ground surface visibility is zero percent (Figure 6.28). Soils of the site consisted of very pale brown, light brownish gray, gray, reddish yellow loamy sands, clay loams, and sandy clays. Inclusions consisted of 0 to greater than 20 percent of gravels, pebbles, and cobbles. Soil deposits ranged from 0 to 90 cm deep and terminated at compact soils and dense concentrations of large cobbles.

Site 41BP917 measures 73 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest, southwest, and southeast beyond the project boundaries. Site boundaries were determined by shovel testing and project boundaries. Seven shovel tests (AJ12–14 and DR211–214) were excavated, five of which (AJ12–13 and DR212–214) were positive for subsurface materials (Table 6.11). Subsurface materials ranged from 0 to 100 cmbs and consisted of primary, secondary and tertiary flakes, one chipped stone tool, cultural shatter, and fire-cracked rock fragments. Flakes of charcoal were also observed in DR214 from 50–65 cmbs, but no defined cultural features was observed. Overall, approximately 20–40 primary flakes, 10–20 secondary flakes, 40–80 tertiary flakes, 1 scraper, 1 modified flake, 20–40 cultural shatter, and 15–30 burned rock fragments were observed during shovel test excavations (Figure 6.29). No cul-

Table 6.11. Shovel Test Data for 41BP917

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
	0-10	10YR 8/3	Very pale brown	Sandy Loam	10-20% gravels, and pebbles	Negative	-	
	10-20	10YR 8/3	Very pale brown	Sandy Loam	10-20% gravels, and pebbles	Positive	1 secondary flake; 1 tertiary flake	
	20-30	10YR8/3	Very pale brown	Loamy Sand	10-20% gravels, and pebbles	Positive	1 primary flake; 1 secondary flake;1 tertiary flake	
	30-40	10YR8/3	Very pale brown	Loamy Sand	10-20% pebbles and gravels	Positive	1 chipped stone tool; 5 tertiary flakes	
	40-50	10YR8/3	Very pale brown	Loamy Sand	10-20% cobbles, gravels and pebbles	Positive	1 secondary flake; 1 tertiary flake	
AJ12	50-60	10YR8/3	Very pale brown	Loamy Sand	>20% cobbles, gravels and pebbles	Negative	-	Terminated at compact soil.

Table 6.11. - continued

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
	0-10	10YR8/3	Very pale brown	Loamy Sand	5-10% gravels and pebbles	Negative	-	
	10-20	10YR8/3	Very pale brown	Loamy Sand	5-10% gravels and pebbles	Negative	-	
	20-30	10YR8/3	Very pale brown	Loamy Sand	5-10% gravels and pebbles	Negative	-	
	30-40	10YR8/3	Very pale brown	Loamy Sand	5-10% gravels and pebbles	Positive	3 tertiary flakes	
	40-50	10YR8/3	Very pale brown	Loamy Sand	5-10% gravels and pebbles	Positive	3 tertiary flakes	
	50-60	10YR8/3	Very pale brown	Loamy Sand	10-20% gravels, and pebbles	Negative	-	
	60-70	10YR8/3	Very pale brown	Loamy Sand	10-20% gravels, and pebbles	Positive	1 tertiary flake	
AJ13	70-80	10YR8/3	Very pale brown	Loamy Sand	10-20% gravels, and pebbles	Negative	-	Terminated at compact soil.
AJ14	0-30	10YR5/1	Gray	Sandy Clay	>20% cobbles, gravels and pebbles	Negative	-	Terminated at compact soil.
DR211	0-40	10YR6/2	Light Brownish Gray	Clay Loam	-	Negative	-	Terminated at compact soil.
DR212	0-50	10YR8/3	Very pale brown	Sandy Loam	5-10% pebbles	Positive	12 secondary flakes and tertiary flakes; 5 fire cracked rock fragments; 2 cultural shatter	Terminated at compact large cobbles
	0-80	10YR8/3	Very pale brown	Sandy Loam	5-10% pebbles	Positive	13 primary, secondary and tertiary flakes; 3 cultural shatter;1 utilized flake	
DR213	80-90	5YR6/6	Reddish Yellow	Sandy Clay	0%	Negative	-	Terminated at basal clay
	0-50	10YR7/3	Very pale brown	Sandy Loam	5-10% pebbles	Positive	5 tertiary flakes; 1 cultural shatter	
DR214	50-65	5YR6/6	Reddish Yellow	Sandy Clay	1-5% pebbles	Positive	charcoal flakes; 1 cultural shatter	Terminated at basal clay

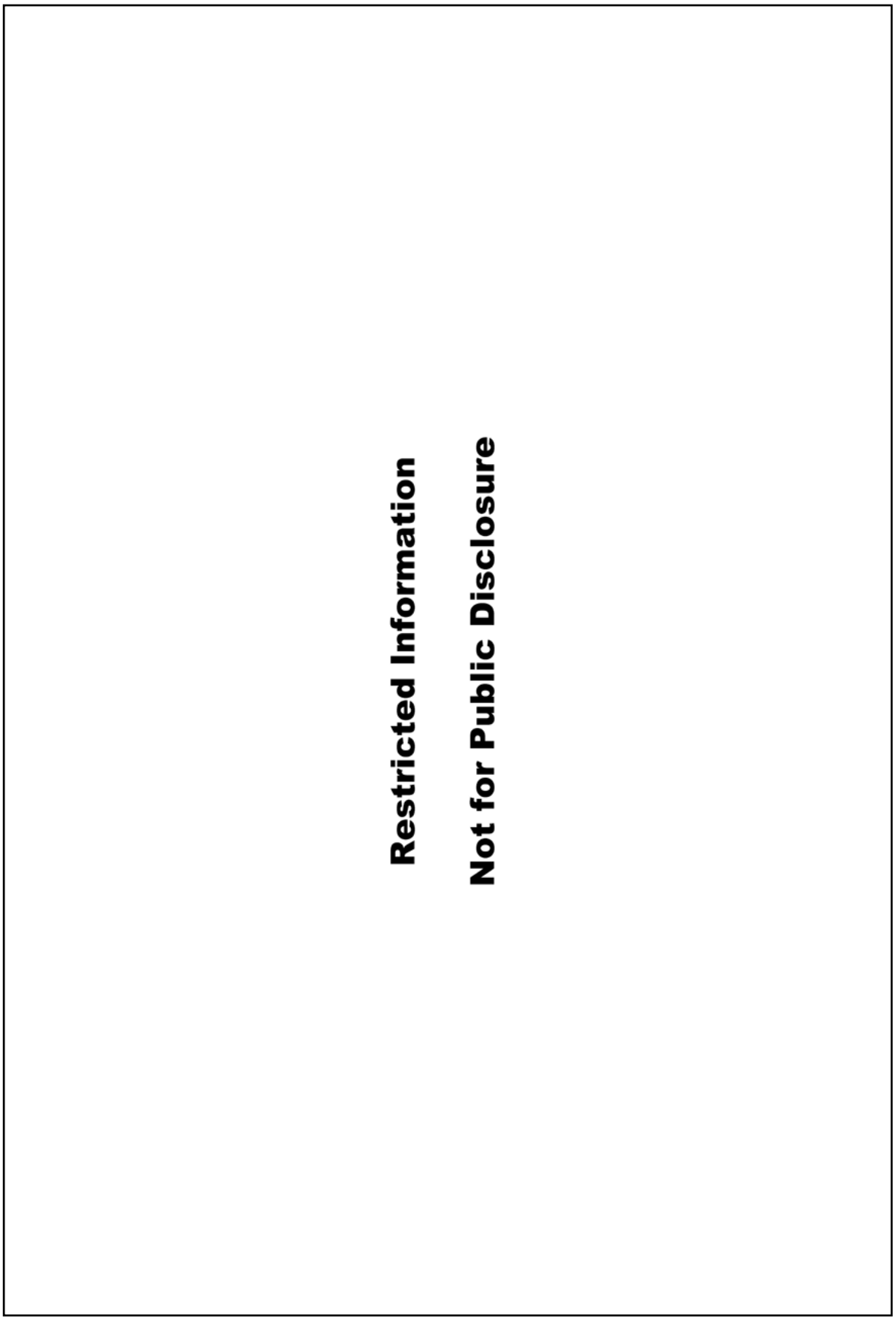

Figure 6.27. Map of 41BP917.

Figure 6.28. Overview of 41BP917.

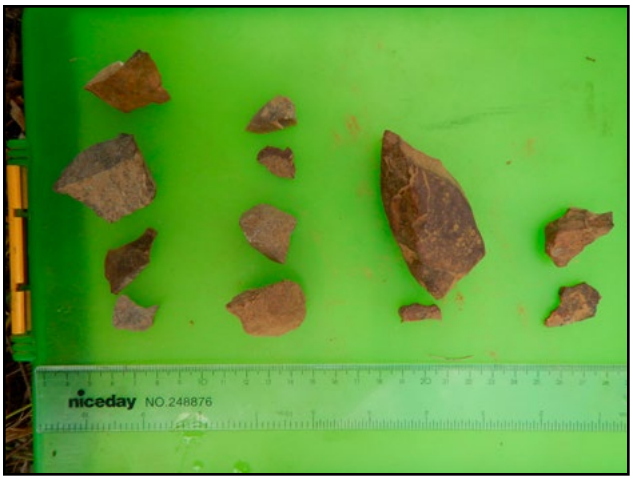

Figure 6.29. Burned rock fragments from 41BP917.

tural materials were observed on the ground surface. All lithic materials observed were composed of chert material types, and no diagnostic materials or cultural features were observed.

Site 41BP917 is located within privately owned land used for agricultural practice. Vegetation clearing and land modifications for roads, property fences, and agricultural activity were observed. Additional disturbances to the area include an existing overhead transmission line immediately north of the site boundary, as well as a two-track road within the transmission line corridor.

41BP917 Summary

Site 41BP917 is a prehistoric campsite with intact subsurface deposits suggesting the potential for isolable activity areas and burned rock features. Although no diagnostic artifacts were recovered during investigations, and no cultural features were observed, the burned-rock fragments and charcoal flecks observed during shovel testing suggests that there may be intact subsurface thermal features with datable organics associated with debitage, utilized flakes and stone tools. Overall, site 41BP917 has the potential to yield information important to the prehistory of the region. The eligibility for site 41BP917 is recommended as undetermined for listing in the NRHP and for designation as an SAL. SWCA recommends therefore that the site should be avoided or subject to significance testing if the final project alignment were to be shifted back to the rerouted alignment.

41BP918

Site 41BP918 is a prehistoric camp in western Bastrop County. The site is on the edge of a level terrace that gently slopes to the southwest (Figure 6.30). Vegetation consists of isolated mixed hardwood trees and dense bunch grasses (Figure 6.31). Ground surface visibility ranged from 0 to 20 percent with occasional outcrops of cobbles visible at ground surface. Two unnamed drainages of Cedar Creek are within 100 m south and west. Soils of the site consist gray and brown silty loams, silty clays, and silty clay loams with cobble, gravel, and pebble inclusions. Soils ranged from 15 to 40 cmbs and terminated at compact clay subsoil.

Site 41BP918 measures 98 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area. Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Nine shovel tests (MN68–71 and SM69–73) were excavated during site documentation, seven of which (MN68–70 and MS69–72) were positive for cultural materials (Table 6.12). Subsurface materials ranged from 1 to 30 cmbs and consisted primarily of flakes, chert shatter, one late stage biface, and burned limestone rocks (Figure 3.32 and 6.33). No artifacts were observed on the ground surface. All lithic materials are chert with the exception of the

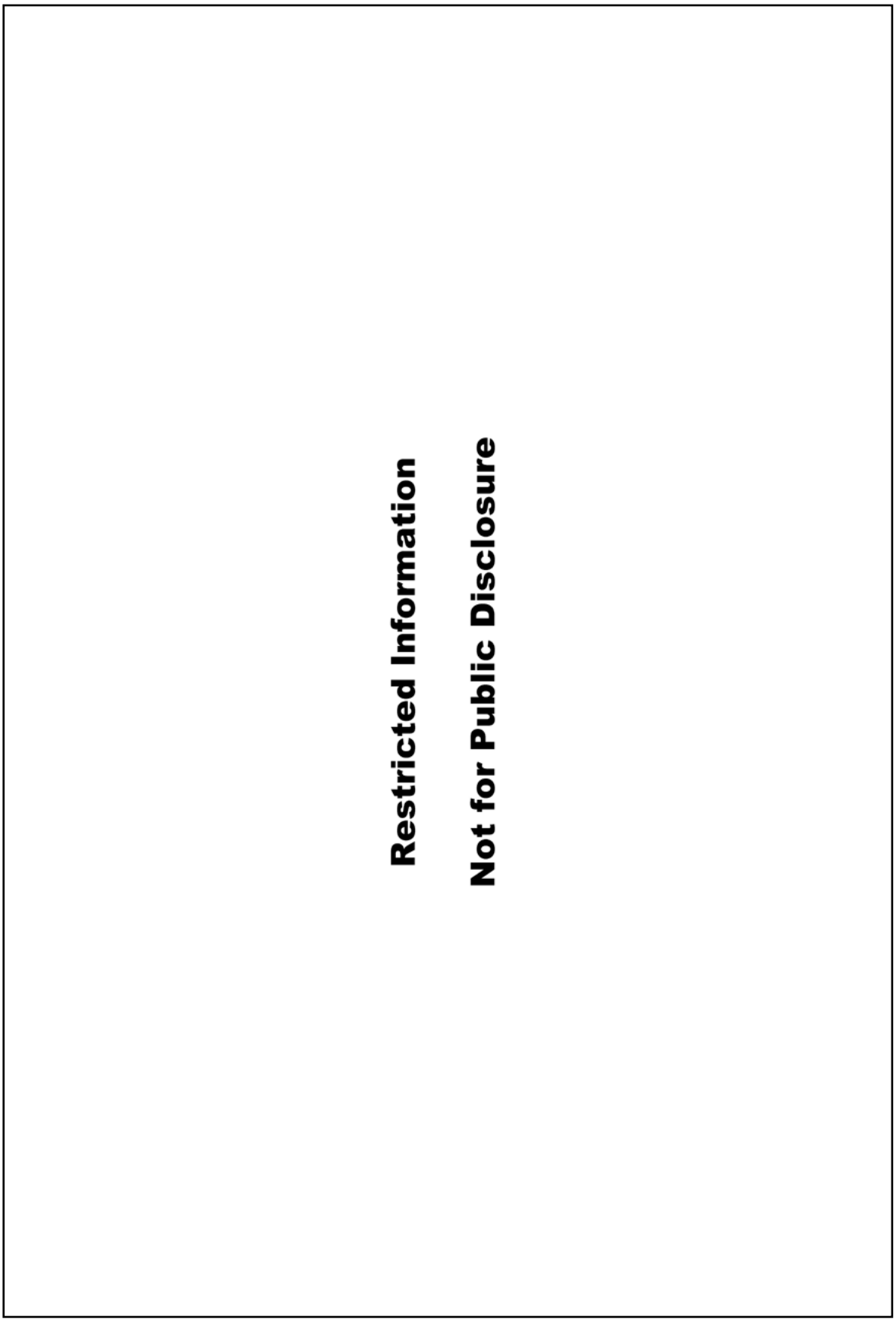

Figure 6.30. Map of 41BP918.

Table 6.12. Shovel Test Data for 41BP918

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN68	0-40	10YR 5/1	gray	Silt Loam	Cobbles, gravels, pebbles	Positive	72 tertiary flakes, 4 secondary flakes, 1 biface	Terminated at compact soil
	0-10	10YR 5/1	gray	Silt Loam	1-5%, pebbles	Negative	-	
MN69	10-35	10YR 5/1	gray	Silt Loam	10-20% cobbles and gravels	Positive	10 tertiary flakes	Terminated at compact soil
MN70	0-15	10YR 5/1	gray	Silt Loam	1-5%, Pebbles	Positive	2 tertiary flakes	Terminated at basal clay.
	0-10	10YR 5/1	gray	Silt Loam	1-5%, gravels	Negative	-	
MN71	10-25	10YR 5/1	gray	Silt Loam	>20%, cobbles, gravels, pebbles	Negative	-	Terminated at basal clay.
MS69	0-30	10YR 4/3	brown	Silt Loam	>20%	Positive	275 flakes and shatter; 50 burned limestone fragments	Terminated at bedrock.
MS70	0-30	10YR 4/3	brown	Silt Loam	>20%, cobbles, gravels	Positive	19 flakes and shatter; 8 flakes	Terminated at dense gravel.
MS71	0-20	10YR 4/3	brown	Silty Clay	>20%	Positive	2 tertiary flakes	Dense gravel at surface, possibly due to disturbance. Terminated at compact clay.
MS72	0-30	10YR 4/3	brown	Silt Loam	>20%, Cobbles, gravels	Positive	2 tertiary flakes	Terminated at compact soil
MS73	0-25	10YR 6/3	pale brown	Silty Clay Loam	>20% cobbles, gravels	Negative	-	Terminated at compact soil

Figure 6.31. Overview of 41BP918, facing southeast.

Figure 6.32. Example of lithic materials from 41BP918.

Figure 6.33. Late state biface stone tool from 41BP918.

burned limestone rock. No diagnostic materials or cultural features were observed, although the density of artifacts encountered in shovel test MS69 may be indicative of a sheet midden.

Site 41BP918 is located within privately owned open-range cattle ranch land. Vegetation clearing and land modifications for agricultural purposes were observed throughout the site. Additional disturbances include an existing overhead transmission line along the northwestern site boundary. Natural erosion and bioturbation were also observed throughout the general area of the site.

41BP918 Summary

Site 41BP918 is a prehistoric campsite with shallow, dense subsurface deposits of an unknown age. Although the dense concentrations of lithic materials may be indicative of a sheet midden, no cultural features were documented. The assemblage consists of flakes, chert shatter, one late stage biface, and burned limestone rock. Disturbances to the site include an existing transmission line and general vegetation and land modification for agricultural operations. Overall, site 41BP918 exhibits shallow, unstratified and compressed cultural deposits, and lacks diagnostic artifacts. As such, SWCA recommends that 41BP918 is not eligible for listing in the NRHP or for SAL designation. No avoidance or additional work is recommended for the site within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41BP919

Site 41BP919 is a prehistoric lithic scatter in northern Bastrop County within a rerouted alignment that is no longer within the December 8, 2015 alignment. The site is situated along the sandy northern terrace of Little Sandy Creek (Figure 6.34). Vegetation consists of a moderately dense riparian forest at the edge of a lush hay field. Ground surface visibility ranges from 0 to 5 percent due to a dense grass cover (Figure 6.35). Little Sandy Creek is the nearest natural water source, situated 20 m south of the site. Soils on site consist of grayish-brown, brown, and pale brown sandy loams, clay loams, and clay with 1–10 percent gravel inclusions and mottles. Soil deposits range from 55 to beyond 100 cm deep and terminate at sterile clay subsoil.

Site 41BP919 measures 150 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the south and southeast beyond the project area. Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Seven shovel tests (MN96–99 and MS93–95) were excavated, four of which (MN96, MN99, MS93, and MS95) were positive for cultural materials (Table 6.13). Shovel testing recovered artifacts from 10 cm to 80 cmbs that consisted of 10 tertiary flakes ranging from a translucent brown to a heat-treated opaque red (Figure 6.36). Due to the density of the grass in the hay field, no cultural material was observed on the ground surface. All debitage was chert and no diagnostic materials or cultural features were observed.

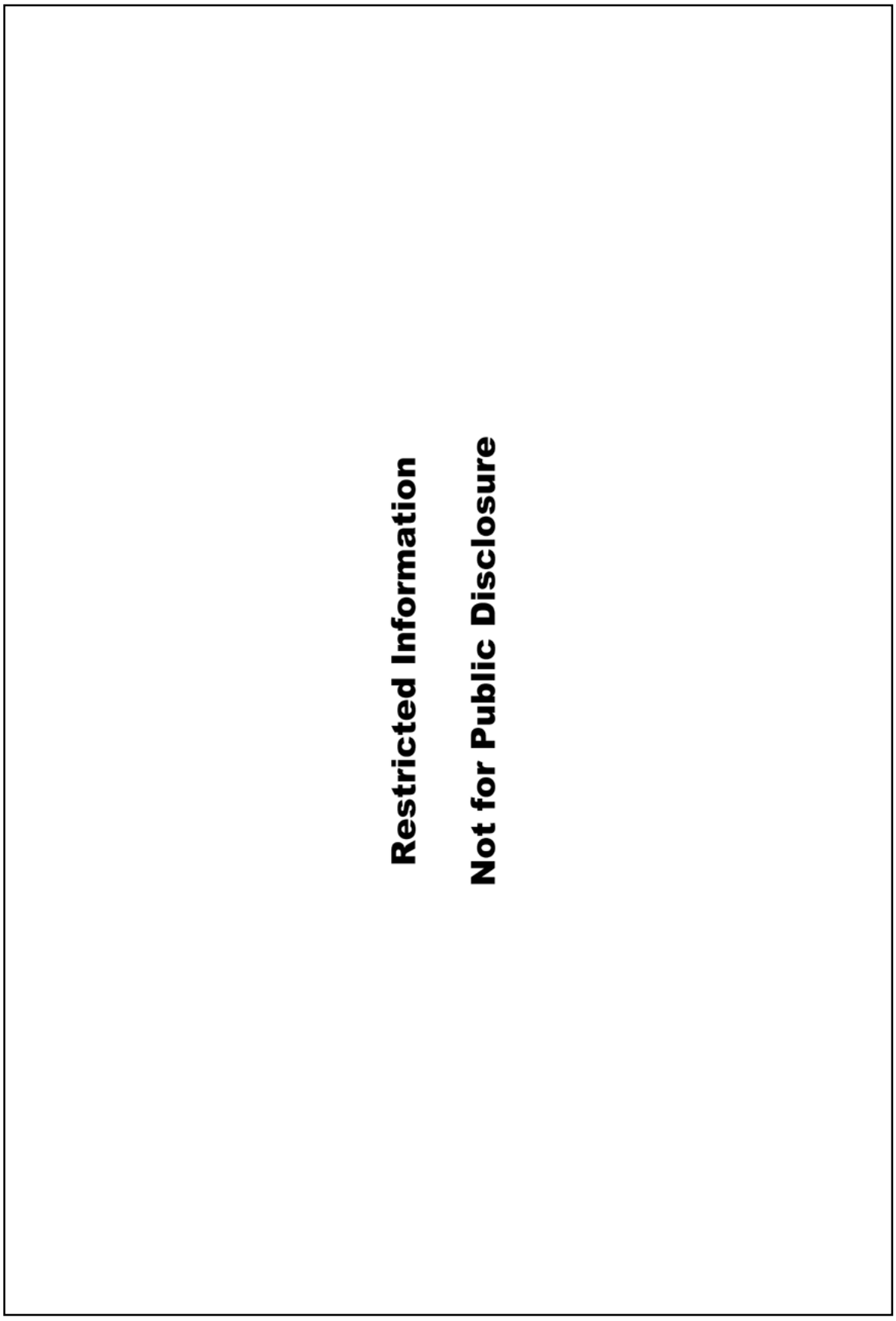

Figure 6.34. Map of 41BP919.

Table 6.13. Shovel Test Data for 41BP919

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN96	0-100	10YR 5/2	grayish brown	Sandy Loam	1-5%, gravels	Positive	4 tertiary flakes	Terminated at depth.
MN97	0-100	10YR 5/3	brown	Sandy Loam	5%, Gravels	Negative	-	Terminated at depth.
MN98	0-100	10YR 5/3	brown	Sandy Loam	5%, Gravels	Negative	-	Terminated at depth.
MN99	0-100	10YR 5/2	grayish brown	Sandy Loam	1-5%, Gravels	Positive	1 tertiary flake	Terminated at depth.
MS93	0-100	10YR 5/3	brown	Clay Loam	1-5%, Gravels, mottles	Positive	4 flakes, 3 coarse grained and 1 fine grained and heat treated	Terminated at depth.
	0-50	10YR 6/3	pale brown	Sandy Loam	1-5%, Gravels	Negative	-	
MS94	50-55	10YR 4/6	dark yellowish brown	Clay	-	Negative	-	Terminated at basal clay.
	0-60	10YR 5/4	yellowish brown	Sandy Loam	-	Positive	2 translucent brown chert flakes	
	60-75	10YR 6/3	pale brown	Sandy Loam	5-10%, Mottles	Negative	-	
MS95	75-80	10YR 6/3	pale brown	Clay	10-20%, Mottles	Negative	-	Terminated at basal clay.

Figure 6.35. Overview of 41BP919, facing west.

Figure 6.36. Example of artifact assemblage from 41BP919.

Site 41BP919 is located on privately owned land used for agricultural purposes. Vegetation clearing and land modifications for agricultural use was observed in the form of a plowed hay field under cultivation. Additional disturbances include an existing overhead transmission line bisecting the site from north northwest to east southeast, as well as a fence line south of the site boundary.

41BP919 Summary

Site 41BP919 is a low density prehistoric lithic scatter with minimal subsurface deposits of an unknown age. No diagnostic artifacts or cultural features were documented. Disturbances to the site include an existing transmission line and plowing for hay cultivation. Given the paucity of subsurface artifacts, the lack of apparent vertical integrity, and lack of cultural features, SWCA recommends that site 41BP919 is not eligible for listing on the NRHP or for SAL designation No further work or avoidance is recommended. However, as the site likely south or southeast extends beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41BP920

Site 41BP920 is an early Archaic lithic scatter with a historic component in northwestern Bastrop County. The site is situated on a generally level upland formation overlooking an unnamed ephemeral tributary of Wilbarger Creek (Figure 6.37). The unnamed tributary is 350 m to the north, and Wilbarger Creek is 1.3 km southwest of the site boundary. Vegetation consists of a fallow agricultural field with 60 to 70 percent ground surface visibility (Figure 6.38). Soils of the site consisted of light gray, very pale brown, red, reddish brown, and strong brown sandy clays, clay loams, sandy clays, and sandy loams. Soil inclusions include gravels, pebbles, and mottles that raged from 1 to 10 percent. Soil deposits ranged from 15 to 40 cmbs and terminated at compact and sterile clay subsoils.

Site 41BP920 measures 140 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project boundaries. Site boundaries were determined by shovel testing for subsurface cultural deposits and project area boundaries. Twenty–six shovel tests (AJ18–21, DR218–222, DR245–252, and MN213–221) were excavated within the site boundaries, 15 of which (AJ19, DR218, DR220, DR246–DR249, DR252, MN213–217, and MN220–221) were positive for subsurface cultural materials (Table 6.14). Subsurface materials ranged from ground surface to 35 cmbs and consisted of one sherd of prehistoric earthenware, primary flakes, secondary flakes, tertiary flakes, utilized flakes, cultural shatter, burned rock fragments, one Pedernales projectile point which dates to the early Archaic, and historic brick fragments (Figure 6.39). Materials observed on ground surface consisted of: one biface; 10–20 modified flakes; 10–20 primary flakes; 10–20 secondary flakes; 100–150 tertiary flakes; 20–80 cultural shatter fragments; 1–2 cores; 300–500 burned rock fragments; 3–5 clear glass shards; two solarized glass shards which date to the late nineteenth, early twentieth century; and three whiteware sherds. All lithic materials observed were composed of chert material types.

Site 41BP920 is located on private property within a fallow agricultural field. Disturbances to the site consist mainly of land clearing, property fence lines, cultivation, and the construction of a gravel drive (Figure 6.40). Additional disturbances include an existing overhead transmission line and one large earthen push pile at the southwest end of the site. One contemporary storage shed (Figure 6.41) has been constructed on the northeastern end of site 41BP920 in association with the contemporary barn to the north of the site 30 m north of the site boundary.

41BP920 Summary

Site 41BP920 is a multi-component prehistoric and historic site with subsurface deposits. One Pedernales projectile point dating the prehistoric component to the early Archaic was recovered during investigations, and one sherd of prehistoric earthen ware was documented. The historic component dates to the late nineteenth to early twentieth century based on ceramic and glass types. Disturbances to the site include a fence line and gravel road that intersect the site north to south. Overall, site 41BP920 has the potential to yield information important to the prehistory and history of the region based on intact subsurface deposits and diagnostic materials. SWCA therefore recommends that site 41BP920 has undetermined eligibility for inclusion to the NRHP or for SAL designation. As such, it is further recommended that the site be avoided or subject to significance.

Table 6.14. Shovel Test Data for 41BP920

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
AJ18	0-30	10YR 7/1	Light gray	Sandy Clay	1-5% Pebbles	Negative	-	Terminated at compact soil.
AJ19	0-10	10YR 8/1	White	Sandy Clay	5-10% Gravels, Pebbles	Negative	-	Terminated at compact soil.
	10-20	10YR 7/2	Light gray	Sandy Clay	5-10% Gravels, Pebbles	Positive	1 Primary flake, 1 secondary flake	
	20-30	10YR 7/2	Light gray	Sandy Clay	5-10% Gravels, Pebbles	Positive	2 primary flakes, 2 secondary flakes, 2 tertiary flakes, 1 projectile point, and one large highly oxidized stone	
AJ20	0-15	10YR 8/1	White	Clay	5-10% Gravels, Pebbles	Negative	-	Terminated at compact soil.
AJ21	1-30	10YR 6/6	Brownish yellow	Sandy Clay	1-5% Gravels, Pebbles	Negative	-	Terminated at compact soil.
DR218	0-30	10YR 7/3	very pale brown	Sandy Loam	1-5% Pebbles	Positive	4 tertiary flakes, 1 secondary flake	Terminated at basal clay.
	30-35	2.5YR 5/8	red	Clay Loam	5-10% Mottles	Negative	-	
DR219	0-20	10YR 7/3	very pale brown	Sandy Loam	1-5% Pebbles	Negative	-	Terminated at basal clay.
	20-25	2.5YR 5/8	red	Clay Loam	5-10% Mottles	Negative	-	
DR220	0-25	7.5YR 7/3	pink	Sandy Loam	1-5% Pebbles	Positive	6 tertiary flakes	Terminated at basal clay.
	25-35	5YR 5/8	yellowish red	Clay Loam	-	Negative	-	
DR221	0-20	10YR 7/3	very pale brown	Sandy Loam	1-5%Pebbles	Negative	-	Terminated at basal clay.
	20-30	2.5YR 5/8	red	Clay Loam	5-10% Mottles	Negative	-	
DR222	0-50	10YR 5/3	brown	Clay Loam	1-5% Cobbles, Pebbles	Negative	-	Terminated at compact soil.
DR245	0-15	7.5YR7/3	Pink	Sandy Loam	5-10% pebbles	Negative	-	Terminated at basal clay
	15-20	5YR4/6	Yellowish red	Sandy Clay	5-10% mottles	Negative	-	
DR246	0-32	10YR5/4	Yellowish brown	Sandy Loam	5-10% pebbles and 2% burned rock fragments	Positive	2 primary flakes; 11 tertiary flakes; 1 earthen ware	Terminated at basal clay
	32-35	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	

Table 6.14. - continued

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR247	0-20	7.5YR5/6	Strong Brown	Sandy Clay Loam	1-5% pebbles and 2% burned rock fragments	Positive	17 tertiary flakes; 1 secondary flakes;1 primary flake	
	20-27	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	Terminated at basal clay
DR248	0-25	7.5YR5/6	Strong Brown	Sandy Clay Loam	5-10% pebbles	Positive	1 utilized flake; 4 tertiary flakes; 1 microflake	Terminated at basal clay.
	25-27	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	
DR249	0-25	7.5YR5/6	Strong brown	Sandy Clay Loam	1-5% pebbles	Positive	1 tertiary flake	Terminated at basal clay
	25-27	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	
DR250	0-25	7.5YR5/6	Strong Brown	Sandy Clay Loam	1-5% pebbles	Negative	-	Terminated at basal clay
	25-30	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	
DR251	0-20	7.5YR5/6	Strong Brown	Sandy Clay Loam	1-5% pebbles	Negative	1 chert shatter	Terminated at basal clay.
	20-25	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	
DR252	0-20	7.5YR5/6	Strong Brown	Sandy Clay Loam	1-5% pebbles	Positive	1 primary flake; 6 tertiary flakes	Terminated at basal clay.
	20-30	5YR4/4	Reddish Brown	Clay Loam	5-10% mottles	Negative	-	
MN213	0-25	10YR5/6	Yellowish brown	Silt Loam	1-5% gravels	Positive	4 tertiary flakes	Terminated at basal clay
MN214	0-30	10YR5/6	Yellowish brown	Silt Loam	1-5% gravels	Positive	8 tertiary flakes	Terminated at basal clay
MN215	0-30	10YR5/6	Yellowish brown	Silt Loam	1-5% gravels	Positive	25 tertiary flakes	Terminated at basal clay
MN216	0-20	2.5YR5/6	Light olive brown	Silty Clay Loam	0%	Negative	-	Terminated at basal clay
	20-30	2.5YR6/8	Light red	Clay Loam	0%	Positive	1 tertiary flake; 1 thinned biface	
MN217	0-35	7.5YR5/6	Strong brown	Silt Loam	1-5% gravels	Positive	2 tertiary flakes	Terminated at basal clay
MN218	0-40	7.5YR5/6	Strong Brown	Silt Loam	1-5% gravels	Negative	-	Terminated at basal clay.
MN219	0-40	7.5YR5/6	Strong Brown	Silt Loam	1-5% gravels	Negative	-	Terminated at basal clay.
MN220	0-30	7.5YR5/6	Strong Brown	Silt Loam	1-5% gravels	Positive	3 tertiary flakes	Terminated at basal clay
MN221	0-30	7.5YR5/6	Strong Brown	Silt Loam	1-5% gravels, road gravel from adjacent road	Positive	1 tertiary flake; 1 brick fragment	Terminated at dense road gravels.

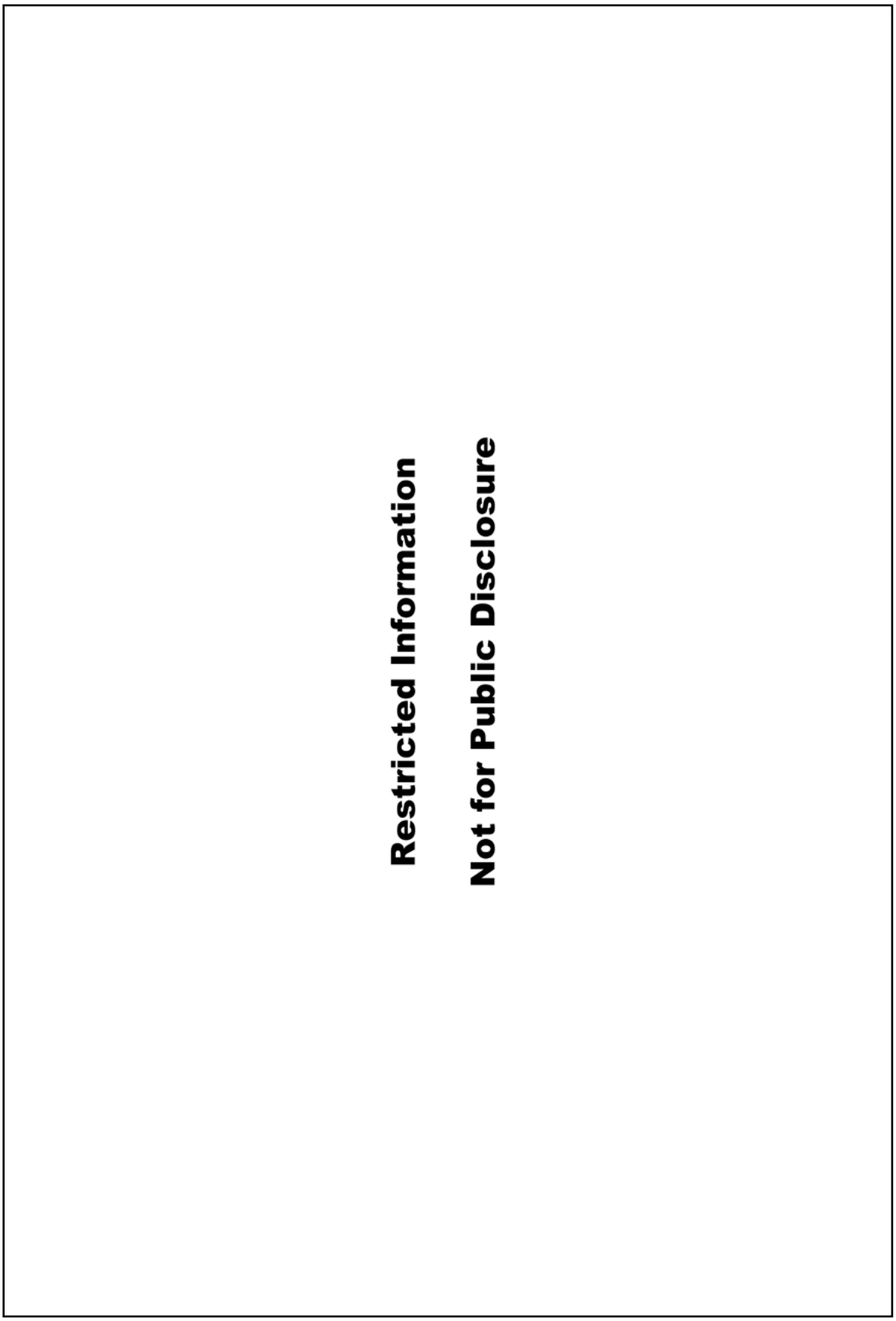

Figure 6.37. Map of 41BP920.

Figure 6.38. Overview of 41BP920, facing west.

Figure 6.40. Overview of existing disturbances on 41BP920, including a private gravel drive, an overhead transmission utility, and property fence lines, facing south.

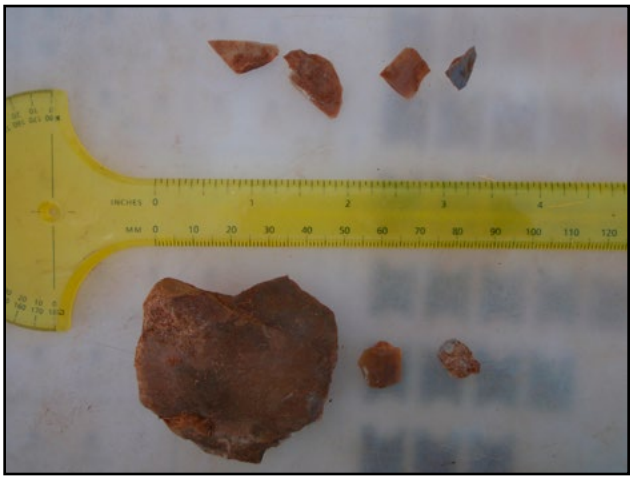

Figure 6.39. Example of subsurface prehistoric materials from 41BP920.

Figure 6.41. Existing shed within the boundaries of site 41BP920, facing west.

41BP921

Site 41BP921 is a historic artifact scatter in northern Bastrop County. The site is situated on a sandy knoll that gently slopes to the south and west toward an unnamed tributary. Vegetation consists of a grove of several old oak trees bordered by hay fields to the southeast, south, west, and northwest (Figure 6.42). Ground surface visibility ranges from 0 to 5 percent with dense grasses on the ground surface. An unnamed tributary of Big Sandy Creek is the nearest natural water source, situated 140 m to the southwest.

Site 41BP921 measures 120 m northeast to southeast by 50 m northeast to southwest (Figure 6.43). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Five shovel tests (MN127–MN129, and MS110–MS111) were excavated, four of which (MN127–MN128 and MS110) were positive for cultural materials (Table 6.15). Soils encountered within the shovel tests consisted of brown to very pale brown sand and sandy clay with 1 to 5 percent gravel inclusions. Soil deposits ranged from 30 to 100 cm deep and terminated at basal clay. Subsurface materials ranged from ground surface to 80 cmbs and consisted primarily of mid-twentieth-century household debris including one wire nail, one painted porcelain tea cup fragment, one whiteware plate base, one plain whiteware fragment, one whiteware with green transfer pattern, one amber bottle glass, three lamp glass fragments, 17 shards of oxidized window glass, one rusty nail or bolt, one clear bottle base fragment, and one metal fragment (Figure 6.44). Materials observed during ground surface inspection consisted of mortared brick fragments and a push pile of chimney fragments (Figure 6.45). No diagnostic materials or cultural features were observed.

Site 41BP921 is located within privately owned land used for agricultural purposes. Vegetation clearing and land modifications for hay production were observed in the form of a brush pile at the southeastern end of the site as well as general brush control and regular mowing of the hay field to the east, south, west and northwest of the site. Additional disturbances include a fence line to the east of the oak grove that transects the site from north to south and a two-track road paralleling the northern site boundary

Figure 6.42. Overview of 41BP921, facing southwest.

41BP921 Summary

Site 41BP921 is a historic scatter with minimal subsurface deposits of a single early- to mid-twentieth-century occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely subsurface in nature, consisting primarily of modern window glass fragments; whiteware and porcelain ceramic fragments; glass bottle fragments, and metal artifacts. Disturbances to the site include a brush pile at the southeastern end of the site as well as general brush control and regular mowing of a field to the east, south, west and northwest of the site for hay production purposes. Overall, site 41BP921 does not have the potential to yield information important to the history of the region. The site lacks substantial intact subsurface deposits, diagnostic artifacts, isolable activity areas and overall integrity. Due to its lack of potential research value, 41BP921 is not recommended eligible for listing in the NRHP or for designation as an SAL. As such, no further survey or avoidance is recommended for the site within the project area.

41BP922

Site 41BP922 is a prehistoric camp site in northwestern Bastrop County. The site is situated on an upland formation with a 3 to 8 percent slope. Vegetation consists of short to medium grasses and shrubs with a fallow agricultural field (Figure 6.46). Ground surface visibility ranges from 0 to 70 percent with eroded areas of a fine sandy loam soil at ground surface. An unnamed tributary of Wilbarger Creek is the nearest natural water source.

Table 6.15. Shovel Test Data for 41BP921

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN127	41BP921	0-30	10YR 5/2	grayish brown	Sand	1-5%, gravels	**Positive**	**1 brown glass fragment**	
MN127	41BP921	30-35	10YR 5/6	yellowish brown	Sandy Clay	1-5%, Gravels, pebbles,	Negative	No cultural material encountered	Terminated at compact soil.
MN128	41BP921	0-30	10YR 5/2	grayish brown	Sand	1-5%, Gravels	**Positive**	**3 window pane glass fragments**	
MN128	41BP921	30-40	10YR 5/3	brown	Sandy Clay	1-5%, Gravels	Negative	No cultural material encountered	Terminated at basal clay.
MN129	41BP921	0-20	10YR 5/2	grayish brown	Sand	1-5%, Gravels	Negative	No cultural material encountered	
MN129	41BP921	20-30	10YR 5/6	yellowish brown	Sandy Clay	1-5%, Mottles, Pebbles	Negative	No cultural material encountered	Terminated at basal clay.
MS110	41BP921	0-60	10YR 7/3	very pale brown	Sand	1-5%, Gravels	**Positive**	**1 wire nail (rusty, detail unknown), painted porcelain tea cup fragment, 1 whiteware plate base frag, 1 amber bottle glass frag, 2 clear lamp glass frags; 1 undecorated whitware, 1 whiteware frag w/ green transfer print (likely same piece)**	
MS110	41BP921	60-63	10YR 5/4	yellowish brown	Sandy Clay	10-20%, Mottles	Negative	No cultural material encountered	Terminated at basal clay.
MS111	41BP921	0-100	10YR 7/3	very pale brown	Sand	1-5%, Gravels	**Positive**	**9 clear window glass fragments, 2 oxidized window glass, 1 rusty nail or bolt; 1 unknown rusty metal, 4 clear window glass, 1 clear bottle base; 1 lamp glass; 2 clear window glass**	Terminated at depth.

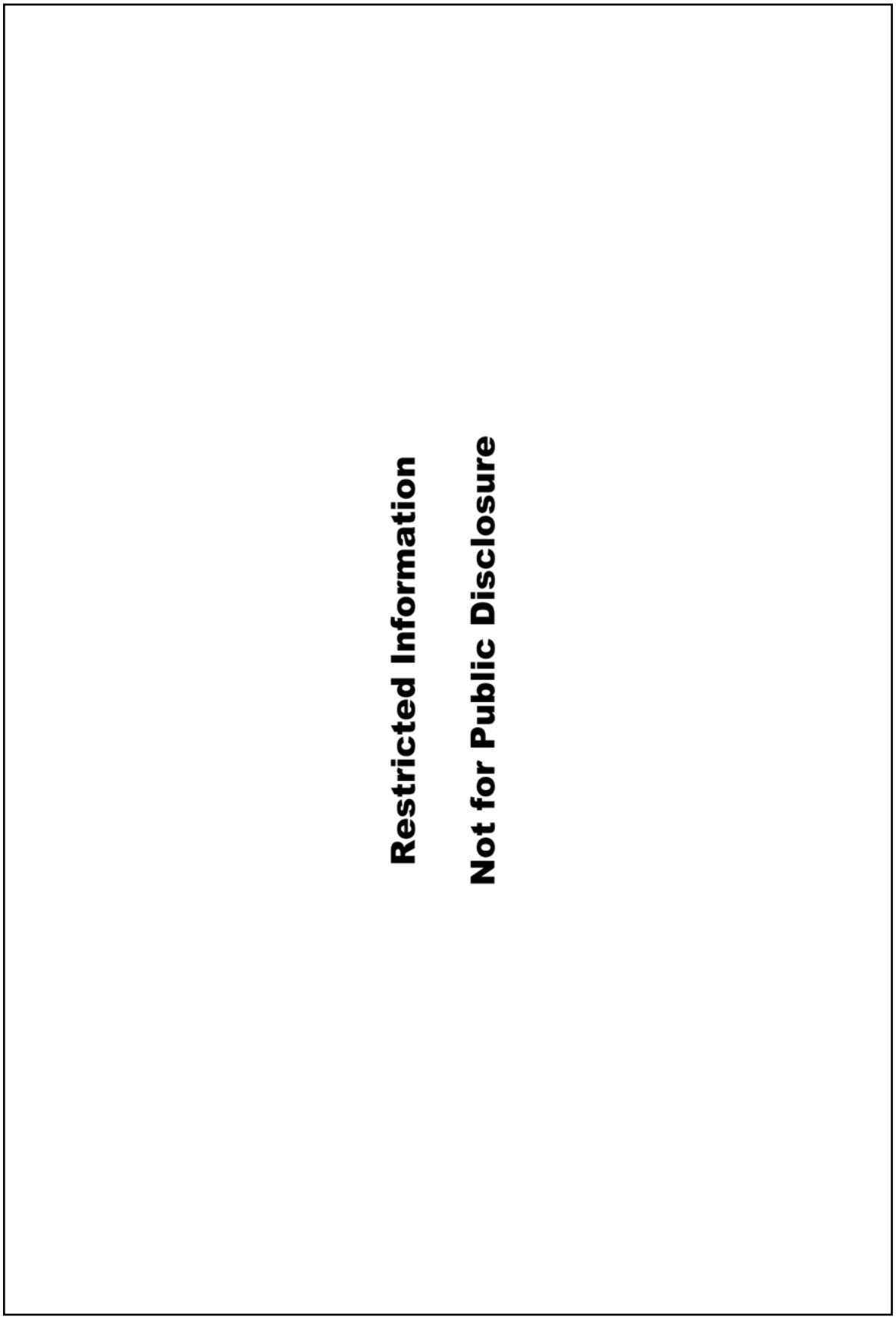

Figure 6.43. Map of 41BP921.

Figure 6.44. Representative sample of historic artifacts from 41BP921.

Figure 6.45. Above ground utilities within 41BP921, facing southwest.

Figure 6.46. Overview of 41BP922, facing west.

Site 41BP922 measures 26 m northeast to southwest by 20 m northwest to southeast; however, the site likely extends to the south beyond the project area (Figure 6.47). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Three shovel tests (DR275, MN241 and MN242) were excavated, all of which were negative for cultural materials (Table 6.16). Soils of the site consisted of reddish yellow clay loam with 5 to 10 percent mottling. Soil deposits extended to 30 cmbs and terminated at basal clay. Materials observed during ground surface inspection consisted of burned rocks and tertiary flakes on the southern portion of the right-of-way. All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BP922 is located within privately owned land used for agricultural purposes. Vegetation clearing and land modifications for agricultural activities were observed in the form of a plowed field and other cleared areas with short to medium grasses throughout the general area of the site. Additional disturbances include land clearing for construction of an existing overhead transmission line, as well as a heavily eroded areas throughout the general area of the site.

41BP922 Summary

Site 41BP922 is a prehistoric camp site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of burned rock fragments and tertiary flakes. Disturbances to the site include an existing transmission line, a plowed field, and general land clearing for agricultural purposes and access to utility lines.

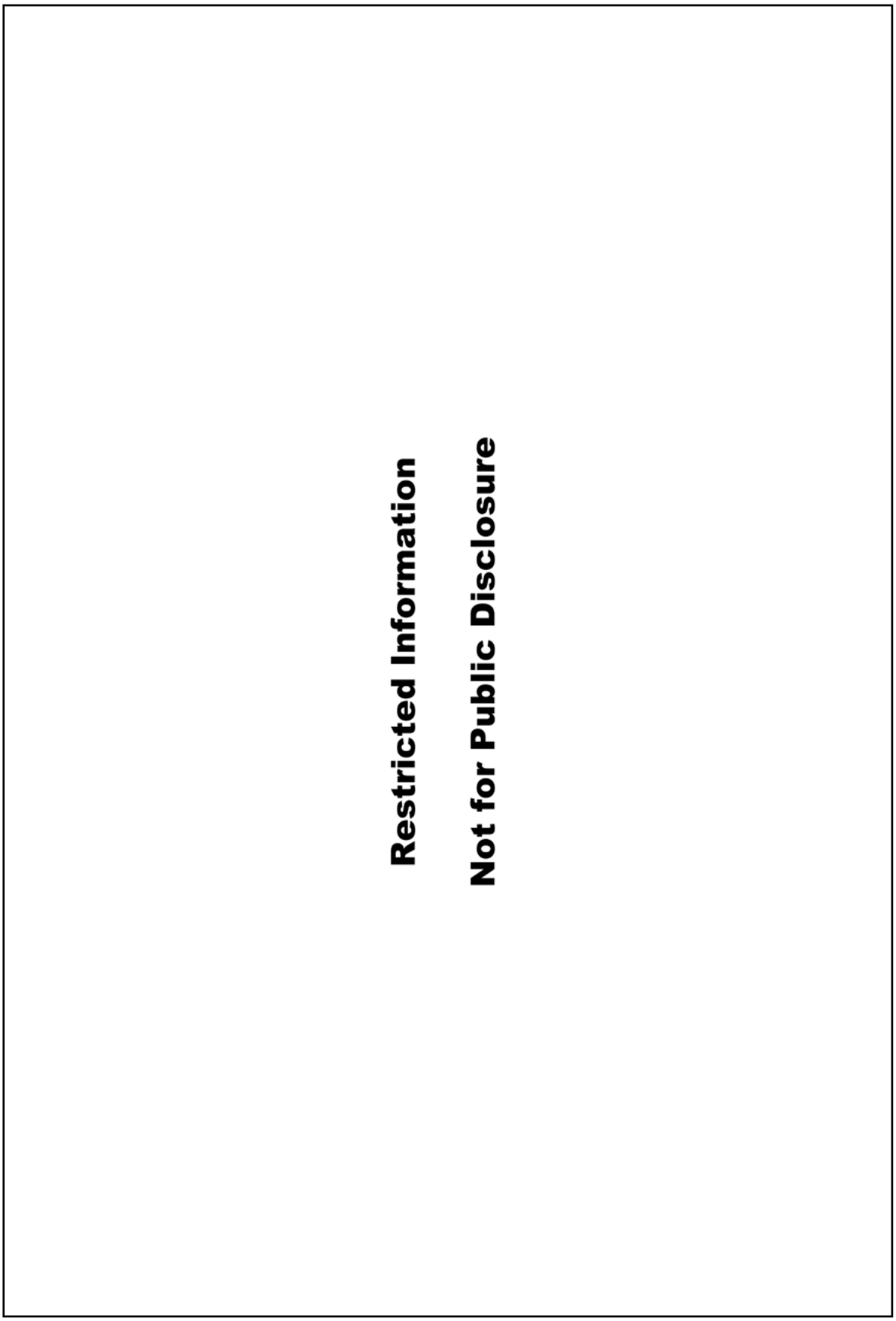

Figure 6.47. Map of 41BP922.

Table 6.16. Shovel Test Data for 41BP922

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR275	41BP922	0-30	7.5YR 7/6	reddish yellow	Clay Loam	5-10%, Mottles	Negative	No cultural material encountered.	Terminated at basal clay.
MN241	41BP922	0-100	10YR5/3	brown	Sand	None	Negative	No cultural material encountered.	Terminated at depth.
MN242	41BP922	0-100	10YR5/3	brown	Sand	None	Negative	No cultural material encountered.	Terminated at depth.

Overall, 41BP922 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41BP922 is not recommended eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance is recommended for the site within the project area. However, as the site likely extends south beyond the project area, should the alignment shift, additional investigations would be necessary.

Figure 6.48. Overview of 41BP923, facing west.

41BP923

Site 41BP923 is a prehistoric lithic scatter and historic artifact scatter in northern Bastrop County. The site is situated on an upland terrace that gently slopes to the west (Figure 6.48). Vegetation consists of a fallow agricultural field short with grasses. Ground surface visibility ranges from 0 to 40 percent with areas of sandy soil outcrops at ground surface. Little Sandy Creek is the nearest natural water source, situated 300 m to the southwest. Soils of the site consisted light to strong brown, or brownish yellow sandy clay or sand to depths between 35 and 100 cm before terminating at depth or encountering basal clay.

Site 41BP923 measures 104 m northwest to southeast by 17 m northeast to southwest; however, the site likely extends to the east and southeast beyond the project area (Figure 6.49). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Five shovel tests (MCC37–MCC39, MN321, and MN322) were excavated, and two (MCC37 and MCC38) were positive for cultural materials (Table 6.17). Subsurface materials ranged from ground surface to 10 cmbs and consisted tertiary flakes, one clear glass bottle fragment, and one white-

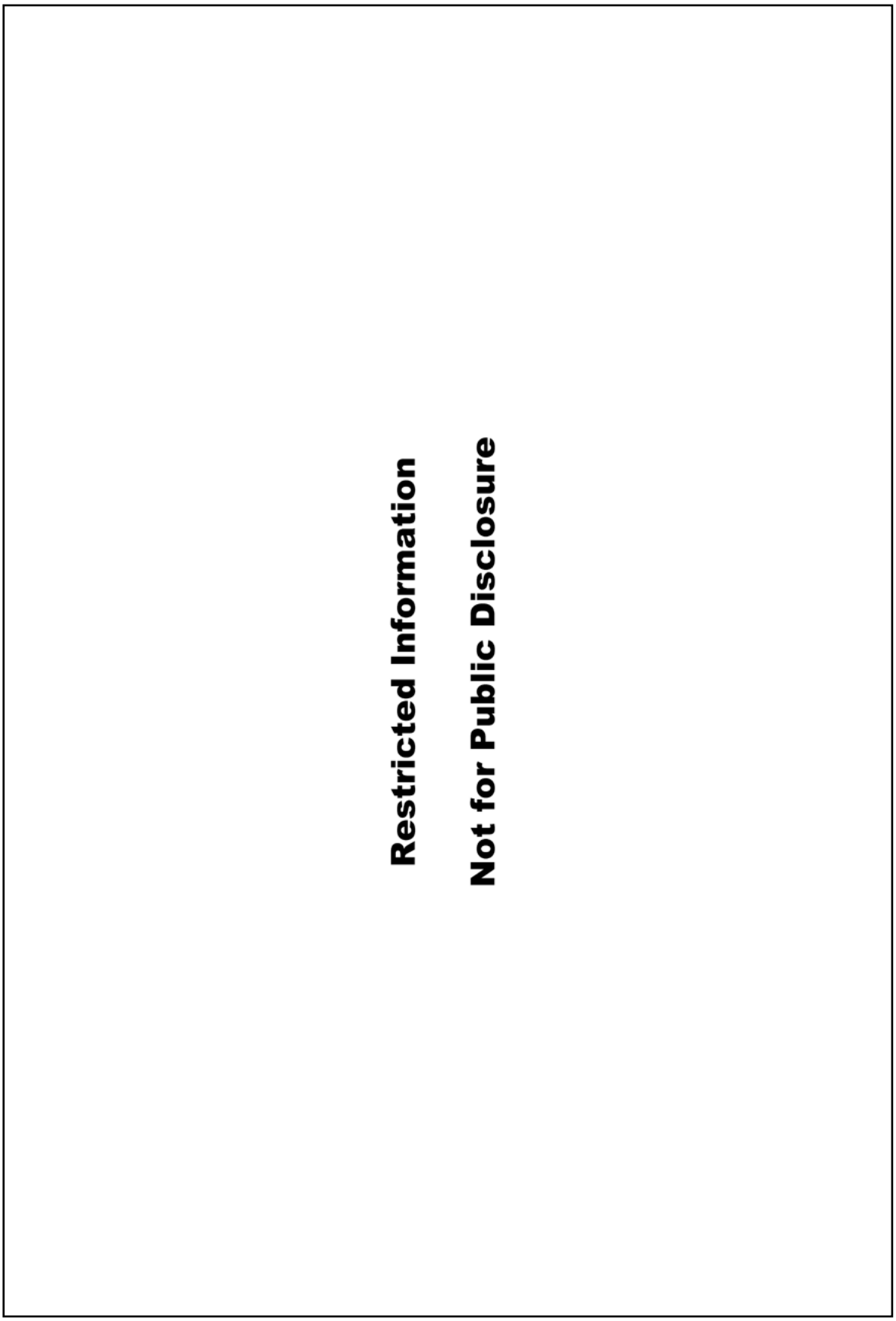

Figure 6.49. Map of 41BP923.

Table 6.17. Shovel Test Data for 41BP923

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MCC37	41BP923	0-100	7.5YR 6/4	light brown	Sand	no information provided	**Positive**	**4 tertiary flakes, 1 whiteware fragment**	Terminated at depth.
MCC38	41BP923	0-100	7.5YR 6/4	light brown	Sand	no information provided	**Positive**	**1 clear glass bottle fragment and 2 tertiary flakes**	Terminated at depth.
MCC39	41BP923	0-65	7.5YR 4/6	strong brown	Sand	no information provided	Negative	No cultural material encountered.	
		65-70	10YR 6/8	brownish yellow	Sandy Clay	no information provided	Negative	No cultural material encountered.	Terminated at basal clay
MN321	41BP923	0-100	7.5YR 5/6	strong brown	Sandy Loam	0%, no inclusions	Negative	No cultural material encountered.	Terminated at depth.
MN322	41BP923	0-35	7.5YR 5/6	strong brown	Sandy Loam	0%, no inclusions	Negative	No cultural material encountered.	Terminated at depth.

ware sherd. Materials observed during ground surface inspection consisted of: 2 whiteware sherds, 1 clear glass fragment, 1 Albany slipped stoneware sherd, 6 tertiary chert flakes, and 1 aqua bottle glass fragment. The ceramic and glass material types generally date the site to the mid-ninetieth to mid-twentieth century. No diagnostic materials were observed for the prehistoric component and no cultural features were observed.

Site 41BP923 is located within privately owned land used for agricultural purposes. Vegetation clearing and land modifications for farming, road and fence construction were observed in the form of a fallow agricultural field, gravel road grades, and areas void of brush. Additional disturbances include natural erosion throughout the general site area. The two-track road is encapsulated by two fence lines and runs parallels to the northern site boundary. A third fence line bisects the right-of-way approximately 60 m east of the eastern site boundary.

41BP923 Summary

Site 41BP923 is a prehistoric lithic scatter of unknown age and a mid- to late-twentieth-century historic artifact scatter with minimal subsurface deposits. No historic or prehistoric cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of historic ceramic sherds and glass fragments with sporadic prehistoric tertiary chert flakes throughout. Disturbances to the site include a two-track road bordered by two fence lines that parallel the site to the north, as well as general vegetation and land modification for farming operations. Overall, site 41BP923 does not have the potential to yield information important to the prehistory and history of the region following potential research avenues and outlines of the cultural context. The site lacks a substantial artifact assemblage, existing buildings, and intact cultural features.

Given these data, SWCA recommends that site 41BP923 is not eligible for listing in the NRHP or for SAL designation. As such, no further survey or avoidance is recommended for the site within the project area. However, as the site likely extends east and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

Caldwell County

Eight cultural resources and two isolated finds were identified and recorded within Caldwell County (Figure 6.50). The isolated finds consisted of one prehistoric lithic flake and one prehistoric bifacially reduced cobble with cortex. Formally recorded sites include one existing building (41CW162), two prehistoric campsites (41CW163 and 41CW164), two historic artifact scatters with a prehistoric component (41CW166 and 41CW168), and three historic artifact scatters (41CW165, 41CW167 and 41CW169). None of the newly recorded archaeological sites in Caldwell County are eligible for listing on the NRHP or for designation as an SAL. No avoidance strategy or further work is recommended for any of the eight sites.

41CW162

Site 41CW162 is a historic-age, dilapidated house in western Caldwell County. The site is on an upland terrace that gently slopes to the east (Figure 6.51). Vegetation on site consisted of short grasses, briar vines, and oak trees growing along an adjacent fence line. At the time of recording, ground surface visibility ranged from 0 to 5 percent. An unnamed tributary of Plum Creek is the nearest natural water source, situated 320 m north of the site.

Site 41CW162 measures 30 m northwest to southeast by 20 m northeast to southwest. Site boundaries were determined by ground surface inspection and shovel testing. Six shovel tests (DR126–DR129, and MN02–MN03) were excavated, none of which were positive for cultural materials. Soils encountered within the shovel tests consist of brown loam to black clay loam with 10 to 20 percent cobble, gravel, and pebble inclusions. Soil deposits extend to 15 cm deep and terminate at bedrock (Table 6.18).

The house measures 98 feet by 65 feet and is oriented northwest to southeast on the parcel. The house is constructed with board and batten siding and a steeply pitched gable roof. An awning extends from the southwest side of the building, creating a covered shelter for livestock and storage (Figure 6.52). The interior of the building consists of two rooms which are currently used for tire and agricultural refuse storage. The house has been heavily modified from its original state, indicated by the use of corrugated tin sheets to reinforce the exterior roof and siding (Figure 6.53). Diagnostic artifacts include an electrical box on the southern exterior of wall of the house with a 1952 date. Other than the meter box, no other diagnostic materials were observed.

Site 41CW162 is on privately owned land used for agricultural and residential purposes. Vegetation clearing and land modifications for farming and ranching were observed in the form of cultivated fields and the previous construction of stock pens. Additional disturbances include existing fence lines to the south and east of the building.

Table 6.18. Shovel Test Data for 41CW162

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR126	41CM162	0-15	10YR 5/3	brown	Clay Loam	10-20%; Gravels, Pebbles	Negative	No cultural material encountered.	Terminated at bedrock.
DR127	41CM162	0-15	10YR 5/4	yellowish brown	Loam	1-5%; Pebbles	Negative	No cultural material encountered.	Terminated at bedrock.
DR128	41CM162	0-15	10YR 5/4	yellowish brown	Loam	1-5%; Pebbles	Negative	No cultural material encountered.	Terminated at bedrock.
DR129	41CM162	0-15	10YR 5/4	yellowish brown	Loam	1-5%; Pebbles	Negative	No cultural material encountered.	Terminated at bedrock.
MN02	41CM162	0-15	10YR 2/1	black	Clay Loam	>20%; Cobbles, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.
MN03	41CM162	0-15	10YR 2/1	black	Clay Loam	>20%; Cobbles, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.

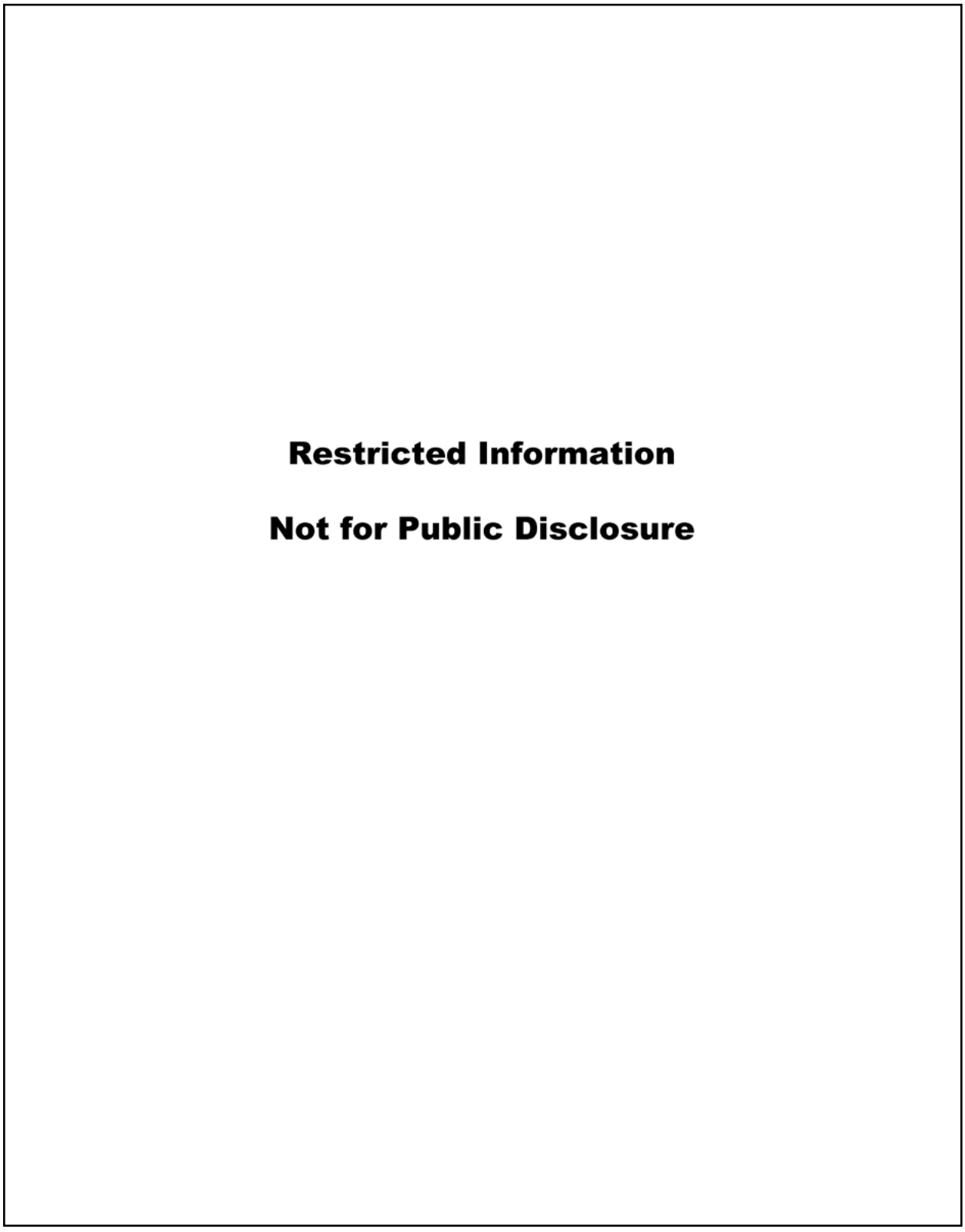

Figure 6.50. Caldwell County map.

Figure 6.51. Map of 41CW162.

Figure 6.52. Extension of structure serving as livestock shelter and storage on 41CW162.

Figure 6.53. Modifications to the original exterior of the structure on 41CW162.

41CW162 Summary

Site 41CW162 is a mid-twentieth-century historic-age building in fair condition, but that lacks outstanding design, history, or integrity. Additionally, the site lacks a substantial subsurface deposit and artifact assemblage. Due to its lack of integrity and generally low research value, 41CW162 is not recommended eligible for listing in the NRHP. As per the ACT, because the structure is not recommend eligible for the NRHP, the site is not eligible for SAL designation and no further work or avoidance is recommended for the site within the project area.

41CW163

Site 41CW163 is an Early to Middle Archaic campsite in western Caldwell County on a prominent ridge that steeply slopes to the east and south. Vegetation consists of mixed hardwood trees, tall weeds, sunflowers, gourds, and cacti (Figure 6.54). At the time of survey, ground surface visibility ranged from 10 to 90 percent with exposed rocks at ground surface. Morrison Creek is the nearest natural water source, situated approximately 225 m northeast of the site.

Site 41CW163 measures 620 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area (Figure 6.55). Site boundaries were determined by ground surface inspection, shovel testing, and project boundaries. A total of six shovel tests (MS43–MS44 and SS10–SS13) were excavated, three of which (MS43, MS44, and SS11) were positive for cultural materials (Table 6.19). Subsurface materials ranged in depth from 0–30 cmbs and consisted of one projectile point, and dense concentrations of lithic debitage in all stages of reduction (Figures 6.56 and 6.57). Of note, several fragments of historic decorated whiteware ceramic were recovered from one of the shovel tests (see Figure 6.57), however the data pertaining to their provenience is unavailable. Soils encountered within shovel tests consist of very dark gray clay to light yellowish brown clay loam with 5 to 20 percent cobble, gravel, and pebble inclusions. Soil deposits extend to 35 cmbs and generally terminate at compact soil or basal clay.

Figure 6.54. Overview of 41CW163, facing west.

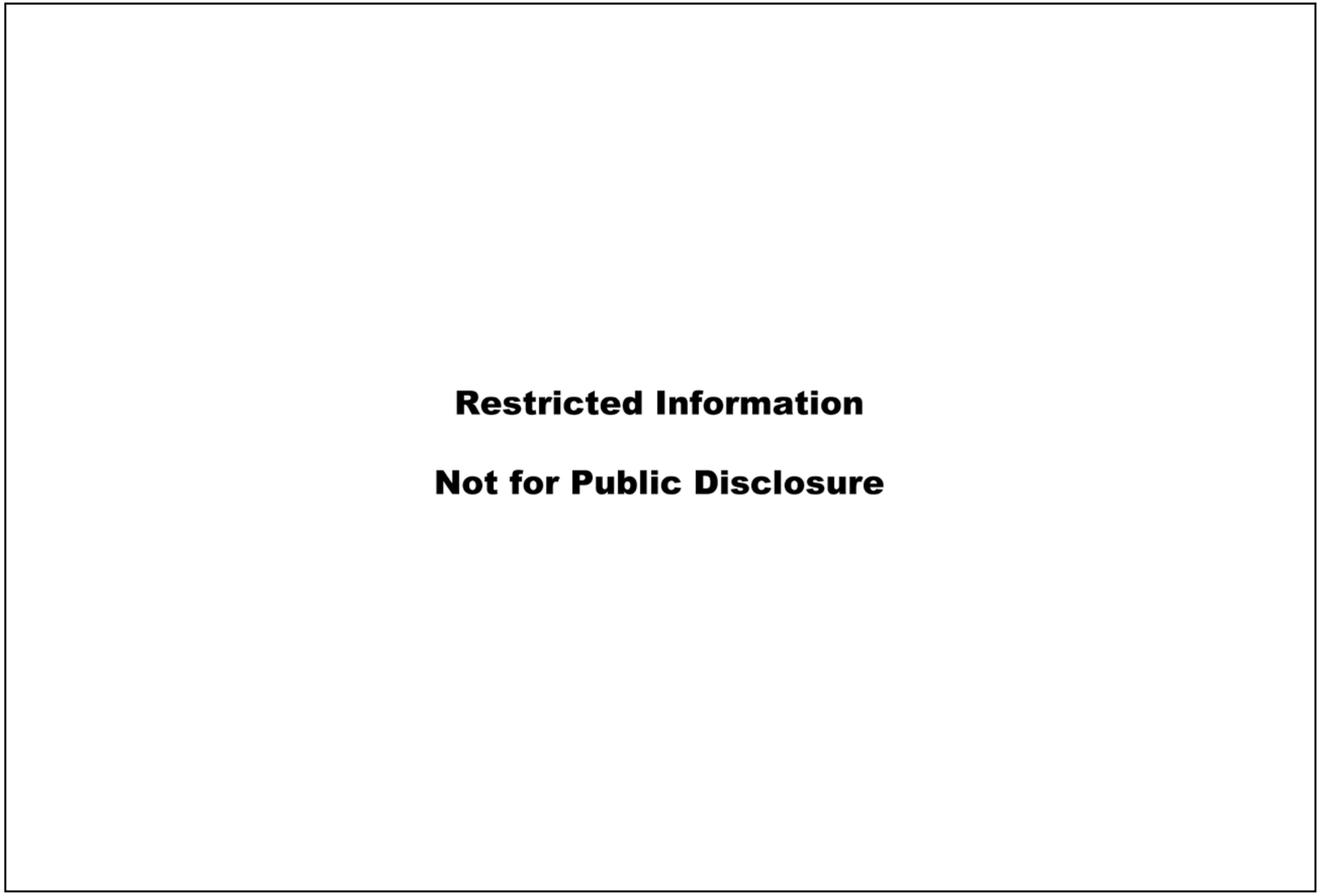

Figure 6.55. Map of 41CW163.

Table 6.19. Shovel Test Data for 41CW163

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MS43	41CW163	0–20	10YR 3/1	very dark gray	Clay	>20%, calcium carbonate, gravels, pebbles, snail shell fragments, roots	**Positive**	**20 tertiary flakes**	Terminated at dense gravels and cobbles?
MS44	41CW163	0–20	10YR 3/1	very dark gray	Clay	>20%; no explanation on what types of inclusions	**Positive**	**1 tertiary flake**	Terminated at dense gravel.
SS10	41CW163	0–35	10YR 4/3	brown	Clay Loam	10-20%, gravels and pebbles	Negative	No cultural material encountered	
		35–45	10YR 6/4	light yellowish brown	Clay Loam	5-10%, gravels, pebbles	Negative	No cultural material encountered	Terminated at compact soil.
SS11	41CW163	0–10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Gravels	Positive	1 core, 2 primary flakes, 6 secondary flakes, 32 tertiary flakes	
		10–20	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Gravels	Positive	1 projectile point, 2 primary flakes, 4 secondary flakes, 6 tertiary flakes	
		20–30	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Gravels	Positive	1 primary flake, 4 secondary flakes, and 7 tertiary flakes	Terminated at bedrock.
SS12	41CW163	0–35	10YR 4/3	brown	Loam	10-20%, gravels and pebbles	Negative	No cultural material encountered	Terminated at bedrock.
SS13	41CW163	0–35	10YR 4/3	brown	Loam	10-20%, gravels and pebbles	Negative	No cultural material encountered	Terminated at bedrock.

Figure 6.56. Bulverde type projectile point from shovel test SS11 on 41CW163.

Figure 6.57. Example of prehistoric and historic artifacts from 41CW163.

Materials observed during ground surface inspection consisted of a dense concentration of lithic debitage, burned limestone fragments, and 16 non-diagnostic stone tools. All observed lithic materials were chert with the exception of the burned limestone rocks. One Bulverde dart, one Pedernales dart point, and one unidentified projectile point were also documented. The Pedernales dart point was recovered from 10 to 20 cmbs in shovel test SS11, while the other two projectile points were observed at the ground surface. No cultural features were observed.

Site 41CW163 is on privately owned land used for agricultural purposes. Vegetation clearing and land modifications for property boundary and farming were observed in the form of a barbed wire fence line and a planted sorghum field on a floodplain northeast of the site. Additional disturbances include two stock ponds to the south and east of the site and an existing overhead transmission line bisecting the site from northeast to the southwest.

41CW163 Summary

Site 41CW163 is a prehistoric campsite that dates to the Early and Middle Archaic occupation based on Bulverde and Pedernales dart points documented during investigations. The remainder of the artifact assemblage consists of a dense concentration lithic debitage and burned rock fragments that ranged from ground surface to 30 cmbs. Disturbances from an existing transmission line, man-made stock ponds, and a planted sorghum field have heavily impacted the site. Based on the shallow compressed deposits and extensive disturbance, 41CW163 does not exhibit intact cultural deposits that have the potential to yield information important to regional prehistory. Due to its lack of potential research value, 41CW163 is recommended not eligible for listing on the NRHP or for SAL designation. No avoidance strategy or further work is recommended within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41CW164

Site 41CW164 is a prehistoric campsite in northern Caldwell County. The site is on an upland ridge with a 5 to 8 percent slope. Vegetation consists of grasses and weeds bordered by a mixed hardwood forest (Figure 6.58). At the time of survey, ground surface visibility

Figure 6.58. Overview of 41CW164, facing southwest.

ranged from 0 to 60 percent, with localized concentrations of gravels and cobbles on the ground surface. Plum Creek is the nearest natural water source, located approximately 250 m northeast of the site.

Site 41CW164 measures 140 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area (Figure 6.59). Site boundaries were determined by ground surface inspection and shovel testing. Seven shovel tests (MN46–MN51 and MS59) were excavated, one of which (MS59) was positive for cultural materials (Table 6.20). Artifacts within shovel test MS59 were encountered to a depth of 40 cmbs and consisted primarily of chert tertiary flakes and lithic shatter (Figure 6.60). Soils of the site consist of very dark brown and very dark gray clay loam with dense gravel inclusions. Soil deposits extend to 40 cmbs and terminate at compact soil. Cultural materials observed at ground surface consisted of bifacial tools, core tools, formal cores, tertiary flakes, and burned chert (Figure 6.61). All observed lithic materials were composed of chert and no diagnostic materials were observed.

One cultural feature was documented within the boundaries of 41CW164. Prehistoric Feature 1 (PF01) consists of a dense concentration of tertiary debitage and burned chert near the western end of the site. The feature is at the edge of the relatively flat ridge top, and measures 10 m in diameter. Material deposits within the feature range from ground surface to 20 cmbs (Figure 6.62).

Site 41CW164 is on privately owned rangeland used for cattle ranching. Vegetation clearing and land

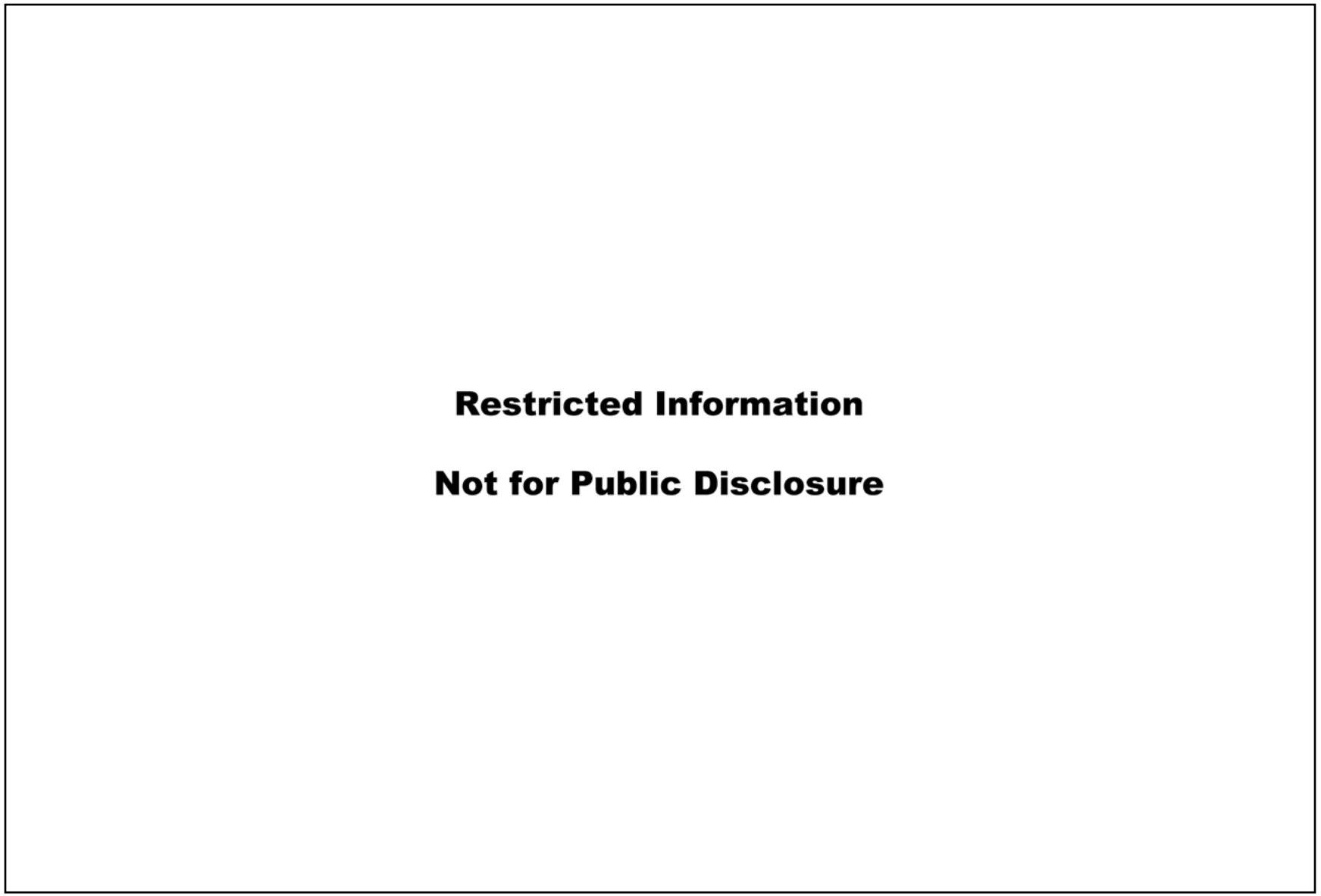

Figure 6.59. Map of 41CW164.

Table 6.20. Shovel Test Data for 41CW164

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MN46	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN47	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN48	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN49	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN50	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN51	41CW164	0-40	10YR 2/2	very dark brown	Clay Loam	>20% Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MS59	41CW164	0-40	10YR 3/1	very dark gray	Clay	1-5%, calcium carbonate, gravels	**Positive**	**88 flakes, mostly tertiary and chert shatter**	Terminated at compact soil.

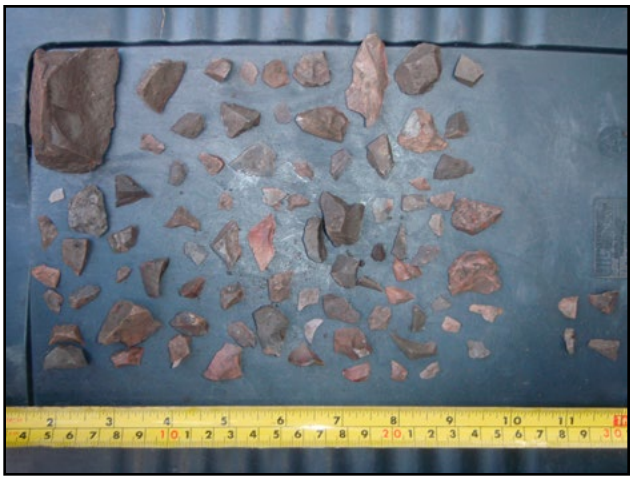

Figure 6.60. Representative sample of artifacts recovered from shovel test MS59 on 41CW164.

Figure 6.61. Numerous early-stage bifaces observed on the 41CW164 site surface.

Figure 6.62. Detail view of the surface of feature PF01, a dense lithic concentration on 41CW164.

modifications for agricultural activities were observed throughout the site. Additional disturbances include an existing overhead transmission line immediately southeast of the site boundary and a property fence line along the southwestern site boundary. Natural erosion and indications of flash flooding were also observed throughout the general area of the site.

41CW164 Summary

Site 41CW164 is a prehistoric campsite with minimal subsurface deposits of unknown age. SWCA archaeologists observed no diagnostic artifacts were during investigations. Investigations noted one cultural feature consisting of a dense concentration of decorticate debitage and burned chert. The artifact assemblage is largely surficial in nature, consisting primarily of bifacial tools, tertiary debitage and burned chert. Although PF01 was documented on site, subsurface investigations are indicative of a mixed deposit from multiple reduction activities that cannot be teased out into individual reduction events.

Disturbances to the site include an existing transmission line and general vegetation and land modification for agricultural purposes. Based on the above data, it is SWCA's opinion that site 41CW164 does not have the potential to yield information important to regional prehistory given its largely surficial context that likely represents a palimpsest deposit from multiple site uses that cannot be divided into discrete occupations. Due to its lack of potential research value, 41CW164 is recommended not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41CW165

Site 41CW165 is a historic artifact scatter in northwestern Caldwell County. The site is situated within a fallow agricultural field that gently slopes to the southwest. Vegetation consists of short grasses within the site boundary. Ground surface visibility is 70 percent with short grasses and areas of exposed clay loam at ground surface. Plum Creek is the nearest natural water source, situated 0.22 mile to the southwest. Soils of the site consisted of dark brown clay loam with 10 to 20 percent calcium carbonate, cobble, and gravel inclusions. Soil deposits ranged from 30 to 40 cm deep before terminating at compact soil.

Site 41CW165 measures 40 m northeast to southwest by 15 m northwest to southeast (Figure 6.63). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Three shovel tests (MN277–78 and DR309) were excavated and all tested negative for subsurface cultural materials (Table 6.21). Materials observed during ground surface inspection consisted of approximately 75 whiteware ceramic sherds, 1 blue glass fragment, 20 solarized glass fragments, 7 green glass fragments and 1 clear glass fragment. Diagnostic artifacts include the cobalt and solarized glass fragments that suggest an early twentieth century component. No cultural features were observed.

Site 41CW165 is located within privately owned land used for farming and ranching. Vegetation clearing and land modifications for farming and open range cattle ranching were observed in the form of a fallow agricultural field and heavily grazed mesquite and shrub pastures. Additional disturbances include erosion throughout the general area of the site, a fence line along the southern site boundary, and an existing overhead transmission line that runs parallel to the northwestern site boundary.

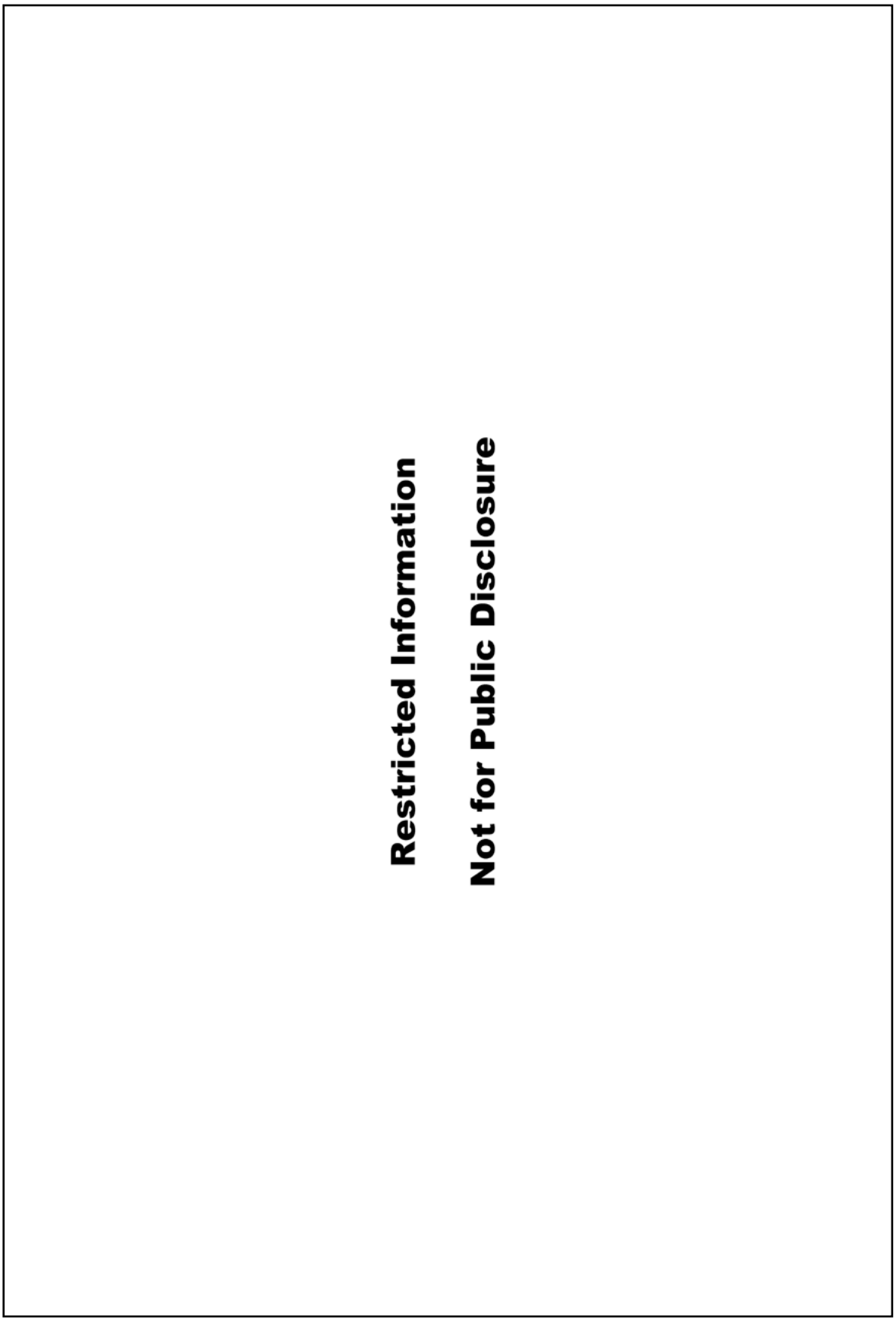

Figure 6.63. Map of 41CW165.

Table 6.21. Shovel Test Data for 41CW165

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR308	41CW165	Level 1, 0-30	10YR 3/3	dark brown	Clay Loam	10-20%, Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN277	41CW165	Level 1, 0-40	10YR 3/3	dark brown	Clay Loam	10-20%, Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered	Terminated at compact soil.
MN278	41CW165	Level 1, 0-30	10YR 3/3	dark brown	Clay Loam	10-20%, Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered	Terminated at compact soil.

41CW165 Summary

Site 41CW165 is a historic scatter site with minimal subsurface deposits of a single early twentieth century occupation. Diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of whiteware ceramic fragments as well as blue, solarized, green, and clear glass fragments. Disturbances to the site include an existing overhead transmission line paralleling the northwest site boundary, a fence line immediately south of the site, and general vegetation and land modification for open-range cattle ranching and farming operations.

Overall, site 41CW165 does not have the potential to yield information important to the history of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41CW165 is not recommended eligible for listing in the NRHP or for SAL designation. No further survey or avoidance is recommended.

41CW166

Site 41CW166 is a historic artifact scatter with one prehistoric tool located in northwestern Caldwell County. The site is situated on a peak of an upland hill formation that steeply slopes to the east and south within the cleared right-of-way of an existing overhead transmission line (Figure 6.64). Vegetation consists of moderately dense mesquite secondary growth vegetation with tall grasses and cacti. Ground surface visibility is 100 percent with 30 to 40 percent gravels and cobble at ground surface. Elm Creek is the nearest natural water source, situated 0.42 mile to the northeast. Soils of the site consisted of weak red stony clay loams with 30 to 40 percent cobble, gravel, and pebble inclusions. Soil deposits ranged from 15 to 30 cm deep and terminated at eroding bedrock.

Site 41CW166 measures 30 m east to west by 70 m north to south; however, the site likely extends in all directions beyond the project area. Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Three shovel tests (RW406–RW407, and KS207) were excavated, and all were negative for cultural materials (Table 6.22). No subsurface materials were observed. Materials observed during ground surface inspection consisted of approximately 25 green glass fragments; 40 clear glass fragments; 25 milk glass fragments; 30 whiteware sherds; 15 brown glass fragments; 15 porcelain fragments, 25 stoneware sherds and ironware sherds, 60 amethyst glass fragments, 25 cobalt glass fragments; and 1 crude chert chopper. No diagnostic cultural features were observed.

Figure 6.64. Map of 41CW166.

Table 6.22. Shovel Test Data for 41CW166

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KS207	FS42	0-15	2.5YR4/2	Weak red	Clay Loam	1-5% cobbles, gravels, and pebbles	Negative	-	Terminated at compact soils
RW406	FS42	0-30	2.5YR4/2	Weak red	Clay Loam	1-5% cobbles, gravels, and pebbles	Negative	-	Terminated at compact soils.
RW407	FS42	0-30	2.5YR4/2	Weak red	Clay Loam	1-5% cobbles, gravels, and pebbles	Negative	-	Terminated at compact soils.

Site 41CW166 is located within privately owned land used for open-range cattle and horse ranching. A historic-age house with roughly seven barns and outbuildings is 80 m northwest of the site boundary. The house is on the highest point of the upland hill formation and is likely the source of the historic artifact scatter. The house and associated outbuildings outside of the project area are currently occupied and were not documented at the time of investigation. Vegetation clearing for open-range ranching were observed primarily in the form of secondary mesquite growth. Additional disturbances include an existing overhead transmission line immediately north of the site boundary. A barbed wire fence parallels the western site boundary.

41CW166 Summary

Site 41CW166 is a historic artifact scatter with no subsurface deposits. Amethyst and cobalt glass types observed at ground surface generally date the site to the early twentieth century, but no diagnostic artifacts were recovered during investigations, and no cultural features or existing structures were observed. The assemblage is surficial in nature, consisting primarily of glass, ceramic, and metal fragments. Disturbances to the site include vegetation clearing, an existing transmission line to the southeast, and a property fence line to the west. Overall, site 41CW166 does not have the horizontal integrity to yield information important to the history of the region. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and existing structures within the project area. Due to its lack of potential research value, 41CW166 is recommended not eligible for listing in the NRHP or for SAL designation and no further survey or avoidance is recommended for the site within the project area. As the site likely extends in all direction beyond the project area, should the alignment shift, additional investigations would be necessary.

41CW167

Site 41CW167 is a historic scatter located in northwestern Caldwell County. The site is situated on an upland prairie within a fallow agricultural field. Vegetation consists of tall ragweed and scattered mesquite trees in wooded areas and short grasses in clearings (Figure 6.65). Ground surface visibility ranges from 0 to 15 percent with primarily dense vegetation at ground surface. An unnamed drainage that feeds into the Guadalupe River is the nearest natural water source, situated 0.42 mile to the north.

Site 41CW167 measures 64 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond

Figure 6.65. Overview of 41CW167 (including disturbance), facing south.

the project area (Figure 6.66). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Six shovel tests (AG21, AG26, AG27, MS201, MS202, and MS206) were excavated, and four of which (AG21, AG26, AG27, and MS201) were positive for cultural materials (Table 6.23). Materials encountered within shovel tests were observed to a maximum depth of 40 cmbs and consisted of typical late-nineteenth- to early-twentieth-century domestic materials (i.e., square and wire nails, clear, colored, and solarized glass, and miscellaneous metal fragments) (Figure 6.67). Soils encountered within shovel tests consisted of black and very dark clay and clay loam with dense cobble, gravel, and pebble inclusions. Soil deposits ranged from 20–40 cm deep and all shovel tests terminated at compact soil. Materials observed during ground surface inspection consisted of manganese bleached bottle glass, clear glass, blue glass, window glass, lamp glass, amber glass, plain whiteware fragments, transfer ware, round

Table 6.23. Shovel Test Data for 41CW167

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
AG21	41CW167	Level 1, 0-35	10YR 2/1	black	Clay	10-20%, Cobbles, Gravels, Large rock fragments, Pebbles	**Positive**	**47 historic artifacts including ceramics, metal and glass**	Terminated at compact soil.
AG26	41CW167	Level 1, 0-20	10YR 2/1	black	Clay	10-20%, Cobbles, Gravels, Large rock fragments, Pebbles	**Positive**	**3 clear glass fragments, 1 cobalt blue glass fragment, 1 square nail fragment**	
		Level 2, 20-40	10YR 2/1	black	Clay	10-20%, Cobbles, Gravels, Large rock fragments, Pebbles	**Positive**	**3 clear glass fragments, 2 wire nails, 1 UID nail fragment**	Terminated at compact soil.
AG27	41CW167	Level 1, 0-20	10YR 2/1	black	Clay	>20% Cobbles, Gravels, Large Rock Fragments, Pebbles	**Positive**	**2 clear glass fragments, 1 amber glass fragment, 1 wire nail fragment**	Terminated at fire ants.
MS206	41CW167	Level 1, 0-40	10YR 3/1	very dark gray	Clay Loam	10-20%, Cobbles, Gravels	**Positive**	**1 wire nail, 1 screw top mason jar neck fragment, 3 clear glass vessel fragments, 1 mang-bleached glass fragment, 3 white ware sherds, 1 mang-bleached glass base fragment, 2 clear glass bottle fragments, 2 mortar fragments**	Terminated at compact soil.
MS201	41CW167	No data available	No data available	No data available	No data available	No data available	Negative	No data available	No data available
MS202	41CW167	No data available	No data available	No data available	No data available	No data available	Negative	No data available	No data available

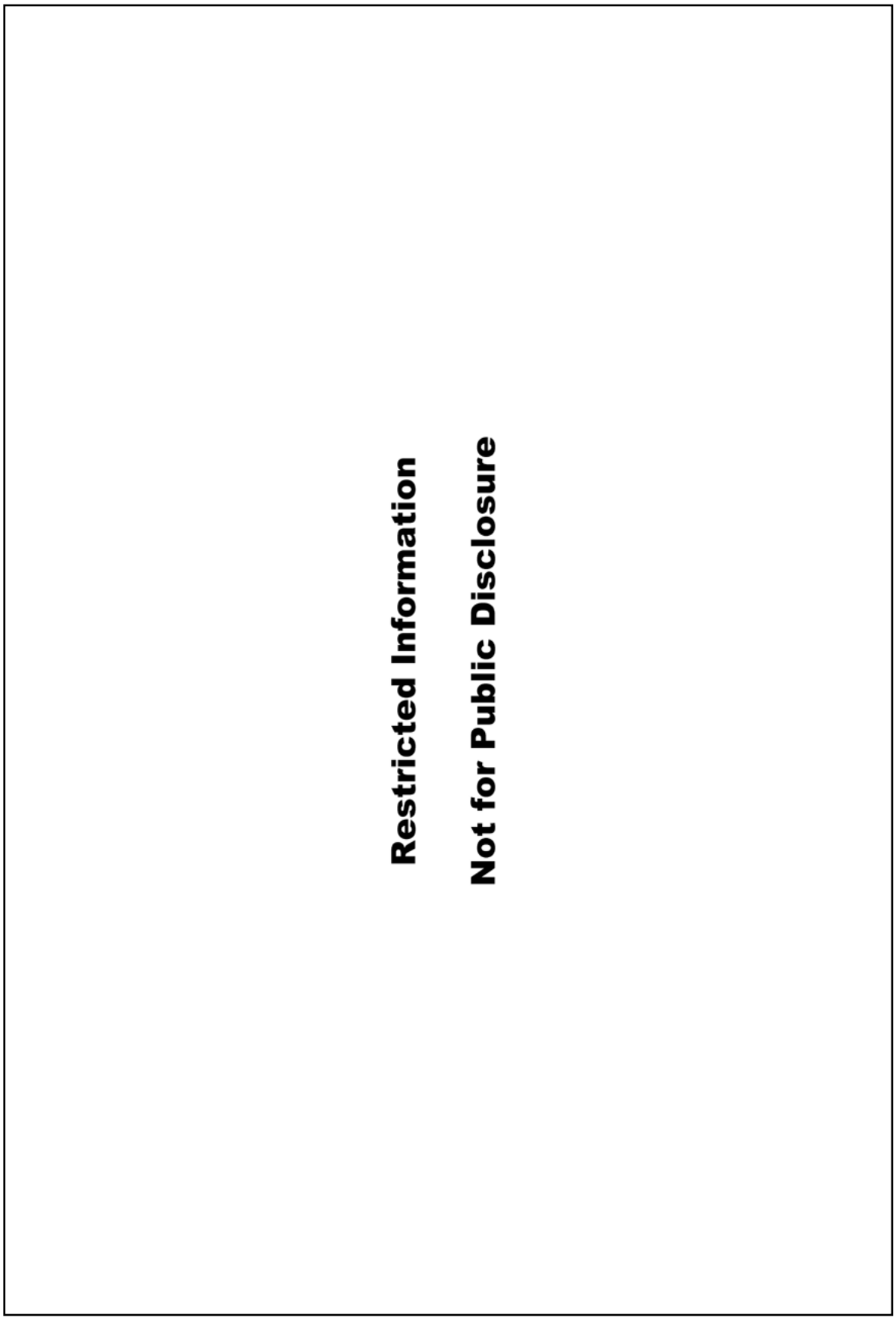

Figure 6.66. Map of 41CW167.

Figure 6.67. Representative sample of historic artifacts recovered from shovel tests within site 41CW167.

and square metal nails, red brick, mortar fragments, 1 B.F. Avery & Sons tractor part, and glazed stoneware. Diagnostic materials include the plain whiteware, the multiple colors of glass, round and square metal nails, and the tractor part that all suggest a single occupation from the late nineteenth to early twentieth centuries. No cultural features were observed.

Site 41CW167 is located within privately owned land used for farming operations. Vegetation clearing and land modifications for crop cultivation and construction of existing utility lines were observed in the form of a fallow field throughout the general area of the site and a cleared right-of-way along the northwestern site boundary. Additional disturbances include an existing high pressure gas line paralleling the right-of-way and cutting through the northwestern edge of site from the north northeast to the southwest (see Figure 6.65).

41CW167 Summary

Site 41CW167 is a late-nineteenth- to early-twentieth-century historic scatter with minimal subsurface deposits. Diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of multiple colors of glass fragments, ceramics, wire and square nails, a tractor part, and red brick. Disturbances to the site include an existing high pressure gas line cutting through the northwestern edge of site from the north northeast to the southwest and general vegetation and land modification for farming operations. Overall, site 41CW167 does not have the potential to yield information important to the history of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas.

Due to its lack of potential research value, 41CW167 is not recommended eligible for listing in the NRHP or for SAL designation. As such, no further survey or avoidance is recommended for the site within the project area. Additionally, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41CW168

Site 41CW168 is a multiple component site in northwestern Caldwell County. The site consists of a prehistoric lithic scatter of an unknown temporal affiliation with a late-twentieth-century refuse scatter. The site is located within a saddle between two steep, undulating hill formations. The erosional dip slopes (5–15 percent slope) north towards a man-made stock pond. Vegetation consists of a riparian forests with moderately dense shrub and vine undergrowth, bordered by a cleared existing ROW to the east (Figure 6.68). At the time of the survey, ground surface visibility ranged from 40 to 100 percent, with areas of exposed bedrock at ground surface. Elm Creek is the nearest natural water source, situated 630 m to the northeast. Soils of the site consisted of brown to weak red clay loams and silty clay loams. Root and mottle inclusions were observed within shovel tests SMM50. Soil deposits ranged from 25 to 40 cm deep and terminated at compact soils.

Site 41CW168 measures 30 m east to west by 30 m north to south (Figure 6.69). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Six shovel tests (SMM50, and RW422–425) were excavated, one of which (SMM50) was positive for cultural materials (Table 6.24). Subsurface materials ranged from ground surface to 25 cmbs and consisted of 1 clear glass bottle shard, 1 whiteware sherd, and 1 complete clear glass bottle. Materials observed during ground surface inspection consisted of approximately 7 primary flakes; 8 secondary flakes; 3 clear bottle glass shards; and 4 whole brown and clear glass bottles (Figure 6.70). All lithic materials observed were composed of chert material types and limited to the ground surface. No diagnostic materials or cultural features were observed.

Figure 6.68. Map of 41CW168.

Table 6.24. Shovel Test Data for 41CW168

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
SMM50	0-25	10YR 4/3	brown	Clay Loam	1-5% Mottles, Roots	Positive	1 clear glass shard, 1 whiteware sherd, 1 complete clear glass bottle	Terminated at compact soil.
RW422	0-40	2.5YR 4/2	weak red	Clay Loam	-	Negative	-	Terminated at compact soil.
RW423	0-10	2.5YR 4/2	weak red	Clay Loam	-	Negative	-	Terminated at compact soil.
RW424	0-40	2.5YR 4/2	weak red	Clay Loam	-	Negative	-	Terminated at compact soil.
RW421	0-35	2.5YR 4/2	weak red	Silty Clay Loam	-	Negative	-	Terminated at compact soil.
RW425	0-35	2.5YR 4/2	weak red	Silty Clay Loam	-	Negative	-	Terminated at compact soil.

Figure 6.69. Overview of 41CW168, facing northeast.

Figure 6.70. Example of lithic materials from 41CW168.

Modern refuse, such as aluminum cans, food wrappers, and glass beer bottles, were also observed within the site boundaries from ground surface to 20 cmbs.

Site 41CW168 is located within privately owned land used for residential, recreational hunting, and open cattle ranching purposes. Natural erosion has heavily impacted the site, evidence by compact, deflated soils and disturbed cultural deposits. Cultural materials have likely eroded from upland locals and have redeposited within the erosional drainage. Furthermore, modern refuse materials were observed from ground surface to 20 cmbs, indicating disturbance in cultural material deposition. Additional disturbances to the site include vegetation clearing for an existing overhead transmission line to the east, a two-track road to the east and south, a man-made stock tank to the west, and the construction of a property fence line to the south. (Figure 6.71).

41CW168 Summary

Site 41CW168 is a prehistoric lithic scatter and mid- to late-twentieth-century refuse scatter. Cultural materials were mostly surficial and no diagnostic artifacts were recovered during investigations. Additionally, no cultural features were observed. Modern refuse as observed from 0 to 20 cmbs, while all prehistoric materials were on ground surface. Disturbances to the site include natural erosion, an existing transmission line, a two-track road, a stock tank, and a property fence line. Overall, site 41CW168 does not have the potential to yield information important to the prehistory or history of the region given the sparse disturbed prehistoric subsurface component, while the remainder of the de-

Figure 6.71. Example of mid-to-late twentieth century refuse on 41CW168.

posit is modern debris. The site lacks substantial intact subsurface deposits, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41CW168 is not recommended eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance is recommended for the site within the project area.

41CW169

Site 41CW169 is a late-nineteenth- to early-twentieth-century historic artifact scatter in west Caldwell County. The site is situated on an upland formation that slopes to the southwest towards a man-made stock tank (Figure 6.72.). Vegetation consists of mixed hardwood trees, with low shrub and vine undergrowth and ground surface visibility ranges from 20 to 100 percent with limestone gravels and cobble at ground surface (Figure 6.73). Morrison Creek is the nearest natural water source, situated 0.65 mile southwest of the site boundary, and Dry Branch Creek is 0.75 mile northeast of the site. Soils of the site consisted of very dark brown to black clay loams with 5 to 10 percent cobble and gravel inclusions, and greater than 20 percent eroding bedrock inclusions. Soil deposits ranged from 2 to 30 cm deep and terminated at eroding bedrock.

Site 41CW169 measures 120 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project boundary. Site boundaries were determined by shovel testing for subsurface cultural deposits, ground surface inspection, and project boundaries. Twelve shovel tests (KS502–505 and RW702–709) were excavated, four of which (KS502, KS504, RW702, and RW706) were positive for subsurface cultural materials (Table 6.25). Subsurface materials ranged from ground surface to 15 cmbs and consisted of two wire nails, one metal saw blade fragment, iridescent glass bottle shards, charcoal, one porcelain sherd, and one light aqua-green glass bottle shard (Figure 6.74).

Materials observed during ground surface inspection consisted of approximately: 15 cobalt blue glass bottle shards and bottle base fragments; 40 clear and iridescent glass bottle shards and bottle bases fragments; 25 amethyst glass bottle and decorative ware fragments; 3 green depression glass bottle shards; 25 brown glass bottle shards and bottle bases fragments; 15 green bottle glass shards and bottle base fragments; 7 milk glass bottle and container sherds; 2 stoneware sherds; 6 whiteware sherds; 2 porcelain sherds; 7 decorative iron metal fragments; 25 coarse grain and gravel mortar conglomerates; 3 red brick fragments; and one iron horse shoe (Figures 6.75 and 6.76). No cultural features or existing buildings or structures were observed. The cobalt, amethyst, and light aqua-green glass types generally date the site to the late nineteenth to early twentieth century. An assemblage of glass bottle and decorative ware types, multiple ceramic types, and decorative iron metal fragments suggests a residential dwelling site.

Site 41CW169 is located within privately owned land used for open-range cattle ranching. Natural disturbances to the area consist of natural erosion and artificial disturbances consist of an existing overhead transmission line to the southeast and a two-track road to the northeast (Figure 6.77).

41CW169 Summary

Site 41CW169 is a historic artifact scatter with shallow subsurface deposits and no existing buildings or structures. Diagnostic artifacts were limited to glass types, such as cobalt, aqua-green, and amethyst, that date to the late ninetieth and early twentieth century, but no cultural features or existing structures were observed.

Disturbances to the site include an existing transmission line to the southeast and a two-track road to the northeast. Overall, site 41CW169 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks existing buildings or features and a substantial artifact assemblage. Due to its lack of potential research value,

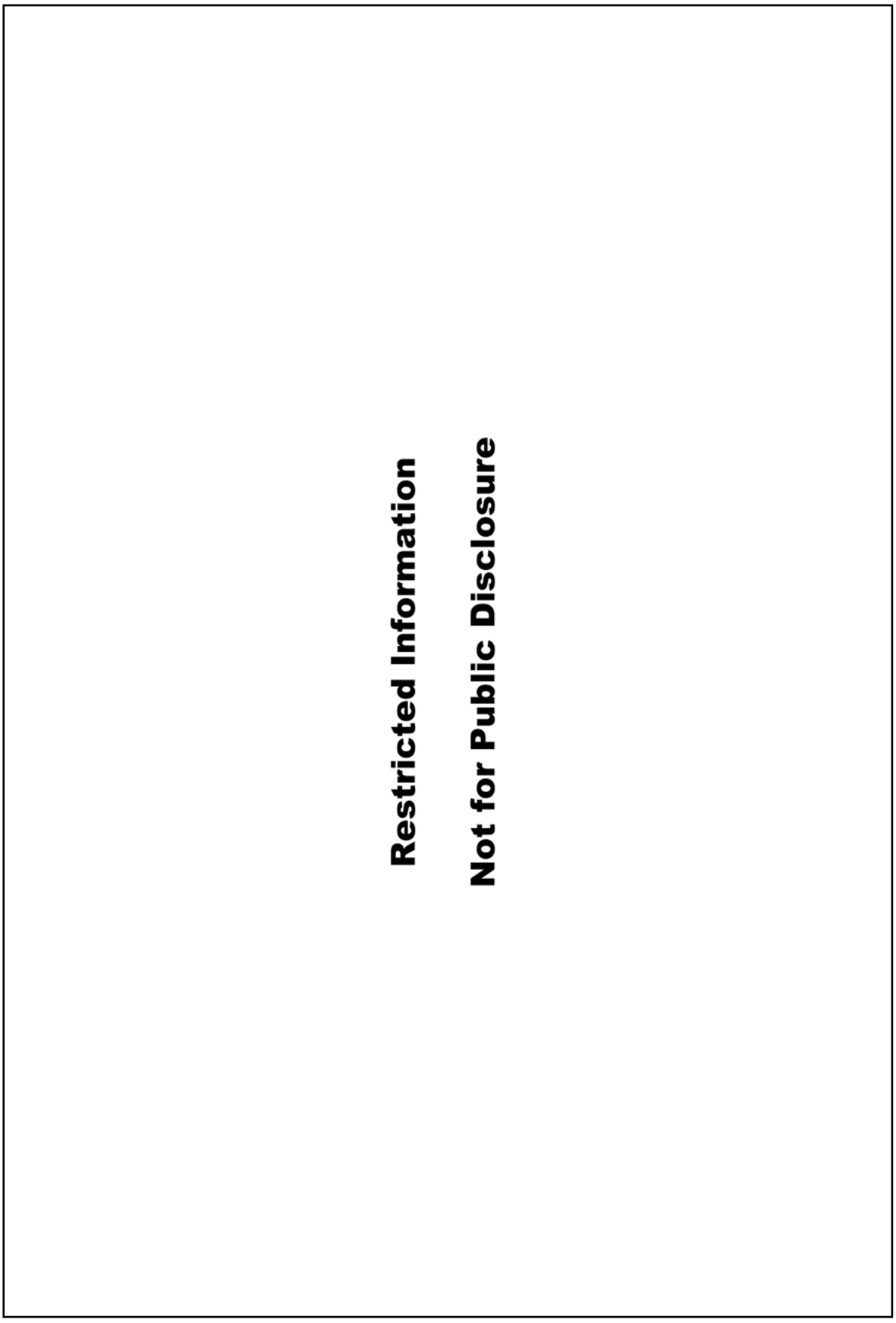

Figure 6.72. Map of 41CW169.

Table 6.25. Shovel Test Data for 41CW169

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KS501	0-5	10YR 2/1	black	Clay Loam	10-20% Cobbles, Large Rock Frags	Negative	-	**Terminated at bedrock.**
KS502	0-10	10YR 2/1	black	Clay Loam	10-20% Cobbles, Gravels, Large Rock Frags	Positive	2 round nails, 1 metal blade fragment, 2 iridescent glass shards, charcoal chunks and chert pot lid	Terminated at bedrock.
KS503	0-10	10YR 2/1	black	Clay Loam	10-20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
	0-10	10YR 2/1	black	Clay Loam	5-10% Cobbles	Negative	1 iridescent glass bottle shard	
	10-20	10YR 2/1	black	Clay Loam	5-10% Cobbles	Negative	1 whiteware, 1 stoneware sherd	
KS504	20-30	10YR 2/1	black	Clay Loam	5-10% Cobbles	Negative	1 iridescent glass bottle shard	Terminated at bedrock.
KS505	0-5	10YR 2/1	black	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
KS506	0-5	10YR 2/1	black	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
RW702	0-15	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Positive	2 iridescent glass bottle shards	Terminated at bedrock.
RW703	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.
RW704	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.
RW705	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.
RW706	0-15	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Positive	1 porcelain sherd, 1 clear bottle glass shard, 1 light aqua green bottle glass shard	Terminated at bedrock.
RW707	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.
RW708	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.
RW709	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Eroding Bedrock	Negative	-	Terminated at bedrock.

Figure 6.73. Overview of 41CW169.

Figure 6.75. Example of glass and ceramic surficial materials from 41CW169.

Figure 6.74. Example of subsurface materials from 41CW169.

Figure 6.76. Example of metal surficial materials from 41CW169.

Figure 6.77. Two-track road to the northeast of the 41CW169 site boundary, facing northwest.

41CW169 is not recommended eligible for listing in the NRHP or for designation as an SAL. No further survey or avoidance is recommended for 41CW169 within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

Guadalupe County

Six sites and two isolated finds were delineated within Guadalupe County during investigations (Figure 6.78). The isolated finds consist of a single prehistoric lithic flake and a biface that were not recorded as archaeological sites. Of the six archaeological sites, one is a prehistoric campsite (41GU177), two are well sites (41GU176 and 41GU179), one is a historic artifact scatter (41GU178), and two are house and farm complexes (41GU180 and 41GU181). Two newly recorded archaeological site (41GU177 and 41GU180) in Guadalupe are recommended as having unknown eligibility with recommendations of avoidance or significance testing. The remaining four sites are recommended as not eligible for listing as NRHP properties or as Sal and no further work or avoidance is recommended.

41GU176

Site 41GU176 is a modified historic-age well in north Guadalupe County. The site is on a rolling upland hay field that gently slopes to the east and southeast. Vegetation consists of low, cut grasses, mixed with sporadic mesquite saplings and low shrubs. At the time of investigations, there was no ground surface visibility and soils consisted of compact clay loams. No shovel tests were excavated within the site boundaries due to restrictions set by the land owners. The nearest natural water sourced is an unnamed tributary of Long Creek 240 m to the east.

Site 41GU176 measures 10 m east to west by 10 m north to south (Figure 6.79). Site boundaries were determined by the extent of existing structures and features associated with the well. The modified well is constructed of a gray, medium-grain and small pebble matrix formed from a single cast. The opening of the well is approximately 3 feet in diameter, and stands approximately 0.5 foot above ground surface. At an unknown time, a steel plate and lock mechanism were added to cover the well opening (Figure 6.80). The well was locked at the time of documentation, so the condition and depth of the interior of the well is unknown. A contemporary water valve inset into to a rectangular concrete foundation is 2–3 feet north of the well opening. The concrete foundation measures approximately 1.5×1.5 feet and is raised just above ground surface (Figure 6.81). A contemporary meter mounted to a square, wooden post is located 5–6 feet northeast of the well opening. Lastly, two yellow concrete pylons are located to the northwest and southeast of the well opening, likely used to mark the location of the structure during hay cutting. No cultural materials were observed on the ground surface in association with the site. The contemporary meter and water valve suggest that the well may have been modified in recent years.

Site 41GU176 is located within a privately owned pasture used for costal hay harvest and cattle rangeland. Major impacts to the well consists of contemporary modifications. Additional disturbances to the immediate area include an existing overhead transmission line, fence construction, and vegetation clearing associated with agricultural activities.

41GU176 Summary

Site 41GU176 is a historic-age well that has been heavily modified for contemporary use. No diagnostic artifacts were recovered during investigations, and no existing buildings or structures are located within the project area in association with the well.

The well has been modified from its original structure given the addition of modern valves and meter. The well may be associated with house complexes to the northeast and southwest, but because the buildings are outside of the project area, Criterion C cannot be applied. Based on the ubiquity of old wells and the modern alterations, site 41GU176 is not recommended eligible for listing in the NRHP or for SAL designation and no further survey or avoidance is recommended for the site within the project area.

41GU177

Site 41GU177 is a prehistoric campsite located in northwestern Guadalupe County. The site is on the western high bank of the Guadalupe River, with a 30- to 40-foot vertical drop to the river bottom to the east and gently sloping (2–5 percent slope) terrain to the west. Vegetation consists of mixed hardwood trees, large live oak trees, and moderately dense shrub undergrowth (Figure 6.82). Ground surface visibility ranges from 0 to 20 percent with limestone gravels and cobbles at ground surface. The Guadalupe River

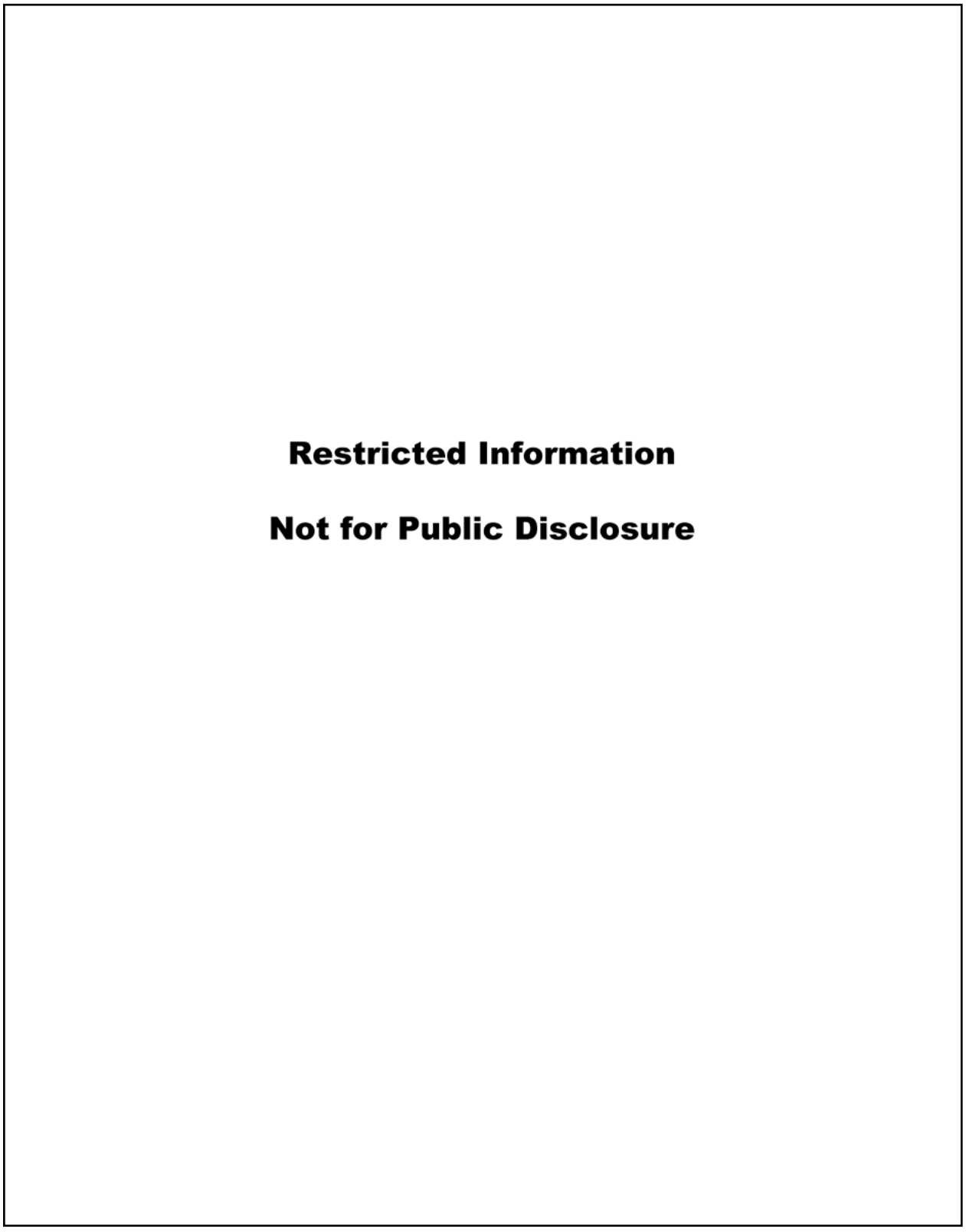

Figure 6.78. Guadalupe County map.

Figure 6.79. Close-up of modern manhole on 41GU176, facing east.

Figure 6.80. Modern water meter on 41GU176.

is the nearest natural water source, forming the eastern boundary of the site. Soils of the site consisted of very dark grayish brown to brown clay loams with 1 to 5 percent inclusions. Inclusions vary with depth, but include limestone cobbles, gravels, Rabdotus snail shell, a variety of snail shell, and calcium carbonates. Soil deposits ranged from 30 to beyond 80 cm deep and terminated at compact soils or depth.

Site 41GU177 measures 137 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project boundaries (Figure 6.83). Site boundaries were determined by shovel testing for subsurface cultural deposits and project area boundaries. Five shovel tests (KS139–141 and RW342–343) were excavated, and three of the five (KS139 and RW342–343) were positive for cultural materials (Table 6.26). Subsurface materials ranged from ground surface to beyond 80 cmbs and consisted primarily of tertiary flakes with few secondary flakes and cultural shatter also observed (Figure 6.84). Materials observed during ground surface inspection consisted of: 2 fragmented projectile points (Figure 6.85); 5–10 scrapers (Figure 6.86); 2–4 choppers (Figure 6.87); 50–80 primary flakes; 100–200 secondary flakes; 100–200 cultural shatter fragments (see Figure 6.84). All lithic materials observed were composed of chert material types. Fragments of iridescent water mussel shells were also observed during shovel testing. No diagnostic materials or cultural features were observed during shovel test excavations.

Due to the potential for deeply buried cultural deposits, backhoe trench investigations were also conducted at the site. A total of three BHTs (G1–G3) were excavated; G1 and G2 were excavated within the site boundary and G3 was excavated approximately 40 m southwest of the site (see Figure 6.83). G1 and G3 encountered a friable brown (10YR5/3) silt loam overlying light yellowish brown (10YR6/4) to very pale brown (10YR7/4) silt loam with increasing gravel and pebble inclusions (see Table 5.5). In contrast, G2 encountered friable very dark grayish brown (10YR3/2) to brown (10YR4/3) silt loam horizons containing cultural materials separated by a sterile loose brown (10YR4/3) silt loam horizon (see Table 5.5). Artifacts including numerous lithic flakes, and three burned rock were initially observed in the trench wall profile between 0–60 cmbs. A second cultural horizon containing lithic flakes and a blade were also observed from 90–120 cmbs.

To investigate the nature of the burned rock and determine if a cultural feature was present, a column sample was excavated off the north wall of G2. A total of 10 flakes, two animal bone fragments, one small piece of charcoal, and two burned rock were recovered from the column sample between 0–55 cmbs (Figure 6.88). In addition, four small- to medium-sized burned rocks (one 0–5 cm diameter and three 5–10 cm diameter) were encountered in a cluster at the base of the column sample (Figure 6.89). The feature was truncated on the south side by the backhoe, however a large burned rock appears to continue into the column sample wall suggesting portions of the feature may remain intact (Figure 6.90). After documentation was complete, the

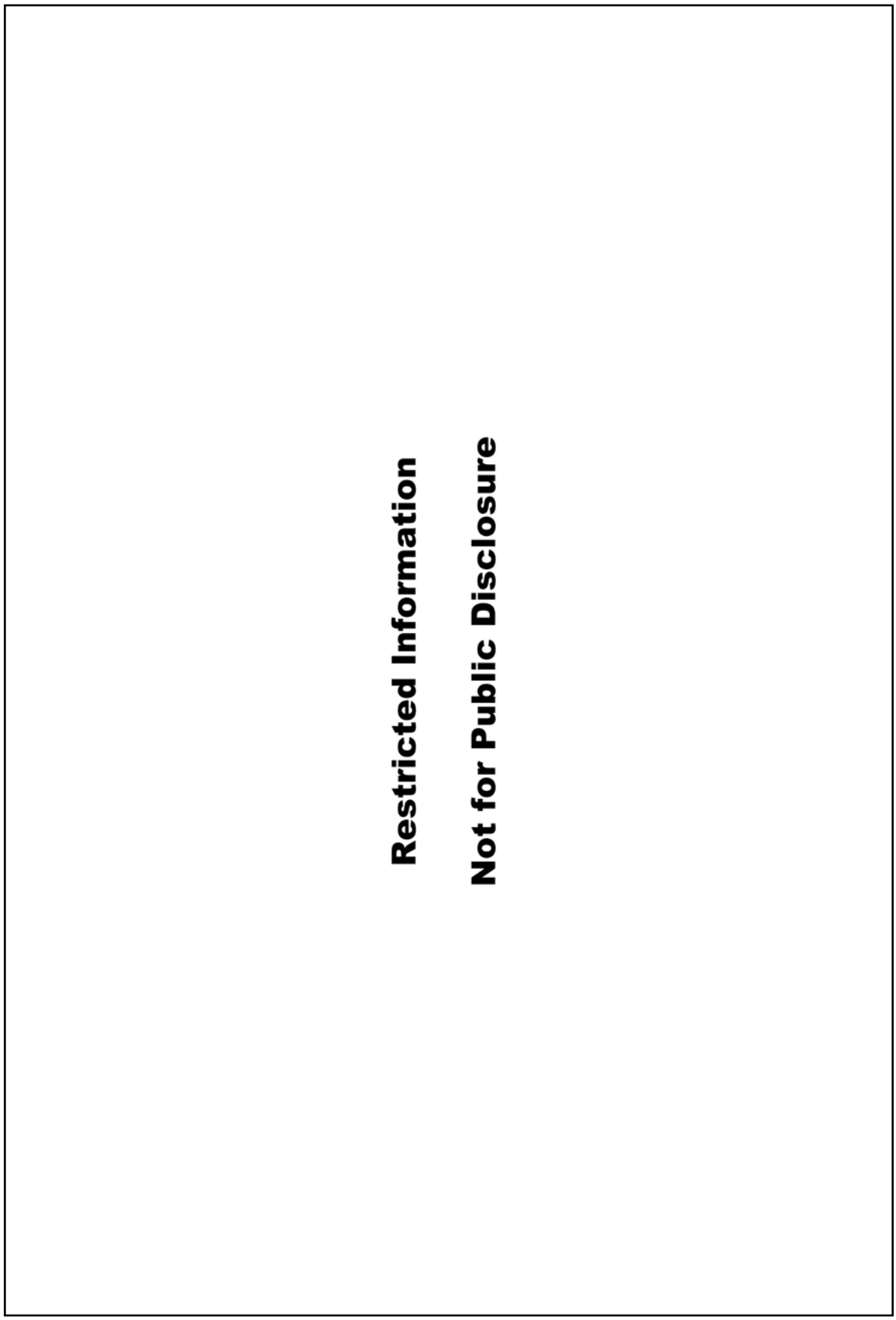

Figure 6.81. Map of 41GU176.

Table 6.26. Shovel Test Data for 41GU177

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KS139	0-10	10YR 3/2	very dark grayish brown	Clay Loam	1-5% Gravels	Positive	13 tertiary flakes	Terminated at depth.
	10-20	10YR 3/2	very dark grayish brown	Clay Loam	1-5% Calcium Carbonate, Roots, Rabdotus Snail Shell	Positive	6 tertiary and secondary flakes	
	20-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5% Calcium Carbonate, Gravels, Pebbles	Positive	9 tertiary flakes	
	30-40	10YR 3/2	very dark grayish brown	Clay Loam	1-5% Calcium Carbonate, Large Rock Fragments	Positive	15 tertiary flakes	
	40-50	10YR 3/2	very dark grayish brown	Clay Loam	-	Positive	10 tertiary flakes; mussel shell	
	50-60	10YR 3/2	very dark grayish brown	Clay Loam	-	Positive	6 tertiary flakes	
	70-80	10YR 3/2	very dark grayish brown	Clay Loam	1-5% Calcium Carbonates	Positive	5 tertiary flakes	
KS140	0-25	10YR 5/3	brown	Clay Loam	>20% Calcium Carbonate, gravels, large rock fragments	Negative	-	Terminated at sterile soil/ compact.
	25-30	10YR 4/2	dark grayish brown	Clay Loam	>20% Calcium Carbonate, cobbles, gravels	Negative	-	
KS141	0-30	10YR 5/3	brown	Clay Loam	>20% calcium carbonate, gravels, large Rock Fragments	Negative	-	
RW342	0-30	10YR 4/2	dark grayish brown	Silty Clay Loam	-	Negative	-	Terminated at depth.
	30-80	10YR 4/2	dark grayish brown	Silt Loam	5-10% Rabdotus Snail Shell, Tree Root	Positive	5 tertiary flakes; 4 cultural shatter; 1 burned flake with potmarks	
RW343	0-20	10YR 4/3	brown	Silty Clay Loam	5-10% Variety of Snail Shell	Negative	-	Terminated at compact soil.
	20-40	10YR 4/3	brown	Silty Clay Loam	>20% Variety of Snail Shell	Positive	1 tertary flake	

Figure 6.82. Overview of 41GU177, facing southeast.

feature and associated artifacts were covered with soil and the trench was backfilled.

Site 41GU177 is located within privately owned forested rangeland. Vegetation clearing and grading, fence line construction, and natural erosion have impacted. The southeastern boundary of the site has been recently been cleared of vegetation and graded 2–3 feet for the construction of a residential house and drive. One property fence borders the northwestern site boundary, and natural erosion from the high bank of the Guadalupe River has impacted the northeastern site boundary.

41GU177 Summary

Site 41GU177 is a prehistoric campsite site with intact, deep cultural deposits of an unknown occupation. One intact hearth feature and a dense artifact assemblage was observed during backhoe trench excavations. Disturbances to the site consist of minimal vegetation clearing. Based on the deep subsurface component, and dense artifact concentration, and buried hearth feature, SWCA recommended that site 41GU177 has undetermined eligibility for listing on the NRHP and for designation as an SAL. As such, SWCA recommends that site 41GU177 should be avoided or subject to significance testing.

41GU178

Site 41GU178 is a low-density historic artifact scatter in west Guadalupe County. The site is situated within a plowed agricultural field on an upland formation overlooking an unnamed tributary to the south and southeast (Figure 6.91). No vegetation was within the freshly plowed agricultural field, but a tree line of mixed hardwoods and tall grasses borders the field to the northeast. An unnamed tributary of Fourmile Creek is the nearest natural water source, 230 m to the south of the site boundary. At the time of investigations, ground surface visibility was 100 percent, with dark grayish brown to light brownish gray clay loams with 10 to 20 percent cobble and gravel inclusions at the ground surface (Figure 6.92). Soil deposits ranged from 20 to 25 cmbs and terminated at dark grayish-brown and sterile clay subsoil.

Site 41GU178 measures 30 m northeast to southwest by 60 m northwest to southeast; however the site likely extends to the northeast beyond the project area. Site boundaries were determined by ground surface inspection and project boundaries. Three shovel tests (RW734–735 and SMM78) were excavated, none of which were positive for cultural materials (Table 6.27). Surficial cultural materials consisted of approximately 3 whiteware sherds, 2 porcelain sherds, one stoneware sherd, 3 milk glass fragments, 4 amethyst bottle glass fragments, 2 aqua-green bottle glass fragments, and 4 clear glass fragments (Figure 6.93). The amethyst and aqua–green bottle glass generally date the site to the early twentieth century, but no diagnostic materials or cultural features were observed.

Site 41GU178 is located within privately owned land used for agricultural farming. Land clearing and agricultural plowing has heavily impacted the site, exhibited by a plow zone that ranged from 20 to 30 cmbs. A two-track road along the northeastern boundary of the agricultural field has also likely impacted the site. Multiple construction material push piles also border the field, just within the tree line to the northeast (Figure 6.94). An abandoned house, open well, and dilapidated barn are approximately 20–30 m northeast of the site boundary and are the likely source of the historic artifact scatter (Figure 6.95).

41GU178 Summary

Site 41GU178 is a sparse historic artifact scatter lacking subsurface deposits or existing buildings or structures. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is surficial in nature, consisting primarily of ceramic and glass fragments. Disturbances to the site include land clearing an agricultural plow-

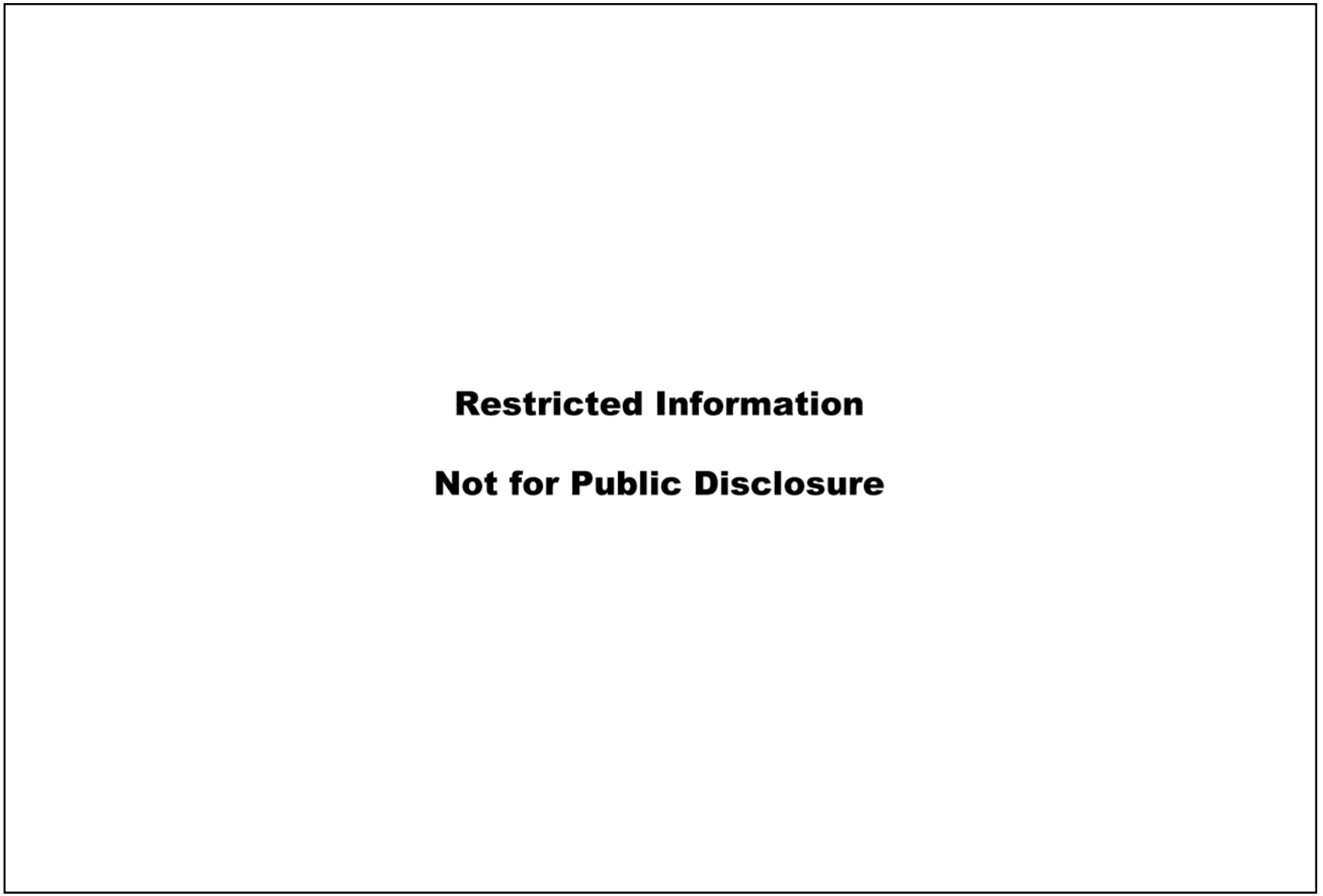

Figure 6.83. Map of 41GU177.

Figure 6.84. Example of lithic materials from 41GU177.

Figure 6.85. Two projectile points found on the surface at 41GU177.

Figure 6.86. Example of a scraper found on the surface at 41GU177.

Figure 6.87. Example of a chopper found on the surface at 41GU177.

Figure 6.88. Example of artifacts encountered in the soil column sample of G2.

Figure 6.89. Example of burned rock encountered in the soil column sample of G2.

Figure 6.90. View of the soil column sample of G2.

ing. Site 41GU178 does not have the potential to yield information important to the prehistory of the region following due to a lack of substantial intact subsurface deposits, a substantial artifact assemblage, and existing buildings within the project area. As such, site 41GU178 is not recommended eligible for listing in the NRHP or for designation as an SAL, and no further survey or avoidance is recommended for the site within the project area. However, as the site likely extends northeast beyond the project area, should the alignment shift in that direction, additional investigations would be necessary.

41GU179

Site 41GU179 is a rock-lined well and associated historic scatter in northern Guadalupe County. The site is situated within a moderately dense tree line between two plowed agricultural fields (Figure 6.96). The topography is generally level, with a slight slope to the northeast (less than 2 percent), toward and unnamed ephemeral drainage. Vegetation consists of cacti, mesquite, mixed hardwoods, and scrub vegetation. At the time of investigations, ground surface visibility was about 90 percent. The nearest seasonal water source is an unnamed drainage 300 m to the northeast which feeds into the San Marcos River. Soils consisted of black (10YR2/1) clay loam with 1–5 percent gravel inclusions which became highly compact at around 25 cmbs where clay subsoil was encountered.

Site 41GU179 measures 80 m northeast to southwest by 30 m northwest to southeast (Figure 6.97). Site boundaries were determined through visual inspection and shovel test excavation. Four shovel tests were excavated, one of which (KS602) was positive for cultural material. The remaining three tests (KS603, SMM92, and SM93) did not contain subsurface material. The subsurface material observed in KS602 consisted of one historic ceramic sherd found within 10 cm of the ground surface (Table 6.28). Materials observed during the visual inspection included fewer than 20 amethyst, clear, and green glass fragments, and 5 whiteware sherds (Figure 6.98). The historic scatter

Table 6.27. Shovel Test Data for 41GU178

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20% Cobbles, Gravels	Negative	
RW734	2	20-25	10YR 6/2	light brownish gray	Clay	-	Negative	Terminated at sterile clay subsoil.
	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20% Cobbles, Gravels	Negative	
RW735	2	20-25	10YR 6/2	light brownish gray	Clay	-	Negative	Terminated at sterile clay subsoil.
SMM78	1	0-25	10YR 4/1	dark gray	Clay Loam	>20% Calcium Carbonate	Negative	Terminated at compact soil.

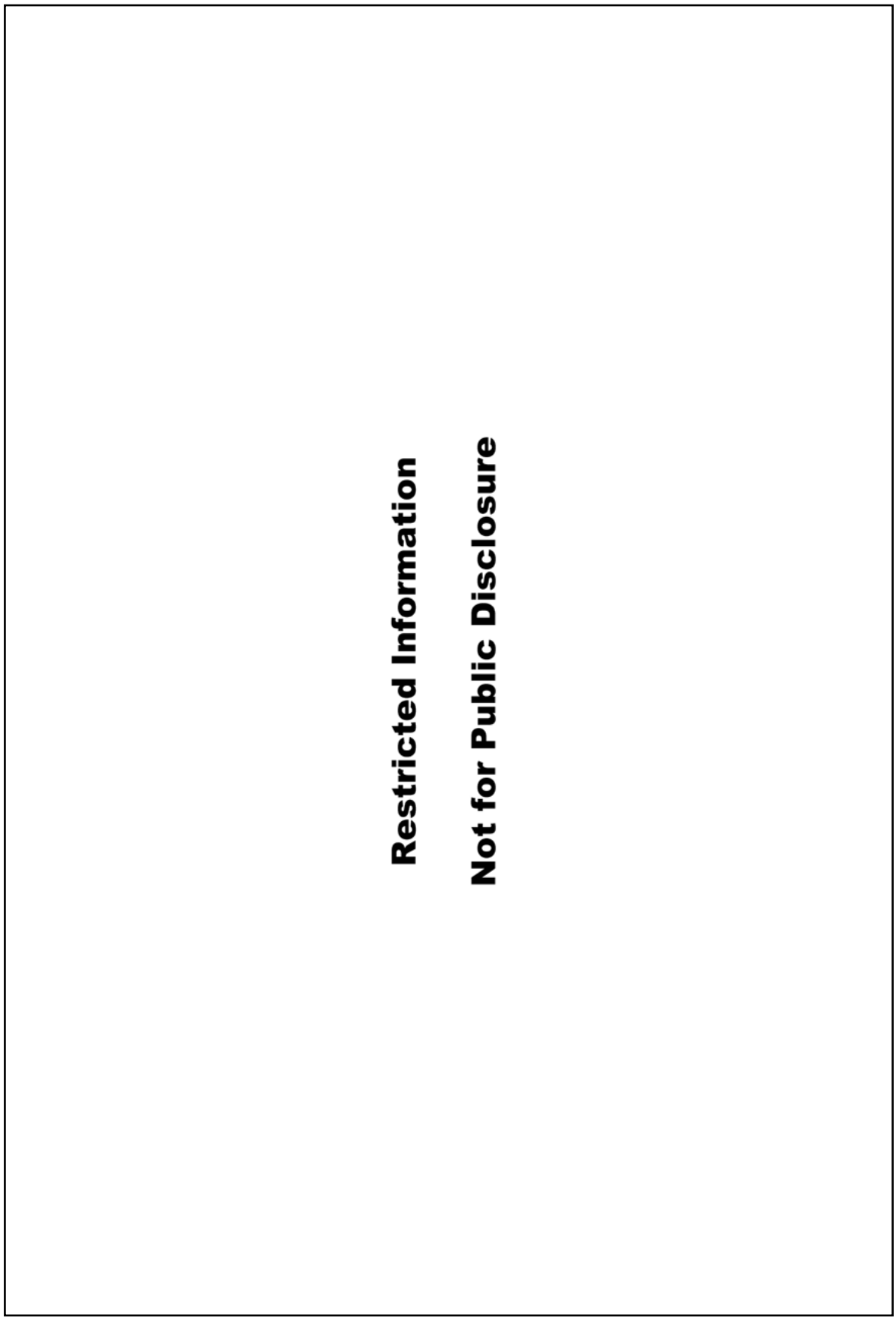

Figure 6.91. Map of 41GU178.

Figure 6.92. Overview of 41GU178, facing northwest.

Figure 6.94. Example of construction material push pile to the northeast of 41GU178, facing east.

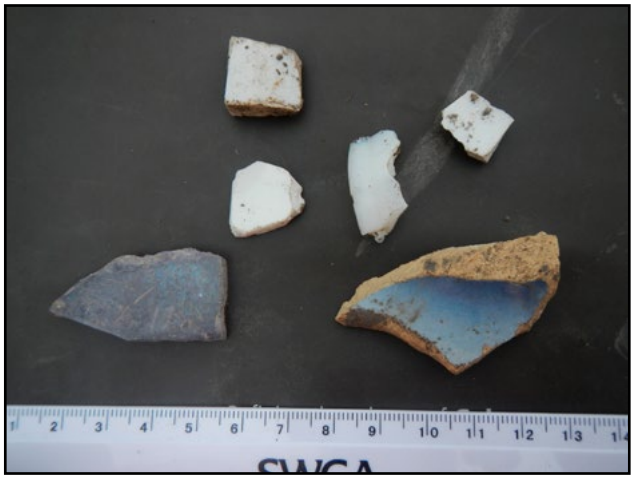

Figure 6.93. Examples of artifacts on 41GU178.

Figure 6.95. Existing abandoned house and open well to the northeast of 41GU178, facing north.

Figure 6.96. Overview of 41GU179, facing southwest

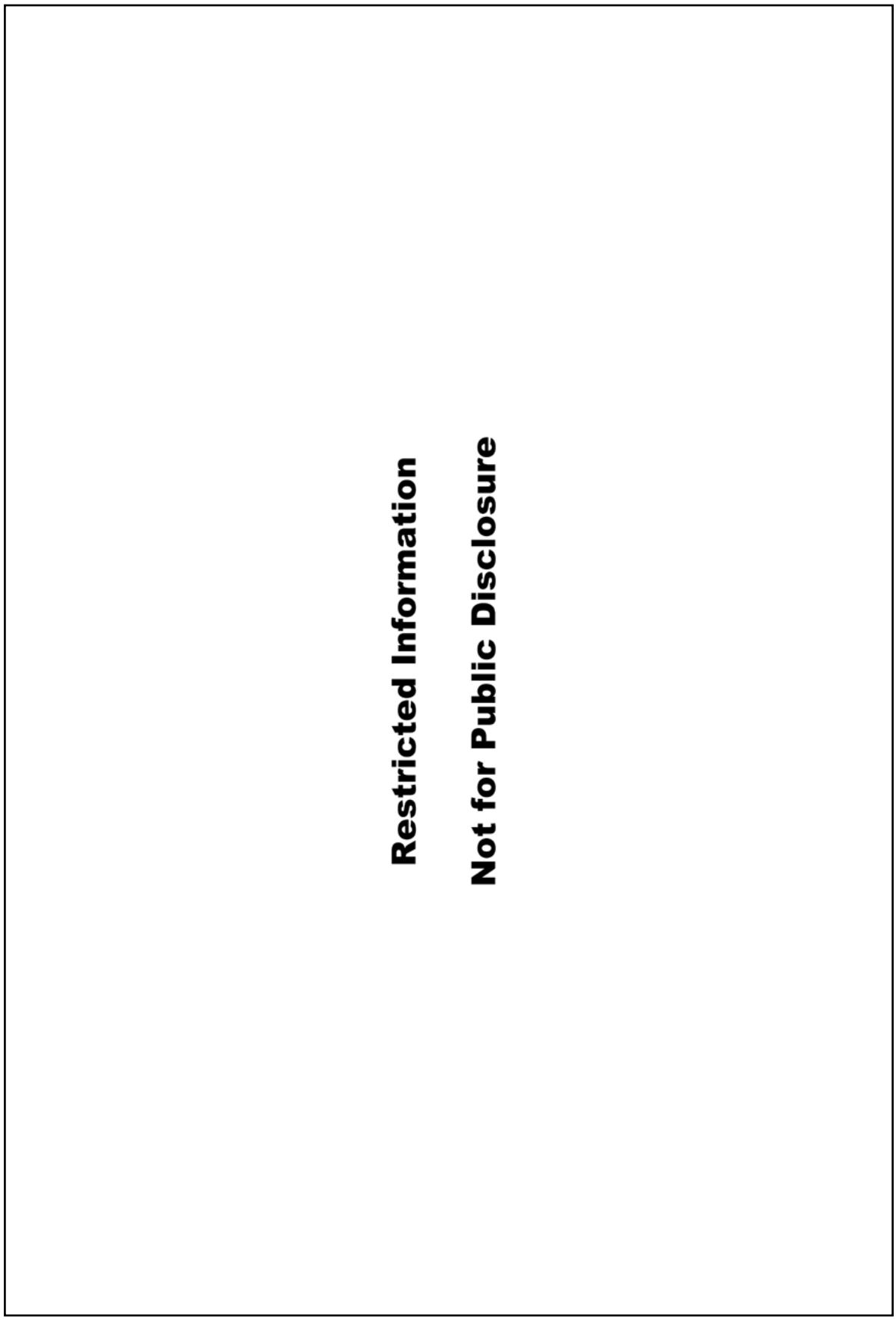

Figure 6.97. Map of 41GU179.

Table 6.28. Shovel Test Data for 41GU179

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KS602	41GU179	0-25	10YR 2/1	Black	Clay Loam	1-5% gravels	Positive	1 ceramic (historic)	Terminated at compact soil
KS603	41GU179	0-10	10YR2/1	Black	Clay Loam	1-5% gravels	Negative	N/A	Terminated at compact soil.
SMM92	41GU179	0-10	10YR2/1	Black	Clay Loam	1-5% gravels	Negative	N/A	Terminated at compact soil
SM93	41GU179	0-20	10YR2/1	Black	Clay Loam	1-5% cobbles and gravels	Negative	N/A	Terminated at compact soil

Figure 6.98. Examples of artifacts at 41GU179.

Figure 6.99. View of rock well at 41GU179.

is likely associated with the rock-lined well. The well measures 2 feet in height, 6 feet in diameter, and 1 foot thick (Figure 6.99). The well is composed of chert and limestone rocks and cobbles and held together with a coarse mortar. Although it is difficult to establish, site 41GU179 dates to the late nineteenth or early twentieth century based on the presence of whiteware sherds and the rock-lined well.

Site 41GU179 is located within privately owned land utilized for agricultural purposes. While the site is positioned between two actively plowed fields, previous agricultural activity and erosion have impacted the site's integrity. Vegetation clearing and agricultural use has destroyed approximately 50 percent of the site.

41GU179 Summary

Site 41GU179 is a rock-lined well and associated historic scatter with a sparse subsurface deposit of an unknown age. Based on ceramic and glass types identified in the scatter, the site dates to the turn of the twentieth century. Disturbances include agricultural impacts and erosion, and have destroyed approximately 50 percent of the site area. Given the ubiquity of abandoned historic water wells, the extremely sparse subsurface component and the primarily surficial nature of the site, SWCA recommends that 41GU179 is not eligible for inclusion to the NRHP or for SAL designation. No further survey or avoidance is recommended for the site within the project area.

41GU180

Site 41GU180 is a historic farmstead in northwest Guadalupe County. The site is situated on a generally level upland terrace of Long Creek, overlooking a drainage to the east. The area is heavily overgrown with mesquite and mixed thorny bramble, vines, grasses, and cacti. At the time of investigations, ground surface was poor, ranging from 0 to 10 percent. The nearest natural

water to the site is found in Long Creek, approximately 400 m to the northwest. The site area has been impacted by vegetation clearing, plowing, cattle ranching, and erosion. Soils consisted of black (10YR2/1) clay with 5 to 10 percent calcium carbonate, gravel, and pebble inclusions. Soil deposits were roughly 20 cm deep and terminated at basal clay.

Site 41GU180 measures 5 m northwest to southeast by 47 m northeast to southwest (Figure 6.100). The site boundary was determined by visual inspection of the ground surface and shovel test excavation. Three shovel tests were conducted within the site area, all of which were negative for cultural material and encountered pre-Holocene clay at or near the surface (Table 6.29). Visual inspection revealed a historic farmstead containing seven historic structures and an associated scatter of yellow and white/gray brick, corrugated metal fragments, miscellaneous wood fragments, and spools of barbed wire. The seven features found at 41GU180 include a stone-lined well (HR01), the main house (HR02), a metal cistern (HR03), a dilapidated barn (HR04), a board and batten siding shed (HR05), five vertical concrete footings (HR06), and a second dilapidated board and batten barn (HR07).

Feature HR01 is an open stone-lined well which still contains water. The well appears to be over 20 feet deep and constructed out of native limestone lined with fine, gray mortar. The well was capped with a gray, coarse-pebbled concrete circular cap with a square, coarse-grain concrete addition providing access to the well with cedar posts forming the base of the opening (Figure 6.101). The well measures 6 feet in diameter, with the smaller opening measuring 2 feet square. A wire bucket containing glass bottles and jars was also seen at the base of the opening (Figure 6.102).

The main house, Feature HR02, measures approximately 40 feet northeast to southwest by 40 feet northwest to southeast, and is laid out in an "L" shaped pattern with the main opening facing northeast. The house is a slat board construction with a corrugated metal roof (Figure 6.103). The northeast extension of the house is constructed with the use of square cut nails (Figure 6.104). Investigators were unable to closely examine the remaining portion of the house due to an infestation of bees, but also observed a patio awning at the northeast opening of the house.

Feature HR03 consists of a metal cistern standing approximately 6–8 feet in height and with a diameter of about 6–8 feet (Figure 6.105).

Feature HR04 is a dilapidated barn measuring 15×15 feet and constructed with board and batten siding with a corrugated metal roof (Figure 6.106). The barn may have once been used as a garage based on the presence of some metal gears and a propane tank.

Feature HR05 is a small board and batten shed measuring roughly 6×6 feet. The shed is in poor condition appears to be used to store old tires (Figure 6.107).

Feature HR06 is a set of five vertical, coarse-pebbled concrete footings all placed within an area measuring 4–5 feet (Figure 6.108). Feature HR06 may represent the remains of an old outhouse based on the presence of sandstone paving stones.

Table 6.29. Shovel Test Data for 41GU180

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW753	41GU180	0-20	10YR2/1	Black	Clay	5-10% calcium carbonate, gravels, and pebbles	Negative	N/A	Terminated at basal clay.
RW754	41GU180	0-20	10YR2/1	Black	Clay	5-10% calcium carbonate, gravels, and pebbles	Negative	N/A	Terminated at basal clay.
SMM105	41GU180	0-25	10YR2/1	Black	Clay	10-20-10% cobbles, gravels, and pebbles	Negative	N/A	Terminated at compact soil.

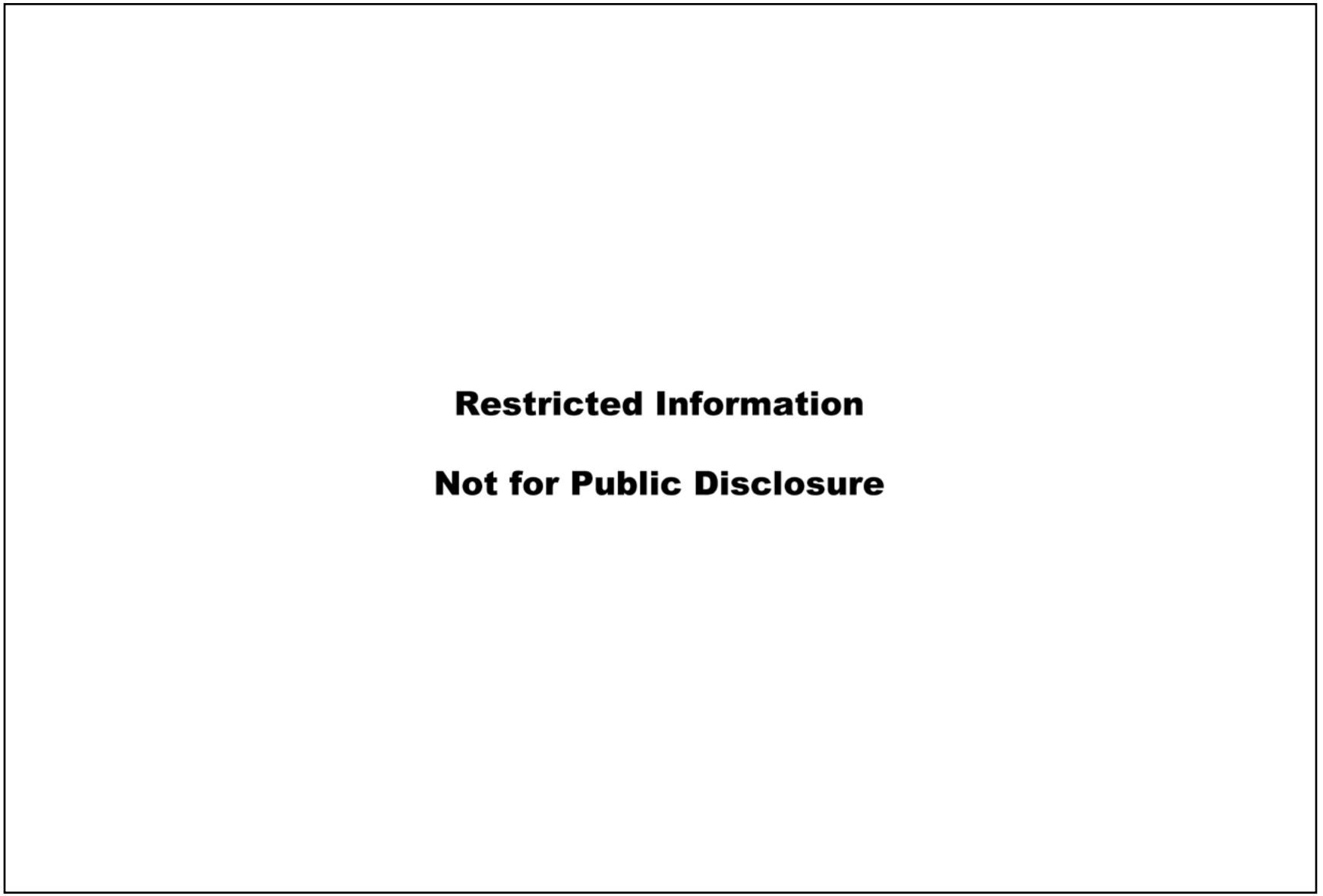

Figure 6.100. Map of 41GU180.

Figure 6.101. Feature HR01 on 41GU180, facing southwest.

Figure 6.102. Feature HR01 on 41GU180 –.

Figure 6.103. Feature HR02 on 41GU180, facing south.

Figure 6.104. Feature HR02 on 41GU180.

Figure 6.105. Feature HR03 on 41GU180, facing northwest.

Figure 6.106. Feature HR04 on 41GU180, facing southeast.

Figure 6.107. Feature HR 05 on 41GU180, facing southwest.

Figure 6.108. Feature HR 06 on 41GU180 .

Figure 6.109. Feature HR07 on 41GU180, facing south.

The last feature, HR07, recorded at 41GU180 is an extremely dilapidated two-story board and batten barn with a corrugated tin roof (Figure 6.109). An accurate measurement of the structure was difficult to obtain due to its very poor condition and the dense vegetation growing around it. Investigators estimate the building measures 30×30 feet. Based on the structures present and the associated historic scatter of brick and corrugated metal, the site is estimated to date from the late nineteenth to early twentieth century.

Site 41GU180 is located within privately owned land used for open-range cattle ranching. Vegetation clearing, plowing, and erosion have disturbed approximately 60 percent of the site area.

41GU180 Summary

Site 41GU180 is recommended ineligible based on Criterion D. The remains of the structures and the associated surficial scatter of construction materials does not have the potential to yield significant, new information on turn of the century homesteads in the area.

However, archival and deed research is recommended to determine if the site is eligible for NRHP listing based on Criterion A or B. It is currently unknown if site 41GU180 is associated with important events or persons. Until it can be determined if the site is eligible for NRHP listing based on Criterion A and/or B, avoidance of the site is recommended.

41GU181

Site 41GU181 is a historic farmstead located between an active quarry to the north and a plowed corn field to the south, in northern Guadalupe County. The site is perched on top of a small, level terrace that slopes 10–20 percent towards a lower terrace of the Guadalupe River.

Vegetation consists of extremely dense prickly pear cactus and secondary mixed hardwood forest, with a grass and weed undergrowth. (Figure 6.110). At the time of investigations, ground surface visibility was good, ranging between 70–100 percent, and investigators were able to observed dense gravel concentrations and multiple push piles within and adjacent to the site boundary. The nearest natural water source is the Guadalupe River located approximately 0.6 mile to the southwest. Soils within the site consist of a dark grayish brown (10YR4/2) clay loam with 50–70 percent

Figure 6.110. Overview of 41GU181, facing southwest.

cobble and gravel inclusions, becoming increasingly compact around 20 cmbs (Table 6.30)

Site 41GU181 measures 20 m northwest to southeast by 22 m northeast to southwest (Figure 6.111). The site boundary was determined by a visual inspection of the ground surface and shovel test excavation. Visual inspection revealed two historic barns recorded as features HR01 and HR01 on the northeastern edge of the project area. No artifacts were observed on the ground surface. Three shovel tests were excavated, none of which contained cultural materials.

Features HR01 (Figure 6.112) and HR02 (Figure 6.113) are barns enclosed in a wooden animal pen fence and constructed of cedar and hardwood posts, wooden beams, and corrugated tin. The barns open up towards each other and are oriented northeast to southwest (HR01) and southeast to northwest (HR02) in an "L" shaped layout. Soils are disturbed, with a large amount of cobble and gravel inclusions. The surrounding area consists of a rock quarry and multiple earthen and brush push piles in the site area. The site area is heavily overgrown with prickly pear cactus and short shrubs.

Site 41GU181 is located within privately owned land used for agricultural activity and as a quarry. Vegetation clearing, ground moving activity, as evidence by the numerous push piles, active quarrying, agricultural activity and erosion have all impacted the site leaving only 40–60 percent of the site intact.

41GU181 Summary

Site 41GU181 is a historic-age farmstead consisting of two wooden barn surrounded by a wood animal pen with no subsurface deposits. No diagnostic material was found, but based on the barns themselves, the site likely dates to the mid-twentieth century. Approximately 40–60 percent of the site has been disturbed through vegetation clearing, ground moving and agricultural activity, active quarrying in the surrounding area, and erosion.

Overall, site 41GU181 does not have the potential to yield information important to the history of the region following potential research avenues and outlines of the cultural context. The site lacks subsurface deposits, and the integrity of the historical features is poor. Due to its lack of potential research value, 41GU181 is not recommended eligible for listing in the NRHP or for SAL designation further survey or avoidance is recommended for the site within the project area.

Table 6.30. Shovel Test Data for 41GU181

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW763	41GU181	0-20	10YR 4/2	Dark grayish brown	Clay Loam	>20% cobbles and gravels	Negative	N/A	Terminated at compact soil.
RW764	41GU181	0-20	10YR 4/2	Dark grayish brown	Clay Loam	>20% cobbles and gravels	Negative	N/A	Terminated at compact soil.
RW765	41GU181	0-10	10YR 4/2	Dark grayish brown	Clay Loam	>20% cobbles and gravels	Negative	N/A	Terminated at compact soil.

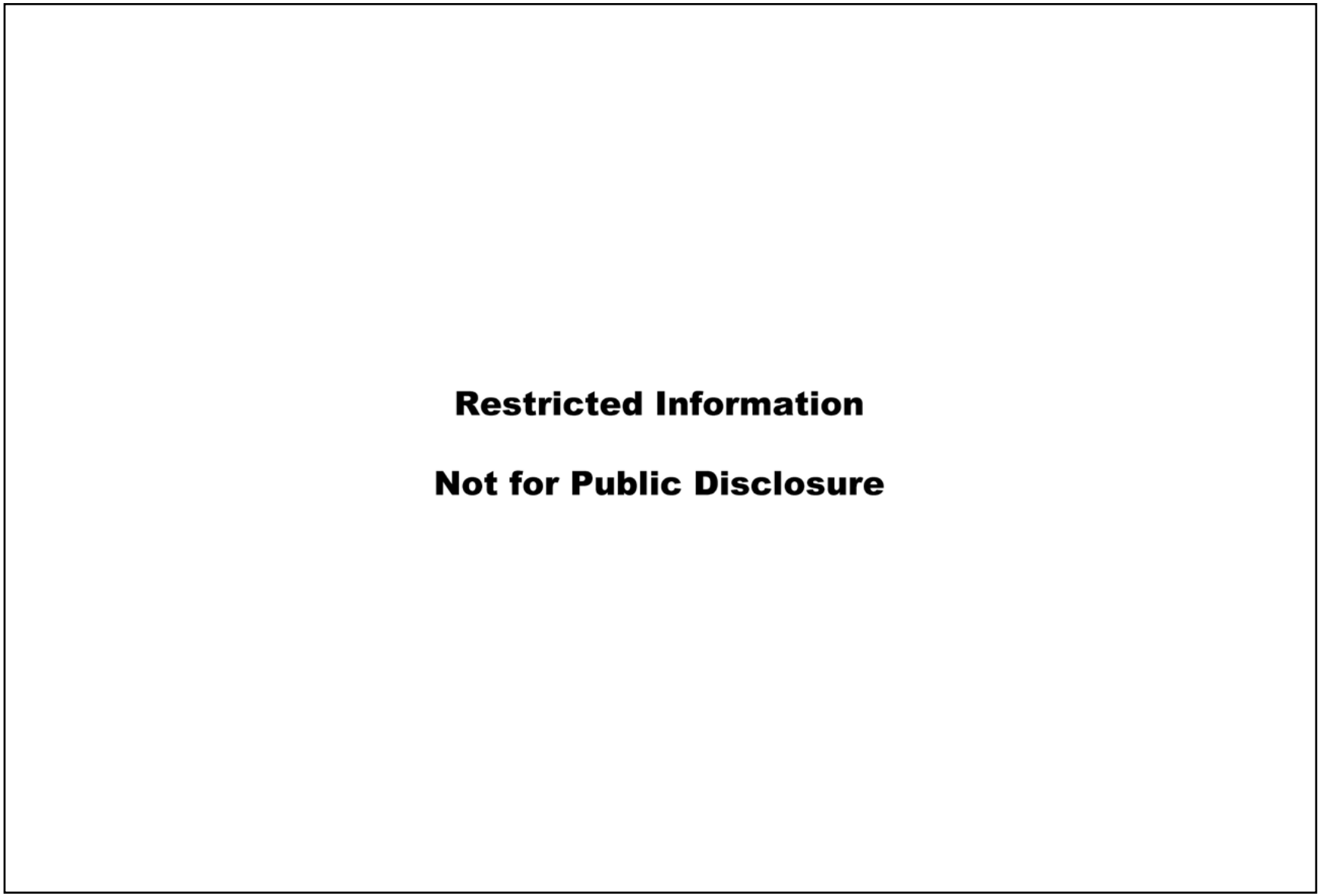

Figure 6.111. 41GU181 site map.

Figure 6.112. Feature HR01 on 41GU181, facing east.

Figure 6.113. Feature HR02 on 41GU181, facing northwest.

Comal County

Twelve cultural resource sites and one isolated find were identified and recorded within Comal County (Figure 6.114). The isolated find consists of a biface. The find was not recorded as an archaeological site based on the lack of additional cultural materials. Newly recorded archaeological sites consist of two limestone rock walls (41CM391 and 41CM393), six prehistoric lithic scatters (41CM392, 41CM394, 41CM396, 41CM398, 41CM399, and 41CM404) one prehistoric campsite (41CM395), two prehistoric lithic procurement sites (41C397 and 41CM400), and one historic artifact scatter with a prehistoric lithic scatter component (41CM401). One of the twelve newly recorded sites in Comal County is recommended eligible unknown for listing on the NRHP or for SAL designation. An avoidance strategy or additional eligibility testing is recommended for 41CM395. No avoidance or further work is recommended for the remaining 11 sites.

41CM391

Site 41CM391 is a limestone rock wall in southern Comal County. The wall is atop a moderately (5–10 percent) sloped upland formation carved out by erosional drainages that slope to the west and southwest. Vegetation consists of large oak trees with sparse grass, vine, and shrub undergrowth (Figure 6.115). At the time of survey, ground surface visibility was 100 percent with concentrations of gravels, cobbles, and large rock fragments at ground surface. Soils Consist of black clay loam that ranges from 2–20 cmbs with 20 percent cobble, gravel, and pebble inclusions. Soils terminate at eroding limestone bedrock.

The site boundary for 41CM391 measures 140 m northeast to southwest by 5 m northwest to southeast; however, the rock wall extends to the southwest beyond the project area (Figure 6.116). The site boundary consists of a 15-foot buffer zone around the rock wall structure. Two shovel tests (DR60 and RW48) were excavated adjacent to 41CM391, but neither was positive for cultural materials (Table 6.31).

The wall measures 1 to 2.5 feet high, 2 to 3 feet wide, and 445 feet long within the project corridor. Construction of the wall involved dry-stacking limestone rocks, none of which appeared to be uniformly stacked. Vertical cedar posts were placed at systematic intervals at the center of the wall with stands of collapsed barbed wire affixed (Figure 6.117). The cedar posts measure approximately 4 to 5 feet tall. Another, more contemporary cedar and barbed wire fence generally parallels the rock wall 1 to 2 feet south of the wall base.

Site 41CM391 is on privately owned rangeland. Disturbance to the site consists mainly of extreme natural erosion. Storm and flash flooding events prior to the recording of 41CM391 have stripped away all low-lying vegetation in the area and deposited flood debris against the base of the wall. A well-defined erosional channel is near the western end of the site boundary

Restricted Information

Not for Public Disclosure

Figure 6.114. Comal County Map.

Table 6.31. Shovel Test Data for 41CM391

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR60	0–5	10YR2/1	black	clay loam	20% cobbles, gravels, and pebbles	N	-	Terminated at bedrock.
RW48	0–20	10YR2/1	black	clay loam	20% cobbles, gravels, and pebbles	N	-	Terminated at bedrock.

Figure 6.115. Overview of 41CM391, facing southeast.

and intersects the wall. Additional disturbances to 41CM391 include an existing overhead transmission line corridor to the north and the construction of the contemporary post and barbed wire fence immediately south.

41CM391 Summary

Site 41CM391 is a dry-stacked limestone wall with no associated artifact assemblage. Disturbances to the site include natural erosion, the construction of a property fence line, and vegetation clearing for agricultural purposes to the north. Overall, site 41CM391 does not have the potential to yield information important to the history of the region. The site lacks a substantial artifact assemblage and association with an existing building or building complex. Due to its lack of potential research value, 41CM391 is not recommended eligible for listing in the NRHP or for designation as an SAL. No further survey or avoidance is recommended for the site within the project area. However, as the site extends southwest beyond the project area, should the alignment shift into that area, additional investigations would be necessary.

41CM392

Site 41CM392 is a prehistoric lithic scatter in southern Comal County. The site is on an upland formation that gently slopes to the northeast. Vegetation consists of moderately dense juniper forest mixed with tall grasses in open areas Figure 6.118). At the time of survey, ground surface visibility ranged from 80 to 100 percent with dense concentrations of gravels, cobbles, and large rocks at ground surface. An unnamed drainage of Bexar Creek is the nearest natural water source, approximately 0.8 mile northwest of the site. Soils on site consist of very pale brown to reddish brown clay and silty clay loams with over 20 percent pebbles, 5 to 20 percent gravels, or 10 to 20 percent calcium carbonate inclusions. Soil deposits range from 15 to 35 cm deep and terminated at eroded bedrock.

Site 41CM392 measures 30 m northeast to southwest by 30 m northwest to southeast; however, the site likely extends to the northwest and southeast beyond the project area (Figure 6.119). Site boundaries were determined by ground surface inspection and shovel testing. Three shovel tests (DR74–DR75, and RW66) were excavated, all of which were negative for cultural materials (Table 6.32). Cultural materials observed during ground surface inspection of the site areas included 5 modified flakes, approximately 300 burned rock fragments, and up to 30 tertiary flakes (Figure 6.120). All lithic materials observed were chert. No diagnostic materials or cultural features were observed.

Site 41CM392 is on privately owned land. Vegetation clearing and land modifications from fence construc-

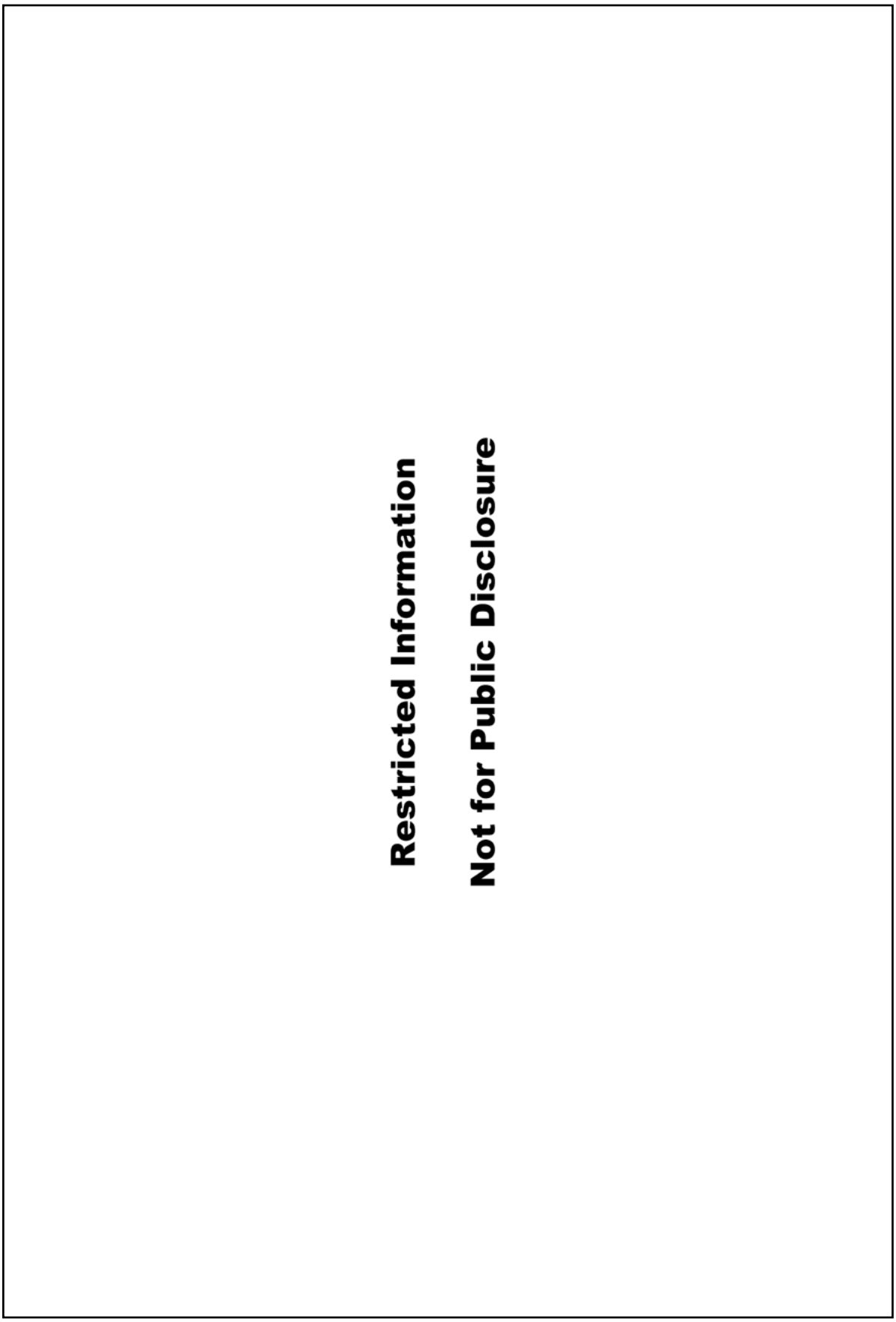

Figure 6.116. Map of 41CM391.

Table 6.32. Shovel Test Data for 41CM392

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR74	FS13	0-35	10YR 7/4	very pale brown	Clay Loam	>20% Pebbles	Negative	-	Terminated at bedrock.
DR75	FS13	0-15	10YR 7/4	very pale brown	Clay Loam	>20% Pebbles	Negative	-	Terminated at bedrock.
RW66	FS13	0-20	2.5YR 4/4	reddish brown	Silty Clay Loam	5-10%, Gravels	Negative	-	Terminated at bedrock.
	FS13	20-30	2.5YR 4/4	reddish brown	Clay Loam	10-20%, Calcium carbonate, Gravels	Negative	-	

Figure 6.117. Tangled barbed wire and post associated with site 41CM391, facing south.

Figure 6.118. Overview of 41CM392, facing east.

tion have impacted the surface of the area, as evidenced in push piles of brush along the western edge of the site. Additional disturbances include heavy natural erosion throughout the general site area (Figure 6.121).

41CM392 Summary

Site 41CM392 is a prehistoric lithic scatter of an unknown temporal affiliation with minimal subsurface deposits. No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include brush piles from fence construction and heavy natural erosion. Given these conditions, site 41CM392 does not have the potential to yield information important to the prehistory of the region and is recommended as not eligible for listing on the NRHP or SAL designation—the site lacks a subsurface component and a substantial artifact assemblage. As such, the site is recommended as not eligible for inclusion to the NRHP or for designation as an SAL. SWCA recommends that no further survey or avoidance is recommended for the site within the project area. However, as the site likely extends northeast and southwest of the project area. Should the alignment shift into those areas, additional investigations would be necessary.

41CM393

Site 41CM393 is a limestone wall located in southern Comal County. The wall is situated at the edge of and ephemeral drainage that flows to the northeast. Vegetation consists of a cluster of juniper trees, at the edge of a juniper and oak tree line to the south (Figure 6.122). A fallow agricultural field with overgrown grasses and weeds borders the site to the north. Ground

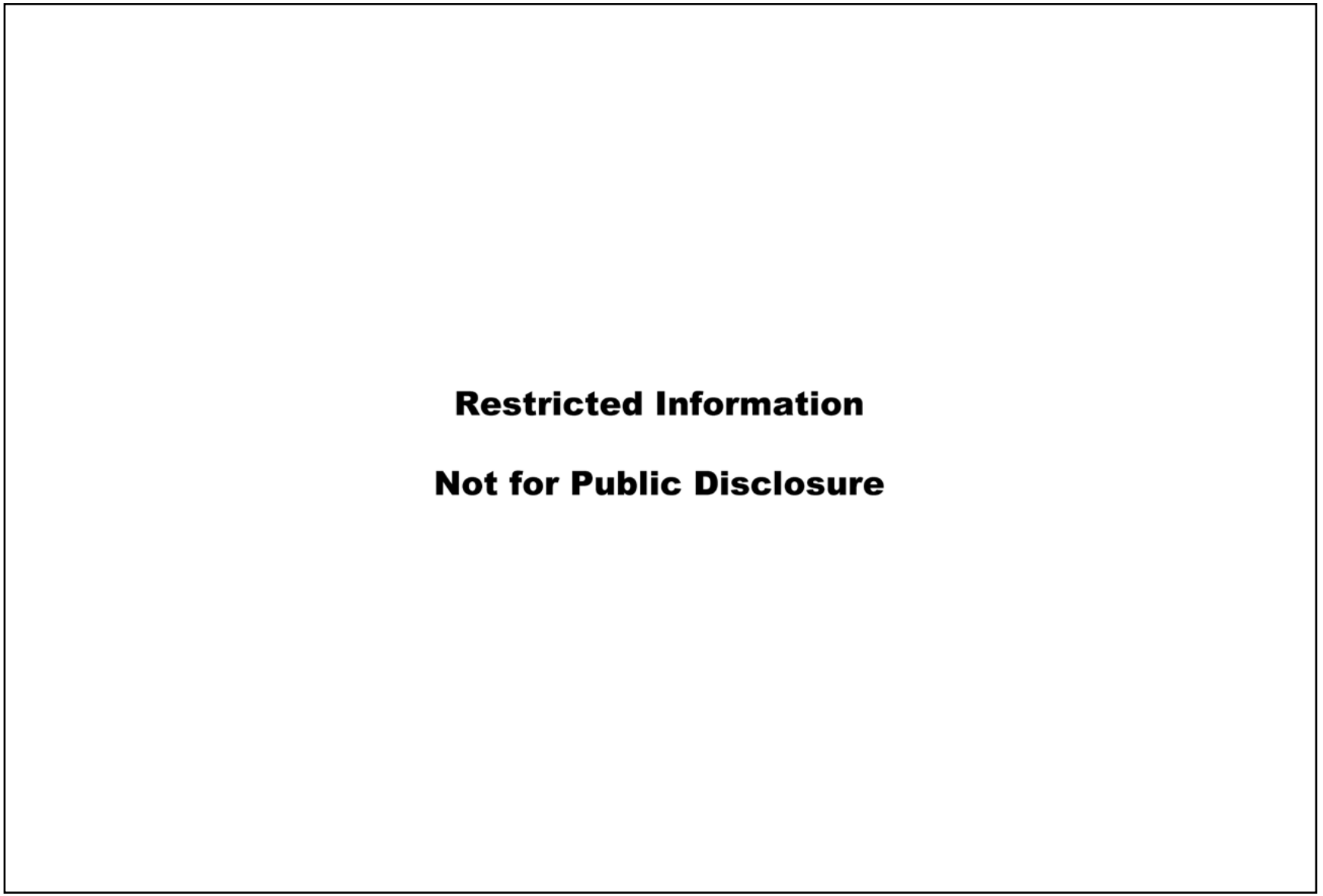

Figure 6.119. Map of 41CM392.

Figure 6.120. Example of lithic materials from 41CM392.

Figure 6.121. Site disturbance on 41CM392 from natural erosion, facing north.

surface visibility ranges from 80 to 100 percent with exposed bedrock and dense concentrations of gravels and cobble at ground surface. The ephemeral drainage of Bear Creek that parallels the limestone wall to the north is the nearest natural water source. Bear Creek is 1.05 miles east of the site boundary. Soils of the site consisted of shallow, dark yellowish-brown clay loams and black clays with 1 to 5 percent gravel and pebble inclusions. Soil deposits ranged from 20 to 30 cm deep and terminated at eroding bedrock.

Site 41CM393 measures 45 northeast to southwest by 1 m northwest to southeast. Site boundaries were determined by the extent of the existing limestone wall, which is entirely within the project area (Figure 6.123). Two shovel tests (DR77 and RW70) were excavated within the vicinity of the limestone wall, but did not test positive for subsurface cultural materials (Table 6.33). No cultural material were observed on the ground surface in association with the structure. The wall is composed of dry-stacked limestone rock fragments and cobbles in a northeast to southwest orientation (Figure 6.124). The wall measures roughly 1 foot tall and 1–3 feet wide, but is in various stages of collapse. The wall terminates at the ends of the juniper tree cluster, suggesting that the trees have acted as a protective barrier to disturbances that have eliminated the wall to the northeast and southwest.

Site 41CM393 is located within privately owned, abandoned agricultural and range land. Natural erosion from the ephemeral drainage has heavily impacted the site during flooding episodes. Additionally, a modern property fence line has been constructed immediately adjacent to the southern façade of the wall. The construction of the modern fence and the alignment of the parcel boundary suggest that the wall is likely what remains of a historic-age property boundary wall.

41CM393 Summary

Site 41CM393 is a dry-stacked limestone wall with no associated artifact assemblage. Disturbances to the site include natural erosion, the construction of a property fence line, and vegetation clearing for agricultural purposes to the north. Overall, site 41CM393 does not have the potential to yield information important to the history of the region. The site lacks a substantial artifact assemblage and association with an existing building or complex. Due to its lack of potential research value, 41CM393 is not recommended eligible for listing in the NRHP or as designation as an SAL. Based on these

Figure 6.122. Overview of 41CM393, facing southeast.

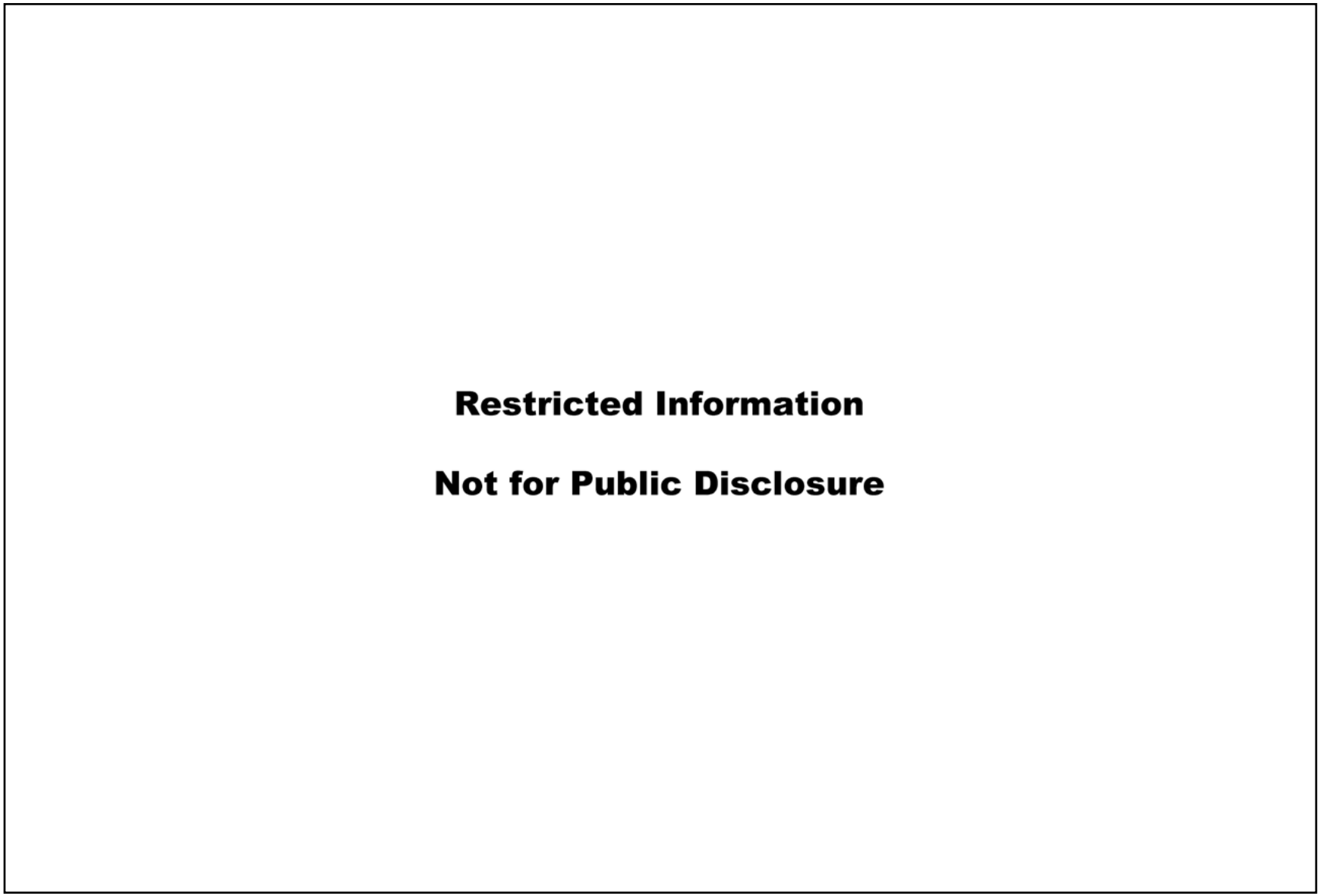

Figure 6.123. Map o f41CM393.

Table 6.33. Shovel Test Data for 41CM393

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR77	FS14	0–30	10YR3/4	dark yellowish brown	clay loam	1–5% gravels and pebbles	N		No cultural materials encountered. Terminated at compact soil.
RW70	FS14	0–20	10YR2/1	black	clay		N		No cultural materials encountered. Terminated at basal clay.

Figure 6.124. Collapsed portion of rock wall on 41CM393, facing south-southwest.

Figure 6.125. Overview of 41CM394, facing west.

data, no further survey or avoidance is recommended for the site within the project area.

41CM394

Site 41CM394 is a prehistoric lithic scatter in southern Comal County. The site is on an upland formation and vegetation on site consists of secondary juniper and mixed hardwood growth with tall grasses (Figure 6.125). Ground surface visibility ranges from 70 to 100 percent with exposed bedrock and concentrations of limestone gravels, cobbles, and large rocks at ground surface. Dry Comal Creek is the nearest natural water source, approximately 0.5 mile southwest of the site.

The site boundaries for 41CM394 measures 2,475 m long by 30 m wide and, in plan, appears "L" shaped. The western end of the site trends northeast by southwest, but then bends to the southeast within the project alignment; however, the site likely extends in all directions beyond the project area (Figure 6.126). Site boundaries were determined by ground surface inspection and shovel testing. A total of 30 shovel tests (DR79–DR83, KS100–KS107, KS120–KS121, RW73–77, RW301–308, and RW321) were excavated within 41CM394, one of which (RW300) was positive for cultural materials (Table 6.34). Shovel test RW300 revealed two secondary flakes at a maximum depth of 10 cmbs, where the test was terminated at bedrock. Soils encountered within the shovel tests consist of dark yellowish brown to dark reddish brown clay loam with substantial cobble, gravel, and pebble inclusions. Soil deposits range from 5 to 10 cm deep and terminate at bedrock.

Cultural materials observed during ground surface inspection consisted of up to 50 cores; approximately 20 modified flakes; up to roughly 120 primary flakes; 90 tertiary flakes; and 20 burned limestone rock fragments (Figure 6.127). All lithic materials observed were composed of chert material types with the exception of the burned rock fragments. No diagnostic materials or cultural features were observed.

Table 6.34. Shovel Test Data for 41CM394

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR79	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	-	Terminated at bedrock.
DR80	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	-	Terminated at bedrock.
DR81	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	-	Terminated at bedrock.
DR82	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	-	Terminated at bedrock.
DR83	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	-	Terminated at bedrock.
KS100	0-5	10YR 3/3	dark brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at bedrock.
KS101	0-5	10YR 3/3	dark brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at bedrock.
KS102	0-5	10YR 3/3	dark brown	Clay Loam	>20% Calcium Carbonate, Cobbles, Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at bedrock.
KS103	0-15	10YR 3/1	very dark gray	Clay Loam	10% 10YR 5/3 (brown) mottles, Gravels	Negative		Terminated at bedrock.
KS104	0-5	10YR 3/3	dark brown	Clay Loam	5% Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at bedrock.
KS105	0-5	10YR 3/3	dark brown	Clay Loam	5% Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at compact soils.
KS106	0-5	10YR 3/3	dark brown	Clay Loam	5% Gravels	Negative	None, though numerous flakes on ground surface nearby	Terminated at compact soils.
KS107	0-5	10YR 3/3	dark brown	Clay Loam	5% Cobbles	Negative	None, though numerous flakes on ground surface nearby	Terminated at compact soils.
KS120	0-5	5YR 2.5/2	dark reddish brown	Clay Loam	10-20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
KS121	0-5	5YR 2.5/2	dark reddish brown	Clay Loam	10-20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW73	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
RW74	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
RW75	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
RW76	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.
RW77	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20% Cobbles, Gravels	Negative	-	Terminated at bedrock.

Table 6.34. - continued

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW300	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	**Positive**	**2 secondary flakes**	Terminated at bedrock.
RW301	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW302	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW303	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW304	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW305	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW306	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW307	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW308	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.
RW321	0-10	5YR 2.5/2	dark reddish brown	Clay Loam	>20% Cobbles, Gravels, Large Rock Frags	Negative	-	Terminated at bedrock.

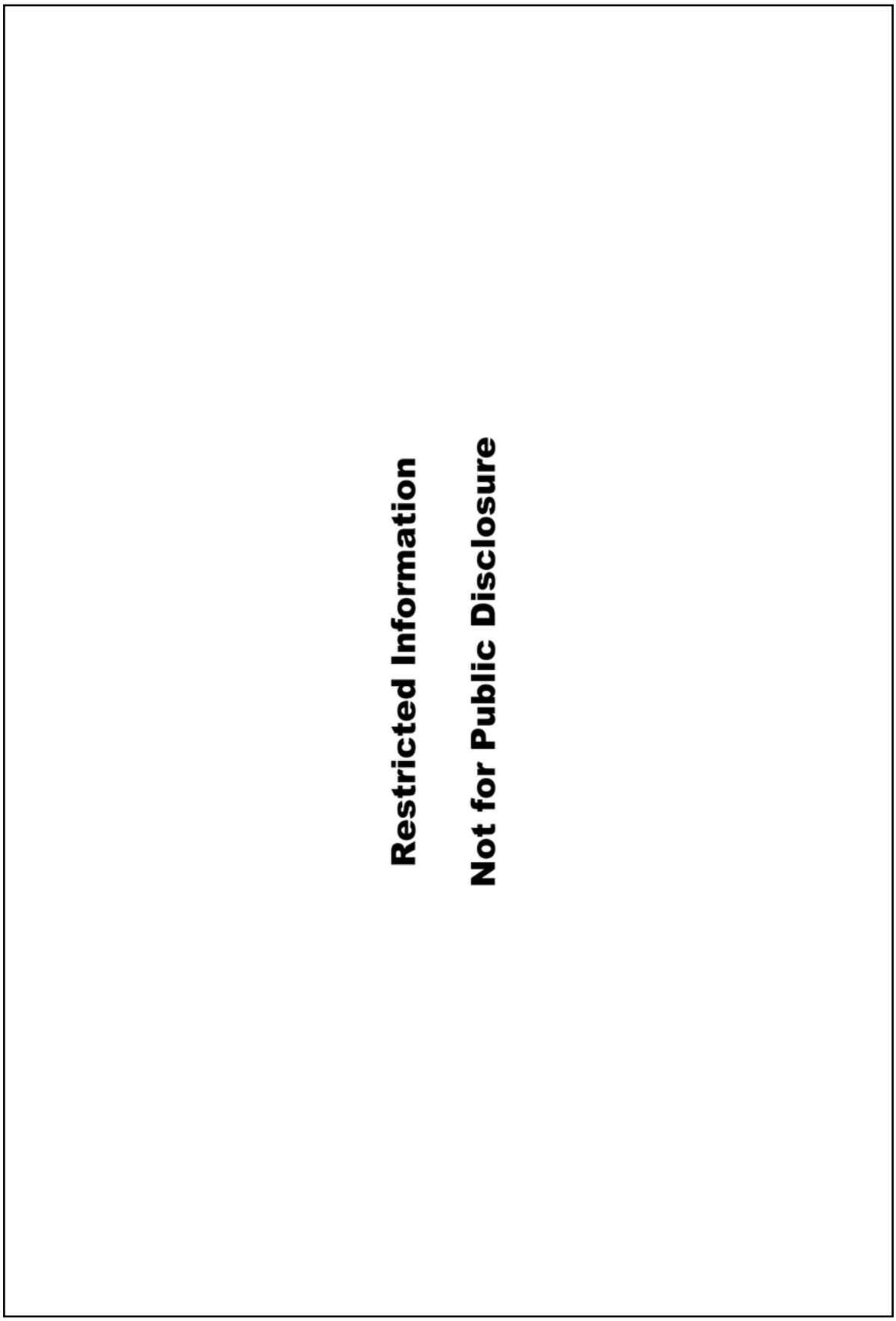

Figure 6.126. Map of 41CM394.

Figure 6.127. Example of lithic materials from 41CM394.

Figure 6.128. View of transmission line corridor on 41CM394, facing east.

Site 41CM394 is on privately owned land used for agricultural and residential purposes. Vegetation clearing and land modifications for general agricultural and residential purposes were observed in the form of a fence line that runs parallel to the transmission line corridor to the northwest of the pipeline corridor and road construction. Additional disturbances include two existing overhead transmission lines to the northwest and southeast as well as a two-track road within the transmission line corridor. The two-track road transects the site from the northeast end (Figure 6.128).

41CM394 Summary

Site 41CM394 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown age. No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include two existing transmission lines, a two-track road that transects the eastern end of the site, and general vegetation and land modification. Overall, site 41CM394 does not have the potential to yield information important to the prehistory of the region and the site is recommended as not eligible for listing in the NRHP or for SAL designation. No further work or avoidance is recommended for the site within the project area. However, as the site likely extends in all directions beyond the project area, should the alignment shift, additional investigations would be necessary.

41CM395

Site 41CM395 is a prehistoric campsite in southern Comal County atop an upland formation that slopes (15 to 20 percent slope) to the northwest towards an unnamed ephemeral drainage. Site 41CM395 was documented within a rerouted alignment and is no longer a part of the December 8th alignment. Vegetation on site consists of moderately dense juniper and oak forest bordering a mechanically cleared area with short grasses (Figure 6.129). At the time of survey, ground surface visibility ranged from 80 to 100 percent, with dense concentrations of gravels and limestone cobbles at ground surface. An ephemeral tributary of Bear Creek is the nearest natural water source. Approximately 125 m northwest of the site.

Site 41CM395 measures 82 m northwest to southeast and 30 m northeast to southwest; however, the site likely extends to the southwest beyond the project area (Figure 6.130). Site boundaries were determined by ground surface inspection, shovel testing for subsurface cultural deposits, and project area boundaries. Five shovel tests (DR84–DR86, and RW79–RW80) were excavated, all of which were negative for cultural materials (Table 6.35). Soils encountered within shovel tests consist of dark brown to light reddish brown loam and clay loam with 1 to 10 percent calcium carbonate, gravel, and pebble inclusions. Soil deposits range from 20 to 35 cm deep and terminate at basal clay, compact soil, and bedrock.

Materials observed during ground surface inspection consisted of approximately 5 scrapers; 150 tertiary flakes; two non-diagnostic projectile point fragments; 100 secondary flakes; 65 specimens of chert l shatter, 15 modified flakes; and 300 burned limestone rock fragments (Figure 6.131). All lithic materials observed

Figure 6.129. Overview of 41CM395, facing southeast.

were chert, with the exception of the burned rock fragments. No diagnostic materials were observed.

In addition to the artifact assemblage, SWCA archaeologists documented one diffused burned rock feature bordering the tree line near the central portion of the site (Figure 6.132). The feature measures 30 m northwest to southeast by 10 m northeast to southwest and is eroding downslope towards the northeast. Cultural materials within the feature were concentrated on the ground surface, although some materials may extend from 0 to 10 cm due to erosion, land modification, and vegetation clearing. Materials observed within the feature consist of moderately dense modified flakes, secondary flakes, tertiary flakes, two non-diagnostic point fragments, and burned limestone. Burned limestone fragments ranged from 1 to 10 cm in diameter.

Site 41CM395 is on privately owned land used for open-range cattle ranching. Vegetation clearing and land modifications for open-range cattle grazing were observed in the form of a mechanically cleared area throughout the majority of the site. Additional disturbances include natural erosion.

41CM395 Summary

Site 41CM395 is a prehistoric camp site with a surficial lithic scatter that likely eroded from a burned rock feature located on the southwestern site boundary. Disturbances to the site include general vegetation and land modification for open-range cattle ranching operations and natural erosion. Although the surface manifestation of the feature is disturbed, there remains a potential for shallow subsurface feature components with reasonable integrity. It is the opinion of SWCA that the burned rock feature at 41CM395 has the potential to provide new or important data concerning regional prehistory. As such, SWCA recommends that the burned rock feature at site 41CM395 has undetermined eligibility for inclusion to the NRHP or for SAL designation, and should be avoided or subject

Table 6.35. Shovel Test Data for 41CM395

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR84	0-20	7.5YR 4/4	Brown	Loam	1-5%, Pebbles	Negative	-	Terminated at bedrock
	20-35	5YR 6/4	light reddish brown	Clay Loam	1-5%, Calcium Carbonate, Gravels	Negative	-	
DR85	0-20	7.5YR 4/4	Brown	Loam	1-5%, Pebbles	Negative	-	Terminated at bedrock
	20-35	5YR 6/4	light reddish brown	Clay Loam	1-5%, Calcium Carbonate, Gravels	Negative	-	
DR86	0-50	10YR 4/4	dark yellowish brown	Clay Loam	5-10%, Gravels, Pebbles	Negative	-	Terminated at compact soil.
RW79	0-15	10YR 3/3	dark brown	Clay Loam	5-10%, Calcium Carbonate, Gravels	Negative	-	Terminated at bedrock
RW80	0-20	10YR 3/3	dark brown	Loam	0%, None	Negative	-	Terminated at basal clay

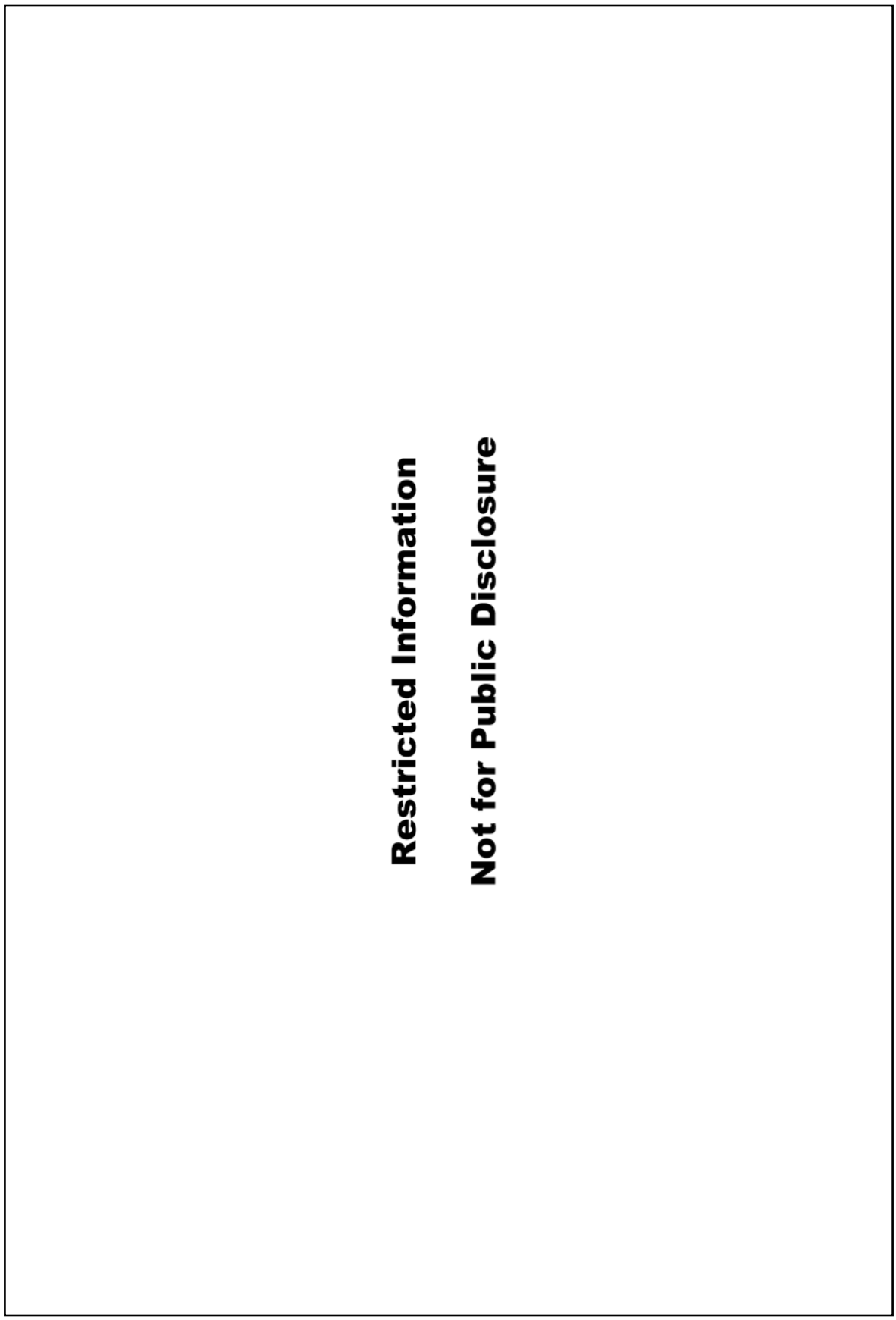

Figure 6.130. Map of 41CM395.

Figure 6.131. Example of lithic materials from 41CM395.

Figure 6.132. Overview of burned rock feature on 41CM395, facing northwest.

to significance testing. Although the site is no longer within the December 8th alignment. As the site likely extends southwest beyond the project area, should the alignment shift in that direction, additional investigations would be necessary.

41CM396

Site 41CM396 is a prehistoric lithic scatter in southern Comal County. The site is on a level upland formation exposed within a two-track road. The surrounding vegetation consists mainly of short grasses, with a moderately dense stand of juniper bordering the northwestern site boundary (Figure 6.133). At the time of survey, ground surface visibility was 100 percent with exposed bedrock at ground surface. Dry Comal Creek is the nearest natural water source, located approximately 752 m northeast of the site. Soils on site consist of a dark yellowish brown clay loam with 10 to 20 percent calcium carbonate and gravel inclusions. Soil deposits range from 0 to 10 cmbs and terminate at eroding bedrock.

Site 41CM396 measures 50 m northeast to southwest by 12 m northwest to southeast; however, the site likely extends to the southeast beyond the project area (Figure 6.134). Site boundaries were determined by ground surface inspection, shovel testing for subsurface materials, and project area boundaries. Three shovel tests (RW91–93) were excavated within the site, all of which were negative for cultural materials (Table 6.36). Soils encountered within shovel tests consist of a dark yellowish brown clay loam with 10 to 20 percent calcium carbonate and gravel inclusions. Soil deposits range from 0 to 10 cmbs and terminate at eroding bedrock.

Materials observed during ground surface inspection consisted of 25 tertiary flakes; one biface; one core; two burned rock fragments; 15 secondary flakes; one modified flake; one medial point fragment; and one bifacial flaked tool (Figure 6.135). All lithic materials observed were chert with the exception of the burned limestone rock fragments. No diagnostic materials or cultural features were observed.

Site 41CM396 is located within privately owned land used for open-range cattle ranching. Land modifications observed in the form of fence construction and an overgrown brush push pile 10 m northeast of the

Figure 6.133. Overview of 41CM396, facing north.

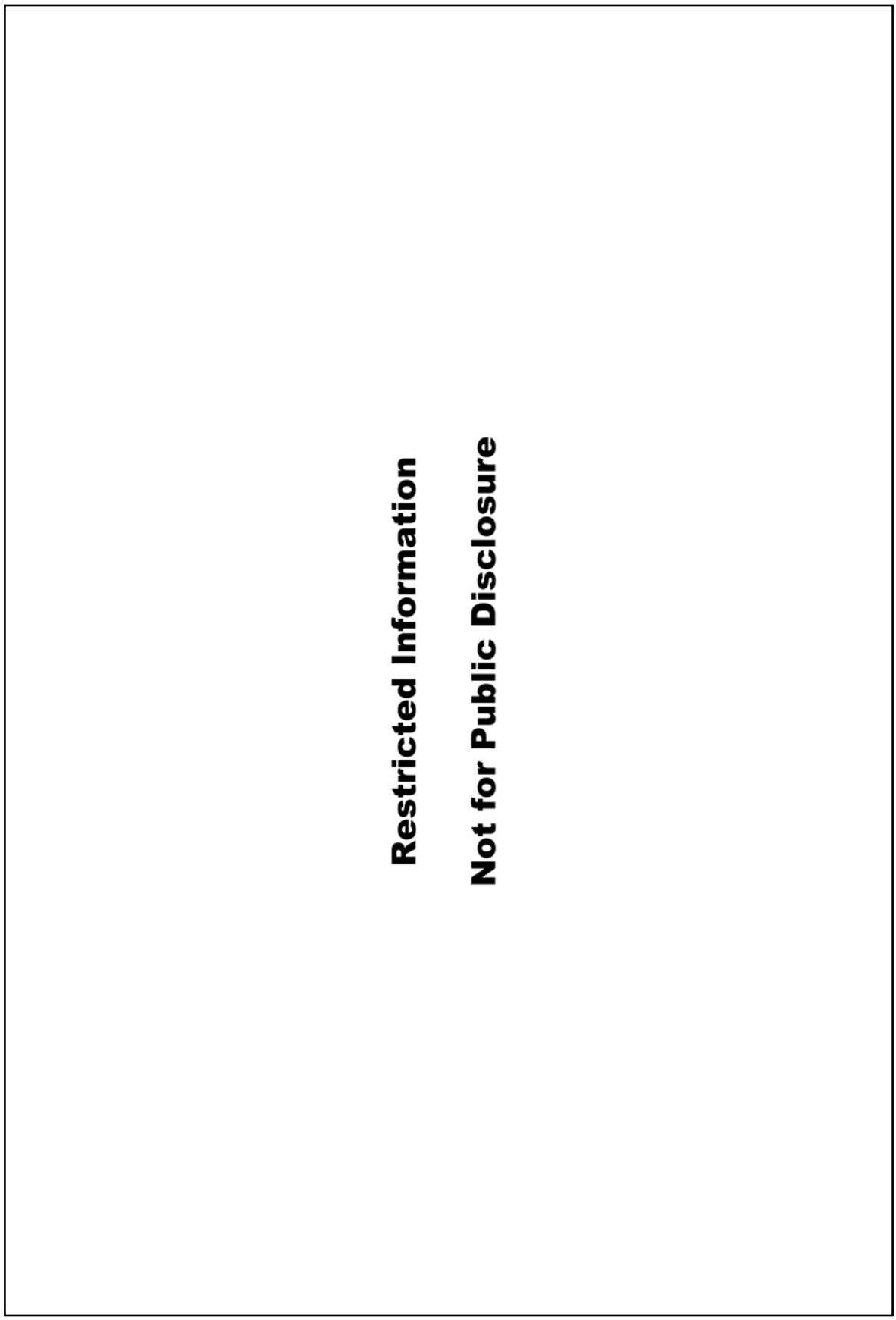

Figure 6.134. Map of 41CM396.

site boundary. Additional disturbances include a graded two-track road and natural erosion throughout the site (Figure 6.136).

41CM396 Summary

No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include the two-track, natural erosion, and general vegetation and land modification for cattle ranching operations and road maintenance. Site 41CM396 does not have the potential to yield information important to the prehistory of the region due to a lack of cultural features and a subsurface component. Based on these data, site 41CM396 is recommended not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance is recommended for the site within the project area. However, as the site likely extends southeast beyond the project area, should the alignment shift in that direction, additional investigations would be necessary.

41CM397

Site 41CM397 is a prehistoric lithic procurement site in southern Comal County. The site is on the steep lower terrace of Dry Comal Creek. Site vegetation consists of a moderately dense juniper forest (Figure 6.137). At the time of survey, ground surface visibility ranged from 80 to 100 percent with exposed limestone gravels, cobbles, and large rocks at ground surface. Dry Comal Creek is the nearest natural water source, located approximately 30 m east of the site.

Table 6.36. Shovel Test Data for 41CM396

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW91	41CM396	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Calcium Carbonate, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW92	41CM396	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Calcium Carbonate, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW93	41CM396	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%, Calcium Carbonate, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.

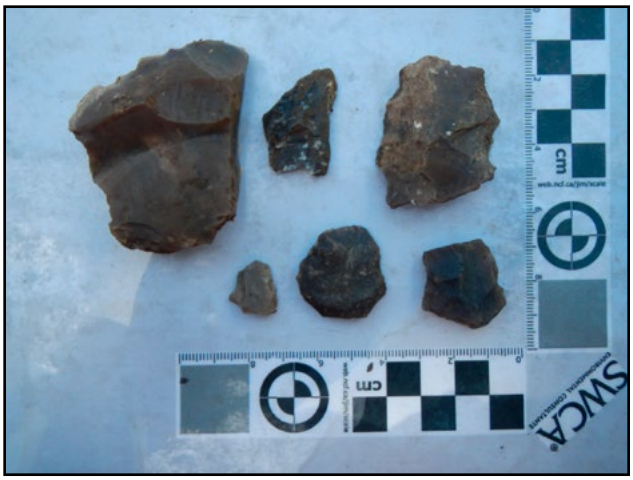

Figure 6.135. Example of lithic materials from 41CM396.

Figure 6.136. Two-track road bisecting 41CM396, facing north.

Figure 6.137. Overview of 41CM397, facing north.

Site 41CM397 measures 160 m northeast to southwest by 30 m northwest to southeast; however, the site continues to the northwest and southeast beyond the project area (Figure 6.138). Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Three shovel tests (DR98–DR99 and RW96) were excavated within the site, all of which were negative for cultural materials (Table 6.37). Soils encountered within shovel tests consist of dark yellowish brown to very dark brown clay and clay loams with 10 to 20 percent cobble, gravel, and pebble inclusions. Soil deposits range from 5 to 20 cm deep and terminate at bedrock. Materials observed during ground surface inspection consisted of approximately 75 secondary flakes; 40 cores; 100 primary flakes; one unifacial chopper; and 50 tertiary flakes (Figure 6.139). All lithic materials observed were composed of chert material types and no diagnostic materials or cultural features were observed.

Site 41CM397 is located within privately owned land used for open-range cattle ranching. General vegetation clearing and land modifications for rangeland use were observed. Additional disturbances include two-track roads near the northeastern end of the site and natural downslope erosion from the Dry Comal Creek channel at the eastern boundary of the site (Figure 6.140).

41CM397 Summary

Site 41CM397 is a prehistoric lithic procurement site with minimal subsurface deposits of an unknown temporal affiliation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include two-track roads near the northeastern end of the site, natural erosion, and general vegetation and land modification for open-range cattle ranching operations.

Given the above conditions, it is the opinion of SWCA that site 41CM397 does not have the potential to yield information important to regional prehistory and is recommended as not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance is recommended for the site within the project area. However, as the site likely extends northwest and southeast beyond the project area, should the alignment be shifted into those areas, additional investigations would be necessary.

Table 6.37. Shovel Test Data for 41CM397

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR98	41CM397	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%, Cobbles, Gravels, Large Rock Fragments	Negative	No cultural material encountered.	Terminated at bedrock.
DR99	41CM397	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%, Cobbles, Gravels, Large Rock Fragments	Negative	No cultural material encountered.	Terminated at bedrock.
RW96	41CM397	0-20	10YR 2/2	very dark brown	Clay	0%, None	Negative	No cultural material encountered.	Terminated at basal clay.

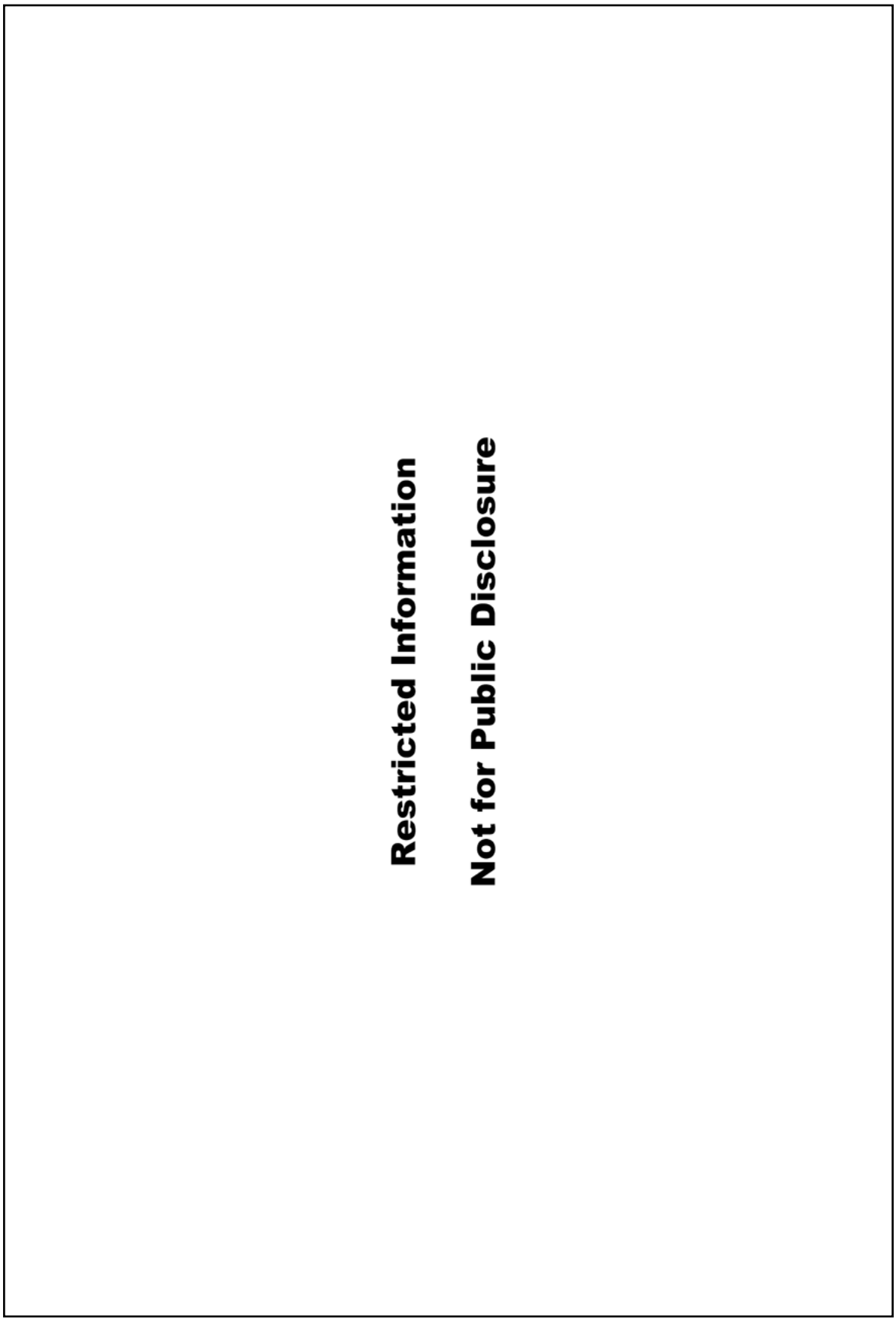

Figure 6.138. Map of 41CM397.

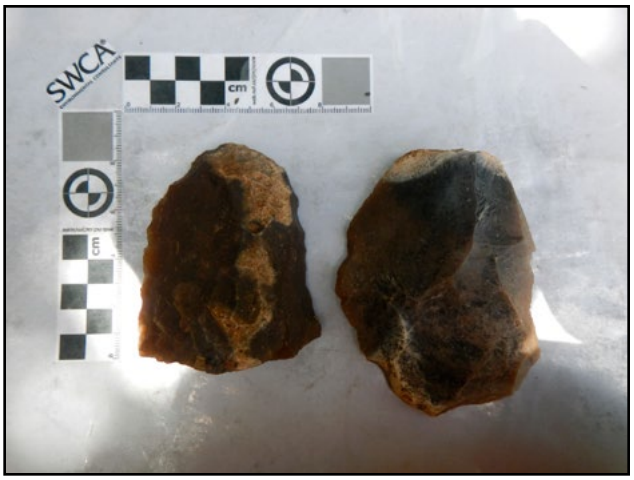

Figure 6.139. Example of lithic materials from 41CM397.

Figure 6.140. Typical erosion on slope toward Dry Comal Creek, facing northwest.

41CM398

Site 41CM398 is a prehistoric lithic scatter in southern Comal County. The site is on an upland formation that slopes to the southwest towards the high bluff of Dry Comal Creek. Vegetation consists of a dense juniper and oak forest. At the time of investigations, ground surface visibility ranged from 80 to 100 percent with exposed limestone cobbles, gravels, and large rocks at ground surface. Dry Comal Creek is the nearest natural water source, situated 600 m to the west.

Site 41CM398 measures 97 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the west and south beyond the project area (Figure 6.141). Site boundaries were determined by ground surface inspection, shovel testing for subsurface deposits, and site boundaries and shovel testing. One shovel test (KH03) was excavated and was negative for cultural materials (Table 6.38). Soils encountered within the shovel test consist of yellowish brown clay loam with gravel and cobble inclusions. Soil deposits extended to 30 cm deep and terminate at large rocks and compact soil.

Materials observed during ground surface inspection consisted of approximately 15 primary flakes; 20 secondary flakes; one modified flake; 5 tertiary flakes; and 10 cores. All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41CM398 is located within privately owned land used as a forested rangeland. Areas of vegetation clearing were observed within the vicinity of the site, but disturbances consisted mainly of natural downslope erosion.

41CM398 Summary

Site 41CM398 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown age. No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include a two-track road, natural erosion, and general vegetation and land modification for cattle ranching operations and road maintenance.

It is the opinion of SWCA that site 41CM398 does not have the potential to yield information important to regional prehistory of the region due to a lack of cultural features, buried deposits and a substantial artifact assemblage. As such, site 41CM398 is recommended not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends south and west beyond

Table 6.38. Shovel Test Data for 41CM398

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KH03	41CM398	0-30	10YR 5/4	yellowish brown	Clay Loam	Cobbles, Gravels, Pebbles	Negative		No cultural material encountered. Terminated at bedrock.

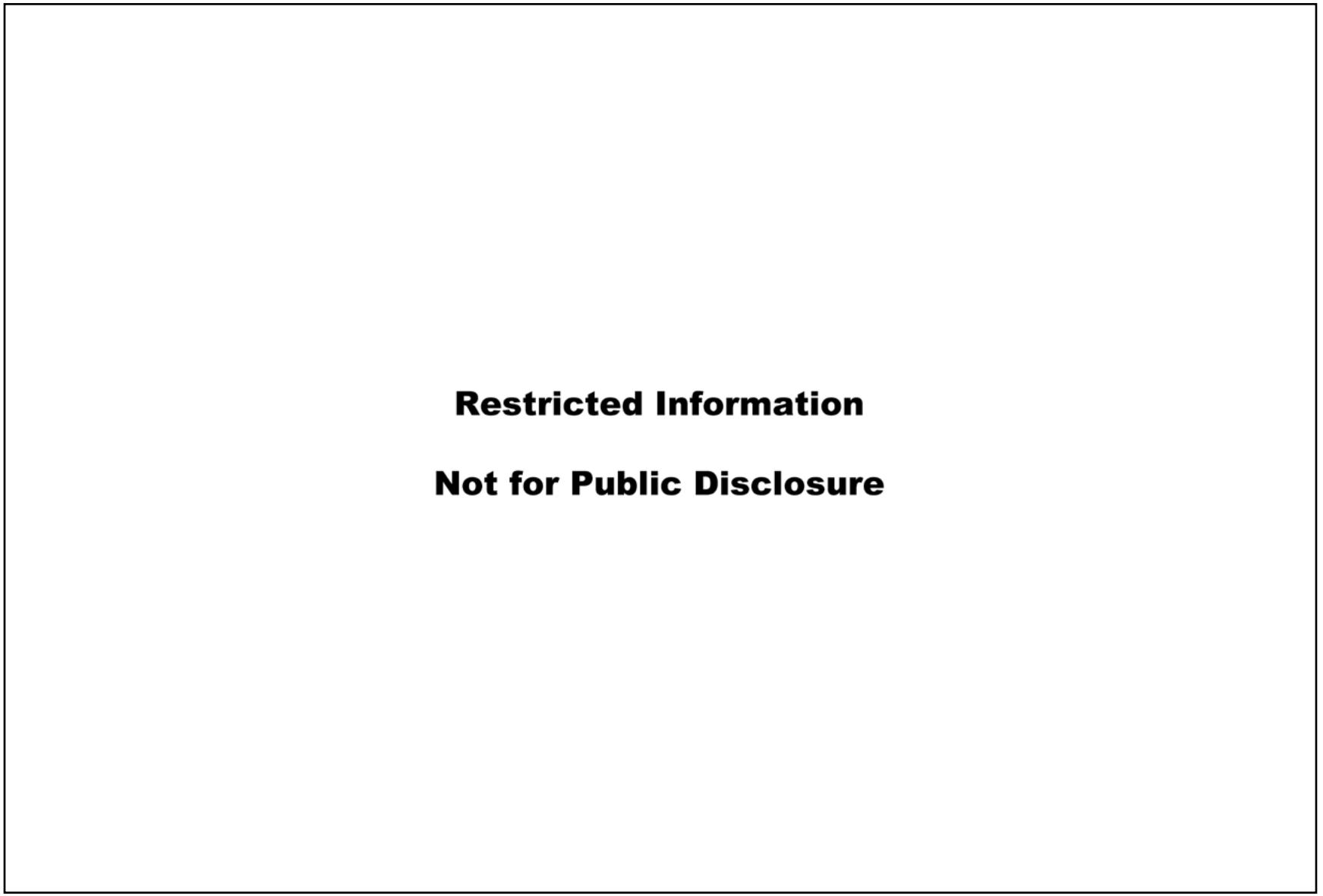

Figure 6.141. Map of 41CM398.

the project area, should the alignment shift into those areas additional investigations would be necessary.

41CM399

Site 41CM399 is a prehistoric lithic scatter in southern Comal County. The site is on a broad, upper terrace of Dry Comal Creek that slopes slightly south. Vegetation consists of oak and mixed hardwood trees with an understory of tall grasses (Figure 6.142). At the time of survey, ground surface visibility ranged from 0 to 15 percent with thick grasses outside of the right-of-way to exposed areas within the right-of-way. Dry Comal Creek is the nearest natural water source, situated 60 m to the south.

Figure 6.142. Overview of 41CM399, facing west.

Site 41CM399 measures 130 m northwest to southeast by 15 m northeast to southwest; however, the site likely extends to the east and west beyond the project area (Figure 6.143). Site boundaries were determined by ground surface inspection, shovel testing for subsurface cultural deposits, and site boundaries. Six shovel tests (MP07–MP09 and DR106–108) were excavated, all of which were negative for cultural materials (Table 6.39). Soils encountered within shovel tests consist of dark yellowish brown to dark grayish brown silty clay loam and clay loam with 1–5 percent gravel and pebble inclusions. Soil deposits range from 30–35 cmbs. Shovel tests were terminated at compact soil or basal clay. Materials observed during ground surface inspection consisted of approximately 40 pieces of cultural shatter; 75 tertiary flakes; 150 primary flakes; one modified flake; one biface; one burned rock fragment; and 10 cores (Figure 6.144). The majority of the lithic materials observed were composed of chert material types with the exception of the burned rock fragment. No diagnostic materials or cultural features were observed.

Site 41CM399 is located within privately owned land used for agricultural purposes. Vegetation clearing and land modifications for agriculture were observed in the form of a large plowed field on the western edge of the site. Additional disturbances include a fence line that transects the site from north to south paralleling the western boundary of the site.

41CM399 Summary

Site 41CM399 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. It is the opinion of SWCA that site 41CM399 does not have the potential to yield information important to regional prehistory of the region due to a lack of cultural features, intact deposits and a substantial artifact assemblage. As such, site 41CM399 is recommended not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance is recommended for the site within the project area. However, as the site likely extends east and west beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41CM400

Site 41CM400 is a prehistoric lithic procurement site in southern Comal County. The site is on an upland terrace that gently slopes towards the north and west. Vegetation consists of moderately dense juniper and other mixed hardwoods, patches of medium grasses, cacti, and small shrubs in open areas (Figure 6.145). Ground surface visibility ranges from 60 to 100 percent with sporadic patches of exposed bedrock and dense concentrations of limestone cobbles and large rocks at ground surface. Dry Comal Creek is the nearest natural water source, as the creek forms the western site boundary.

Site 41CM400 measures 890 m northeast to southwest and 30 m northwest to southeast (Figure 6.146). Site boundaries were determined predominately by ground surface inspection, but shovel testing for subsurface cultural deposits was also conducted. A total of ten shovel tests (KH08, KH09, and RW105–112) were excavated, two of which (KH08 and KH09) were

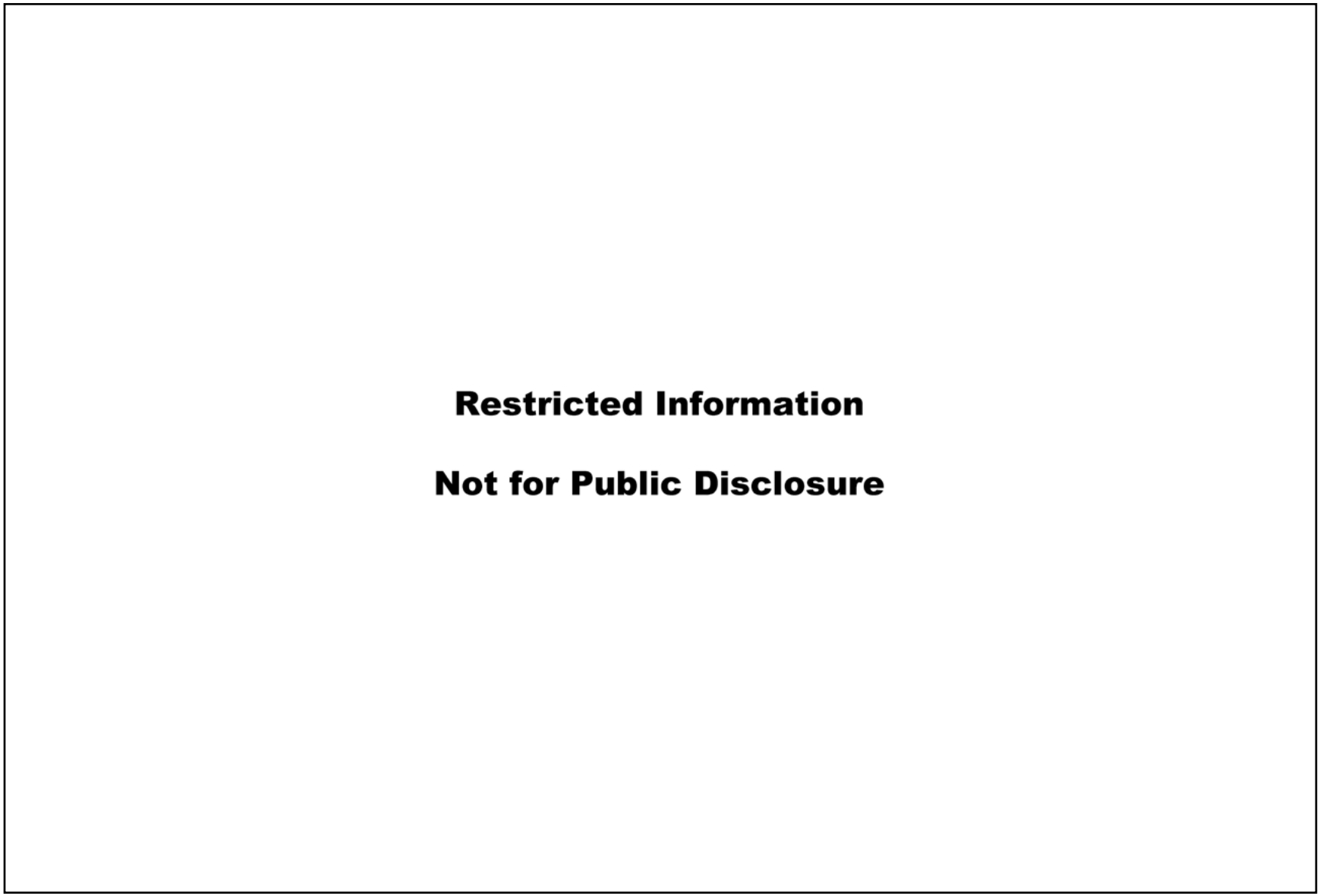

Figure 6.143. Map of 41CM399.

Table 6.39. Shovel Test Data for 41CM399

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
MP07	41CM399	0–10	10YR 4/2	dark grayish brown	Silty Clay Loam	1-5%, Cobbles, Gravels	Negative	No cultural material encountered.	
		10–20	10YR 4/2	dark grayish brown	Silty Clay	1-5%, Gravels	Negative	No cultural material encountered.	
		20–30	10YR 4/2	dark grayish brown	Silty Clay	1-5%, Gravels	Negative	No cultural material encountered.	Terminated at basal clay.
MP08	41CM399	0–30	10YR 4/2	dark grayish brown	Silty Clay	1-5% gravels	Negative	No cultural material encountered.	Terminated at basal clay.
MP09	41CM399	0–30	10YR 4/2	dark grayish brown	Silty Clay	1-5%	Negative	No cultural material encountered.	Terminated at basal clay.
DR106	41CM399	0–35	10YR 4/4	dark yellowish brown	Clay Loam	5-10% gravels and pebbles	Negative	No cultural material encountered.	Terminated at bedrock.
DR107	41CM399	0–35	7.5YR 4/4	brown	Clay Loam	1-5%, Gravels, Pebbles	Negative	No cultural material encountered.	Terminated at compact soil.
DR108	41CM399	0–30	7.5YR 4/4	brown	Clay Loam	1-5%, Gravels, Pebbles	Negative	No cultural material encountered.	Terminated at compact soil.

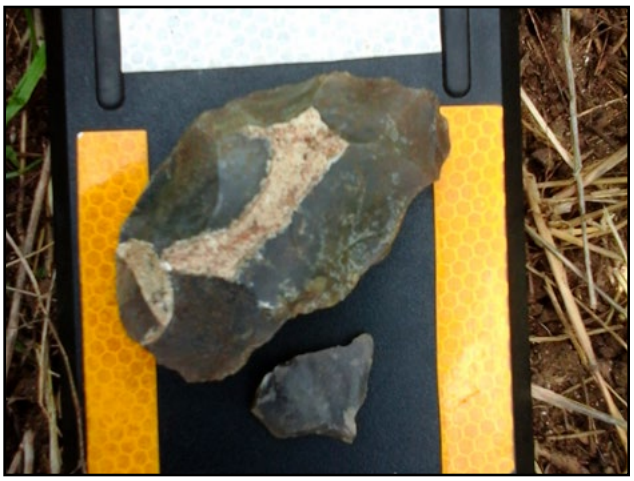

Figure 6.144. Early-stage biface observed on the surface of site 41CM399.

positive for cultural materials (Table 6.40). Artifacts were recovered from shovel tests to a maximum depth of 40 cmbs and consisted entirely of tertiary flakes. Soils encountered within the shovel tests consisted of very dark brown to yellowish brown clay loam to a maximum depth of 40 cmbs overlying compact clayey subsoil, however a majority of the shovel tests were terminated at 5–10 cmbs at bedrock.

Materials observed during ground surface inspection consisted of approximately 1,500 primary flakes; 750 secondary flakes; 400 tertiary flakes; 200 modified flakes; 60 bifaces; and 1,750 cores (Figure 6.147). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41CM400 is on privately owned rangeland. Disturbances included property fence construction and natural downslope erosion. No artificial impacts to the site were observed.

41CM400 Summary

Site 41CM400 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupa-

Figure 6.145. Overview of 41CM400, facing north.

tion. No diagnostic artifacts were recovered during investigations and no cultural features were observed. Disturbances to the site include the two-track road, natural erosion, and general vegetation and land modification for cattle ranching operations and road maintenance.

It is the opinion of SWCA that site 41CM400 does not have the potential to yield information important to regional prehistory due to a lack of cultural features, and its shallow, sparse, and compressed subsurface deposits. As such, SWCA recommends that site 41CM400 is not eligible for listing in the NRHP or for designation as an SAL. No further work or avoidance strategy is recommended for the site within the project area.

Table 6.40. Shovel Test Data for 41CM400

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
KH08	41CM400	0–5	10YR 5/4	yellowish brown	Clay Loam	no percentage given; Cobbles, Gravels, Large Rock Fragments	Negative	No cultural material encountered.	
		5–40	10YR 4/2	dark grayish brown	Clay	no percentage given; Gravels, Pebbles	**Positive**	**1 tertiary flake**	Terminated at basal clay
KH09	41CM400	0–20	10YR 5/6	yellowish brown	Clay Loam	no percentage given; Cobbles, Gravels, Large Rock Fragments	**Positive**	**4 tertiary flakes**	Terminated at bedrock.
RW105	41CM400	0–10	7.5YR 3/3	dark brown	Clay Loam	>20% cobbles and gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW106	41CM400	0–10	7.5YR 3/3	dark brown	Clay Loam	>20% cobbles and gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW107	41CM400	0–10	7.5YR 3/3	dark brown	Clay Loam	>20% cobbles and gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW108	41CM400	0–10	7.5YR 3/3	dark brown	Clay Loam	>20% cobbles and gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW109	41CM400	0–10	7.5YR 3/3	dark brown	Clay Loam	>20% cobbles and gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW110	41CM400	0–5	10YR 2/2	very dark brown	Clay Loam	no percentage given; Cobbles, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW111	41CM400	0–5	10YR 2/2	very dark brown	Clay Loam	>20%; Cobbles, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.
RW112	41CM400	0–5	10YR 2/2	very dark brown	Clay Loam	>20%; Cobbles, Gravels	Negative	No cultural material encountered.	Terminated at bedrock.

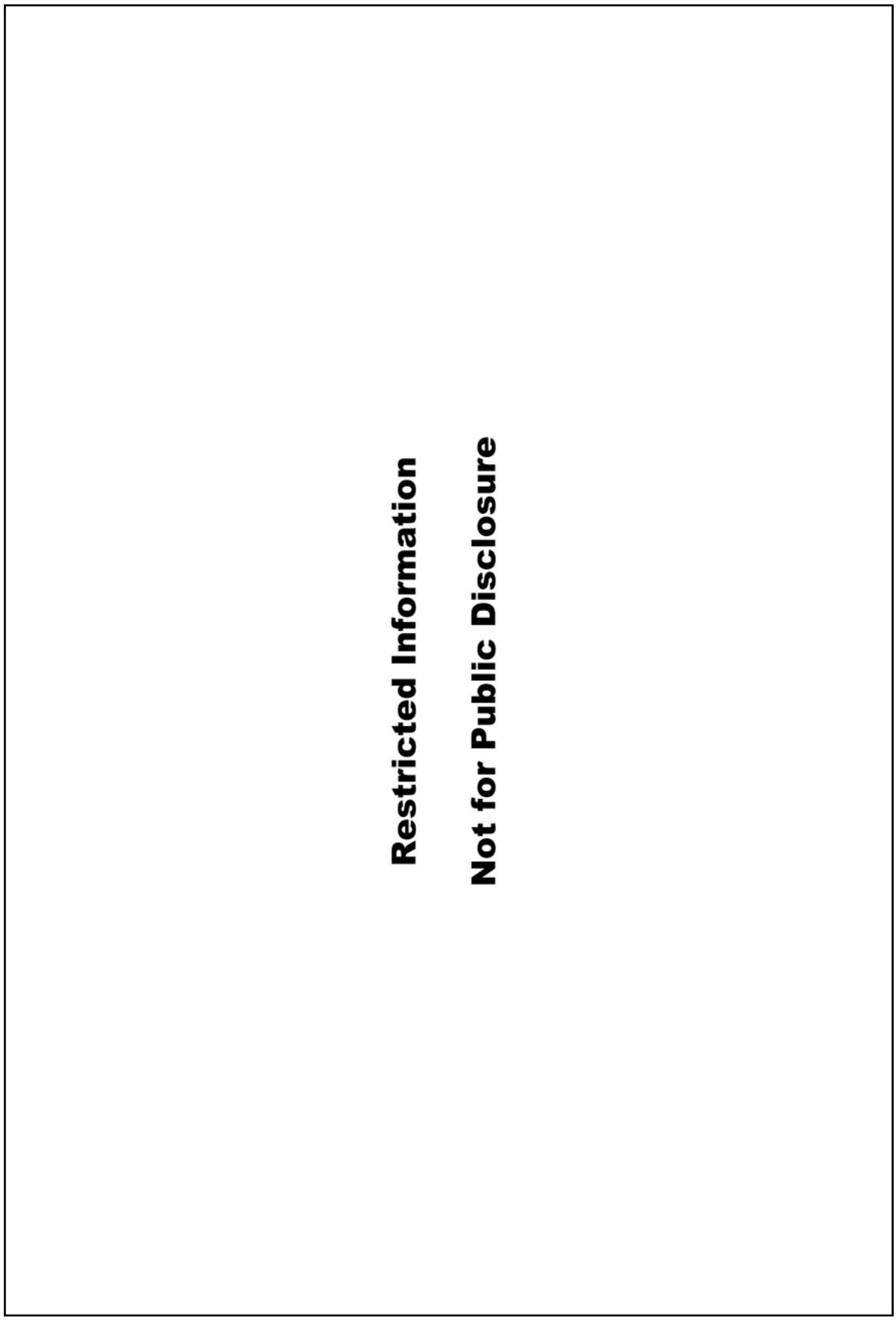

Figure 6.146. Map of 41CM400.

Figure 6.147. Example of lithic materials from 41CM400.

Figure 6.148. Overview of 41CM401, facing east.

41CM401

Site 41CM401 is a historic artifact scatter and prehistoric lithic scatter in southern Comal County. The site is situated on an upland formation that steeply slopes up from an erosional drainage, then gently slopes down towards the lower terraces of Dry Comal Creek to the south. Vegetation consists of tall grasses, weeds and shrubs in open fields with sporadic clusters of oak and other mixed hardwood trees (Figure 6.148). At the time of investigations, ground surface visibility ranges from 50 to 100 percent with exposed bedrock and dense concentrations of gravely clay and compact clay at ground surface. Dry Comal Creek is the nearest natural water source, situated 0.45 mile to the south. Soils of the site consisted of yellowish brown sandy clay loam or black clay loam with greater than 20 percent cobble, gravel, and large rock fragment inclusion. Soil deposits ranged from 10 to 15 cm deep before terminating at bedrock or basal clay.

Site 41CM401 measures 780 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the northeast and southwest beyond the project area (Figure 6.149). Site boundaries were determined by shovel testing for subsurface cultural deposits and ground surface inspection. Eight shovel tests (KS108–11 and RW309–12) were excavated and all tested negative for subsurface cultural materials (Table 6.41). Materials observed during ground surface inspection consisted of approximately 20 miscellaneous ceramics, 200 prehistoric primary chert flakes, 4 green glass fragments, 4 porcelain sherds, 20 miscellaneous metal fragments, 75 prehistoric chert cores, 600 pieces of cultural shatter, 7 clear glass fragments, 3 prehistoric chert bifaces (Figure 6.150), 20 miscellaneous glass type fragments, 8 whiteware sherds, 6 milk glass fragments, 450 prehistoric secondary chert fragments, 6 solarized glass fragments, 3 blue glass fragments, 25 brown glass fragments, and one metal spoon (Figure 6.151) .

Diagnostic artifacts include historic glass and ceramic fragments that indicate an early twentieth century component. No other diagnostic artifacts or cultural features were observed within the project area, however, a cattle barn likely dating to the early to mid-twentieth century was observed immediately adjacent to the southern boundary of the site.

Site 41CM401 is located within privately owned land used for open-range cattle ranching and farming. Vegetation clearing and land modifications for open range pastures and farming were observed in the form of grassy clearings on the northwestern half and a fallow field on the southeastern half of the site. Additional disturbances include a two-track road that cuts through the site along the southeastern and northeastern boundary, a game fence that parallels the northeastern site boundary, and a railroad track to the south.

41CM401 Summary

Site 41CM401 is a historic artifact scatter with a prehistoric lithic scatter component. No prehistoric or historic cultural features were observed within the project boundary. It is the opinion of SWCA that site 41CM401 does not have the potential to yield information important to the prehistory or prehistory of the region as the site lacks cultural features, intact subsurface deposits, and isolable activity areas.

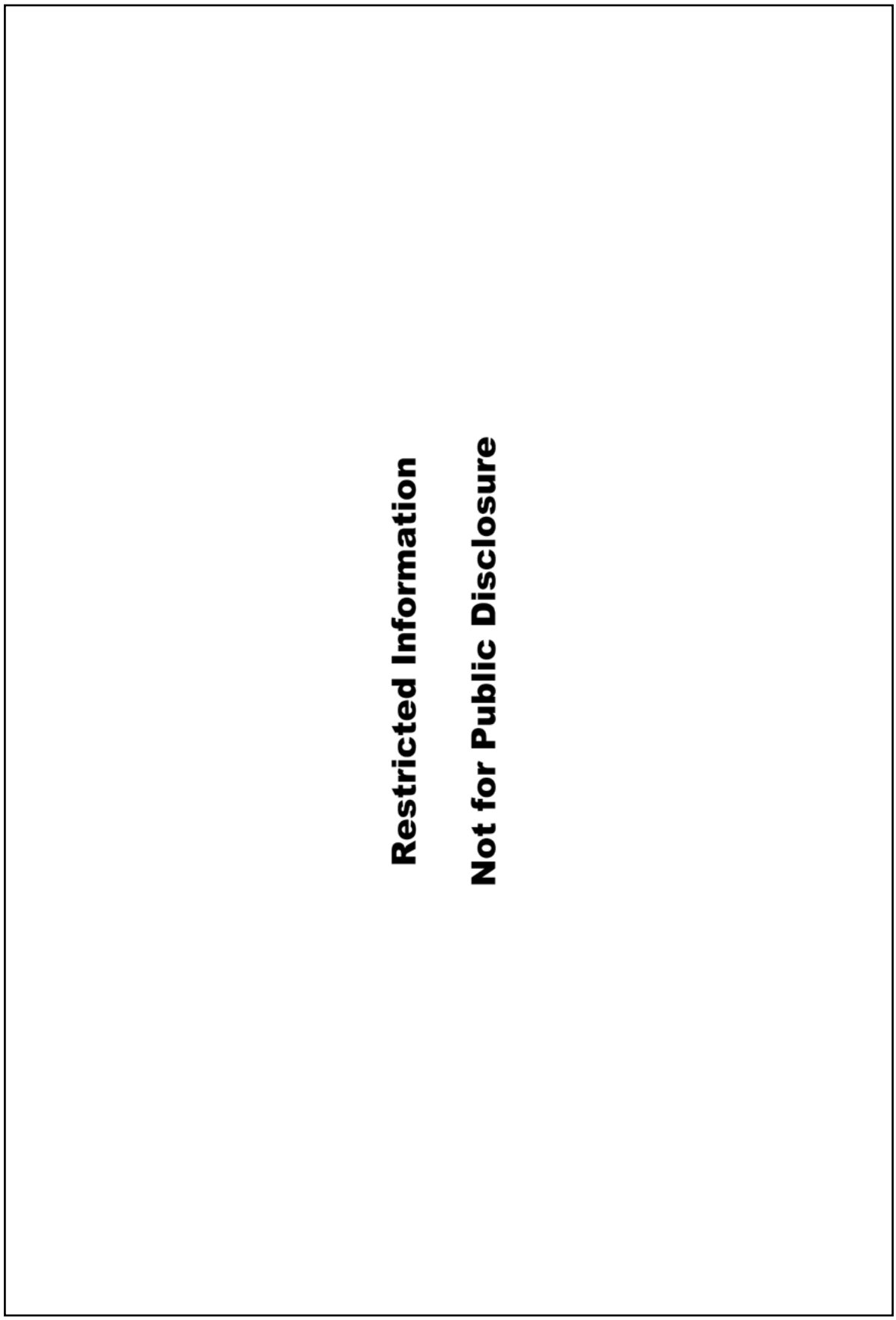

Figure 6.149. Map of 41CM401.

Table 6.41. Shovel Test Data for 41CM401

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW309	41CM401	Level 1, 0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%, Cobbles, gravels, large rock fragments	Negative	No cultural material encountered	Terminated at bedrock.
RW310	41CM401	Level 1, 0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%, Cobbles, gravels, large rock fragments	Negative	No cultural material encountered	Terminated at bedrock.
RW311	41CM401	Level 1, 0-15	10YR 2/1	black	Clay Loam	5-10%, Cobbles	Negative	No cultural material encountered	Terminated at basal clay.
RW312	41CM401	Level 1, 0-15	10YR 2/1	black	Clay Loam	5-10%, Cobbles	Negative	No cultural material encountered	Terminated at basal clay.
KS108	41CM401	Level 1, 0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%, Cobbles, gravels, large rock fragments	Negative	No cultural material encountered	Terminated at bedrock.
KS109	41CM401	Level 1, 0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%, Cobbles, gravels, large rock fragments	Negative	No cultural material encountered	Terminated at bedrock.
KS110	41CM401	Level 1, 0-15	10YR 2/1	black	Clay Loam	5-10%, Cobbles	Negative	No cultural material encountered	Terminated at basal clay.
KS111	41CM401	Level 1, 0-15	10YR 2/1	black	Clay Loam	5-10%, Cobbles	Negative	No cultural material encountered	Terminated at basal clay.

Figure 6.150. Example of chert bifaces found on the surface of 41CM401.

Figure 6.151. Example of historic material found on the surface of 41CM401.

Due to its lack of research value, 41CM401 is not recommended eligible for listing in the NRHP or for SAL designation. No further survey or avoidance is recommended for the site within the project area, though archival research is recommended to determine a more precise date of the historic deposit. As the site likely extends northeast and southwest beyond the project area, should the alignment shift into those areas, additional investigations would be necessary.

41CM404

Site 41CM404 is a prehistoric lithic scatter in southern Comal County. Site is located in an open field consisting primarily of grasses and sporadic mesquite with moderately dense juniper and oak woods along the northwestern periphery (Figure 6.152). Ground surface visibility at the site averaged nearly 100 percent with exposed areas of dense limestone cobble and gravel outcrops. The topography slopes approximately 5–10 percent east toward Bear Creek. Soils of the site consisted of dark yellowish brown (10YR3/4) clay loam with 1–5 percent calcium carbonates and gravel inclusions to a depth of 25 cmbs over a brown (7.5YR4/4) clay with 10–20 percent calcium carbonate inclusions. Shovel tests were typically terminated at a basal clay or degrading bedrock around 30 cmbs.

Site 41CM404 measures 100 m northwest to southeast by 30 m northeast to southwest (Figure 6.153). The site boundaries were determined through visual inspection and shovel test excavation. A total of six shovel tests (RW738–739, SMM83–84, RW739 and RW741) were excavated within the site boundary, none of which contained cultural material (Table 6.42).

Cultural materials observed on the ground surface include secondary and tertiary chert flakes, some of which were less than 1-cm refining flakes, a unifacial drill, and two stone choppers (Figure 6.154). A few scattered burned rocks were also observed around the northwestern end of the site where limestone concentrations were high.

Site 41CM404 is located within privately owned land and is currently utilized for agricultural purposes as and wild game hunting. Vegetation clearing, the construction of a property fence line, and erosion have previously impacted the area, leaving only about 10–20 percent of the site intact.

41CM404 Summary

Site 41CM404 is a prehistoric lithic scatter site limited to the surface, and of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of secondary and tertiary flakes, and a few tools. Disturbances to the site include agricultural disturbances, the construction of a property fence line, and erosion.

Overall, site 41CM404 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits and consists largely of a surface deposit reflecting an unknown number of occupations that cannot be teased into individual components. Due to its lack of potential research value, SWCA recommends that 41BCM404 is not eligible for listing in the NRHP under Criterion D or for SAL designation. As such, no further work or avoidance strategy is recommended for the site within the project area.

Bexar County

Eleven cultural resource sites were delineated within Bexar County during the investigations (see Figure 6.155). A total of five prehistoric lithic scatters (41BX2096, 41BX2102, 41BX2103, 41BX2105, and 41BX2106), four prehistoric lithic procurement locales (41BX2097–41BX2100), one prehistoric campsite (41BX2104), and one multicomponent prehistoric and historic site (41BX2101) were identified and recorded. Site 41BX2101 is prehistoric lithic scatter with a small mound feature surrounded by a historic-age fence. Ad-

Figure 6.152. Overview of 41CM404, facing northwest.

Table 6.42. Shovel Test Data for 41CM404

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW738	41CM404	0-25	10YR 3/4	Dark yellowish brown	Clay Loam	1-50% calcium carbonate and gravels	Negative	N/A	
	41CM404	25-30	7.5YR 4/4	Brown	Clay	10-20% calcium caronate	Negative	N/A	Terminated at basal clays.
RW739	41CM404	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5% calcium carbonate, gravels	Negative	N/A	
	41CM404	25-30	7.5YR 4/4	brown	Clay	10-20% calcium carbonate	Negative	N/A	Terminated at basal clays.
RW740	41CM404	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5% calcium carbonate, gravels	Negative	N/A	
	41CM404	25-30	7.5YR 4/4	brown	Clay	10-20% calcium carbonate	Negative	N/A	Terminated at basal clays.
RW741	41CM404	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5% calcium carbonate, gravels	Negative	N/A	
	41CM404	25-30	7.5YR 4/4	brown	Clay	10-20% calcium carbonate	Negative	N/A	Terminated at basal clays.
SMM83	41CM404	0-15	10YR 4/2	dark grayish brown	Clay Loam	5-10% cobbles and pebbles	Negative	N/A	
	41CM404	15-30	2.5Y 6/6	olive yellow	Clay Loam	>20% calcium carbonate	Negative	N/A	Terminated at basal clays.
SMM84	41CM404	0-10	10YR 4/3	brown	Clay Loam	5-10% cobbles and pebbles	Negative	N/A	
	41CM404	10-20	2.5Y 6/6	olive yellow	Clay Loam	>20% calcium carbonate	Negative	N/A	Terminated at basal clays.

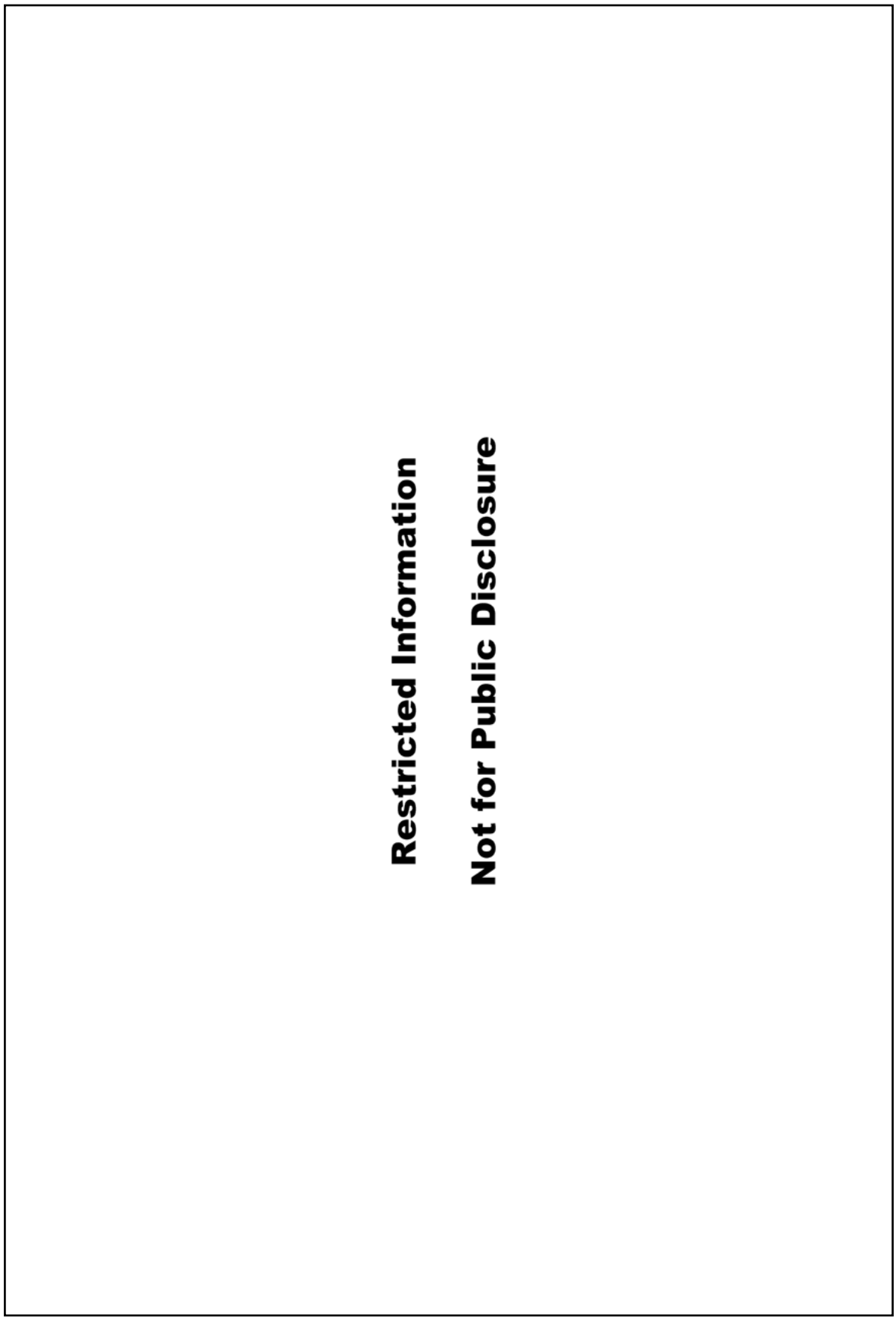

Figure 6.153. Map of 41CM404.

Figure 6.154. Example of lithic materials from 41CM404.

ditional investigations are recommended to adequately assess the feature, or avoidance measures to prevent further impacts to the site. No further work is recommended for the remaining 10 newly recorded sites in Bexar County.

41BX2096

Site 41BX2096 is a prehistoric lithic procurement site in northern Bexar County. The site is on an upland formation that gently slopes to the east, south, and west. Vegetation consists of sporadic mixed hardwood trees, short grasses, shrubs, and cacti (Figure 6.156). At the time of survey, ground surface visibility ranges from 80 to 100 percent with exposed bedrock and dense concentrations of gravels and cobble at ground surface. Mud Creek is the nearest natural water source, located approximately 420 m east of the site.

Site 41BX2096 measures 120 m east to west by 30 m north to south; however, the site likely extends to the north and south beyond the project area (Figure 6.157). Site boundaries were determined by ground surface inspection and shovel testing. Four shovel tests (DR03–DR05, and RW04) were excavated, and three of the four (DR03–04 and RW04) were positive for cultural materials (Table 6.43). Soils encountered within shovel tests consist of dark yellowish brown to very dark brown clay and clay loams with 10 to 20 percent cobble, gravel, and pebble inclusions. Soil deposits range from 10 to 15 cm deep and terminate at eroding bedrock. Subsurface materials ranged from 0 to 10 cmbs and consisted primarily of cultural shatter and secondary flakes. Materials observed during ground surface inspection consisted of approximately 60 cultural shatter chert fragments; 1,500 primary flakes; 750 secondary flakes; 250 tertiary flakes; 150 cores; 30 bifaces; and 150 scrapers (Figure 6.158). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2096 is located within privately owned land used for open-range cattle ranching. Vegetation clearing and land modifications for stock tanks and erosion control berms were observed in the form of earth and brush push piles throughout the site area. Additional

Table 6.43. Shovel Test Data for 41BX2096

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR03	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20% cobbles, gravels, and pebbles	**Positive**	**1 chert shatter**	Terminated at bedrock.
DR04	0-10	10YR 3/3	dark brown	Clay Loam	10-20% cobbles, gravels, and pebbles	**Positive**	**1 chert shatter**	Terminated at bedrock.
DR05	0-10	10YR 3/3	dark brown	Clay Loam	10-20% cobbles, gravels, and pebbles	Negative	-	Terminated at bedrock.
RW04	0-15	10YR 2/2	very dark brown	Clay	>20% cobbles and gravels	**Positive**	**5 secondary chert flakes; 5 chert shatter**	Terminated at bedrock.

Figure 6.155. Bexar County Map.

Figure 6.156. Overview of 41BX2096, facing west.

disturbances include an existing overhead transmission line immediately north of the site boundary, as well as a two-track road within the transmission line corridor. The two-track road parallels the northern site boundary and forms the eastern site boundary as it redirects south (Figure 6.159).

41BX2096 Summary

Site 41BX2096 is a prehistoric lithic procurement site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting of debitage, as well as bifaces and scrapers in various stages of manufacture. Disturbances to the site include an existing transmission line and a two-track road that parallel the site to the north, and general vegetation and land modification for open-range cattle ranching operations. Overall, site 41BX2096 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits and consists largely of a surface palimpsest deposit reflecting potentially thousands of years of use that cannot be teased into individual components. Due to its lack of potential research value, SWCA recommends that 41BX2096 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance is recommended for the site within the project area. However, as the site likely extends north beyond the project area, should the proposed alignment shift into that area, additional survey would be necessary.

41BX2097

Site 41BX2097 is a prehistoric lithic scatter in northern Bexar County. The site is situated on a generally level upland formation overlooking Elm Creek to the east. Vegetation consists of dense mixed hardwood forest, medium to tall grasses, small shrubs, and cacti (Figure 6.160). Ground surface visibility ranges from 0 to 10 percent with exposed bedrock and limestone cobbles at ground surface. Elm Creek is the nearest natural water source, situated 395 m to the east. Soils of the site consist of dark yellowish brown to very dark brown clay and clay loams with 0 to 10 percent cobble, gravel, and pebble inclusions. Soil deposits range from 5 to 30 cm deep and terminate at eroding bedrock or clay subsoil.

Site 41BX2097 measures 107 m southwest to northeast by 30 m southeast to northwest; however, the site likely extends to the north and south beyond the project area (Figure 6.161). Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Ten shovel tests (DR14–DR19 and RW15–RW18) were excavated, and six of the ten (DR14–15, DR18, and RW15–17) were positive for cultural materials (Table 6.44). Subsurface materials ranged from ground surface to 20 cmbs and consisted primarily of tertiary and primary flakes, two scrapers and debitage. Materials observed during ground surface inspection consisted of: 3–10 tertiary flakes; 5–10 primary flakes; and two scrapers (Figure 6.162). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2097 is located within privately owned land used for agricultural purposes. Vegetation clearing for the construction of an existing transmission line paralleling the project corridor to the north was observed. An additional disturbance includes natural erosion.

41BX2097 Summary

Site 41BX2097 is a prehistoric lithic scatter site of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of flakes, scrapers and debitage. Disturbances to the site include an existing transmission line and natural erosion. Overall, site 41BX2097 does not have the potential to yield important to the prehistory of the region; the site lacks substantial intact subsurface deposits and consists largely

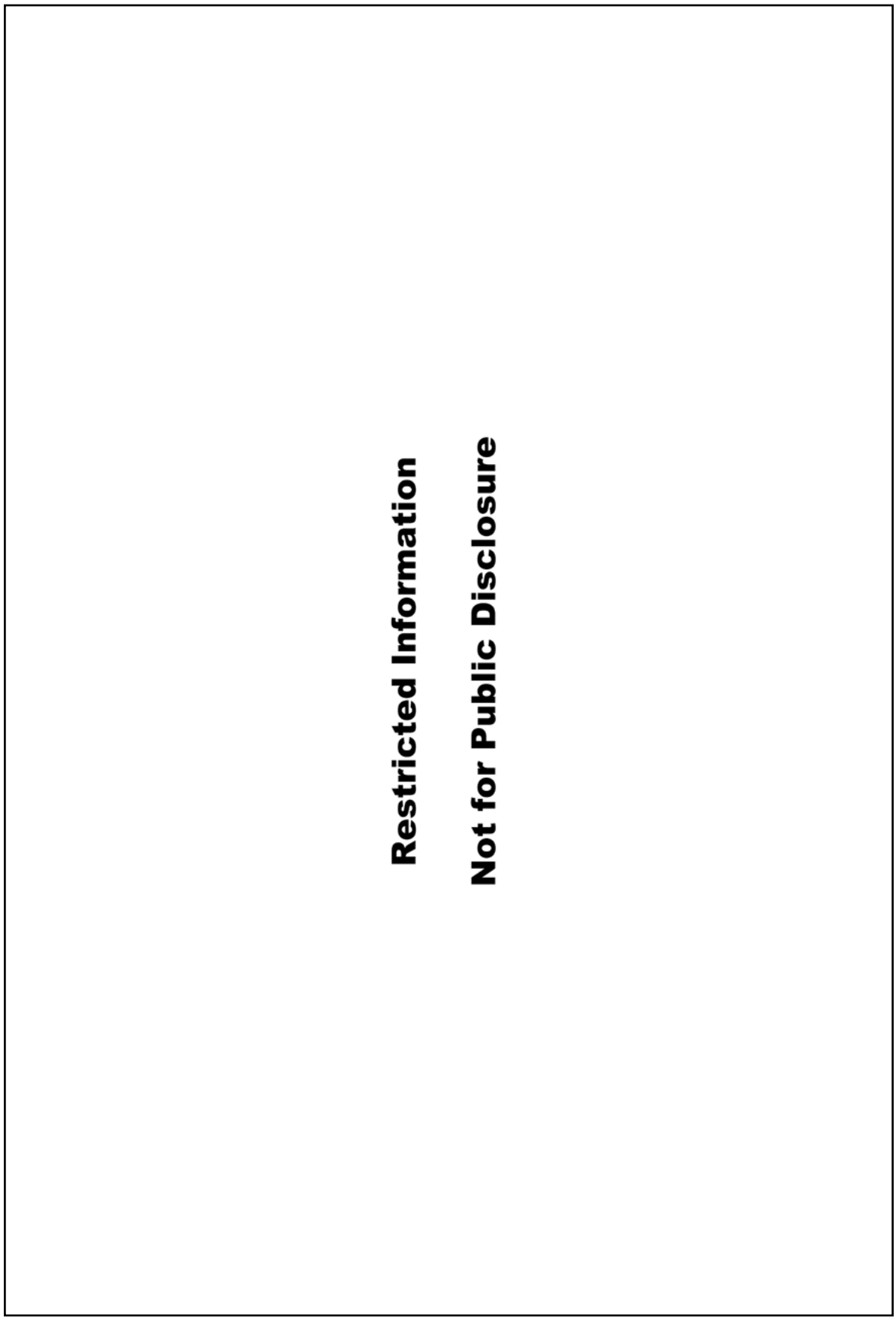

Figure 6.157. Map of 41BX2096.

Table 6.44. Shovel Test Data for 41BX2097

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR14	0-25	10YR 4/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Gravels, Large Rock Fragments	**Positive**	**1 secondary unifacially modified flake**	Terminated at bedrock.
DR15	0-15	10YR 4/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Gravels, Large Rock Fragments	**Positive**	**1 utilized flake**	Terminated at bedrock.
DR16	0-5	10YR 4/4	dark yellowish brown	Clay Loam	5-10%, Cobbles, Gravels	Negative	**-**	Terminated at bedrock.
DR17	0-5	10YR 4/4	dark yellowish brown	Clay Loam	5-10%, Cobbles, Gravels	Negative	-	Terminated at bedrock.
DR18	0-15	10YR 4/4	dark yellowish brown	Clay Loam	5-10%, Cobbles, Gravels, rock fragments	**Positive**	**1 secondary flake**	Terminated at bedrock.
DR19	0-5	10YR 4/4	dark yellowish borwn	Clay Loam	>20% Cobbles, Gravels, and pebbles	Negative	-	Terminated at bedrock.
RW15	0-30	10YR 2/2	very dark brown	Clay	-	**Positive**	**2 chert shatter**	Terminated at bedrock.
RW16	0-20	10YR 3/3	dark brown	Clay Loam	-	**Positive**	**4 chert shatter**	Terminated at basal clay.
	20-25	7.5YR 3/3	dark brown	Clay	-	Negative	-	
RW17	0-10	10YR 3/3	dark brown	Clay Loam	-	**Positive**	**1 utilized flake**	Terminated at basal clay.
	15-Oct	7.5YR 3/3	dark brown	Clay	-	Negative	-	
RW18	0-10	10RY 3/3	dark brown	Clay Loam	-	Negative	-	Terminated at basal clay.
	15-Oct	7.5YR 3/3	dark brown	Clay	1-5%, Roots	Negative	-	

Figure 6.158. Example of lithic materials from 41BX2096.

Figure 6.159. Example of two-track road and overhead transmission utility disturbance on 41BX2096, facing north.

Figure 6.160. Overview of 41BX2097, facing east.

of a surface deposit with questionable horizontal and vertical integrity. Due to its lack of potential research value, SWCA recommends that 41BX2097 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends north and south beyond the project area, should the proposed alignment shift into those areas, additional survey would be necessary.

41BX2098

Site 41BX2098 is a prehistoric quarry and lithic procurement site in northern Bexar County. The site is situated on an upland formation with a gentle (10 to 20 percent) slope to the west. Vegetation consists of juniper trees mixed with medium grasses, low shrubs, and cacti. Ground surface visibility ranges from 60 to 100 percent with areas of gravel concentrations and limestone cobbles at ground surface. East Elm Creek is the nearest natural water source, situated 124 m to the east. Soils of the site consist of dark yellowish brown to very dark brown clay loams with over 20 percent cobble, gravel, pebble, and large rock inclusions. Soil deposits range from 0 to 5 cm deep and terminate at bedrock.

Site 41BX2098 measures 20 m east to west by 10 m north to south; however, the site likely extends to the south beyond the project area (Figure 6.163). Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Two shovel tests (DR19 and RW19) were excavated, both of which were negative for cultural material (Table 6.45). Subsurface cultural materials were not encountered. Materials observed during ground surface inspection consisted of: 2–10 cores; 2–6 modified flakes; two scrapers; and 10–20 cultural shatter (Figure 6.164). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2098 is located within privately owned land used for agricultural purposes. Evidence of vegetation clearing and land modifications likely for agricultural purposes were observed throughout the general area of the site. Additional disturbances include an existing overhead transmission line immediately north of the site boundary and heavy natural erosion throughout the site.

41BX2098 Summary

Site 41BX2098 is a prehistoric quarry and lithic procurement site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of cores, modified flakes, scrapers, and cultural shatter. Disturbances to the site include an existing transmission line directly north of the site, general vegetation and land modification

Table 6.45. Shovel Test Data for 41BX2098

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR19	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%, Cobbles, Gravels, Pebbles	Negative	No cultural materials encountered.	Terminated at bedrock.
RW19	0-5	10YR 2/2	very dark brown	Clay Loam	>20%, Cobbles, Gravels, Large Rock Fragments	Negative	No cultural materials encountered.	Terminated at bedrock.

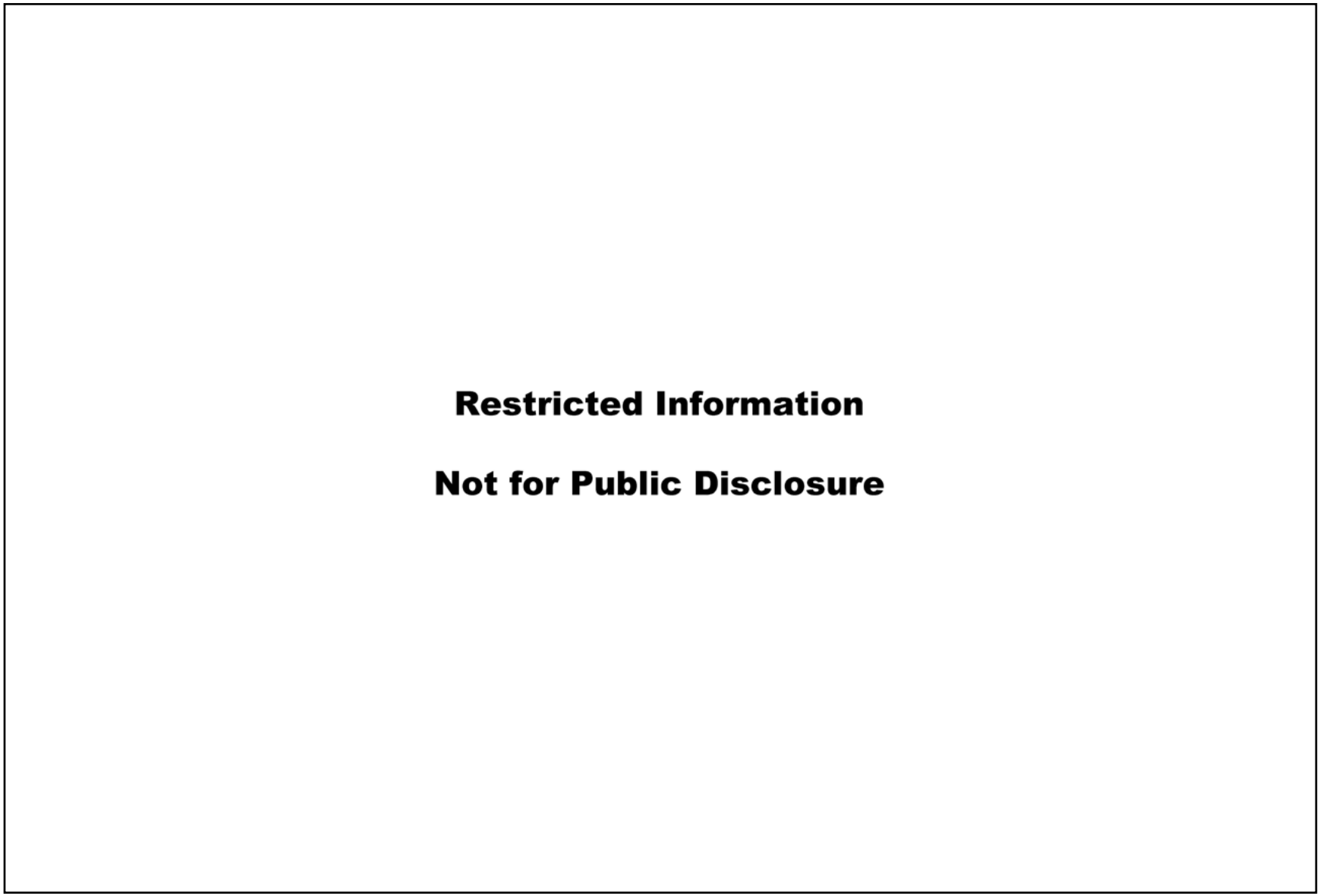

Figure 6.161. Map of 41BX2097.

Figure 6.162. Representative sample of lithic artifacts from 41BX2097.

for agricultural operations, and heavy natural erosion. Overall, site 41BX2098 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface or surface deposits and isolable activity areas. Due to its lack of potential research value, 41BX2098 is not eligible for listing in the NRHP or SAL designation. No further work or avoidance is recommended for the site within the project area. However, as the site may extend south beyond the project area, should the proposed alignment shift into that area, additional survey would be necessary.

41BX2099

Site 41BX2099 is a prehistoric lithic scatter in northern Bexar County. The site is on an upland formation that steeply slopes to the west, towards East Elm Creek. Vegetation consists of moderately dense juniper with medium grasses, cacti and small shrubs in open areas (Figure 6.165). Ground surface visibility is 100 percent with exposed gravels and cobbles at ground surface towards the drainage channel. East Elm Creek is the nearest natural water source, situated 30 m to the west. Soils of the site consist of a very dark brown clay loam with over 20 percent cobble and gravel inclusions. Soil deposits range from 0 to 10 cm deep and terminate at bedrock.

Site 41BX2099 measures 15 m east to west by 12 m north to south (Figure 6.166). Site boundaries were determined by ground surface inspection. One shovel test (RW20) was excavated and tested negative for cultural material (Table 6.46). Materials observed during ground surface inspection consisted of: one biface; approximately 4 cores; 5–10 modified flakes; 20 primary flakes; 25 secondary flakes; and three scrapers (Figure 6.167). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2099 is located within privately owned land used for agricultural purposes. Vegetation clearing

Table 6.46. Shovel Test Data for 41BX2099.

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW20	0-10	10YR 2/2	very dark brown	Clay Loam	>20%, Cobbles, Gravels	Negative	-	Terminated at bedrock.

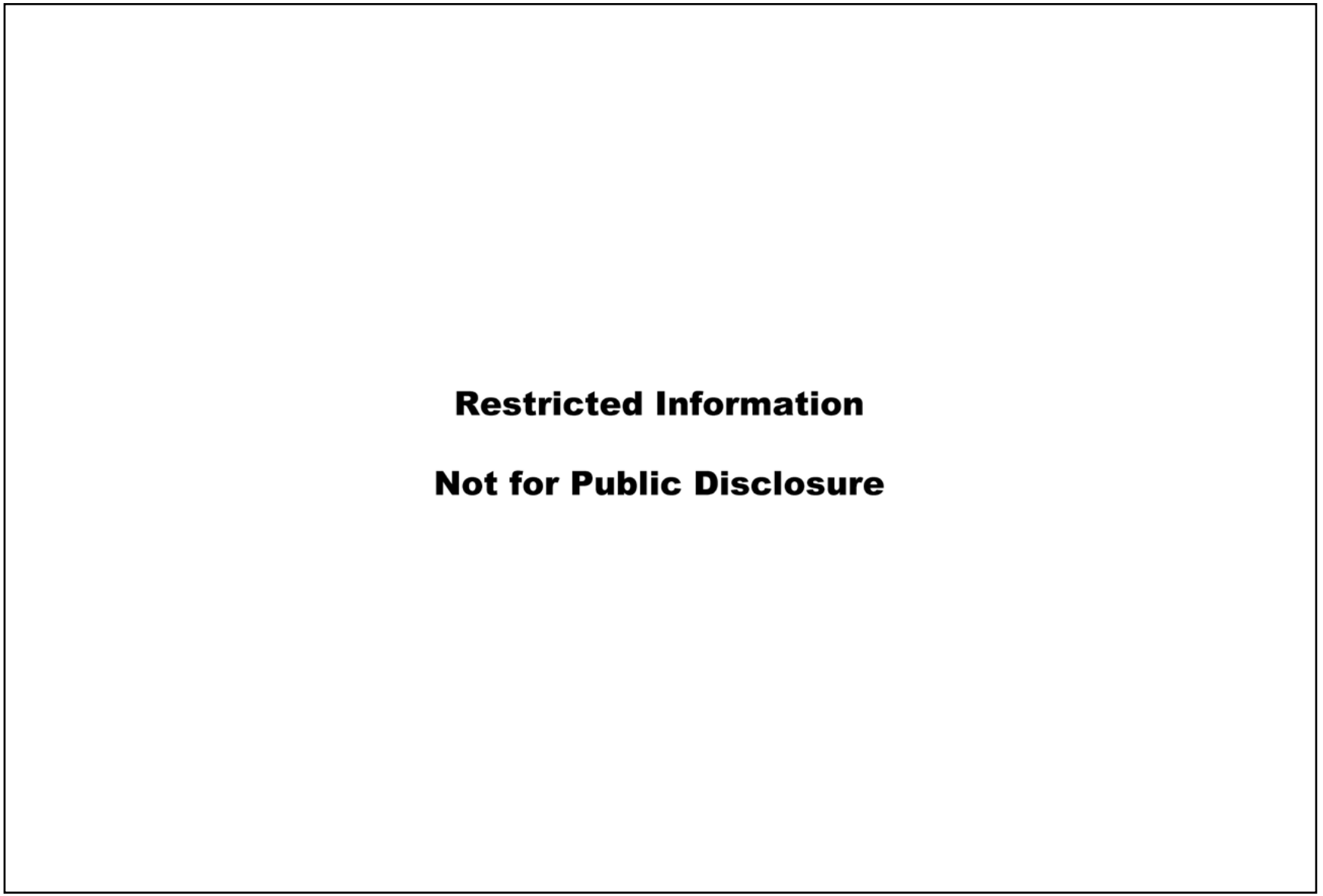

Figure 6.163. Map of 41BX2098.

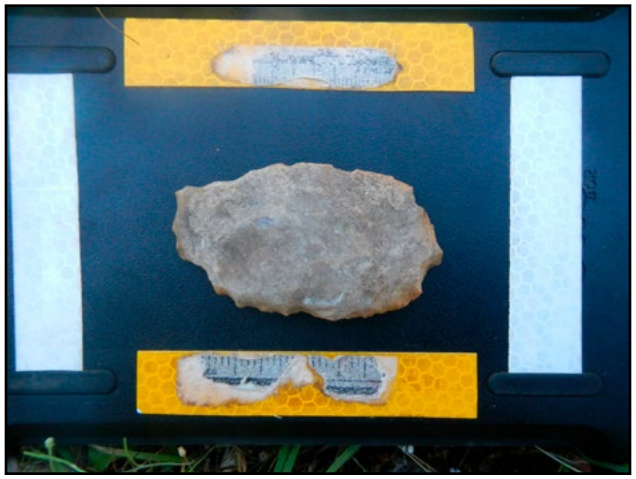

Figure 6.164. Modified flake found on 41BX2098.

Figure 6.165. Overview of 41BX2099, facing south.

and land modifications for agricultural purposes were observed in the form an earth and brush pile near the southwest corner of the site boundary. Additional disturbances include an existing overhead transmission line immediately north of the site boundary.

41BX2099 Summary

Site 41BX2099 is a prehistoric lithic scatter site with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of chert bifaces, cores, scrapers, primary and secondary flakes, and modified. Disturbances to the site include an existing transmission line north of the site boundary and general vegetation and land modification for agricultural purposes. Overall, site 41BX2099 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits and consists largely of a surface palimpsest deposit reflecting multiple uses that cannot be teased into individual components. Due to its lack of potential research value, SWCA recommends that 41BX2099 is not eligible for listing in the NRHP under Criterion D or for SAL designation. As such, no further work or avoidance strategy is recommended for the site within the project area.

41BX2100

Site 41BX2100 is a prehistoric lithic scatter in northern Bexar County. The site is on an upland terrace that gently slopes to the west towards an unnamed drainage. Vegetation consists of sporadic juniper and mixed hardwood trees, medium to tall grasses, small shrubs, and cacti (Figure 6.168). Ground surface visibility ranges from 20 to 100 percent with patches of exposed bedrock and limestone cobbles at ground surface. East Elm Creek is the nearest natural water source, situated 410 m west-southwest. Soils of the site consist of dark yellowish brown, strong brown, and dark brown clay loams and clay with 0 to 10 percent cobble, gravel, and pebble inclusions. Soil deposits range from 5 to 30 cm deep and terminate at bedrock or basal clay.

Site 41BX2100 measures 175 m northeast to southeast by 30 m northwest to southeast; however, the site likely extends to the north and south beyond the project area (Figure 6.169). Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Eight shovel tests (DR21–DR23 and RW23–27) were excavated, three of which (DR21–22 and RW24) were positive for subsurface cultural materials (Table 6.47). Cultural materials ranged from ground surface to 20 cmbs and consisted primarily of primary flakes and cultural shatter. Materials observed during ground surface inspection consisted of approximately 45 modified flakes; 80 scrapers; 150 pieces of cultural shatter; 90 cores; 65 secondary flakes; 7 bifaces; 20 tertiary flakes; and 150 primary flakes. All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2100 is within privately owned land used for agricultural purposes. Vegetation clearing and

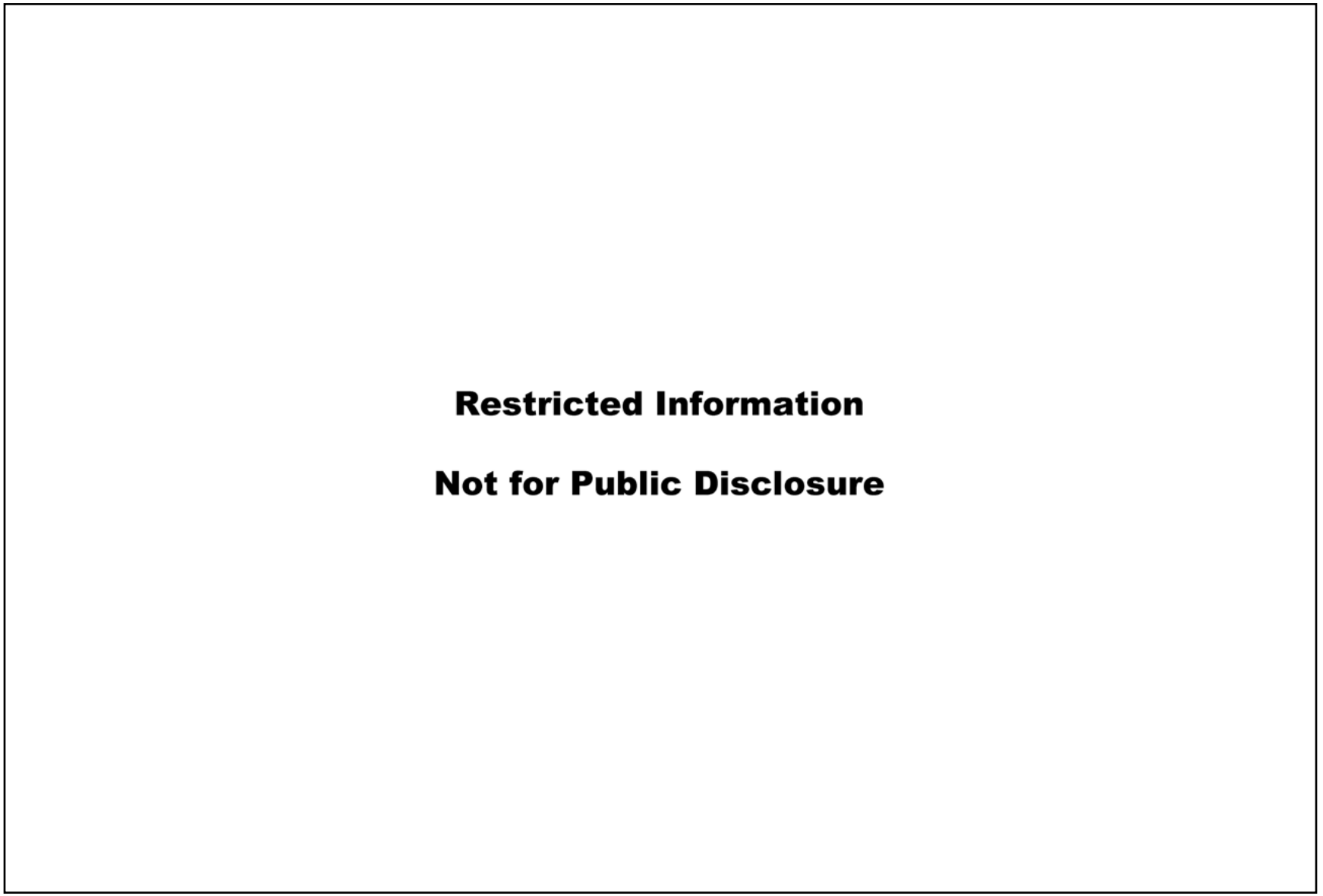

Figure 6.166. Map of 41BX2099.

Figure 6.167. Early stage biface encountered on 41BX2099 site surface.

Figure 6.168. Overview of 41BX2100, facing west.

land modifications for general agricultural purposes were observed. Additional disturbances include an existing overhead transmission line at the northern site boundary and a fence line bisecting the site from north to south.

41BX2100 Summary

Site 41BX2100 is a prehistoric lithic scatter with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of modified flakes, scrapers, cultural shatter, cores, and bifaces. Disturbances to the site include an existing transmission line at the northern site boundary, a fence line bisecting the site from north to south, and general vegetation and land modification for agricultural purposes. Overall, site 41BX2100 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits and consists largely of a surface palimpsest deposit that cannot be teased into individual components. Due to its lack of potential research value, SWCA recommends that 41BX2100 is not eligible for listing in the NRHP or for SAL designation. As such,

Table 6.47. Shovel Test Data for 41BX2100

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR21	0-20	10YR 4/4	Dark yellowish brown	Clay Loam	1-5%, Gravels, Pebbles	**Positive**	**1 primary flake**	Terminated at basal clay.
	20-30	7.5YR 4/6	Strong brown	Clay Loam	1-5%, Gravels, Pebbles	Negative	-	
DR22	0-20	10YR 4/4	Dark yellowish brown	Clay Loam	5-10%, Cobbles, Gravels, Pebbles	**Positive**	**0-20 primary flakes**	Terminated at basal clay.
	20-30	7.5YR 4/6	Strong brown	Clay Loam	5-10%, Cobbles, Pebbles	Negative	-	
DR23	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20% Cobbles, Gravels, Pebbles	Negative	-	Terminated at bedrock.
RW23	0-25	10YR 3/3	dark brown	Clay Loam	1-5%, Gravels	Negative	-	Terminated at basal clay.
	25-30	7.5YR 3/3	dark brown	Clay	-	**Positive**	**1 chert shatter**	
RW24	0-10	10YR 3/3	dark brown	Clay Loam	-	Negative	-	Terminated at bedrock.
RW25	0-10	10YR 3/3	dark brown	Clay Loam	-	Negative	-	Terminated at bedrock.
RW26	0-10	10YR 3/3	dark brown	Clay Loam	-	Negative	-	Terminated at bedrock.
RW27	0-5	10YR 3/3	dark brown	Clay Loam	-	Negative	-	Terminated at bedrock.

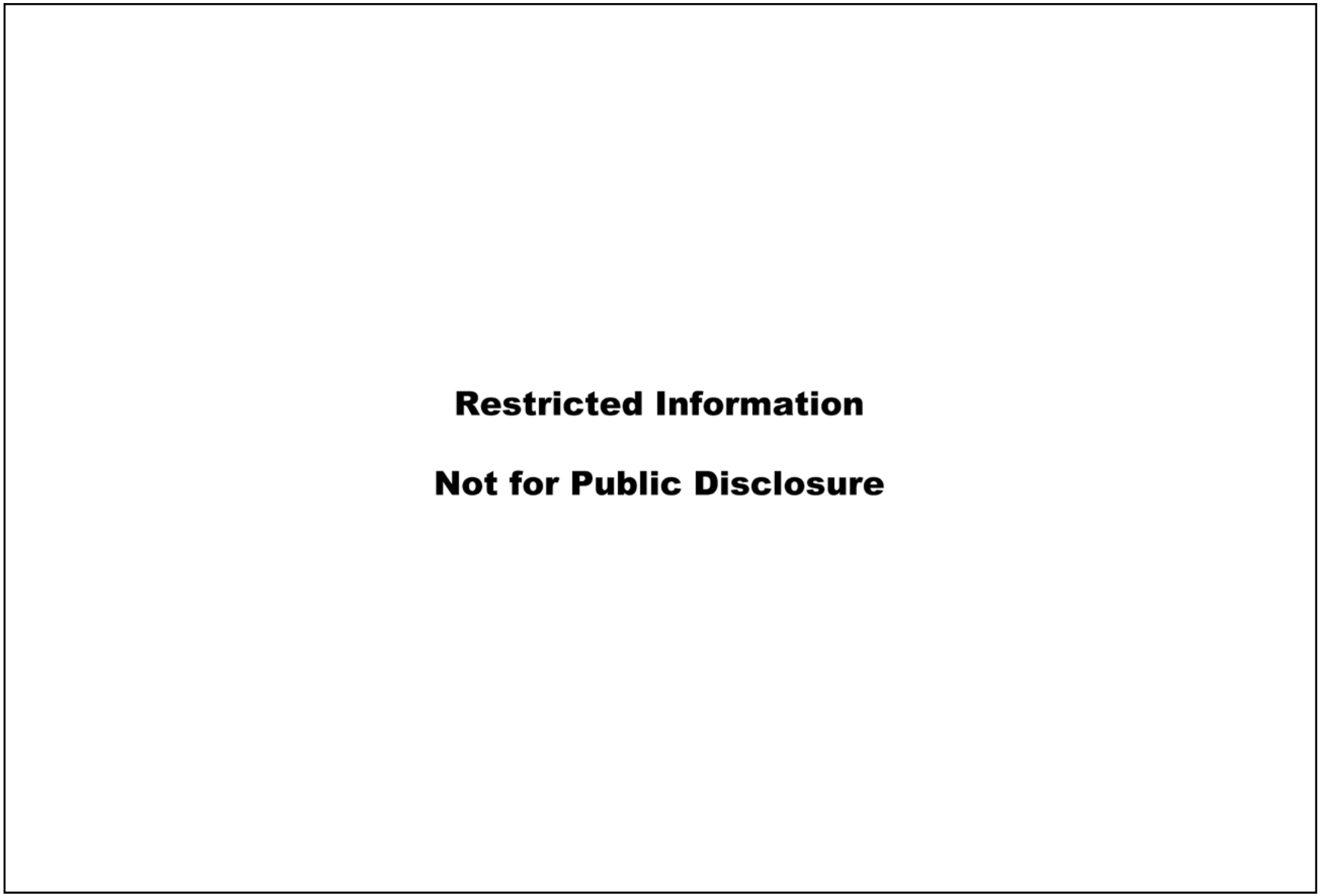

Figure 6.169. Map of 41BX2100.

no further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends north and south beyond the project area, should the proposed alignment shift into those areas, additional survey would be necessary.

41BX2101

Site 41BX2101 is a prehistoric lithic scatter and possible unmarked grave located in northern Bexar County. The site parallels the lower terraces of Elm Waterhole Creek in a moderately dense stand of juniper and oak forest to the north of a residential neighborhood and an existing transmission line. The topography of the site area slopes 10 to 40 percent towards the drainage. Vegetation consists of juniper and oak forest, with a light undergrowth of grasses and small shrubs (Figure 6.170). Ground surface visibility ranged from 40 to 100 percent and areas of exposed gravel and dense limestone cobbles and rock fragments were observed. The nearest natural water source is the Elm Waterhole Creek, located 145 m to the north. Soils at the site consist of a very dark brown (10YR2/2) or black (10YR2/1) clay loam with more than 20 percent cobble, gravel, and pebble inclusions above a shallow bedrock, between five to ten cmbs.

Site 41BX2101 measures 200 m east to west by 30 m north to south (Figure 6.171). It is likely that the site extends to the north, west, and south, beyond the project and parcel boundaries. The site boundary, within the project area, were determined by a visual inspection of the ground surface and through the excavation of shovel tests. Five shovel tests (DR24, RW30-31, and SMM85-86) were excavated, none of which contained archeological material (Table 6.48). Materials observed during the ground surface inspection consisted of 20–80 primary flakes; 50–80 secondary flakes; 10–50 tertiary flakes; 20–40 cores; 20–40 modified flakes; 10–30 bifaces; 10–30 scrappers; and 10–30 lithic shatter (Figure 6.172). All lithic materials observed were of chert material types and limited to the surface. No diagnostic materials were observed.

Figure 6.170. Overview of 41BX2101, facing west.

A possible historic-aged feature was observed near the east end of the lithic scatter that may represent an intentional internment. The feature consists of a 13×13-m rectangular barbed wire fence secured by degrading cedar posts and living oak and cedar trees, within the tree line paralleling the existing transmission line (Figure 6.173). The living trees have been utilized as corner posts and the barbed wire has been overgrown 0.5 to 1 inch deep into the trees. Inside the fenced in area is a limestone ring measuring 1 m in diameter (Figure 6.174). The ring is formed from limestone rocks approximately 10–20 cm in diameter, haphazardly arranged in a circle and positioned in the north-central portion of the fenced in area. A small mound of earth and a ball of roots are within the ring, suggesting that a small tree may have been planted there. Preliminary research of historic maps does not show a cemetery in the vicinity of the feature; however, a house complex to the southwest is depicted with a two-track road extending past the feature. Additionally a small dot on a 1959 topographic map appears in the vicinity of the feature, although it is unclear if this is a reference to the feature or a glitch in the map itself.

Site 41BX2101 is located on land that is currently overgrown with forest. Erosion created by the steep rocky slopes is the biggest factor in the destruction of intact deposits at the site. Additionally, land clearing and modifications from the existing transmission line to the south, as well as residential development in the surrounding area have impacted the site area. The refuse and brush dumping originating from the residential community were observed as well, leaving the site area in poor condition with about 30 percent remaining intact.

41BX2101 Summary

Site 41BX2101 is a surficial prehistoric lithic scatter with a possible historic-aged burial. No diagnostic artifacts were recovered during investigations. The assemblage is surficial in nature, consisting of pri-

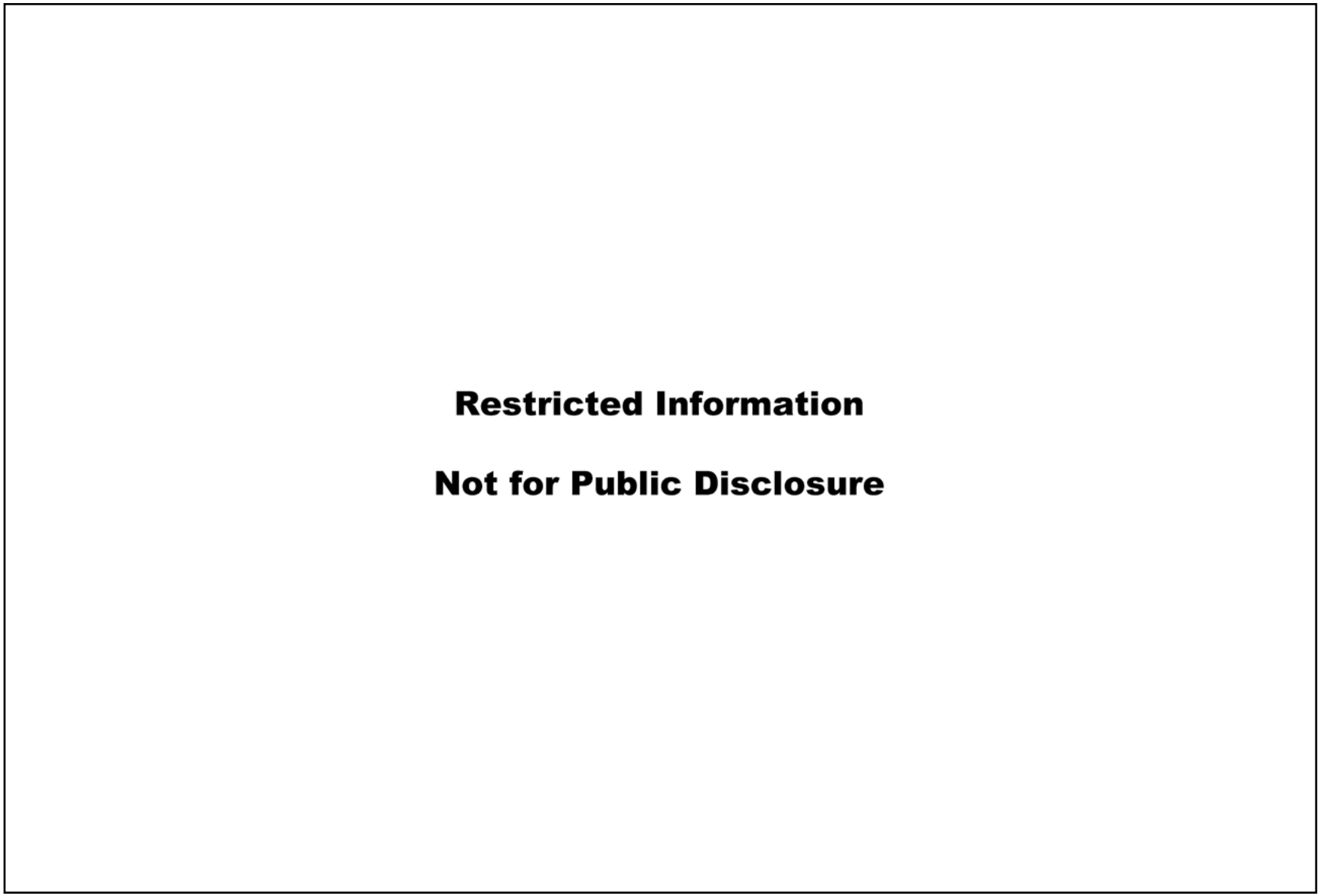

Figure 6.171. Map of 41BX2101.

Table 6.48. Shovel Test Data for 41BX2101

Shovel Test No.	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
RW30	FS06	0-10	10YR2/2	very dark brown	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.
RW31	FS06	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.
DR24	FS06	0-5	10YR4/4	black	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.
RW745	FS06	0-5	10YR2/1	very dark brown	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.
SMM85	FS06	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.
SMM86	FS06	0-10	10YR 2/2	very dark brown	Clay Loam	>20% Cobbles and large rock fragments	Negative	-	Terminated at bedrock.

Figure 6.172. Example of lithic tools from 41BX2101.

Figure 6.173. Barbed wire fence surrounding what was thought to be a burial at 41BX2101.

Figure 6.174. Limestone ring in barbed wire fence enclosure on 41BX2101.

Figure 6.175. Overview of 41BX2102, facing southwest.

mary, secondary, and tertiary flakes, bifaces, modified flakes, scrappers, and cultural shatter. In addition to the prehistoric component, a historic-aged barbed wire fence and rock ring was encountered and possibly represents a burial. The fence has been in place long enough for living trees, acting as corner posts, to become encompassed by the tree trunks. Disturbances to the site include erosion and land clearing as well as modifications from the existing transmission line to the south, residential development in the surrounding area, and the resulting refuse and brush dumping.

The prehistoric component of site 41BX2101 is limited to the ground surface and does not contain any diagnostic points. However, the site is recommended as having undetermined eligibility based on the presence of the possible historic-aged burial. Further field investigations and archival research, or avoidance is recommended in order to determine whether or not the feature is a burial.

41BX2102

Site 41BX2102 is a prehistoric lithic scatter in northern Bexar County. The site is situated within an enclosed livestock pen on an upland formation that gently slopes the east towards and erosional drainage. Vegetation consists of sporadic short grasses, cacti, and sparse patches of juniper (Figure 6.175). Ground surface visibility is 100 percent with exposed bedrock and dense concentrations of gravels and cobble at ground surface. Mud Creek is the nearest natural water source, situated 1 km to the east. Soils of the site consist of dark yellowish brown loams with greater than 20 percent cobble and gravel inclusions. Soil deposits reached 20 cm before terminating at bedrock.

Site 41BX2102 measures 10 m east to west by 10 m north to south; however, the site likely extends to the east and west, but has likely been destroyed by road construction (Figure 6.176). Site boundaries were determined by ground surface inspection, although one shovel tests was excavated to confirm minimal soil deposits. SWCA archaeologists excavated one shovel test (DR01), which was negative for cultural materials (Table 6.49). Materials observed during ground surface inspection consisted of approximately 10 modified flakes (Figure 6.177); 8 chert cores; one burned rock fragment; 30 primary chert flakes; and 15 scrappers (Figure 6.178). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2102 is located within privately owned residential land utilized for open-range cattle ranching. A limestone quarry is also located within the property to the southeast. Vegetation clearing and land modifications for roads and drainage modifications were observed in the form of push piles and modern concrete channels and culverts immediately north and east of the site. Additional disturbances include a barbed wire fence/pen area and a transmission line to the north.

41BX2102 Summary

Site 41BX2102 is a prehistoric lithic scatter site with no subsurface deposits. No diagnostic artifacts were

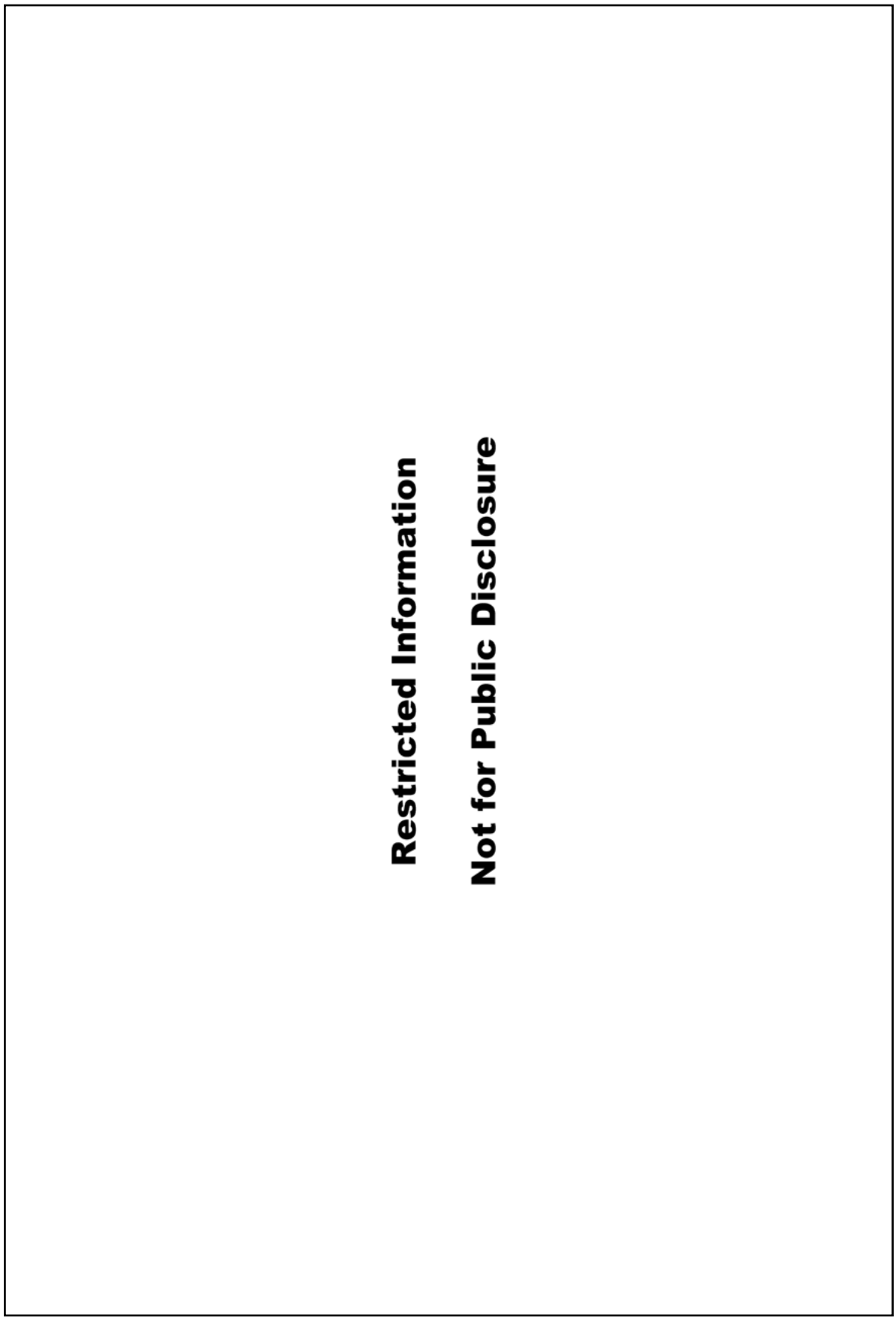

Figure 6.176. Map of 41BX2102.

Table 6.49. Shovel Test Data for 41BX2102

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR01	0-20	10YR 4/4	dark yellowish brown	Loam	>20% Cobbles, Gravels	Negative	-	Terminated at bedrock.

Figure 6.177. Example of modified flakes from 41BX2102.

Figure 6.178. Example of surficial lithic material from 41BX2102.

recovered during investigations and no cultural features were observed. The assemblage is surficial in nature, consisting primarily of primary and modified flakes. Disturbances to the site include road construction, an existing transmission line to the north, a channelized drainage, and a push pile that parallels the site to the west. Overall, site 41BX2102 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits and consists largely of a surface palimpsest deposit that cannot be teased into individual components. Due to its lack of potential research value, SWCA recommends that 41BX2102 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance strategy is recommended for the site within the project area. However, as the site may extend east and west beyond the project area, should the alignment shift into those areas, additional survey would be necessary.

41BX2103

Site 41BX2103 is a prehistoric lithic scatter in northern Bexar County. The site is on the lower bank of an ephemeral tributary of Cibolo Creek. Vegetation consists of dense juniper and live oak forest with sporadic shrub and vine ground cover (Figure 6.179). Ground surface visibility ranges from 10 to 70 percent with areas of exposed bedrock nearest to the tributary channel. Dense concentrations of limestone cobbles and large rocks are exposed at ground surface. Cibolo Creek is the nearest natural water source, situated 0.33 mile to the southeast. Soil of the site consist of black clay loams with 10–20 percent calcium carbonate and gravel inclusions. Soil deposits reached 20 cm before encountering bedrock.

Site 41BX2103 measures 70 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the north and south beyond the project area (Figure 6.180). Site boundaries were determined by ground surface inspection and shovel

Figure 6.179. Overview of 41BX2103, facing north.

testing for subsurface cultural deposits. Three shovel tests (DR27 and RW34-RW35) were excavated with one (RW34) containing a utilized flake (Table 6.50). Materials observed during ground surface inspection consisted of 10–30 secondary chert flakes; 5–8 primary chert flakes; and 10–30 modified flakes (Figure 6.181). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2103 is located within privately owned forested rangeland. Disturbances consist of vegetation clearing for the existing overhead transmission line to the south, natural erosion, and seasonal flooding within the ephemeral tributary.

41BX2103 Summary

Site 41BX2103 is a prehistoric lithic scatter with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of primary, secondary, and modified chert flakes. Disturbances to the site include an existing transmission line to the south, natural erosion, and seasonal flooding. Overall, site 41BX2103 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact subsurface deposits and consists largely of a surface deposit with questionable horizontal integrity given previous disturbances. Due to its lack of potential research value, SWCA recommends that 41BX2103 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance is recommended for the site within the project area. However, as the site likely extends east and west beyond the project area, should the alignment shift into those areas, then additional survey would be necessary.

41BX2104

Site 41BX2104 is a prehistoric campsite in northern Bexar County with a possible historic-age feature. The site is situated at the edge of an upland formation that gently slopes to the west-southwest, towards an unnamed ephemeral tributary of Cibolo Creek. Vegetation consists of a moderately dense juniper and live oak forest with open areas of tall grass, weeds, and cacti (Figure 6.182). Ground surface visibility ranges from 0 to 50 percent with moderately dense cobbles and large limestone rocks observed at ground surface. Cibolo Creek is the nearest natural water source, situated 0.10 mile southeast. Soils of the site consisted of yellowish brown, very pale brown, or very dark brown clay loams with pebble and or gravel inclusions ranging from 1–20 percent. Soils deposits reached a depth of 30 cm before terminating at bedrock or basal clay.

Site 41BX2104 measures 155 m northwest to southeast by 30 m northeast to southwest; however, the site likely extends to the north and south beyond the project

Table 6.50. Shovel Test Data for 41BX2103

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR27	0-20	10YR 3/4	dark yellowish brown	Clay Loam	10-20% Gravels, Pebbles	Negative	-	Terminated at bedrock.
RW34	0-5	10YR 2/1	black	Clay Loam	10-20% Calcium Carbonate, Gravels	Positive	1 utilized flake	Terminated at bedrock.
RW35	0-20	10YR 2/1	black	Clay Loam	10-20% Calcium Carbonate, Gravels	Negative	-	Terminated at bedrock.

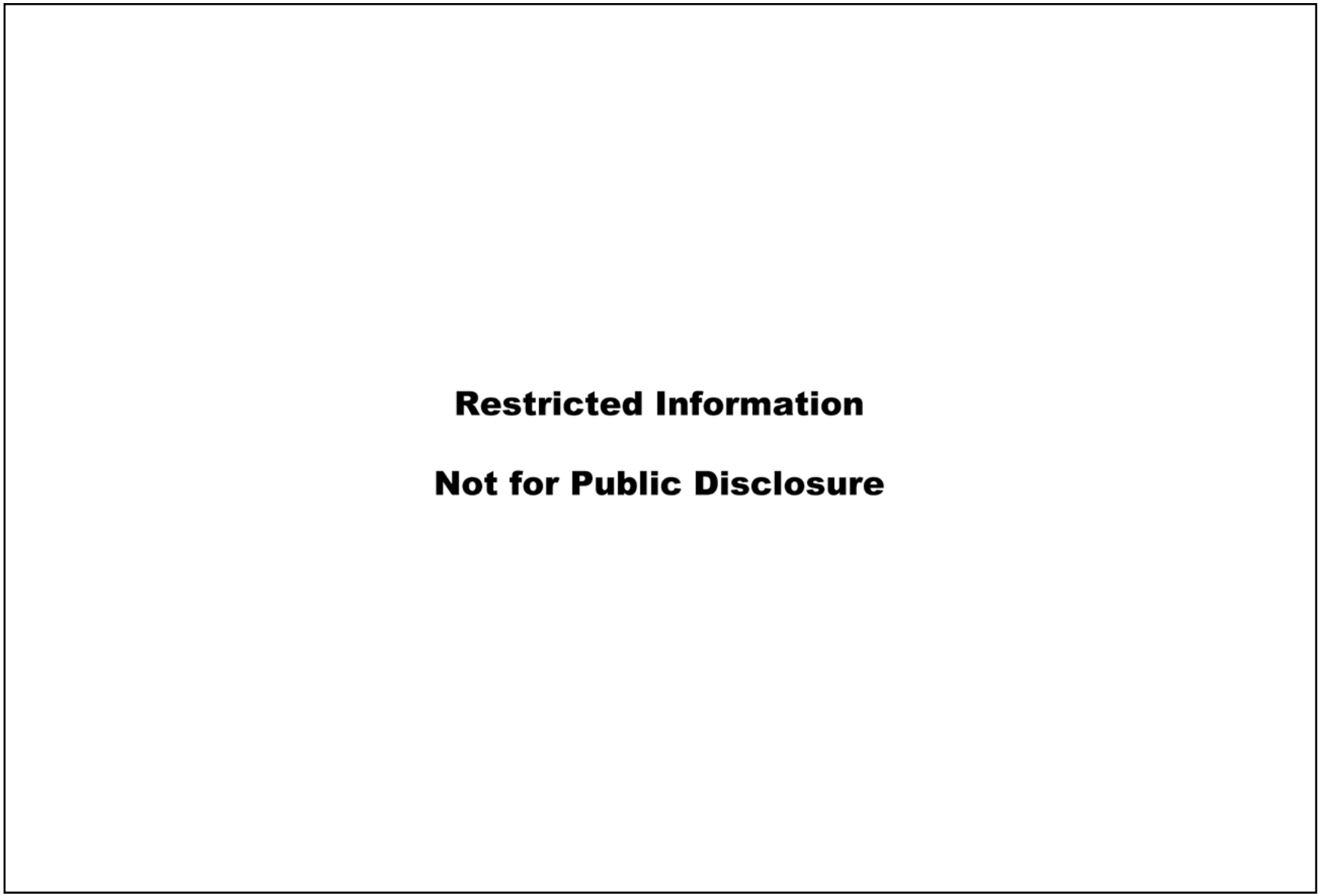

Figure 6.180. Map of 41BX2103.

Figure 6.181. Example of lithic materials from 41BX2103.

Figure 6.182. Overview of 41BX2104, facing north.

area (Figure 6.183). Site boundaries were determined by ground surface inspection and shovel testing for subsurface cultural deposits. Five shovel tests (DR29–DR30, and RW36–RW38) were excavated, none of which contained cultural material except for shovel test DR29 which had three tertiary flakes and four burned rock fragments in the upper 10 cm (Table 6.51) Materials observed during ground surface inspection consisted of cedar post and barbed wire fencing; 50–120 secondary flakes; 10–20 modified flakes; 20–40 primary chert flakes; 200–300 tertiary chert flakes; and 100–200 burned rock fragments. All prehistoric lithic materials observed were composed of chert material types. No diagnostic materials were observed.

A possible historic-age feature was observed on the eastern end of the site boundary (Figure 6.184). The feature consists of a rectangular barbed wire and cedar post enclosure that measures approximately 4×4-m in a north to south orientation. The posts measure approximately 3 feet high and three tiers of barbed wire enclose the posts. One living cedar and one living oak tree were utilized as corner posts on the southern side of the enclosure. Over time, the barbed wire has imbedded into the trunks of the two living trees. Contemporary iron T-posts have been used to reinforce the remaining cedar posts, which show signs of rot and decomposition. Personal communication with the landowner identified the feature as a pen used for hunting activities at an unknown time (Mr. Dierks, personal communication 2015). No diagnostic materials were observed in association with the feature, but the imbedding of the barbed wire into the two living trees indicates that the feature had been erected within the past several decades.

In addition to the possibly historic-age enclosure, one prehistoric burned rock feature was documented within an open grass area near the center of the site. The feature consists of burned limestone fragments mixed with an abundance of tertiary refining flakes. Burned rock fragments ranged from 7–15 cm in diameter and were observed from ground surface to 20 cmbs. Tertiary flakes within the feature ranged from 0.5–2 cm in length, with some displaying treatment discoloration. The diffused feature measured approximately 10 m in diameter with materials ranging from ground surface to 20 cmbs. No diagnostic or organic materials were observed in association with the feature.

Site 41BX2104 is located within privately owned forested rangeland. Disturbances to the site consist of fence construction within and adjacent to the site boundaries, as well as vegetation clearing for an overgrown two-track road. The two-track road bisects the site from north to south, just east of the burned rock feature.

41BX2104 Summary

Site 41BX2104 is a prehistoric campsite of an unknown occupation with a possible historic-age feature. The possible historic-age feature consists of a cedar post and barbed wire enclosure utilized for hunting activities, according to personal communication with the landowner. No diagnostics were associated with the enclosure and a time of construction could not be established. In addition to the possibly historic feature,

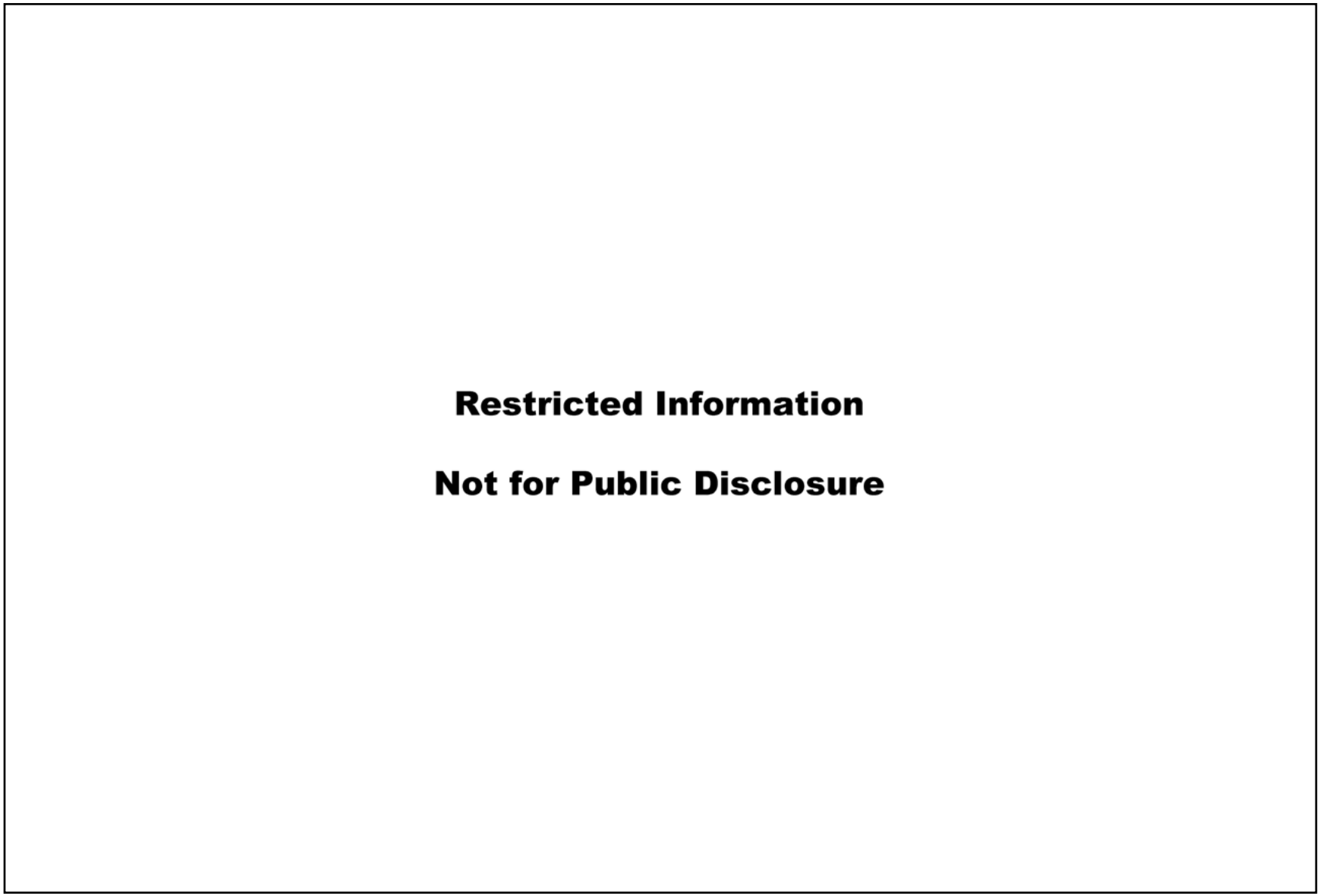

Figure 6.183. Map of 41BX2104.

Table 6.51. Shovel Test Data for 41BX2104

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR29	0-10	10YR 5/4	yellowish brown	Loam	1-5% Pebbles	Positive	3 tertiary flakes, 4 burned rock fragments	
	10-20	10YR 7/3	very pale brown	Clay Loam	-	Negative	-	Terminated at basal clay.
DR30	0-15	10YR 5/4	yellowish brown	Loam	1-5% Pebbles	Negative	-	
	15-30	10YR 7/3	very pale brown	Clay Loam	-	Negative	-	Terminated at bedrock.
RW36	0-10	10YR 2/2	very dark brown	Clay Loam	10-20% Gravels	Negative	-	Terminated at bedrock.
RW37	0-20	10YR 2/2	very dark brown	Clay Loam	1-5% Gravels, Pebbles	Negative	-	
	20-30	10YR 3/4	dark yellowish brown	Clay Loam	-	Negative	-	Terminated at basal clay.
RW38	0-20	10YR 2/2	very dark brown	Clay Loam	1-5%	Negative	-	
	20-30	10YR 3/4	dark yellowish brown	Clay Loam	-	Negative	-	Termianted at basal clay.

Figure 6.184. Possible historic feature at 41BX2104.

one prehistoric burned rock feature with subsurface deposits was also documented; however, the feature appears to be highly disturbed by land clearing and natural erosion. No diagnostic or organic materials were documented within the burned rock feature, or within the boundaries of 41BX2104. Disturbances to the site include fence construction and land clearing for an overgrown two-track road. Overall, site 41BX2104 does not have the potential to yield information important to the prehistory of the region. The site lacks substantial intact cultural features, a substantial artifact assemblage, and isolable activity areas. Due to its lack of potential research value, 41BX2104 is not recommended eligible for listing in the NRHP or for SAL designation. No further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends north and south beyond the project area, should the alignment shift into those areas, additional survey would be necessary.

41BX2105

Site 41BX2105 is a prehistoric lithic scatter located in northern Bexar County. The site is situated on an ululating upland formation covered in moderately dense juniper and live oak forests mixed with low shrubs and patches of medium grasses (Figure 6.185). Ground surface visibility ranges from 0 to 20 percent. Cibolo Creek is the nearest natural water source, situated 1.25 miles east. Soils of the site consisted of very dark brown to dark yellowish brown clay and clay loams with 1 to 10 percent cobble, pebble, and large rock fragment inclusions. Soil deposits ranged from 5 to 15 cm deep and terminated at eroding bedrock.

Site 41BX2105 measures 40 m east to west by 30 m north to south; however, the site likely extends to the south beyond the project boundary (Figure 6.186). Site boundaries were determined by shovel testing for subsurface cultural deposits, ground surface inspection, and project boundaries. Six shovel tests (DR41–43 and KS06–08) were excavated, and one of the six (DR42) was positive for cultural materials (Table 6.52). Sub-

Figure 6.185. Overview of 41BX2105, facing northwest.

surface materials ranged from ground surface to 10 cmbs and consisted of one utilized flake. Materials observed during ground surface inspection consisted of 2–6 cores, 2–4 tertiary flakes, and 5–15 modified flakes (Figure 6.187). All lithic materials observed were composed of a brown chert material type. No diagnostic materials or cultural features were observed.

Site 41BX2105 is located within privately owned rangeland. Impacts to the site consist of property fence construction and natural erosion.

41BX2105 Summary

Site 41BX2105 is a prehistoric lithic scatter with minimal subsurface deposits of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is largely surficial in nature, consisting primarily of chert cores, tertiary flakes, and modified flakes. Disturbances to the site include property fence construction and natural erosion. Overall, site 41BX2105 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits and consists largely of a surface deposit with questionable horizontal integrity due to previous disturbances. Due to its lack of potential research value, SWCA recommends that 41BX2105 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance strategy is recommended for the site within the project area. However, as the site likely extends south beyond the project area, should the alignment be shifted into that area, additional survey would be necessary.

41BX2106

Site 41BX2106 is a prehistoric lithic scatter located in northern Bexar County. The site is situated on the upper, sloped terrace of an ephemeral tributary of Cibolo Creek. Vegetation consists of dense juniper and live oak forests with areas of open, medium grasses (Figure

Table 6.52. Shovel Test Data for 41BX2105

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR41	0-15	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
DR42	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Positive	1 utilized flake	Terminated at bedrock.
DR43	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
KS06	0-15	10YR 2/2	very dark brown	Clay	1-5% Pebbles	Negative	-	Terminated at bedrock.
KS07	0-5	10YR 2/2	very dark brown	Clay	1-5% Pebbles	Negative	-	Terminated at bedrock.
KS08	0-7	10YR 2/2	very dark brown	Clay Loam	5-10% Large Rock Frag, Roots	Negative	-	Terminated at bedrock.

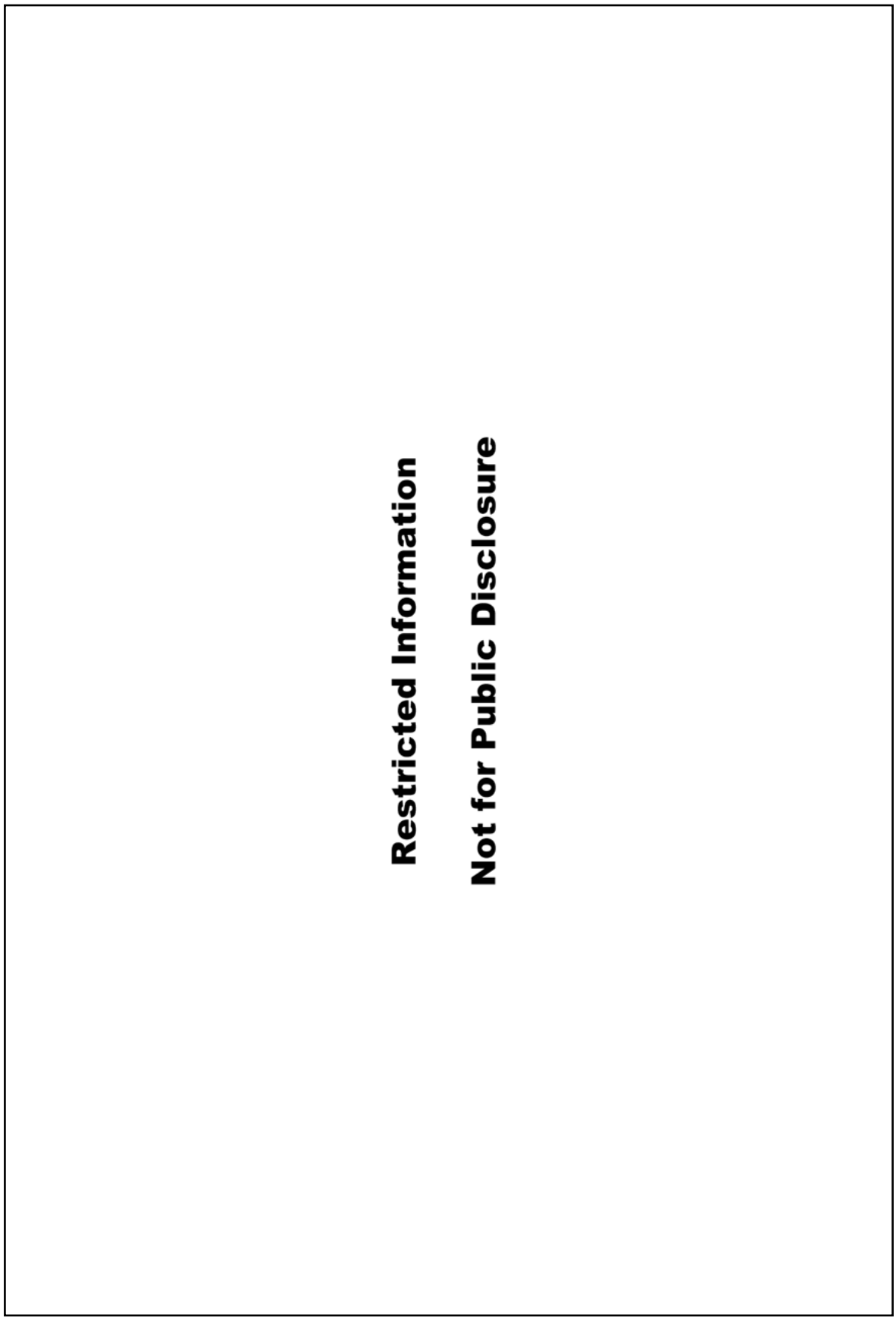

Figure 6.186. Map of 41BX2105.

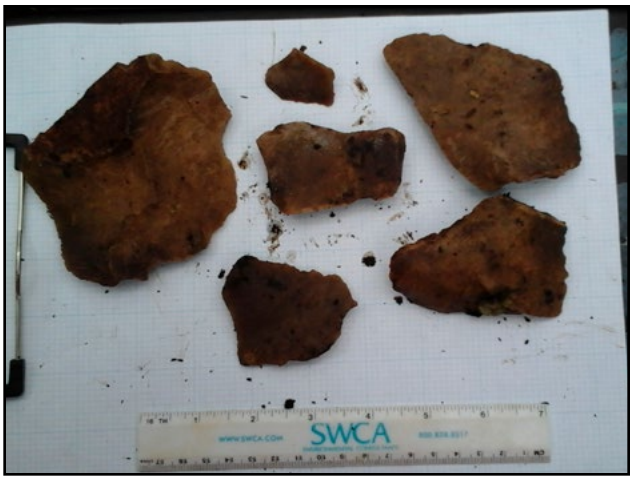

Figure 6.187. Example of lithic materials from 41BX2105.

Figure 6.188. Overview of 41BX2106, facing northwest.

6.188). Ground surface visibility ranges from 0 to 100 percent. An ephemeral drainage of Cibolo Creek is the nearest natural water source, situated 15 m to the east. Soils of the site consisted of dark yellowish brown to very dark brown clay loams with 1 to 10 percent cobble and pebble inclusions. Soil deposits ranged from 5 to 10 cm deep and terminated at eroding bedrock.

Site 41BX2106 measures 73 m southwest to northeast by 30 m northwest to southeast; however, the site likely extends to the southeast and northwest beyond the project boundary (Figure 6.189). Site boundaries were determined by ground surface inspection and project area boundaries. Six shovel tests (DR50–53 and KS15–16) were excavated, none of which were positive for cultural materials (Table 6.53). Materials observed during ground surface inspection consisted of approximately 10 modified flakes; 80 tertiary flakes; 4 bifaces; 7 scrapers; 45 primary flakes; and 15 cores (Figure 6.190). All lithic materials observed were composed of chert material types. No diagnostic materials or cultural features were observed.

Site 41BX2106 is located within privately owned forested rangeland. Property fence construction and natural erosion have moderately impacted the site.

41BX2106 Summary

Site 41BX2106 is a surficial prehistoric lithic scatter of an unknown occupation. No diagnostic artifacts were recovered during investigations, and no cultural features were observed. The assemblage is surficial in nature, consisting of primary flakes, tertiary flakes, crude stone tools, and cores. Disturbances to the site include property fence construction and natural erosion. Overall, site 41BX2106 does not have the potential to yield information important to the prehistory of the region following potential research avenues and outlines of the cultural context. The site lacks substantial intact subsurface deposits and consists of a surface deposit with poor horizontal integrity due to erosion and fence construction. Due to its lack of potential research value, SWCA recommends that 41BX2106 is not eligible for listing in the NRHP or for SAL designation. As such, no further work or avoidance is recommended for the site within the project area. However, as the site likely extends southeast and northwest beyond the project area, should the alignment shift into those areas, additional survey would be necessary.

Revisits

Two previously recorded archaeological sites were revisited during the field investigations for the December 8th alignment. Site 41BP818 is a multiple component site with a historic-age cemetery in northwest Bastrop County. Site 41BX91 is a prehistoric lithic scatter in Bexar County.

41BP818

Site 41BP818 is a prehistoric lithic scatter in northwest Bastrop County. The site was originally recorded in 2007 by PBS&J during the Farm-to-Market (FM) 969 Project (Atlas 2016). The site was described as a prehistoric lithic scatter of an unknown temporal affiliation consisting of flakes, cultural shatter, and fire–cracked rock. The 2007 investigations recommended the site as

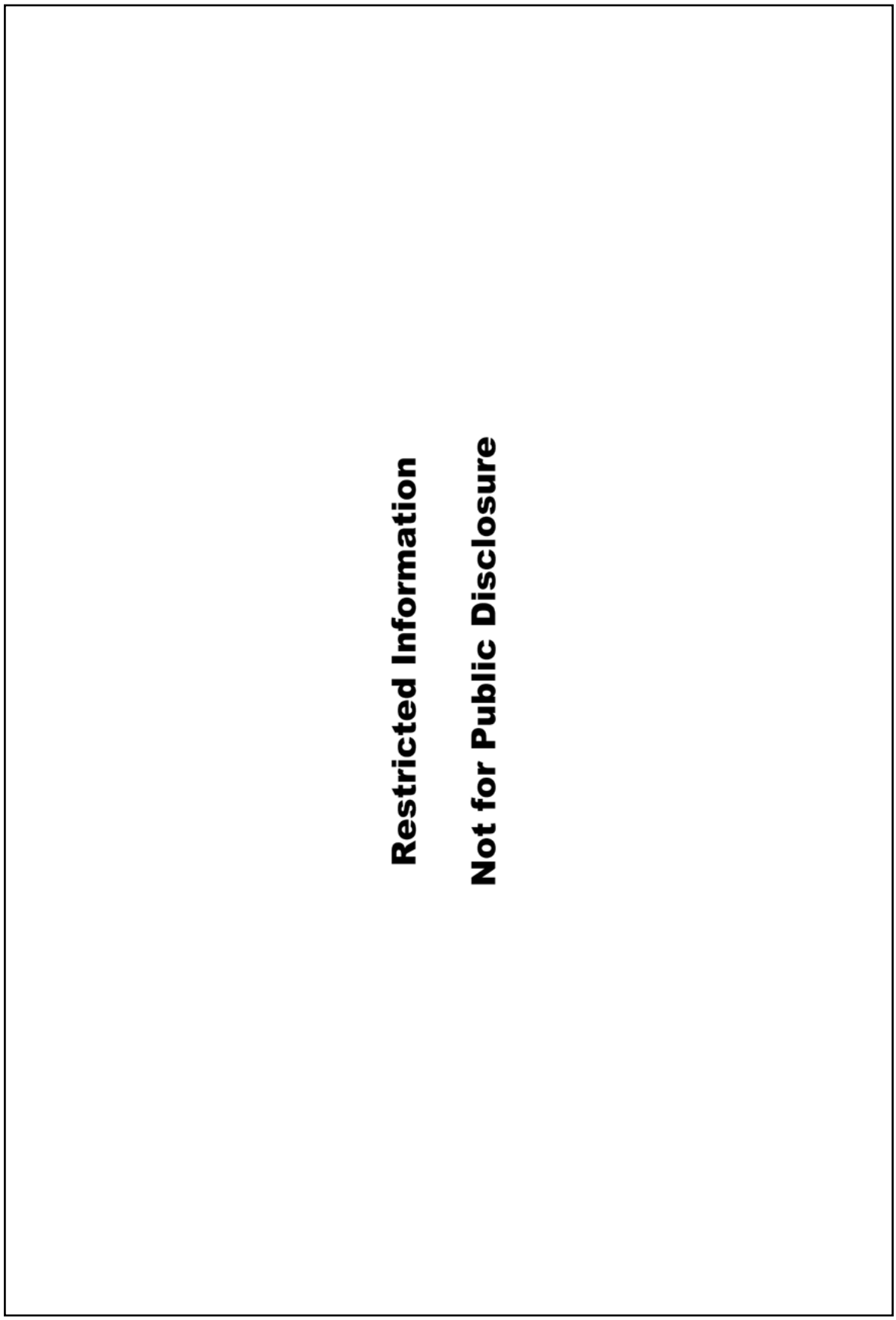

Figure 6.189. Map of 41BX2106.

Table 6.53. Shovel Test Data for 41BX2106

Shovel Test No.	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Pos/Neg	Cultural Artifacts	Comments
DR50	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
DR51	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
DR52	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
DR53	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
KS15	0-5	10YR 2/2	very dark brown	Clay Loam	1-5% Cobbles, Pebbles	Negative	-	Terminated at bedrock.
KS16	0-5	10YR 2/2	very dark brown	Clay Loam	1-5% Cobbles, Pebbles	Negative	-	Terminated at bedrock.

ineligible for listing and no further work was recommended (Atlas 2016).

The site is located on an upland formation overlooking an unnamed tributary of the Colorado River, 220 m southwest. The site is in an open agricultural field bordered by FM 969 to the north and an active quarry to the south. A large spoil pile overlaps the southern boundary of the site, and the western site boundary is defined by a property fence line. The Hill Cemetery, discussed below, is located at the center of the site and northwest of the active quarry.

SWCA archaeologists revisited site 41BP818 and expanded the original site boundary to the south. The extension documented a prehistoric lithic scatter with a historic artifact component and the Hill Cemetery. The new dimensions of the site measure 170 m northeast to southwest by 150 m northwest to southeast, but the site likely extends to the northwest and southeast, beyond the project boundaries. Site boundaries were determined by ground surface inspection, shovel testing for subsurface cultural deposits, and project area boundaries. Twenty–five shovel tests (AY22–26; BM39; DR418–423; BD01–09; MN414–415; PO01–03) were excavated within the site boundaries, 23 of which (AY22–25; AY26; BD01–04 BD06–08; BM39; DR418–23; MN414; and PO01–03) tested positive for subsurface cultural materials from ground surface to 60 cm below surface. Soils consisted of sandy loams that extended beyond 100 cmbs.

Cultural materials consist of: 1 historic earthen ware sherd; 5–10 clear glass fragments; 5–10 brown glass fragments; 10–15 aqua glass fragments; 20–40 milk glass fragments; 1 projectile point; 20–40 bifaces; 10-20 scrapers; 10–20 modified flakes; 500–700 burned rock fragments; 50–100 primary flakes; 75–150 secondary flakes; 200–400 tertiary flakes; and 300–600 cultural shatter fragments. In addition to shovel testing, subsurface deposits were observed within the walls of the quarry to the southeast of the site. Disturbances to the site consist of soil disturbances from agricultural plowing and the active quarry on the southeastern site boundary.

Figure 6.190. Example of lithic materials from Shovel Test FS11 on 41BX2106.

Overall, revisit investigations of 41BP818 determined that the site consists of a prehistoric lithic scatter and historic artifact scatter with the Hill Cemetery at its center. Extensive shovel testing throughout the site determined that no diagnostic artifacts or intact cultural features associated with the prehistoric component or historic artifact component are present on site. Due to

its lack of potential research value, the prehistoric and historic components of 41BP818 within the project boundaries are recommended as not eligible for listing on the NRHP or for designation as a SAL. However, it is recommended that an avoidance strategy be made for the Hill Cemetery within the site boundaries of 41BP818.

41BX91

Site 41BX91 is a prehistoric lithic scatter in northeastern Bexar County. The site was originally documented in 1977 by CAR-UTSA during the Encino Park Project, and revisited in 2012 by Pape-Dawson for the Encino Rio project. The site was described as a prehistoric lithic scatter of an unknown temporal occupation consisting of cores, flakes, retouched flakes, quarry blanks, and heat-treated chert chunks. No further work was recommended for both the 1977 and 2012 surveys, indicating that natural erosion and land clearing had highly impacted the site.

The site is situated in an undulating upland setting, 123 m east of U.S. Highway 281, and 200 m north of Encino Rio Road. An unnamed, paved access road cuts through the site from northeast to southwest, and an overhead transmission line parallels the project area to the northeast. Vegetation consists of moderate juniper trees mixed with sporadic patches of grasses and weeds. Ground surface visibility ranged from 70 to 100 percent, with limestone cobbles, rock fragments, and exposed bedrock at ground surface. Soils ranged from 6 to 16 cm below surface and consisted of black to very dark brown clay loams.

Four shovel tests were excavated within the site boundaries of 41BX91 (DR13 and RW12–14), none of which were positive for subsurface cultural materials. One small concentration of 3–5 chert flakes was observed 10 m west of the access road, but could not be definitively identified as cultural and may have been mechanically crushed during road construction or refuse dumping. No diagnostic materials or cultural features were observed.

The portion of the site within the project area has been highly impacted from land clearing, refuse dumping, road construction, and construction of the existing transmission line. Overall, the portion of site 41BX91 within the project area does not have the potential to contribute new information to the prehistoric of the region, and is recommended as not eligible for listing on the NRHP or for designation as a SAL. No further work for the site is recommended within the project area.

Cemeteries

Two cemeteries were documented within or immediately adjacent to the December 8th alignment. The first is Hill Cemetery in Bastrop County, and the second is the Redwood Cemetery in northwest Guadalupe County. An avoidance strategy is recommended for both cemeteries.

Hill Cemetery

Hill Cemetery is a multiple family, historic-age cemetery, 70 m southeast of FM 696 in northwestern Bastrop County. The cemetery measures roughly 20 m x 20 m and overlooks an unnamed tributary of the Colorado River 230 m to the southwest. A post and barbed wire fence forms the boundaries of the cemetery. A plowed agricultural field is north and east of the cemetery boundary, and an active quarry is to the southeast. Vegetation consists of overgrown grasses, small shrubs, and mixed hardwood trees.

Field investigations identified 9–12 grave markers in various stages of deterioration and collapse. The markers range from 1885 to 1895 and represent individuals from the Hill, Bragg, Griffin, Storey, and Hubbard Families. One monument is erected within the cemetery commemorating the five families represented. Avoidance is recommended for the cemetery within the project area.

Redwood Cemetery

The Redwood Cemetery is a multiple family cemetery in northern Guadalupe County. The cemetery is located at the inner bend of Redwood Road (FM 245), approximately 0.35–mile southeast of its intersection with FM 1979. The cemetery is situated on a generally level upper terrace of Cottonwood Creek 0.13–mile to the northeast. The cemetery measures roughly 90 m x 90 m at a northeast–southwest orientation, and approximately 30 feet of its southern corner is located within the project corridor. The remainder of the cemetery parallels the project boundary 30 feet to the northwest, across the Redwood Road right-of-way.

The cemetery is on two acres of land purchased from A.H. and Sallie Fleming, and the oldest known grave is that of Lizzie Heidemeyer (August 1896). According to the 1996 THC Historic Marker file, nearly 70

burials are located within the cemetery, 62 of which are marked with monuments and 6 of which are unmarked. A majority of those interred in the Redwood cemetery are the founding members of the Redwood community, their families, and their decedents. The cemetery temporarily fell into disuse, but in recent decades the heirs of the original founding members have revitalized the cemetery. The cemetery is currently in use, with only half of the space being filled. Since 1996, as many as 10 individuals have been laid to reset in Redwood Cemetery. The cemetery received approval for an Official Texas Historical Marker in December of 1995, and the marker was dedicated on May 25, 1996 (Texas Historical Commission Historic Marker File, No. 05996).

Personal communication with the landowner adjacent to the cemetery identified potential unmarked graves within the December 8th alignment. The landowner indicated that the unmarked graves belong to the Black and Hispanic workmen and farmhands of the community. The landowners also claim to have archival research which supports the presence of unmarked burials that may extend beyond the modern cemetery fence line and into the project area. Although the landowners have offered to share their research regarding the Redwood Cemetery, we have not been able to contact them as of September 17, 2015.

Field visits, shovel testing, and pedestrian survey determined that there is a possibility that the cemetery may extend beyond the modern fence boundaries. Two large Ligustrum trees were observed on the southeastern boarder of the Redwood Road, across from the cemetery. Ligustrum is a non-native tree species spread by bird droppings from the original planted specimen. The trees were found in abundance within the cemetery, but only the two paralleling the road were observed outside of the cemetery.

A historic map review found that the Redwood Cemetery had been well established before the construction of the modern Redwood road (Foster et al. 2006). A 1906 USDA San Marcos Area Soils map illustrates Redwood Road as extending southeast from the community of Redwood, away from the cemetery location. A 1911 USGS San Marcos Map also illustrates the road as extending southeast from the Redwood community, but with the addition of an undeveloped road radiating to the southwest, along the southeastern boundary of the cemetery (Foster et al. 2006). It is currently unknown when the modern Redwood Road was constructed.

Although only a portion of the December 8th alignment overlaps the cemetery, the potential for unmarked graves within the project area to southwest and southeast of the marked cemetery is high. SWCA recommends avoidance of the cemetery; if the cemetery cannot be avoided, it is recommended that mechanical scraping should be conducted to identify any potential unmarked grave shafts within the proposed alignment.

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Chapter 7

Summary and Recommendations

Laura I. Acuña, Brandon Young, Rhiana D. Ward

On behalf of VRRSP Consultants, LLC and CTRWSC, SWCA conducted an intensive cultural resources investigations of the Vista Ridge Project in Burleson, Lee, Bastrop, Caldwell, Guadalupe, Comal and Bexar Counties. The investigations were conducting to comply with Section 106 of the NHPA (54 USC 306108) and its implementing regulations (36 CFR 800), in anticipation of a Nationwide Permit 12 from the USACE in accordance with Section 404 of the Clean Water Act. In addition, the work is subject to compliance with the Antiquities Code of Texas under Permit Number 7295, as the Vista Ridge Project will be ultimately owned by CTRWSC, a political subdivision of the State of Texas. Any additional work completed for the Vista Ridge Project after the submittal of this report will be reported in sequential interim reports.

Investigations Summary

SWCA conducted a thorough background literature review and intensive field investigations within a 100-foot corridor on available parcels of the 139.45-mile project area. From June 2015 to December 23, 2015, SWCA conducted field investigations to inventory known and previously unidentified cultural resources within the project area. Approximately 24.42 miles were not surveyed based on the results of the background review and extensive disturbances as confirmed by vehicular survey. Of the remaining 115.03 miles, 101.8 were investigated using intensive pedestrian survey with shovel testing and limited backhoe trenching. The remaining 13.23 miles that require survey were either unavailable due to landowner restrictions or part of a newly adopted reroute. Additional mileage, which includes rerouted areas that are no longer part of a December 8th alignment, were also surveyed. Approximately 1,792 shovel tests were excavated during the investigations. The survey was also augmented with limited backhoe trenching at select locations along the proposed alignment.

Based on soil and geology, SWCA identified seven stream crossings with the potential for intact, deeply buried archaeological deposits that could not be adequately assessed with standard survey methodology, namely shovel testing. Subsequent to pedestrian investigations of two of the stream crossings encountered very narrow floodplains with shallow terraces and determined to not warrant mechanical investigations. Conversely, the pedestrian investigations determined that one previously unidentified crossing would also require backhoe trench investigations. A total of 21 backhoe trenches were excavated within four of the identified stream crossings. Three of the 21 backhoe trenches encountered cultural materials. Two of the positive backhoe trenches were recorded as isolated finds and did not warrant documentation as archaeological sites. The remaining positive backhoe trenches were excavated within the boundaries of newly documented archaeological site 41GU177.

The following briefly synthesizes the inventory of cultural resources documented during SWCA's investigations and the subsequent recommendations for those resources.

Cultural Resources Summary

Fifty-nine cultural resources were identified and recorded during the Vista Ridge Project as of December 23, 2015. Of the 59 resources, seven were isolated finds that did not warrant formal site recording or require additional investigations. The remaining 52 cultural resources included 34 (65.4 percent) prehistoric sites, 13 (25.0 percent) historic sites, and five (9.6 percent) multi-component sites with prehistoric and historic materials (Table 7.1). In addition to newly recorded resources, two previously recorded archaeological sites were revisited, and two cemeteries were documented.

Of the 52 recorded sites, seven (41LE332, 41BP917, 41BP920, 41GU177, 41GU180, 41CM395, and 41BX2101) are recommended as having unknown eligibility for inclusion to the NRHP or for SAL designation and, as such should be avoided or subject to significance testing. Of the two previously recorded sites, only one is recommended for avoidance due to the presence of a historic-age cemetery. Addition-

ally, avoidance of the two documented cemeteries is recommended.

The remaining 44 cultural resources (see Table 7.1) are recommended not eligible for nomination to the NRHP or for designation as an SAL and no further cultural resources investigations or avoidance are recommended. Overall, the prehistoric sites not recommended for avoidance or significance testing (41LE333–334, 41LE336, 41BP915–916, 41BP918–919, 41BP922, 41CW163–164, 41CW168, 41CM394, 41CM396–400, 41CM404, 41BX2096–2100, 41BX2102–2106) have an absence of substantial subsurface deposits and/or exhibit significant horizontal and vertical disturbances from erosion and/or mechanical impacts from agricultural activities, vegetation clearing, two-track roads, and general land clearing and improvements. Based on these conditions, the sites cannot provide new or important data concerning regional prehistory.

In terms of historic sites with structures and/or structural remains (41BU115, 41CW162, 41GU176, 41GU179–181, 41CM391, and 41CM393) the integrity of the structures or structural remains has been compromised by modifications and age (e.g., dilapidation of structures or dismantling of stonewalls) (see Table 7.1). Similarly, those sites with historic artifact scatters but no structures or structural remains (41BP921, 41BP923, 41CW165–169, 41GU178, 41CM401) have been impacted by erosion and land use and do not exhibit horizontal or vertical integrity. Given these conditions, it is the opinion of SWCA that these resources cannot contribute new or important data to regional history.

In accordance with 36 CFR 800.4 and the ACT, SWCA has made a reasonable and good faith effort to identify cultural resources within the project area. Eight sites (41LE332, 41LE335, 41BP917, 41BP920, 41GU177, 41GU180, 41CM395, and 41BX2101) are recommended as having unknown eligibility for listing on the NRHP or for SAL designation, while 44 are not recommended as eligible for listing on the NRHP or for SAL designation. It is SWCA's recommendation that the seven sites of unknown eligibility be avoided, or subject to significance testing. No further work or avoidance strategy is recommended for the remaining 44 archaeological sites.

Table 7.1. Summary of Recommendations

County	Site	Site Type	NRHP/SAL Eligibility Recommendation	Additional work recommendations
Burleson	41BU115	Historic Building	Not Eligible	No avoidance strategy or further work recommended.
Lee	41LE332	Prehistoric Lithic Scatter	Eligibility Unknown	Avoidance or significance testing recommended.
	41LE333	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41LE334	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41LE335	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41LE336	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.

Table 7.1. - continued

County	Site	Site Type	NRHP/SAL Eligibility Recommendation	Additional work recommendations
Bastrop	41BP915	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BP916	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BP917	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended if incorporated back into the final alignment.
	41BP918	Prehistoric Campsite	Not Eligible	No avoidance or further work recommended.
	41BP919	Prehistoric Lithic Scatter	Not Eligible	No avoidance or further work recommended.
	41BP920	Multiple Component Site	Eligibility Unknown	Avoidance or significance testing recommended.
	41BP921	Historic artifact Scatter	Not Eligible	No avoidance or further survey but archival research recommended.
	41BP922	Prehistoric Campsite	Not Eligible	No avoidance strategy or further work recommended.
	41BP923	Multiple Component Site	Not Eligible	No avoidance or further survey but archival research recommended.
Caldwell	41CW162	Historic Building	Not Eligible	No avoidance strategy or further work recommended.
	41CW163	Prehistoric Campsite	Not Eligible	No avoidance strategy or further work recommended.
	41CW164	Prehistoric Campsite	Not Eligible	No avoidance strategy or further work recommended.
	41CW165	Historic artifact Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CW166	Multiple Component Site	Not Eligible	No avoidance strategy or further work recommended.
	41CW167	Historic artifact Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CW168	Multiple Component Site	Not Eligible	No avoidance strategy or further work recommended.
	41CW169	Historic artifact Scatter	Not Eligible	No avoidance strategy or further work recommended.
Guadalupe	41GU176	Historic Well	Not Eligible	No avoidance strategy or further work recommended.
	41GU177	Prehistoric Campsite	Eligibility Unknown	Avoidance strategy or additional significance testing recommended.
	41GU178	Historic artifact Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41GU179	Historic Well	Not Eligible	No avoidance strategy or further work recommended.
	41GU180	Historic House/Farm Complex	Eligibility Unknown	Avoidance strategy or additional significance testing recommended.
	41GU181	Historic House/Farm Complex	Not Eligible	No avoidance strategy or further work recommended.

Table 7.1. - continued

County	Site	Site Type	NRHP/SAL Eligibility Recommendation	Additional work recommendations
Comal	41CM391	Historic Limestone Rock Wall	Not Eligible	No avoidance strategy or further work recommended.
	41CM392	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CM393	Historic Limestone Rock Wall	Not Eligible	No avoidance strategy or further work recommended.
	41CM394	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CM395	Prehistoric Campsite	Eligibility Unknown	Avoidance or significance testing recommended if incorporated back into the final alignment.
	41CM396	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CM397	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41CM398	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CM399	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41CM400	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41CM401	Multiple Component Site	Not Eligible	No avoidance strategy or further work recommended.
	41CM404	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
Bexar	41BX2096	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41BX2097	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41BX2098	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41BX2099	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41BX2100	Prehistoric Lithic Procurement	Not Eligible	No avoidance strategy or further work recommended.
	41BX2101	Multiple Component Site	Eligibility Unknown	Avoidance strategy or additional significance testing recommended.
	41BX2102	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41BX2103	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41BX2104	Prehistoric Campsite	Not Eligible	No avoidance strategy or further work recommended.
	41BX2105	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.
	41BX2106	Prehistoric Lithic Scatter	Not Eligible	No avoidance strategy or further work recommended.

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ND "Kimble County Jail 1892-1992". Courtesy of the Kimble County Historical Museum, Junction, Texas.

ND "Kimble County Jails". Courtesy of the Kimble County Historical Museum, Junction, Texas.

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APPENDIX A - SURVEY RESULTS

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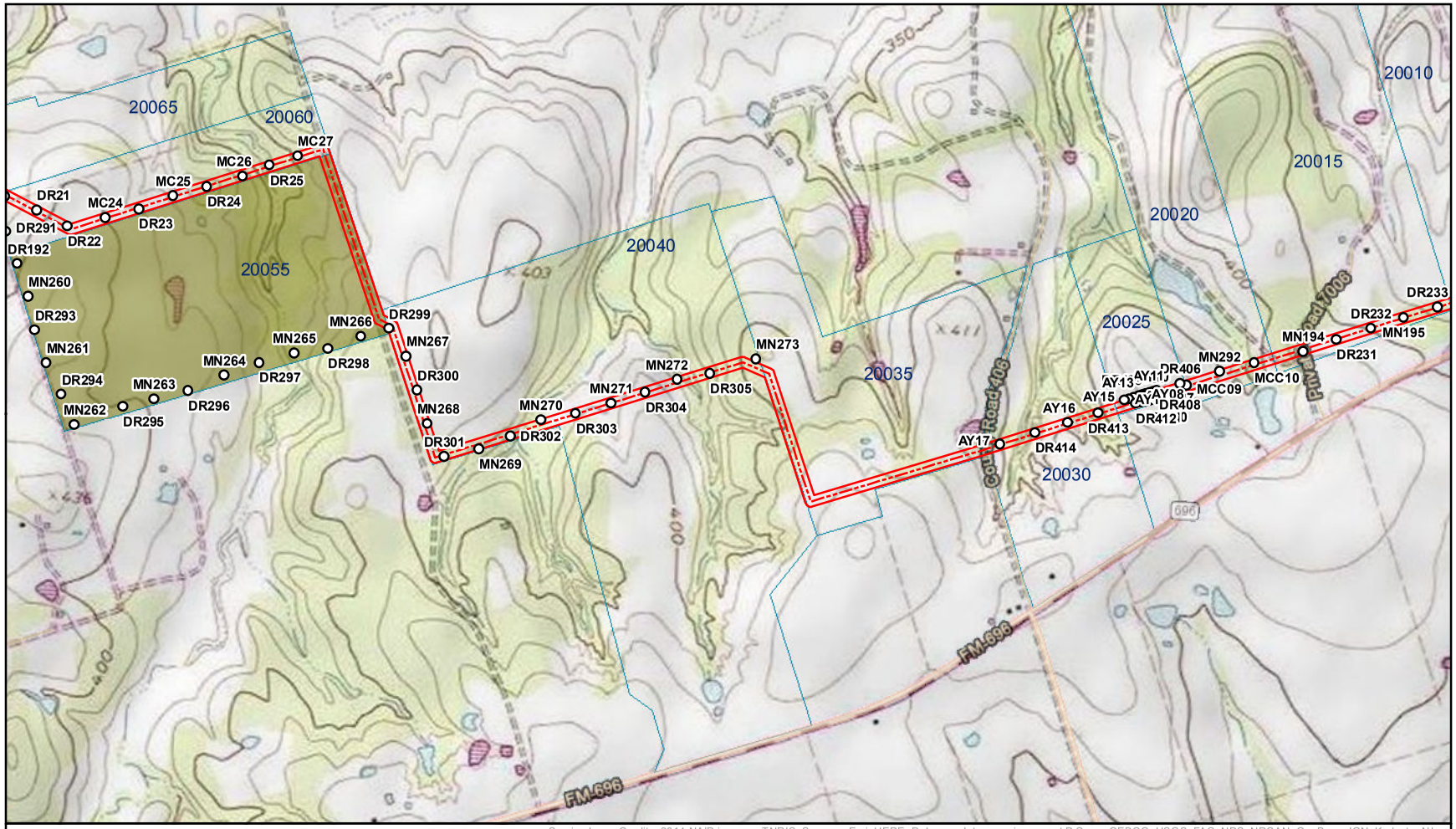

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SWCA PN. 31410, Production: January 7, 2016, CAC.

- Centerline (12/08/2015)
- 100-Foot Survey Corridor (12/08/2015)
- Site Boundary
- Positive Shovel Test
- Negative Shovel Test
- Parcel Boundary
- Centerline Rerouted as of 10/06/2015 (to be resurveyed)

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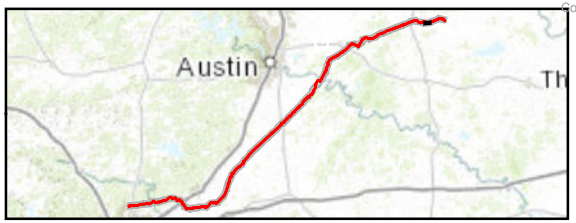

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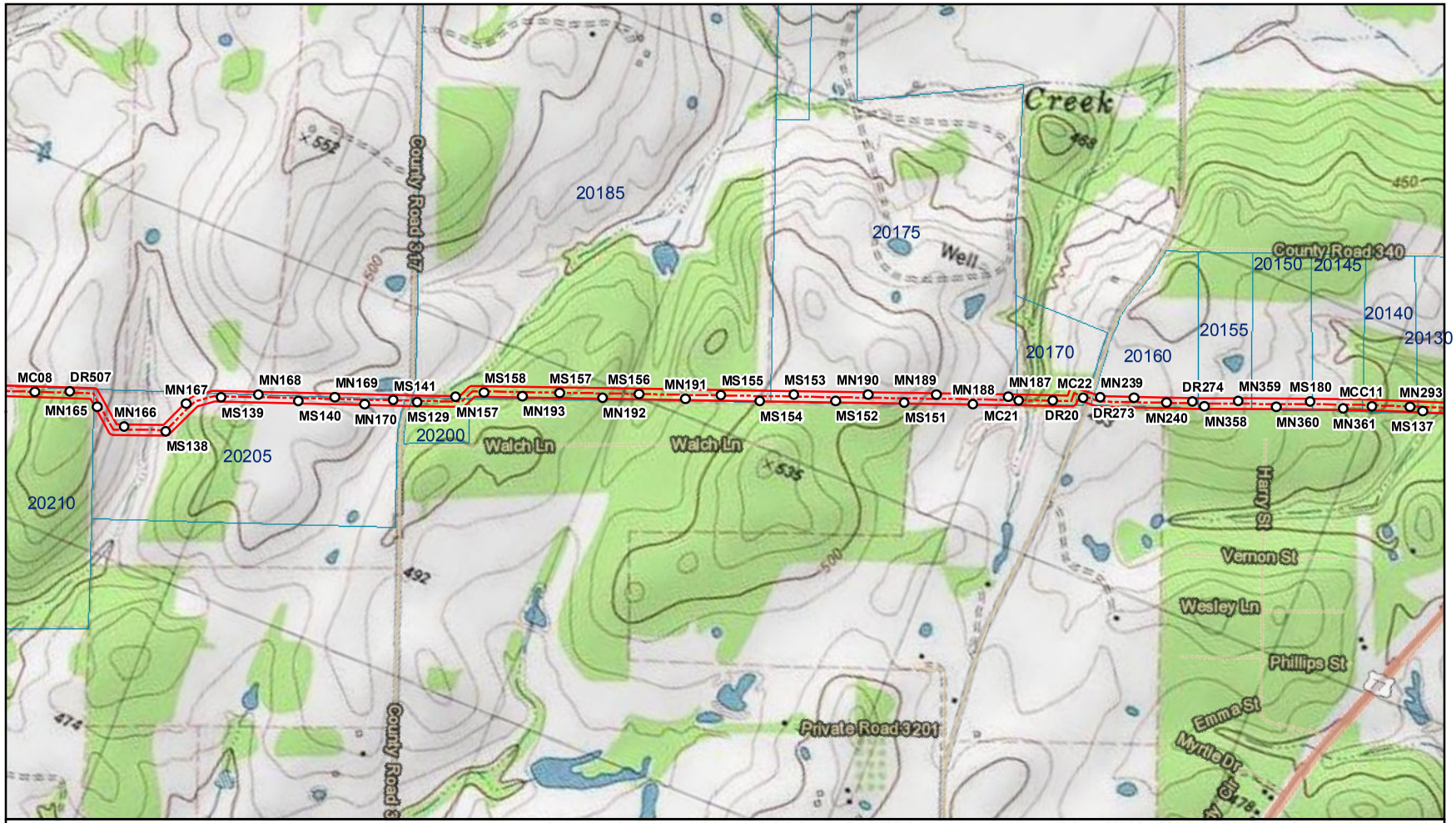

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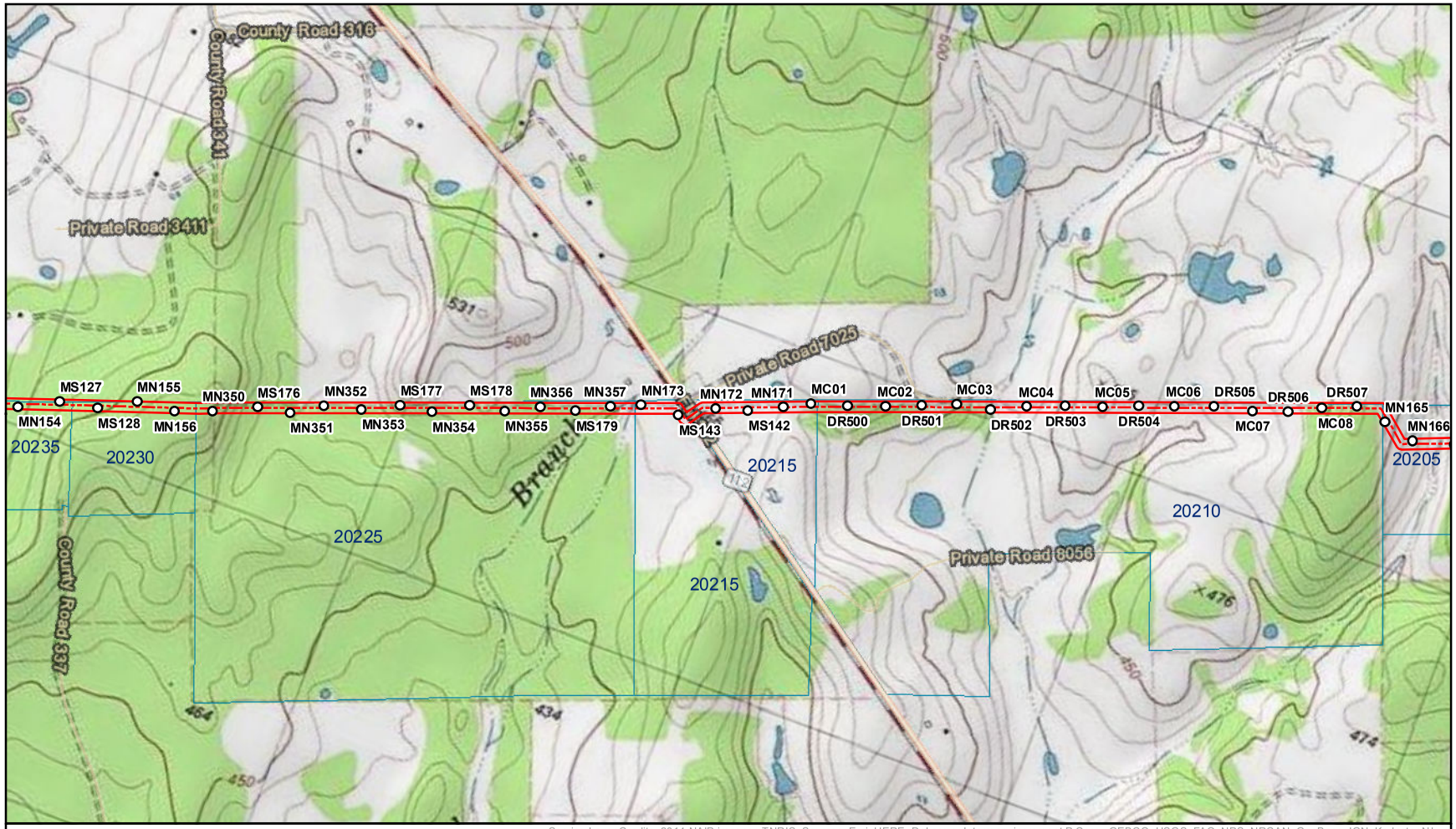

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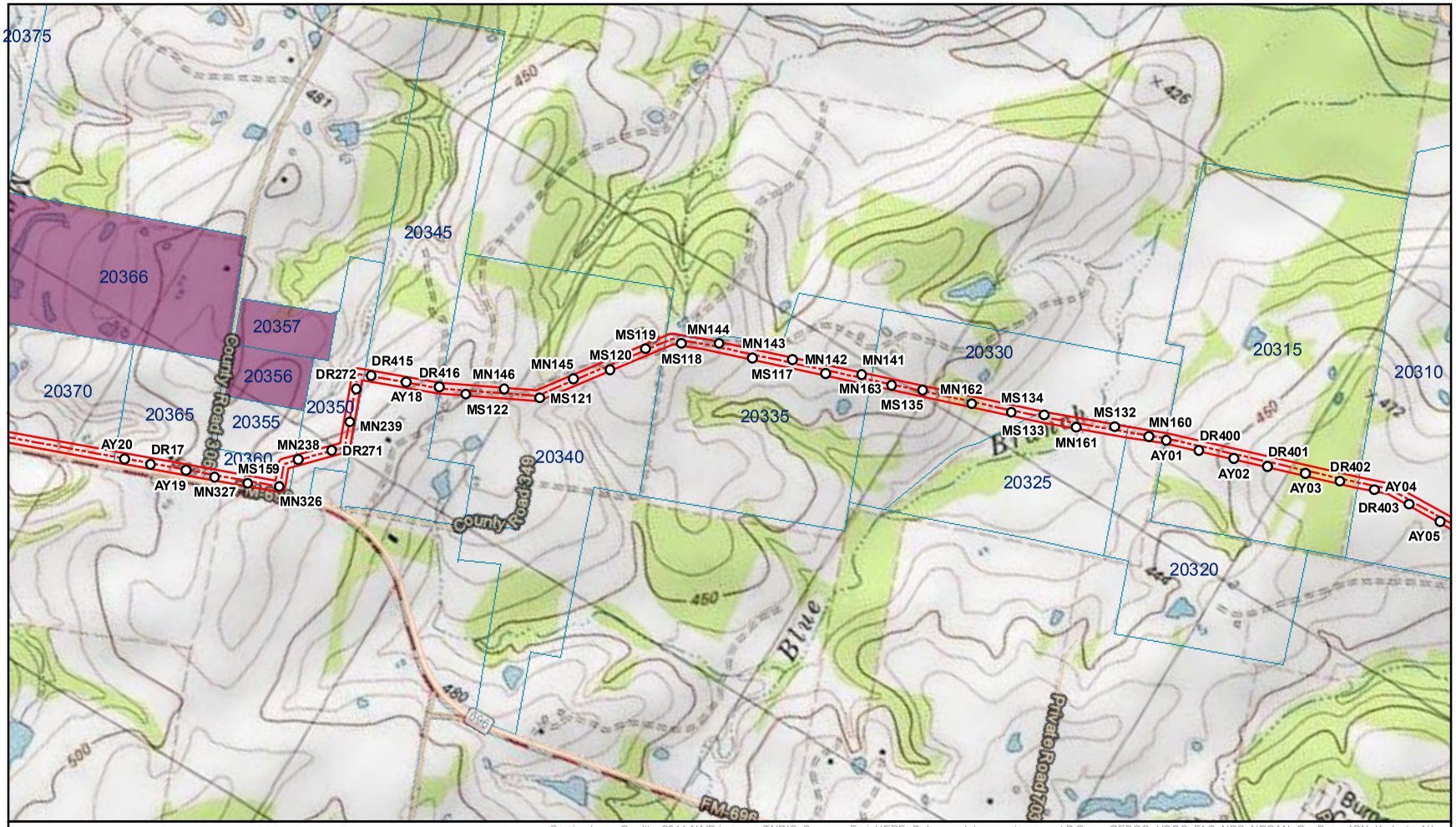

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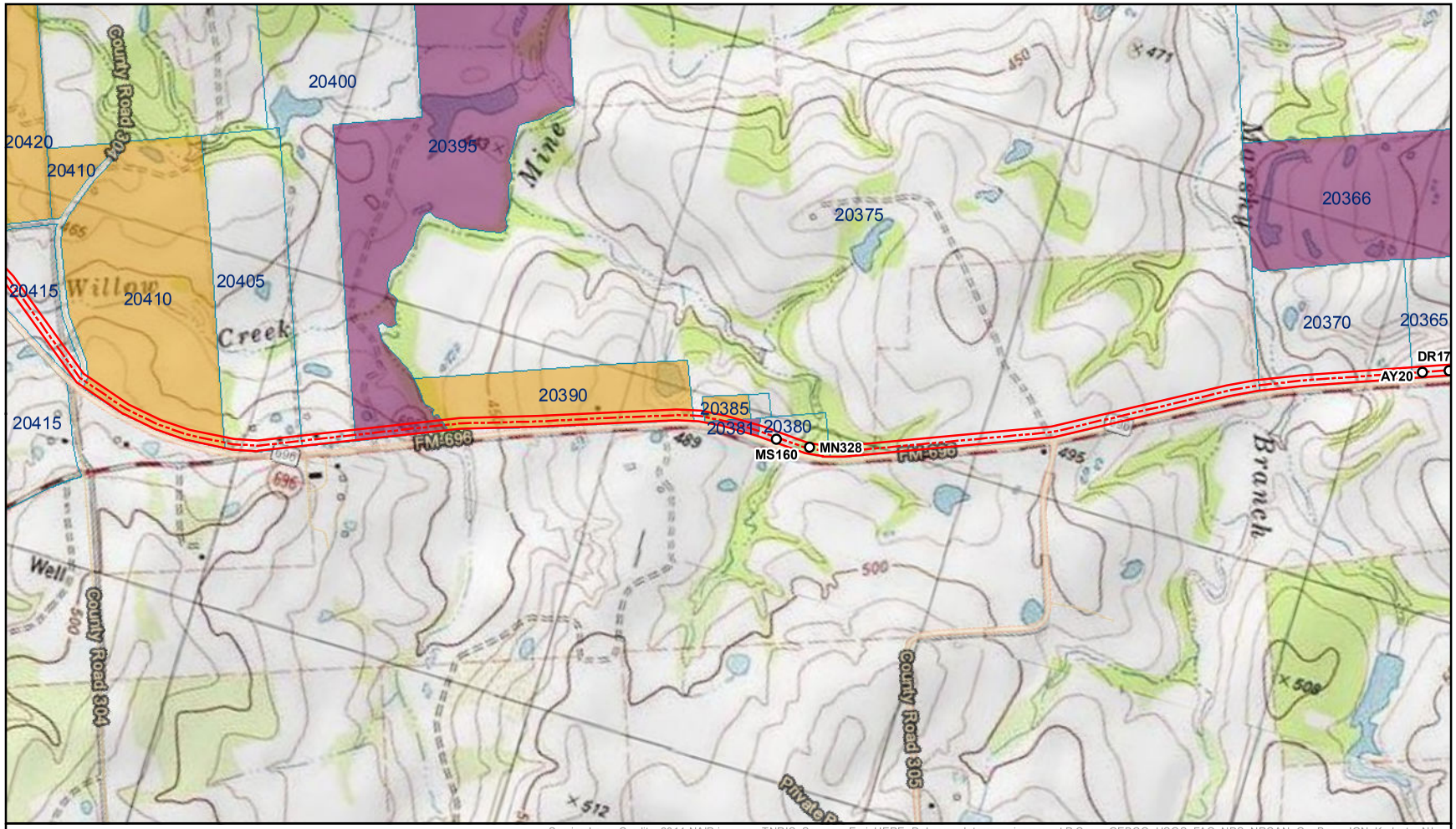

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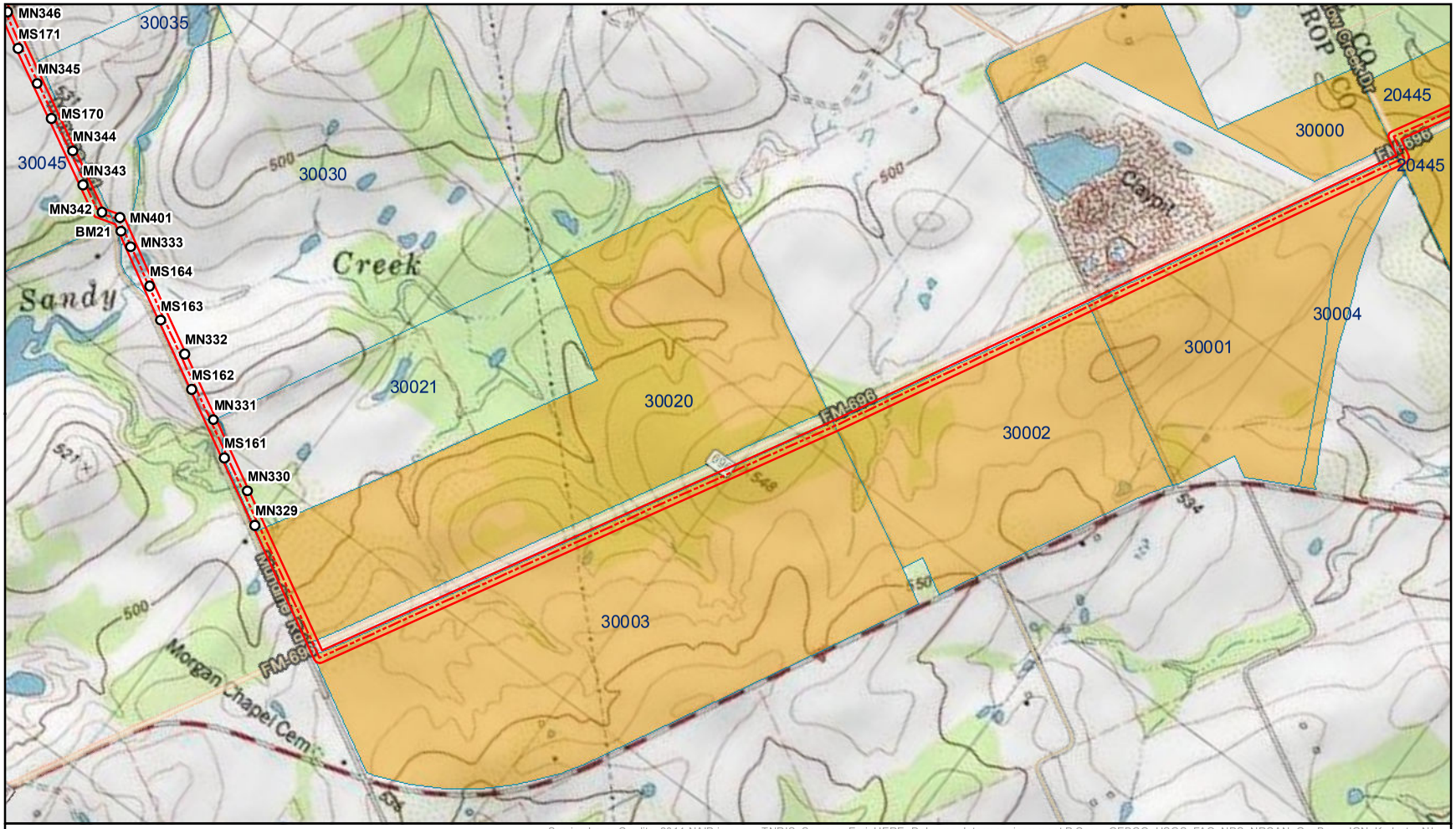

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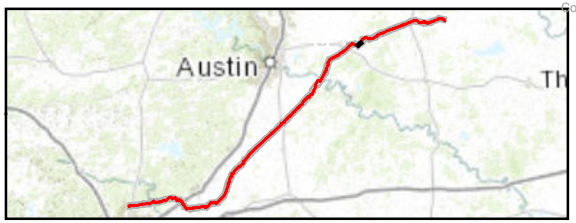

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- Parcel Desktop/Windshield Review

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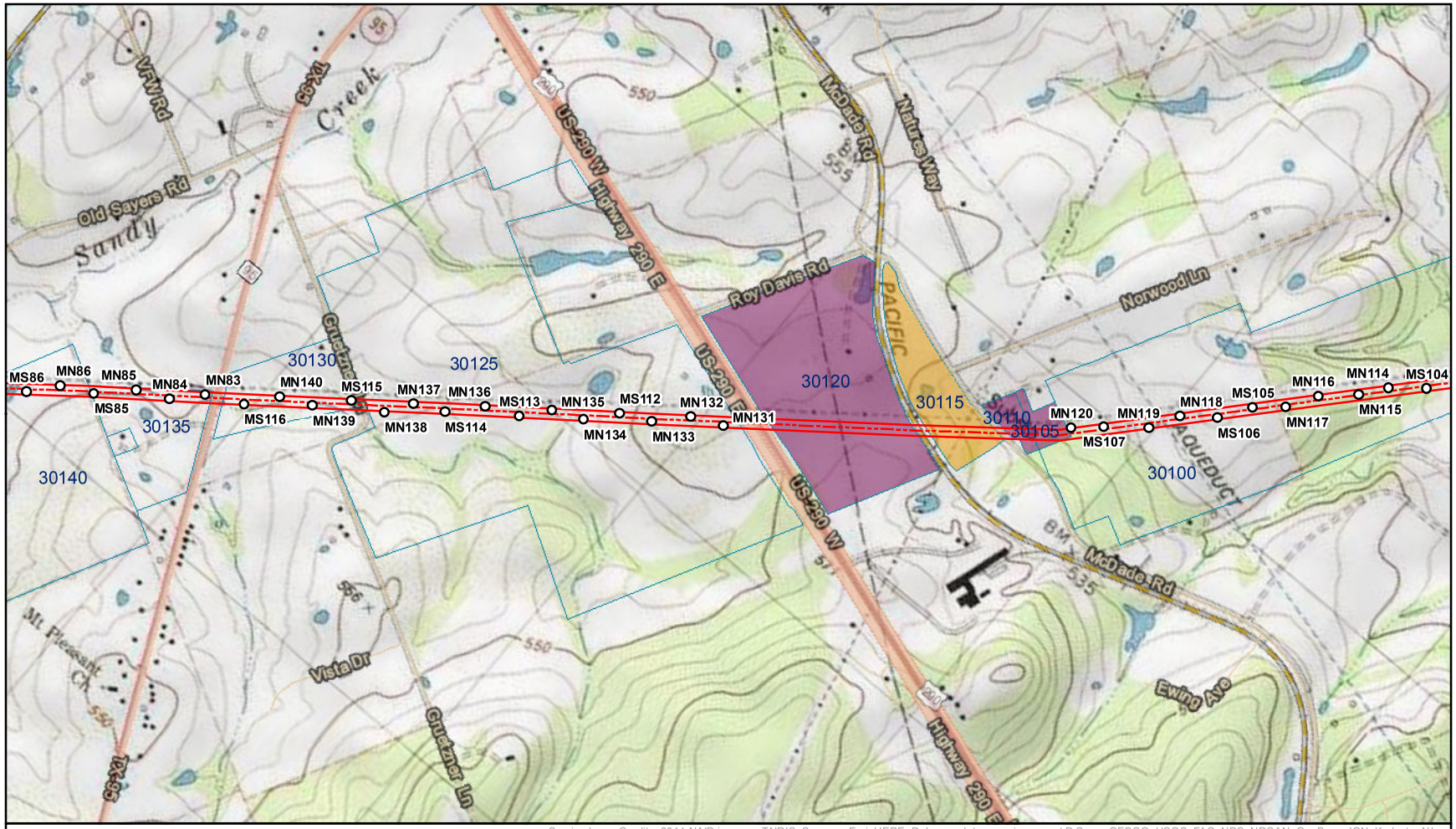

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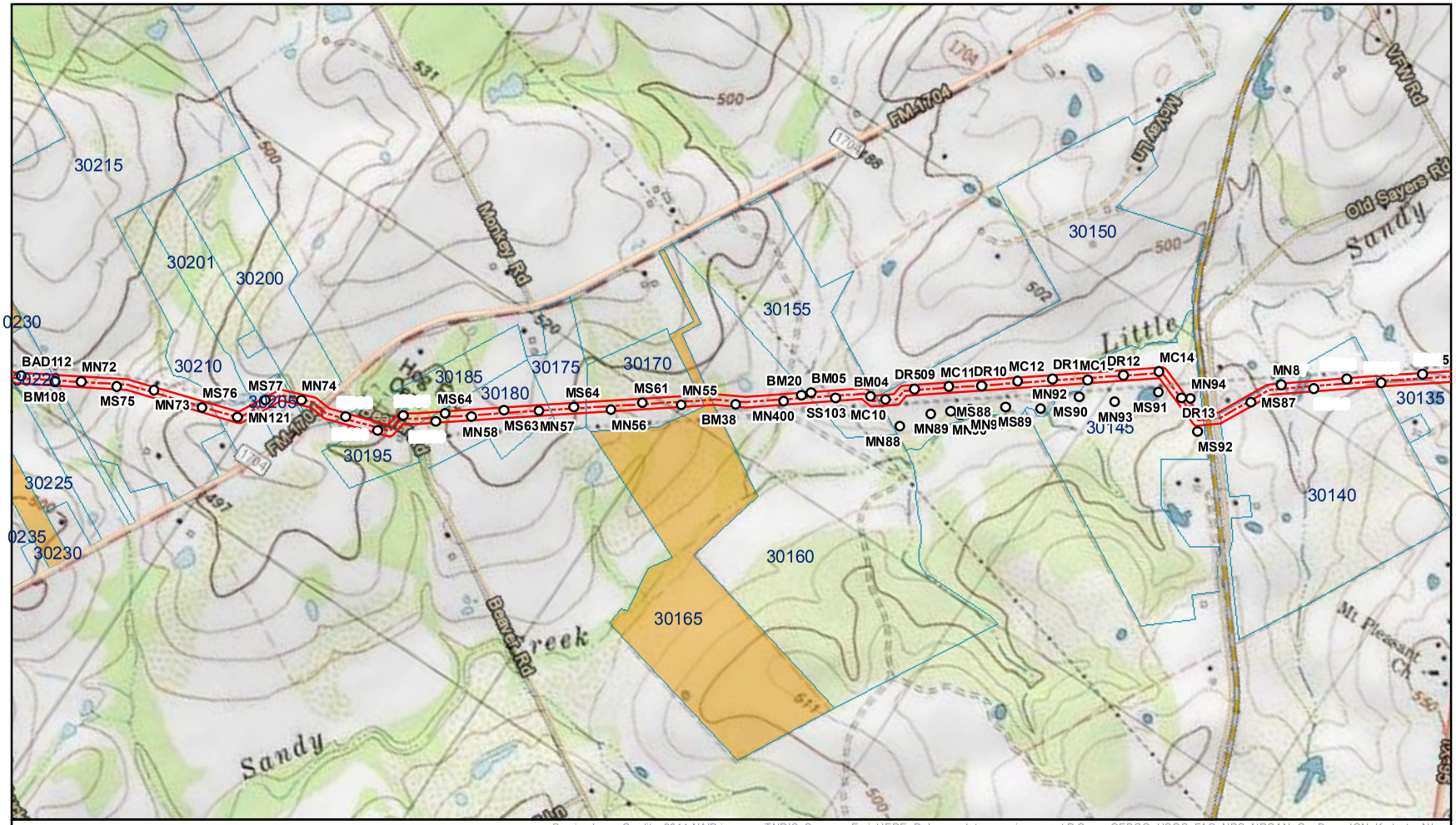

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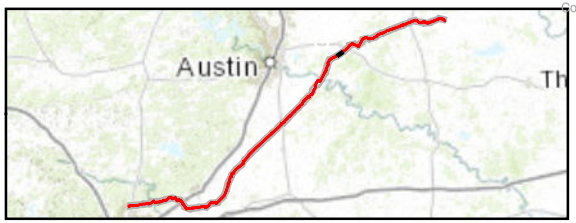

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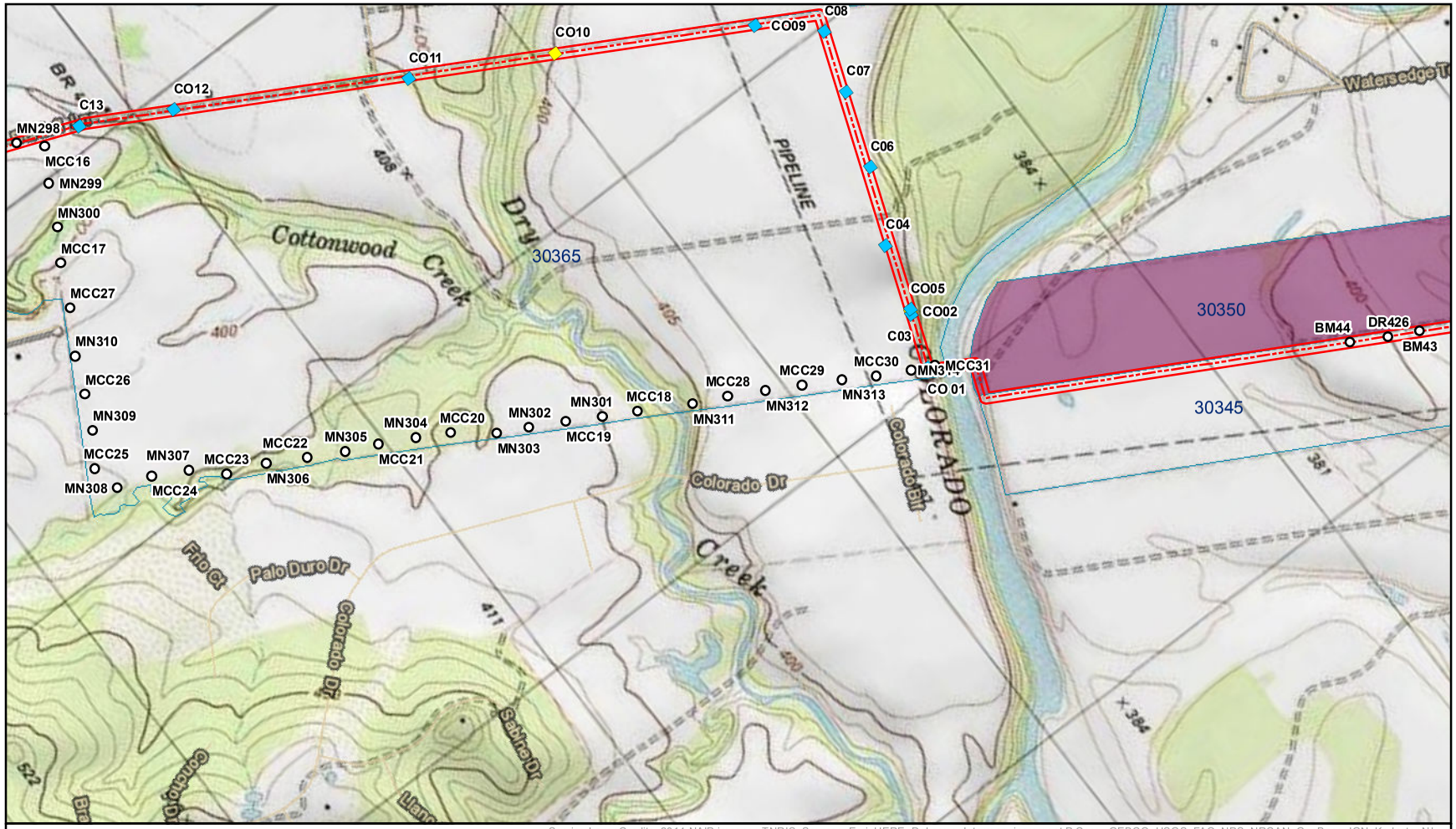

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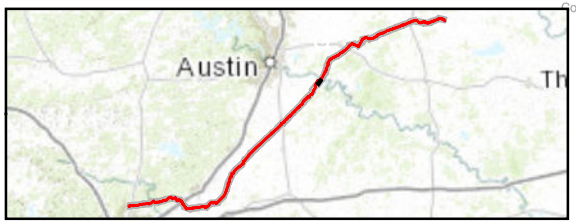
- Centerline (12/08/2015)
- 100-Foot Survey Corridor (12/08/2015)
- Positive Backhoe Trench
- Negative Backhoe Trench
- Negative Shovel Test
- Parcel Boundary
- Parcel Not Surveyed

0 1,500 Feet

0 500 Meters



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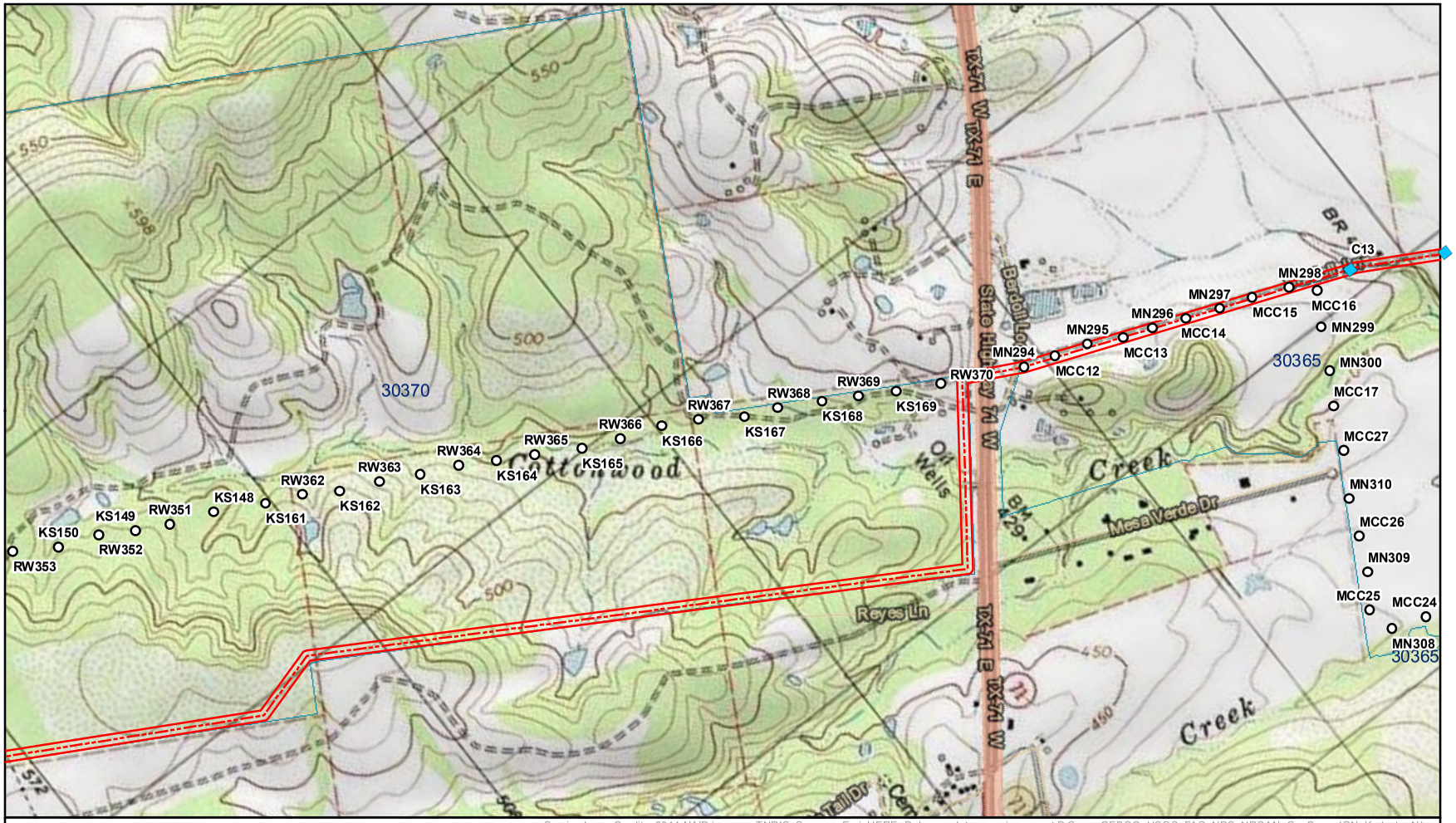

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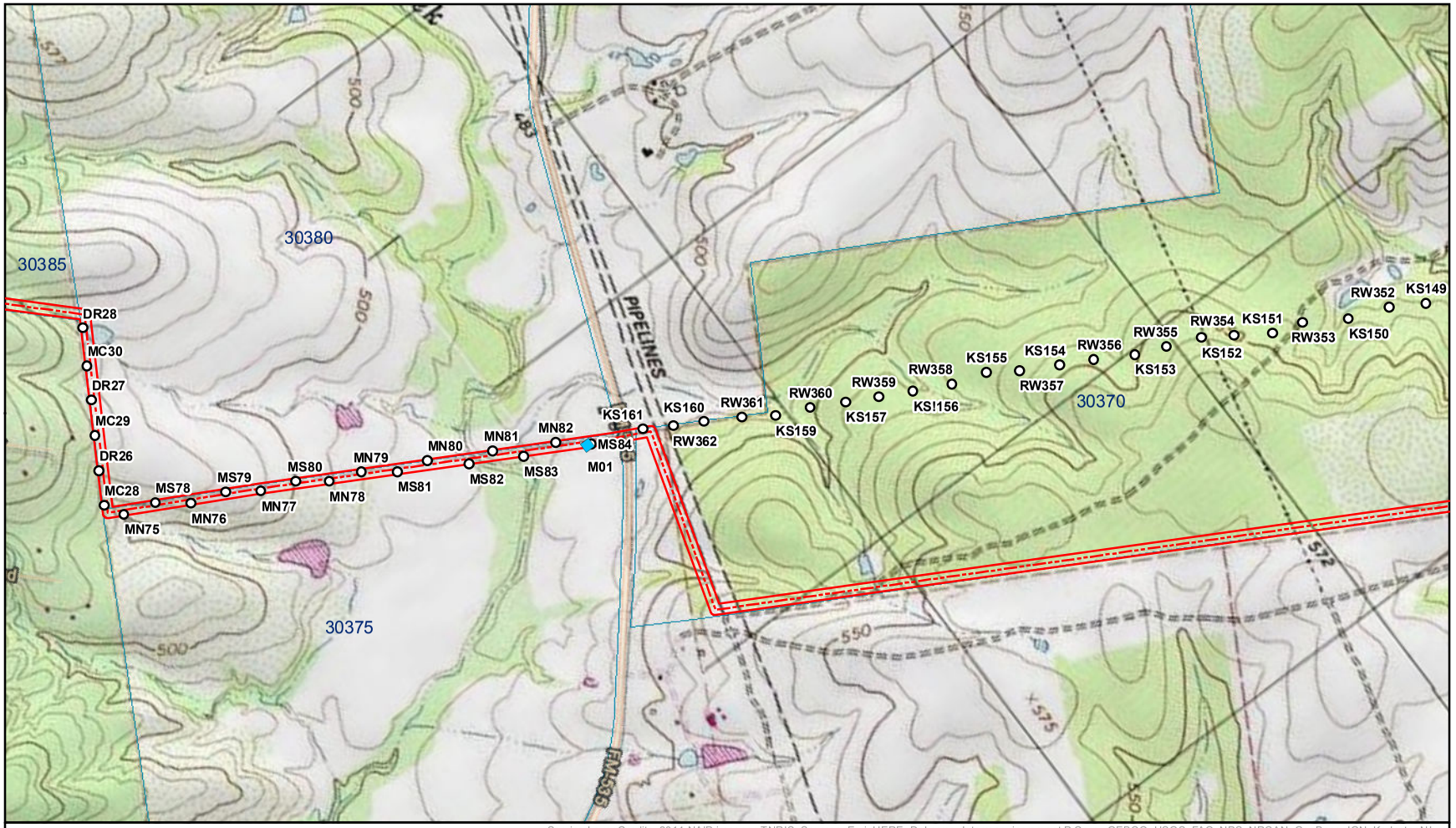

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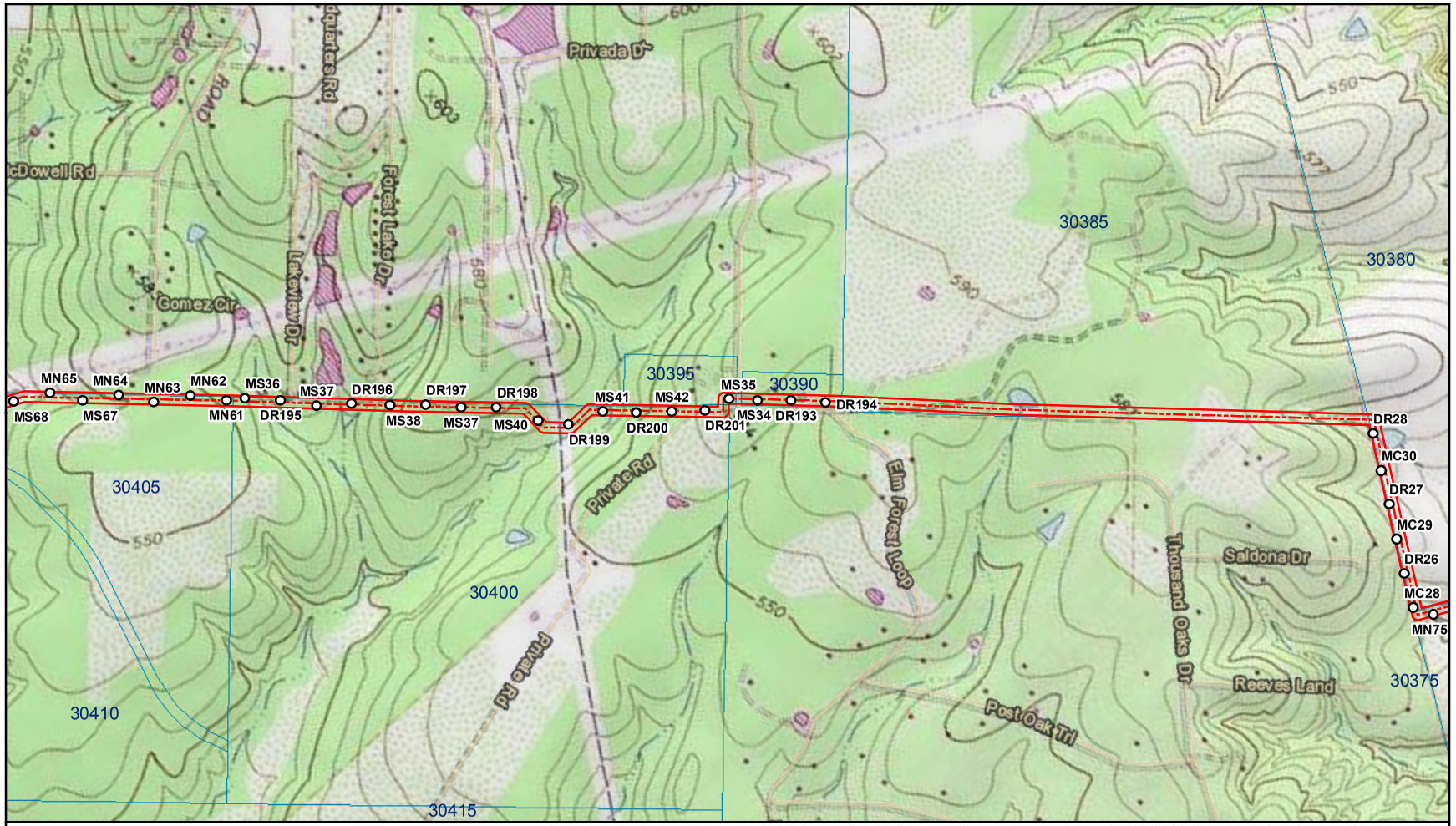

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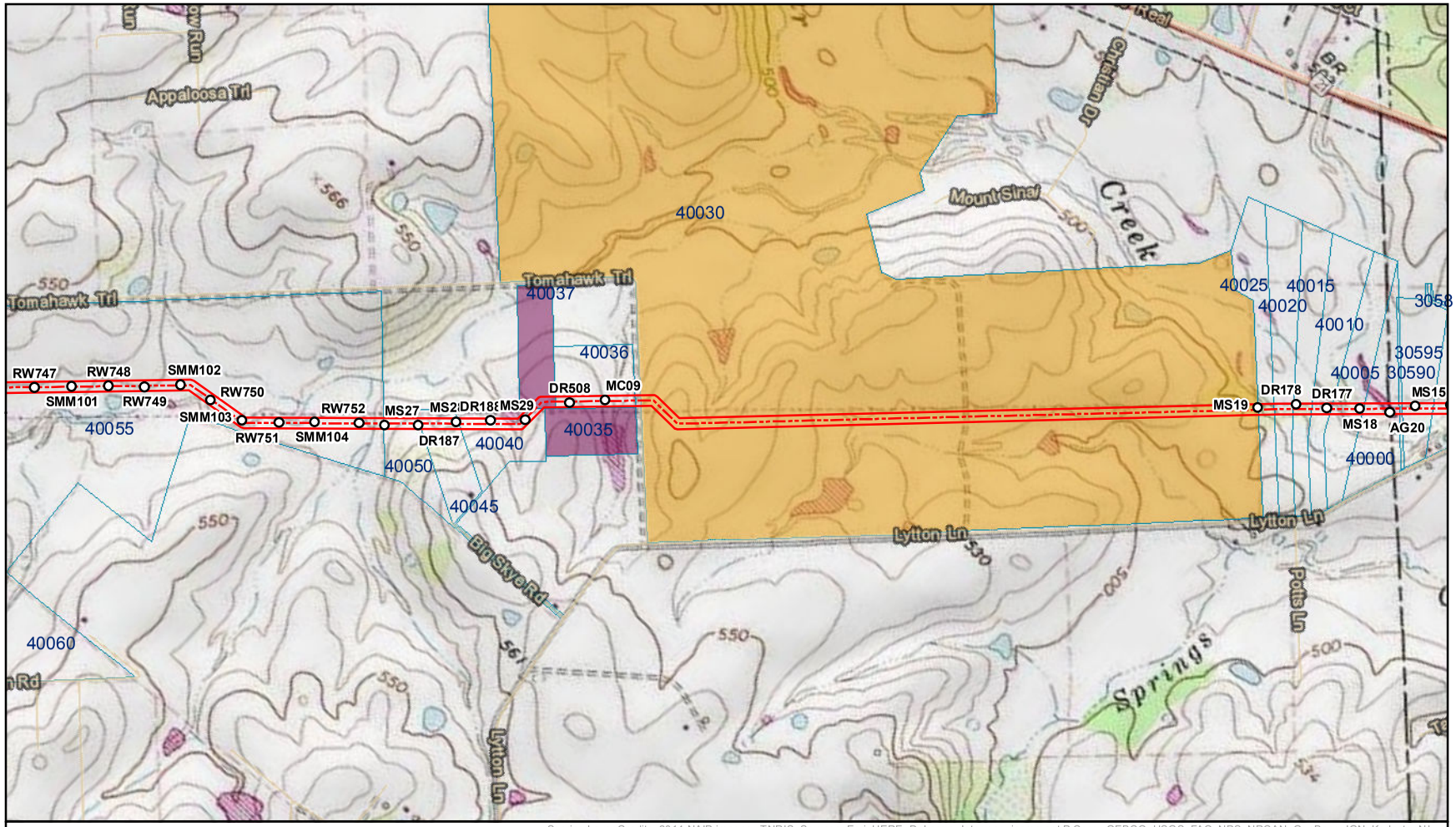

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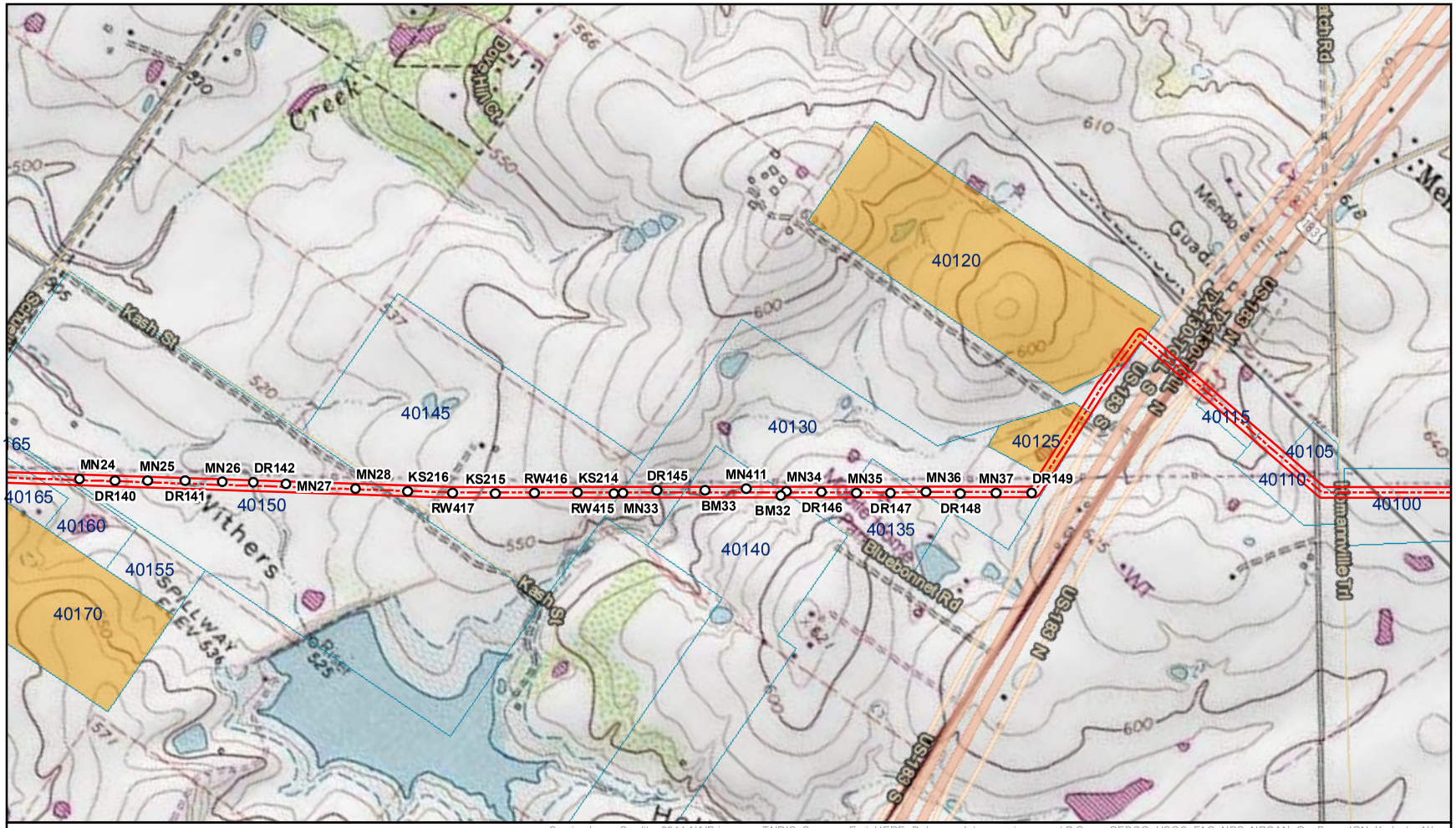

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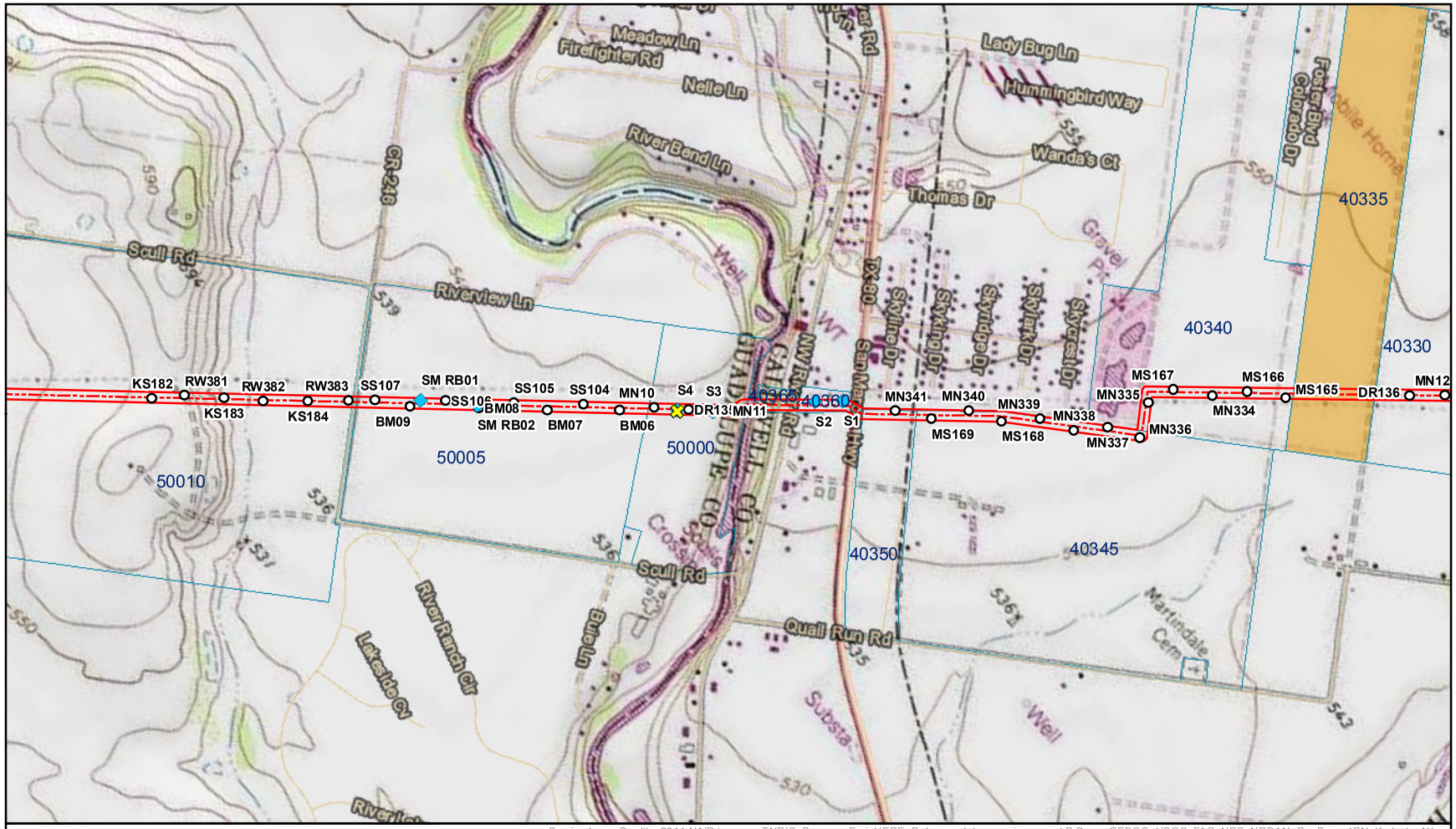

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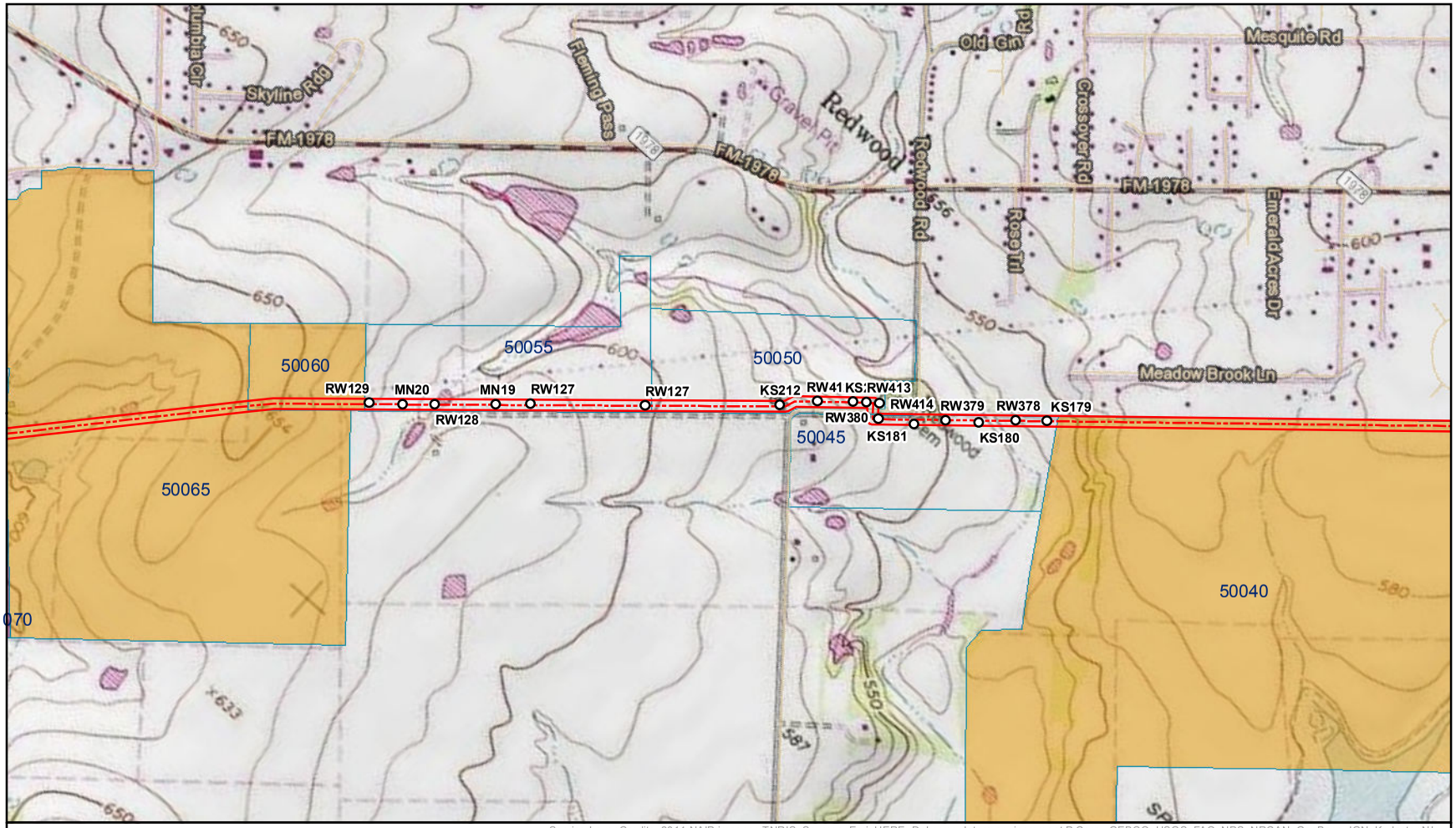

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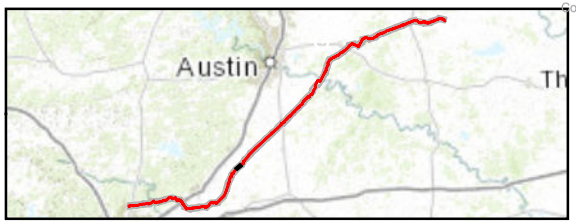

Centerline (12/08/2015)
100-Foot Survey Corridor (12/08/2015)
Negative Shovel Test
Parcel Boundary
Parcel Desktop/Windshield Review
Parcel Not Surveyed

0 1,500 Feet
0 500 Meters

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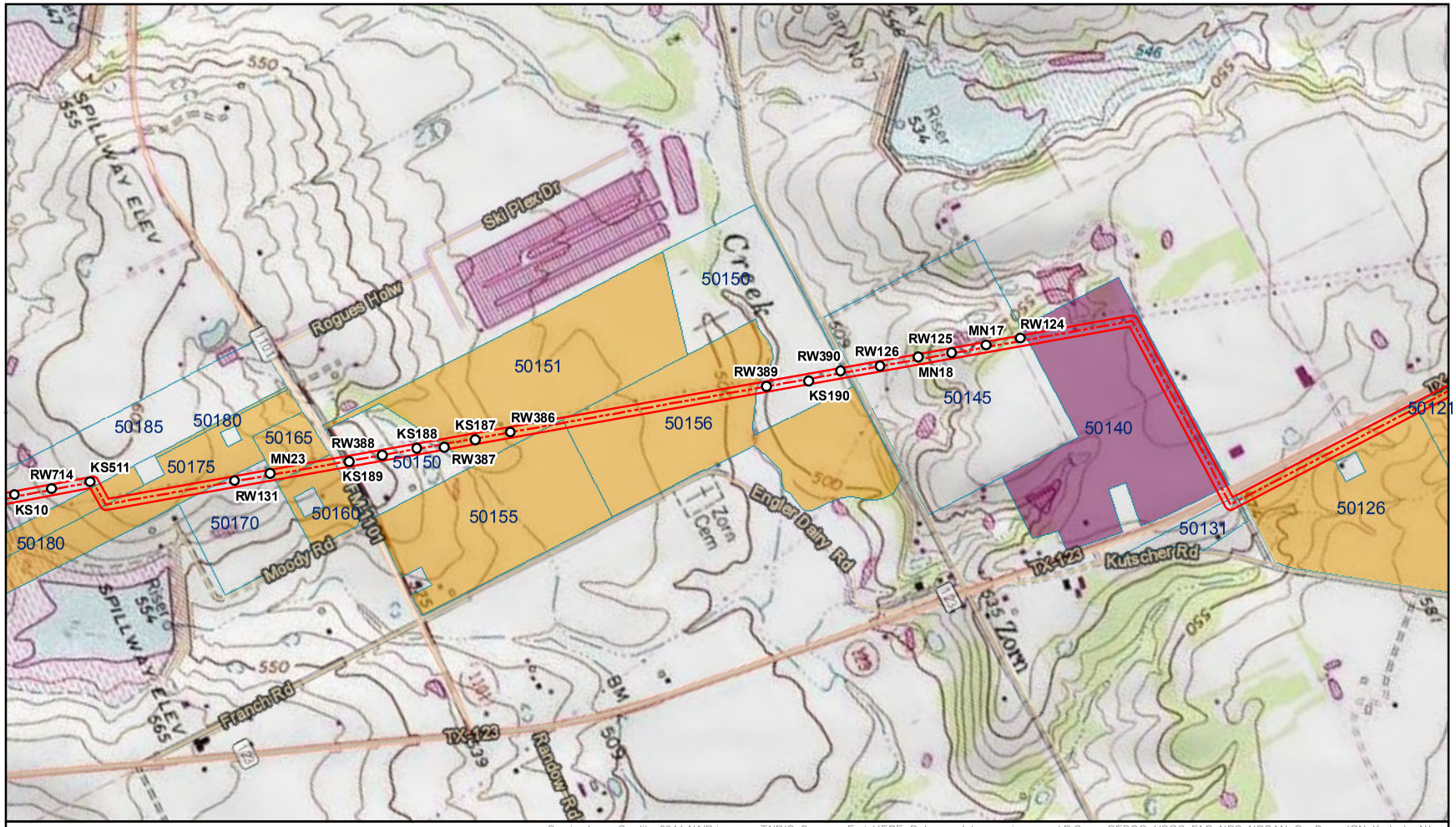

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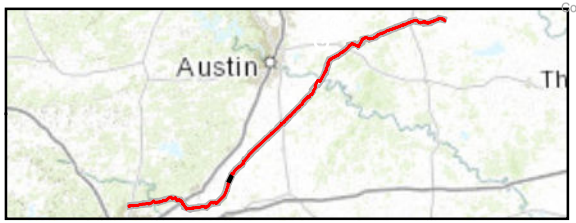
- Centerline (12/08/2015)
- 100-Foot Survey Corridor (12/08/2015)
- Negative Shovel Test
- Parcel Boundary
- Parcel Desktop/Windshield Review
- Parcel Not Surveyed

0 1,500 Feet

0 500 Meters



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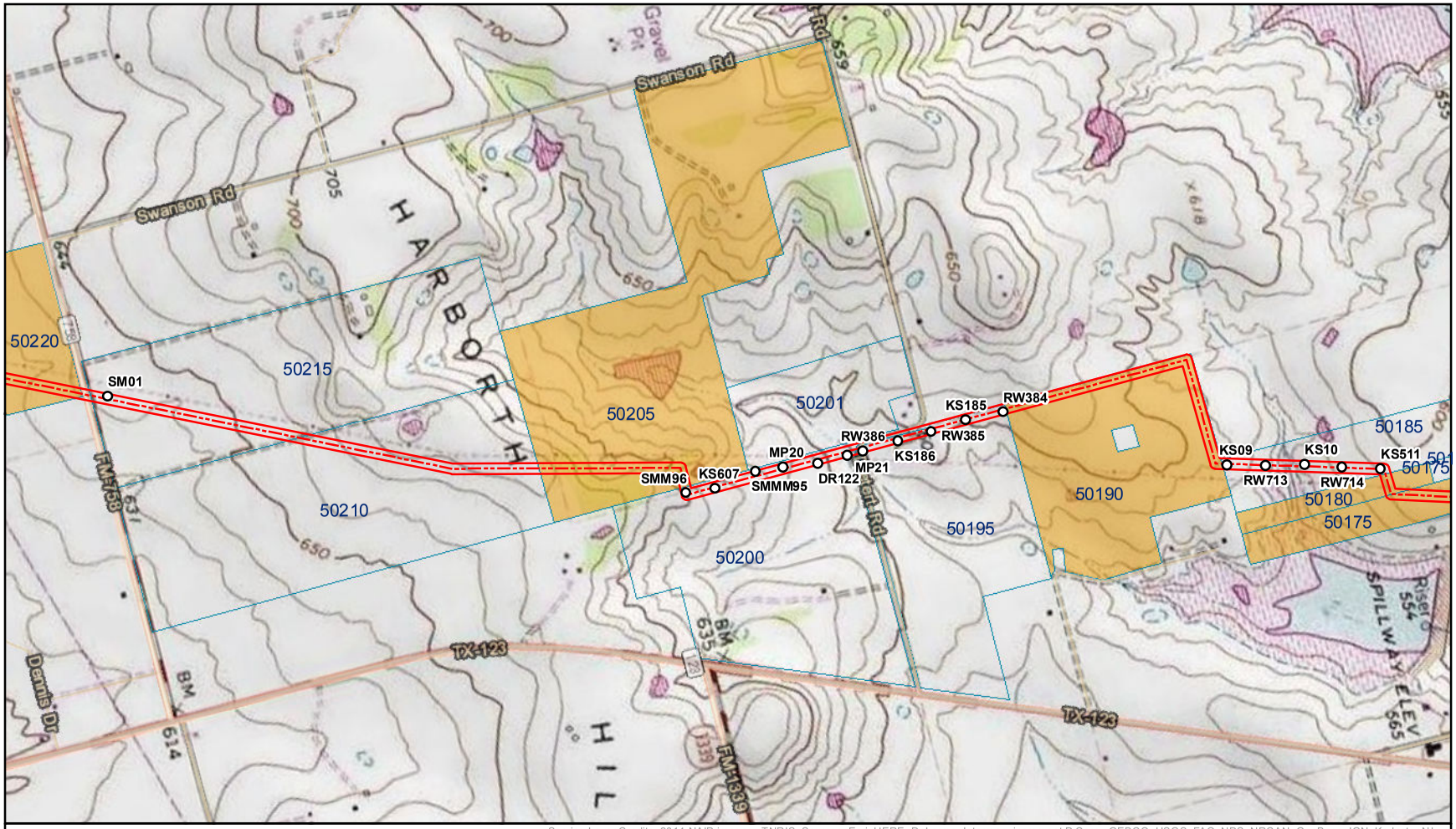

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0 1,500 Feet

0 500 Meters

- Centerline (12/08/2015)
- 100-Foot Survey Corridor (12/08/2015)
- Negative Shovel Test
- Parcel Boundary
- Parcel Desktop/Windshield Review

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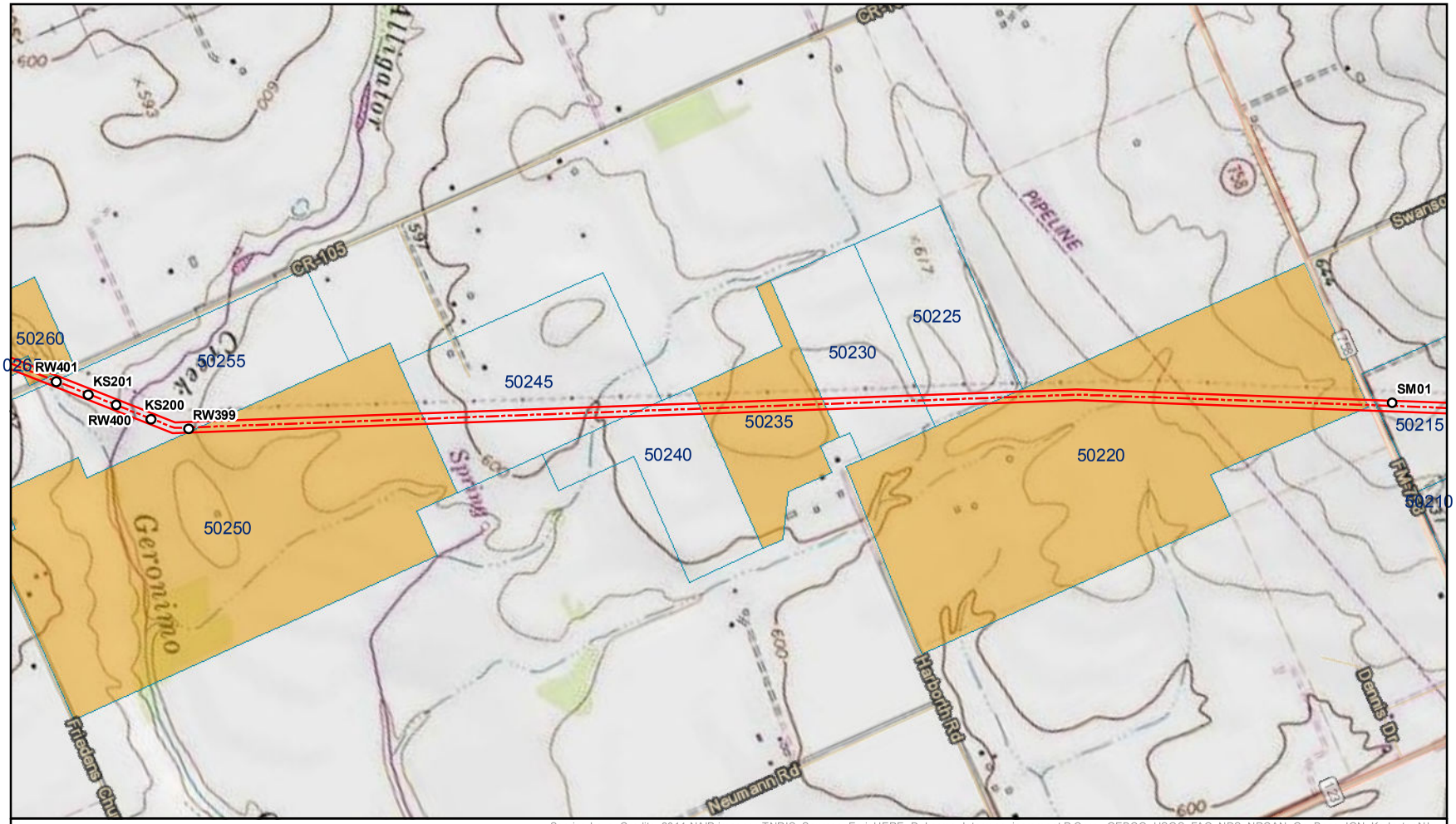

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0 1,500 Feet
0 500 Meters

- Centerline (12/08/2015)
- 100-Foot Survey Corridor (12/08/2015)
- Negative Shovel Test
- Parcel Boundary
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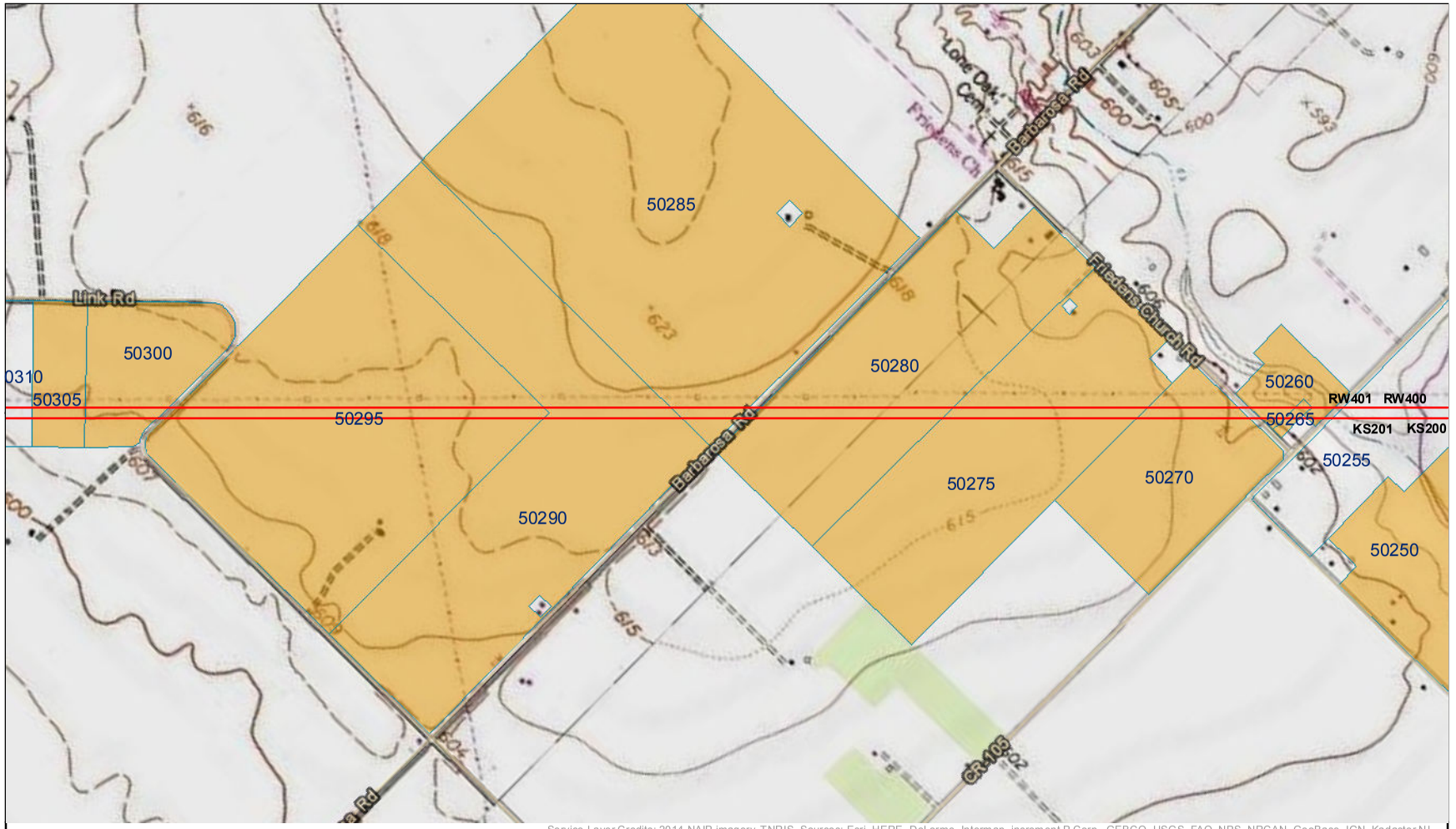

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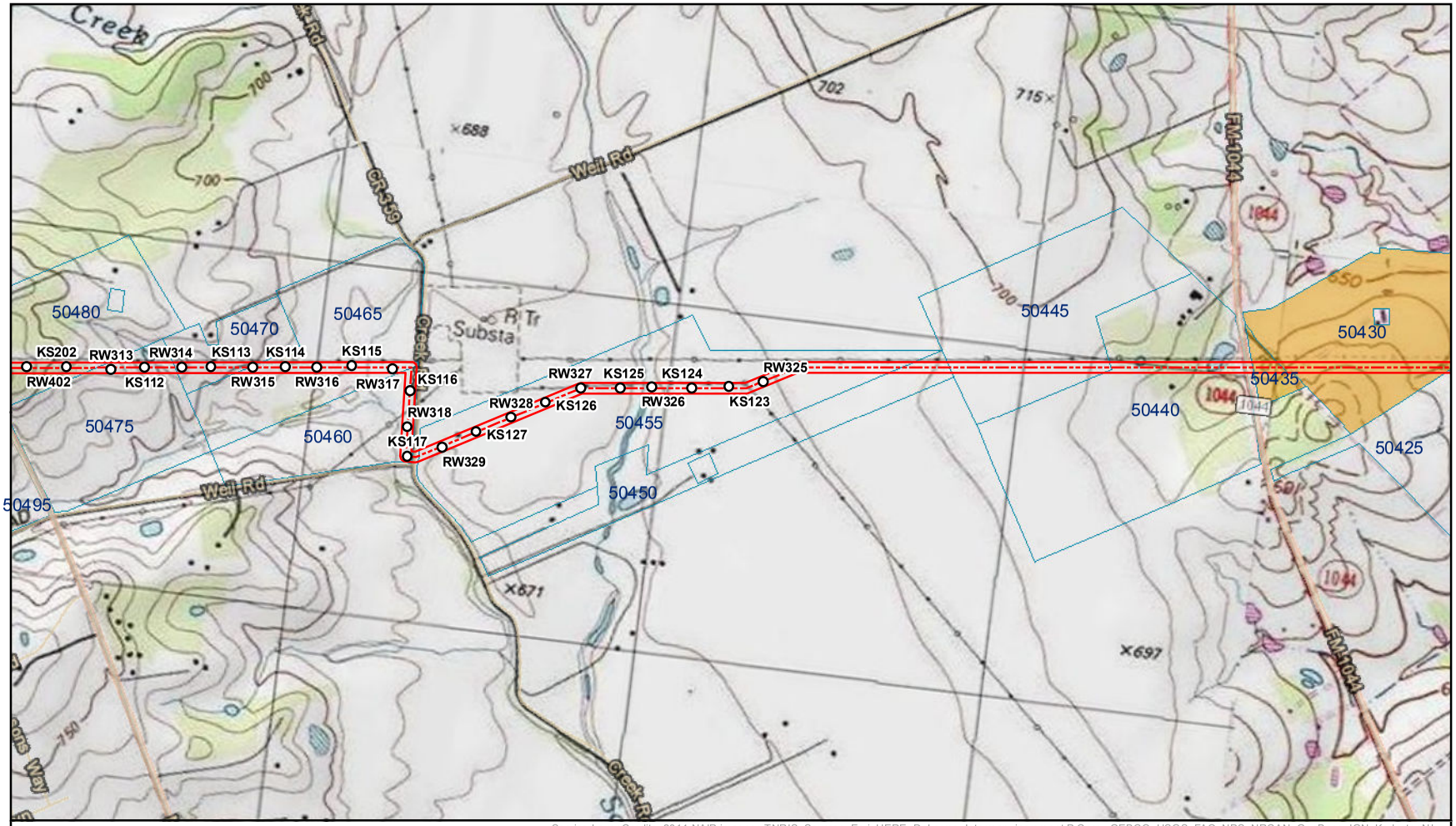

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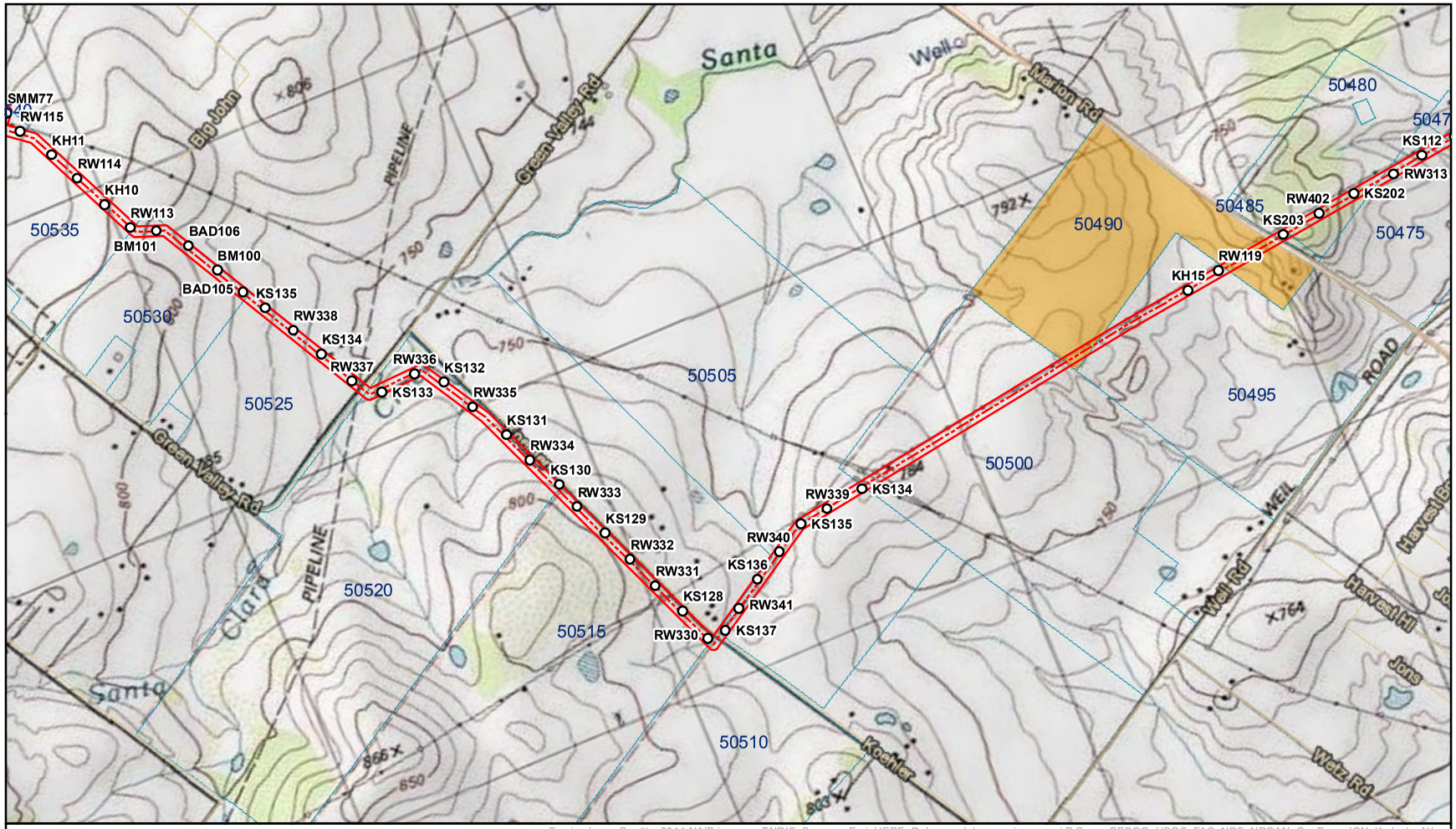

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APPENDIX B - SHOVEL TEST DATA

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Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/14/15	AG01	1	0-15	10YR 4/3	brown	Sandy Loam	1-5%	Rootlets	Negative	No cultural material encountered.
-	9/14/15	AG01	2	15-30	10YR 3/1	very dark gray	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	AG02	1	0-15	10YR 4/3	brown	Sandy Loam	1-5%	Rootlets	Negative	No cultural material encountered.
-	9/14/15	AG02	2	15-40	10YR 3/1	very dark gray	Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	AG03	1	0-20	10YR 4/3	brown	Sandy Loam	1-5%	Rootlets	Negative	
-	9/14/15	AG03	2	20-35	10YR 3/1	very dark gray	Clay	5-10%	Mottles	Negative	Terminated at compact soil.
-	9/14/15	AG04	1	0-10	10YR 4/2	dark grayish brown	Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at rock impasse.
-	9/14/15	AG05	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at rock impasse.
-	9/14/15	AG06	1	0-15	10YR 4/2	dark grayish brown	Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at rock impasse.
-	9/15/15	AG07	1	0-5	10YR 6/3	pale brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	9/15/15	AG07	2	5-10	7.5YR 5/6	strong brown	Sandy Clay	10-20%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/15/15	AG08	1	0-30	10YR 4/4	dark yellowish brown	Sandy Clay	5-10%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at hydric. soil.
-	9/15/15	AG09	1	0-35	10YR 4/4	dark yellowish brown	Sandy Clay	5-10%	Calcium Carbonate, Mottles	Negative	Terminated at hydric. soil.
-	9/15/15	AG10	1	0-20	10YR 4/2	dark grayish brown	Sandy Clay	1-5%	Mottles	Negative	No cultural material encountered.
-	9/15/15	AG10	2	20-40	7.5YR 5/8	strong brown	Sandy Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at hydric soil.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/15/15	AG11	1	0-5	5YR 6/8	reddish yellow	Sandy Clay	1-5%	Mottles	Negative	No cultural material encountered.
-	9/15/15	AG11	2	5-65	10YR 6/3	pale brown	Loamy Sand	1-5%	Iron	Negative	No cultural material encountered.
-	9/15/15	AG11	3	65+	5YR 6/8	reddish yellow	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/16/15	AG15	1	0-30	10YR 5/4	yellowish brown	Sand	1-5%	Rootlets	Negative	No cultural material encountered.
-	9/16/15	AG15	2	30-100	10YR 7/2	light gray	Sand	1-5%	Iron	Negative	No cultural material encountered. Terminated at depth.
-	9/16/15	AG16	1	0-30	5YR 5/8	yellowish red	Sandy Clay	>20%	Cobbles, Gravels, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/16/15	AG17	1	0-35	10YR 2/1	black	Clay	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	AG18	1	0-30	10YR 2/1	black	Clay	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	Terminated at compact soil.
-	9/16/15	AG19	1	0-10	10YR 4/1	dark gray	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at rock obstruction.
-	9/16/15	AG20	1	0-30	10YR 3/2	very dark grayish brown	Clay	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	9/17/15	AG22	1	0-30	10YR 2/1	black	Clay	5-10%	Calcium Carbonate, Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/17/15	AG23	1	0-30	10YR 2/1	black	Clay	5-10%	Calcium Carbonate, Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	9/17/15	AG24	1	0-30	10YR 4/1	dark gray	Clay	5-10%	Calcium Carbonate, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/17/15	AG25	1	0-30	10YR 4/1	dark gray	Clay	1-5%	Calcium Carbonate, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/18/15	AG28	1	0-35	10YR 4/6	dark yellowish brown	Silty Clay	1-5%	Calcium Carbonate, Roots	Negative	No cultural material encountered.
-	9/18/15	AG28	2	35-40	10YR 5/8	yellowish brown	Silty Clay	5-10%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/20/15	AJ01	1	0-30	10YR 6/6	brownish yellow	Clay Loam	5-10%	Calcium Carbonate, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ02	1	0-30	10YR 6/6	brownish yellow	Clay Loam	5-10%	Calcium Carbonate, Pebbles	Negative	Terminated at compact soil.
-	7/20/15	AJ03	1	0-20	10YR 7/3	very pale brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	7/20/15	AJ03	2	20-30	10YR 8/3	very pale brown	Clay Loam	>20%	Mottles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ04	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ05	1	0-30	10YR 6/1	gray	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ06	1	0-30	10YR 6/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/20/15	AJ07	1	0-30	10YR 5/3	brown	Silty Clay	10-20%	Mottles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ08	1	0-20	10YR 5/3	brown	Silty Clay	10-20%	Mottles, Pebbles	Negative	Terminated at compact soil.
-	7/20/15	AJ09	1	0-30	10YR 5/4	yellowish brown	Silty Clay		Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	AJ10	1	0-10	10YR 7/3	very pale brown	Clay Loam	>20%	Cobbles	Negative	No cultural material encountered.
-	7/20/15	AJ10	2	10-20	10YR 5/3	brown	Clay	>20%	Cobbles	Negative	No cultural material encountered. Terminated at too many cobbles.
-	7/20/15	AJ11	1	0-10	10YR 7/2	light gray	Sandy Clay	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/21/15	AJ15	1	0-20	10YR 7/3	very pale brown	Sandy Clay	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/21/15	AJ16	1	0-30	10YR 5/2	grayish brown	Clay Loam	-	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/21/15	AJ17	1	0-30	10YR 5/2	grayish brown	Clay Loam	-	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ22	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	AJ23	1	1-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ24	1	1-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ25	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ26	1	1-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ27	1	1-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ28	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ29	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ30	1	1-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/22/15	AJ31	1	0-30	10YR 5/1	gray	Clay	1-5%	Pebbles	Negative	Terminated at compact soil.
-	10/27/15	AY01	1	0-5	7.5YR 5/4	brown	Sandy Loam	1-5%	Roots and rootlets	Negative	No cultural material encountered.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/27/15	AY01	2	5-15	10YR 7/1	light gray	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered.
-	10/27/15	AY01	3	15-45	7.5YR 5/4	brown	Sandy Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at water table.
-	10/27/15	AY02	1	0-20	7.5YR 5/4	brown	Sandy Loam	1-5%	Gravels, Pebbles, Roots	Negative	No cultural material encountered.
-	10/27/15	AY02	2	20-30	5YR 4/6	yellowish red	Sandy Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/27/15	AY03	1	0-10	10YR 3/4	dark yellowish brown	Sandy Loam	1-5%	Organics	Negative	No cultural material encountered.
-	10/27/15	AY03	2	10-100	7.5YR 5/4	brown	Sandy Loam	>20%	Many large roots	Negative	No cultural material encountered. Terminated at depth.
-	10/27/15	AY04	1	0-50	7.5YR 5/4	brown	Sandy Loam	5-10%	Many roots	Negative	No cultural material encountered.
-	10/27/15	AY04	2	50-55	2.5YR 4/6	red	Sandy Clay	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
-	10/27/15	AY05	1	0-70	7.5YR 5/4	brown	Sandy Loam	5-10%	Pebbles, Many rootlets	Negative	No cultural material encountered.
-	10/27/15	AY05	2	70-75	5YR 6/8	reddish yellow	Sandy Clay Loam	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
-	10/27/15	AY06	1	0-100	7.5YR 5/4	brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	10/27/15	AY07	1	0-5	5YR 6/8	reddish yellow	Clay Loam	1-5%	Organics and roots	Negative	No cultural material encountered. Terminated at basal clay.
-	11/10/15	AY100	1	0-15	5YR 6/8	reddish yellow	Sandy Loam	10-20%	Roots, rootlets, red clay nodules	Negative	No cultural material encountered.
-	11/10/15	AY100	2	15-55	10YR 7/3	very pale brown	Sandy Loam	10-20%	Red and gray clay nodules	Negative	No cultural material encountered. Terminated at disturbance.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/10/15	AY101	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	11/10/15	AY102	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles, Roots	Positive	1: Flake (tertiary) [Flake at 40-50 cmbs] Terminated at depth.
-	11/10/15	AY103	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	11/10/15	AY104	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	11/10/15	AY105	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	10/28/15	AY16	1	0-5	7.5YR 5/4	brown	Loamy Sand	10-20%	Many roots	Negative	No cultural material encountered.
-	10/28/15	AY16	2	5-10	2.5YR 5/8	red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/28/15	AY16	3	10-50	7.5YR 5/4	brown	Sandy Loam	1-5%	Pebbles, Rootlets	Negative	No cultural material encountered.
-	10/28/15	AY16	4	50-55	10YR 6/8	brownish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	AY17	1	0-5	10YR 4/2	dark grayish brown	Sandy Loam	1-5%	Wood debris and organics	Negative	No cultural material encountered.
-	10/28/15	AY17	2	5-50	7.5YR 5/4	brown	Sandy Loam	1-5%	Pebbles, Roots	Negative	No cultural material encountered.
-	10/28/15	AY17	3	50-55	10YR 7/6	yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	AY18	1	0-55	7.5YR 5/4	brown	Sandy Loam	5-10%	Gravels, Pebbles, Organics	Negative	No cultural material encountered.
-	10/28/15	AY18	2	55-60	10YR 7/8	yellow	Sandy Clay Loam	1-5%	Mottles, Rootlets	Negative	No cultural material encountered. Terminated at bedrock.
-	10/28/15	AY19	1	0-5	7.5YR 4/3	brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	10/28/15	AY19	2	5-10	2.5YR 4/6	red	Clay Loam	1-5%	Slixken sides	Negative	No cultural material encountered. Terminated at basal clay.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/28/15	AY20	1	0-50	7.5YR 5/3	brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	AY21	1	0-35	7.5YR 4/4	brown	Sandy Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at disturbance.
-	10/28/15	AY27	1	0-40	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	10/28/15	AY27	2	40-50	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY28	1	0-50	10YR 2/2	very dark brown	Clay Loam	1-5%	Pebbles, Roots and rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY29	1	0-60	10YR 2/2	very dark brown	Clay Loam	1-5%	Pebbles, Roots and rootlets	Negative	Terminated at compact soil.
-	10/29/15	AY30	1	0-35	7.5YR 4/3	brown	Sandy Clay Loam	1-5%	Organics	Negative	No cultural material encountered.
-	10/29/15	AY30	2	35-40	10YR 4/3	brown	Sandy Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/29/15	AY31	1	0-50	10YR 4/1	dark gray	Clay Loam	1-5%	Organics	Negative	No cultural material encountered.
-	10/29/15	AY31	2	50-60	7.5YR 4/1	dark gray	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY32	1	0-40	7.5YR 2.5/3	very dark brown	Clay Loam	1-5%	Organics	Negative	No cultural material encountered.
-	10/29/15	AY32	2	40-55	7.5YR 2.5/2	very dark brown	Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY33	1	0-40	7.5YR 2.5/3	very dark brown	Clay Loam	1-5%	Organics	Negative	
-	10/29/15	AY33	2	40-50	7.5YR 2.5/2	very dark brown	Clay Loam	10-20%	Mottles	Negative	Terminated at compact soil.
-	10/29/15	AY34	1	0-35	7.5YR 2.5/3	very dark brown	Clay Loam	1-5%	Organics	Negative	
-	10/29/15	AY34	2	35-50	7.5YR 2.5/2	very dark brown	Clay Loam	10-20%	Mottles	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/29/15	AY35	1	0-20	7.5YR 4/3	brown	Clay Loam	1-5%	Organics	Negative	No cultural material encountered.
-	10/29/15	AY35	2	20-50	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles, Snail shell fragments	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY36	1	0-50	7.5YR 4/3	brown	Clay Loam	1-5%	Snail shell and insect burrows	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	AY37	1	0-50	7.5YR 4/3	brown	Clay Loam	1-5%	Snail shell and insect burrows	Negative	Terminated at compact soil.
-	11/10/15	BAD100	1	0-10	10YR 7/6	yellow	Sandy Clay	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	11/10/15	BAD100	2	2-80	5YR 4/6	yellowish red	Sandy Clay	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	11/10/15	BAD101	1	0-80	10YR 7/6	yellow	Sand	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	11/10/15	BAD102	1	0-90	10YR 7/6	yellow	Sand	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	11/10/15	BAD103	1	0-90	10YR 7/6	yellow	Sand	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	11/10/15	BAD104	1	0-90	10YR 7/6	yellow	Sand	1-5%	Gravels, Pebbles	Negative	Terminated at depth.
-	11/11/15	BAD105	1	0-45	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/11/15	BAD106	1	0-45	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	11/11/15	BAD107	1	0-40	10YR 2/2	very dark brown	Clay Loam	>20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/11/15	BAD108	1	0-20	10YR 5/6	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/11/15	BAD108	2	20-60	10YR 5/8	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/11/15	BAD108	3	60-70	10YR 5/4	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at water table.
-	11/11/15	BAD109	1	0-80	10YR 7/4	very pale brown	Sand	-	-	Negative	No cultural material encountered.
-	11/11/15	BAD109	2	80-85	10YR 7/4	very pale brown	Sand	>20%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	11/11/15	BAD110	1	0-80	10YR 7/4	very pale brown	Sand	-	-	Negative	
-	11/11/15	BAD111	1	0-80	10YR 7/4	very pale brown	Sand	-	-	Negative	
-	11/12/15	BAD111 2	1	0-70	10YR 5/6	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/12/15	BAD111 2	2	70-80	10YR 7/3	very pale brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at depth.
-	11/13/15	BAD111 5	1	0-40	5YR 4/6	yellowish red	Sandy Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	11/13/15	BAD111 5	2	40-45	2.5Y 6/6	olive yellow	Sandy Clay	>20%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD113	1	0-10	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD113	2	10-50	10YR 5/6	yellowish brown	Sandy Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD114	1	1-10	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD114	2	10-15	10YR 5/6	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD114	3	15-60	10YR 6/6	brownish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD116	1	0-45	2.5Yq 7/6		Silty Clay	1-5%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/13/15	BAD117	1	0-5	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD117	2	5-45	10YR 6/6	brownish yellow	Sandy Clay	1-5%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD118	1	0-5	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD118	2	5-40	10YR 5/4	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD118	3	40-50	10YR 6/6	brownish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD119	1	0-30	10YR 4/6	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD119	2	30-75	10YR 6/6	brownish yellow	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD119	3	75-80	5YR 4/4	reddish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	11/13/15	BAD120	1	0-35	5YR 5/6	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD120	2	35-50	7.5YR 6/6	reddish yellow	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD121	1	0-45	10YR 4/6	dark yellowish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD122	1	0-40	10YR 4/6	dark yellowish brown	Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BAD123	1	0-20	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	11/13/15	BAD123	2	20-45	5YR 4/8		Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/30/15	BD10	1	0-10	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
-	10/30/15	BD10	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
-	10/30/15	BD10	3	20-30	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
-	10/30/15	BD10	4	30-40	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
-	10/30/15	BD10	5	40-50	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
-	10/30/15	BD10	6	50-60	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD11	1	0-10	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	
-	10/30/15	BD11	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	
-	10/30/15	BD11	3	20-30	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	
-	10/30/15	BD11	4	30-40	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	
-	10/30/15	BD11	5	40-50	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	
-	10/30/15	BD11	6	50-60	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	10/30/15	BD12	1	0-10	7.5YR 5/6	strong brown	Sand	>20%	Gravels, Pebbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/30/15	BD12	2	10-20	7.5YR 5/6	strong brown	Sand	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered.
-	10/30/15	BD12	3	20-30	7.5YR 5/6	strong brown	Sand	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD13	1	0-10	10YR 5/6	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/30/15	BD13	2	10-20	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/30/15	BD13	3	20-30	10YR 5/6	yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD13	4	30-40	10YR 5/6	yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD13	5	40-50	10YR 5/6	yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD13	6	50-60	10YR 5/6	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD14	1	0-10	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD14	2	10-20	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD14	3	20-30	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD14	4	30-40	10YR 5/3	brown	Sandy Clay Loam	>20%	Mottles	Negative	No cultural material encountered.
-	10/30/15	BD14	5	40-50	10YR 5/3	brown	Sandy Clay Loam	>20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD15	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD15	2	10-20	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD15	3	20-30	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/30/15	BD15	4	30-40	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD15	5	40-50	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD16	1	0-10	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	
-	10/30/15	BD16	2	10-20	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	
-	10/30/15	BD16	3	20-30	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	
-	10/30/15	BD16	4	30-40	10YR 5/3	brown	Sandy Clay Loam	>20%	Mottles	Negative	
-	10/30/15	BD16	5	40-50	10YR 5/3	brown	Sandy Clay Loam	>20%	Mottles	Negative	Terminated at compact soil.
-	10/30/15	BD17	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD17	2	10-20	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD17	3	20-30	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD17	4	30-40	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Mottles	Negative	No cultural material encountered.
-	10/30/15	BD17	5	40-45	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD18	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD18	2	10-20	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/30/15	BD18	3	20-30	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/30/15	BD19	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD19	2	10-20	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD19	3	20-30	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD19	4	30-40	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	10/30/15	BD19	5	40-50	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM01	1	0-40	10YR 6/4	light yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM02	1	0-40	10YR 6/4	light yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM03	1	0-20	10YR 6/4	light yellowish brown	Sandy Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/10/15	BM04	1	0-30	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM05	1	0-30	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM06	1	0-70	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/10/15	BM07	1	0-60	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/10/15	BM08	1	0-40	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/10/15	BM09	1	0-50	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	11/11/15	BM100	1	0-50	10YR 5/3	brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/11/15	BM101	1	0-40	10YR 5/3	brown	Silty Clay	-	-	Negative	Terminated at compact soil.
-	11/11/15	BM102	1	0-40	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/11/15	BM103	1	0-50	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/11/15	BM104	1	0-60	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at water table.
-	11/11/15	BM105	1	0-60	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	Terminated at water table.
-	11/11/15	BM106	1	0-70	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	Terminated at water table.
-	11/11/15	BM107	1	0-80	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	Terminated at water table.
-	11/12/15	BM108	1	0-50	10YR 5/3	brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at water table.
-	11/13/15	BM109	1	0-50	10YR 6/3	pale brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM110	1	0-40	10YR 4/3	brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM111	1	0-40	10YR 4/3	brown	Silty Clay	-	-	Negative	Terminated at compact soil.
-	11/13/15	BM112	1	0-50	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM113	1	0-40	10YR 5/4	yellowish brown	Sandy Clay Loam	-	-	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/13/15	BM114	1	0-80	10YR 5/4	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at water table.
-	11/13/15	BM115	1	0-80	10YR 4/4	dark yellowish brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM116	1	0-45	10YR 4/4	dark yellowish brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	11/13/15	BM117	1	0-40	10YR 6/4	light yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM118	1	0-40	10YR 5/4	yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM119	1	0-40	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	BM120	1	0-40	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	Terminated at compact soil.
-	11/13/15	BM121	1	0-40	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM20	1	0-50	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/7/15	BM201	1	0-50	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/7/15	BM202	1	0-80	10YR 4/6	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/7/15	BM203	1	0-80	10YR 4/6	dark yellowish brown	Sandy Clay	-	-	Negative	Terminated at compact soil.
-	12/7/15	BM204	1	0-40	10YR 5/4	yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at disturbed soils.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/7/15	BM205	1	0-40	10YR 5/4	yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at disturbed soils.
-	12/7/15	BM206	1	0-40	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/7/15	BM207	1	0-30	10YR 3/2	very dark grayish brown	Silty Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	10/27/15	BM21	1	0-80	10YR 4/3	brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/27/15	BM22	1	0-40	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/27/15	BM23	1	0-30	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM24	1	0-30	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	10/27/15	BM25	1	0-40	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM26	1	0-30	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM27	1	0-40	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM28	1	0-30	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/27/15	BM29	1	0-30	10YR 3/3	dark brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/28/15	BM30	1	0-40	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/28/15	BM31	1	0-40	10YR 4/3	brown	Silty Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/28/15	BM32	1	0-30	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/28/15	BM33	1	0-30	10YR 3/3	dark brown	Silty Clay	-	-	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/28/15	BM34	1	0-20	10YR 4/3	brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	10/28/15	BM35	1	0-30	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/28/15	BM36	1	0-60	10YR 5/4	yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/28/15	BM37	1	0-50	10YR 3/3	dark brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	BM38	1	0-40	10YR 4/3	brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	BM40	1	0-50	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	BM41	1	0-40	10YR 3/3	dark brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/29/15	BM42	1	0-40	10YR 3/3	dark brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/29/15	BM43	1	0-40	10YR 3/3	dark brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	10/29/15	BM44	1	0-50	10YR 3/3	dark brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	6/16/15	DR02	1	0-20	10YR 3/3	dark brown	Clay Loam	10-20%	Cobbles, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	DR06	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	DR07	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
-	6/16/15	DR08	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/16/15	DR09	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
-	6/16/15	DR10	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
-	6/29/15	DR100	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	DR101	1	0-20	7.5YR 4/6	strong brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	DR102	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	DR103	1	0-25	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	DR104	1	0-15	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	DR105	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	DR109	1	0-30	7.5YR 4/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	6/16/15	DR11	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
-	6/29/15	DR110	1	0-30	7.5YR 4/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	6/30/15	DR111	1	0-30	10YR 5/6	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/30/15	DR112	1	0-30	10YR 5/6	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.

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-	6/30/15	DR113	1	0-30	10YR 5/6	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	6/30/15	DR114	1	0-30	10YR 5/6	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	6/30/15	DR115	1	0-45	10YR 6/1	gray	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	DR115	1	0-20	10YR 5/1	gray	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	6/30/15	DR115	2	20-30	10YR 6/3	pale brown	Clay Loam	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	DR117	1	0-30	10YR 5/1	gray	Clay Loam	1-5%	Pebbles	Negative	
-	6/30/15	DR117	1	0-30	10YR 5/1	gray	Clay Loam	1-5%	Pebbles	Negative	
-	6/30/15	DR118	1	0-30	10YR 6/3	pale brown	Clay Loam	1-5%	Calcium Carbonate, Mottles, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	DR119	1	0-30	10YR 6/3	pale brown	Clay Loam	1-5%	Calcium Carbonate, Mottles, Pebbles	Negative	Terminated at basal clay.
-	6/16/15	DR12	-	-	-	-	-	-	-	-	No excavation, within creek.
-	6/30/15	DR120	1	0-30	10YR 6/3	pale brown	Clay Loam	1-5%	Calcium Carbonate, Mottles, Pebbles	Negative	Terminated at basal clay.
-	6/30/15	DR121	1	0-30	10YR 6/3	pale brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/1/15	DR122	1	0-30	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/2/15	DR123	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/2/15	DR124	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at compact soil.

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-	7/2/15	DR125	1	0-30	7.5YR 5/6	strong brown	Loam	1-5%	Calcium Carbonate, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/6/15	DR129	1	0-30	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/6/15	DR130	1	0-20	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
-	7/6/15	DR131	1	0-30	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
-	7/6/15	DR131	1	0-30	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
-	7/6/15	DR132	1	0-45	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
-	7/6/15	DR132	1	0-45	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
-	7/7/15	DR133	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered.
-	7/7/15	DR133	2	30-40	10YR 6/6	brownish yellow	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/7/15	DR134	1	0-35	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/7/15	DR135	1	0-40	7.5YR 6/4	light brown	Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	7/7/15	DR135	2	40-50	5YR 6/4	light reddish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/7/15	DR136	1	0-20	7.5YR 5/4	brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	7/7/15	DR136	2	20-30	5YR 5/6	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/7/15	DR137	1	0-45	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/7/15	DR138	1	0-35	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/7/15	DR139	1	0-45	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/9/15	DR140	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/9/15	DR141	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/9/15	DR142	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/10/15	DR143	1	0-40	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/10/15	DR144	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/10/15	DR145	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	7/10/15	DR146	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	7/10/15	DR147	1	0-10	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	7/10/15	DR148	1	0-40	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	7/10/15	DR149	1	0-15	10YR 5/2	grayish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Pebbles	Negative	No cultural material encountered.

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-	7/10/15	DR149	2	15-30	2.5YR 7/3	light reddish brown	Clay Loam	5-10%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/10/15	DR150	1	0-40	10YR 4/6	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	7/10/15	DR150	2	40-50	10YR 6/4	light yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/10/15	DR151	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	
-	7/10/15	DR151	2	30-35	10YR 6/4	light yellowish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at basal clay.
-	7/10/15	DR152	1	0-20	10YR 4/6	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	
-	7/10/15	DR152	2	20-30	10YR 6/4	light yellowish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at basal clay.
-	7/13/15	DR153	1	0-45	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/13/15	DR154	1	0-35	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/13/15	DR155	1	0-30	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/13/15	DR156	1	0-20	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered.
-	7/13/15	DR156	2	20-30	5YR 7/3	pink	Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/13/15	DR157	1	0-30	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.

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-	7/13/15	DR159	1	0-10	7.5YR 6/4	light brown	Sandy Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at large cobbles.
-	7/13/15	DR160	1	0-20	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	
-	7/13/15	DR160	2	20-30	5YR 7/3	pink	Clay Loam	10-20%	Mottles	Negative	Terminated at basal clay.
-	7/14/15	DR161	1	0-20	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at large cobbles.
-	7/14/15	DR162	1	0-10	7.5YR 5/6	strong brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at large cobbles.
-	7/14/15	DR167	1	0-25	10YR 4/3	brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at large cobbles.
-	7/14/15	DR168	1	0-5	10YR 4/3	brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at large cobbles.
-	7/14/15	DR169	1	0-35	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/14/15	DR170	1	0-15	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/14/15	DR171	1	0-10	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/14/15	DR172	1	0-30	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/14/15	DR173	1	0-3	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/14/15	DR174	1	0-30	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/15/15	DR175	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/15/15	DR175	2	30-50	10YR 6/2	light brownish gray	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/15/15	DR176	1	0-50	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/15/15	DR177	1	0-30	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/15/15	DR178	1	0-30	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/15/15	DR179	1	0-50	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/15/15	DR180	1	0-20	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/15/15	DR181	1	0-40	10YR 5/4	yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/16/15	DR186	1	0-20	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/16/15	DR187	1	0-25	10YR 5/2	grayish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/16/15	DR188	1	0-30	10YR 5/2	grayish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Pebbles	Negative	Terminated at compact soil.
-	7/16/15	DR189	1	0-35	10YR 5/2	grayish brown	Clay Loam	5-10%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/16/15	DR190	1	0-35	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/16/15	DR191	1	0-15	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at large cobbles.
-	7/16/15	DR192	1	0-15	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at large cobbles.
-	7/17/15	DR193	1	0-10	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at massive gravels.
-	7/17/15	DR194	1	0-10	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at massive gravels.
-	7/17/15	DR195	1	0-5	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at massive gravels.
-	7/17/15	DR196	1	0-13	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at massive gravels.
-	7/17/15	DR197	1	0-10	7.5YR 6/6	reddish yellow	Sandy Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at dense large cobbles.
-	7/17/15	DR198	1	0-15	7.5YR 6/6	reddish yellow	Sandy Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at dense large cobbles.
-	7/17/15	DR199	1	0-7	7.5YR 6/6	reddish yellow	Sandy Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at dense large cobbles.
-	6/17/15	DR20	1	0-20	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	7/17/15	DR200	1	0-10	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at massive gravels.
-	7/17/15	DR201	1	0-7	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at massive gravels.
-	7/20/15	DR202	1	0-45	10YR 6/6	brownish yellow	Clay Loam	5-10%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	DR203	1	0-25	10YR 6/4	light yellowish brown	Loam	1-5%	Pebbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/20/15	DR203	2	25-35	10YR 7/3	very pale brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/20/15	DR204	1	0-40	10YR 5/4	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	DR205	1	0-36	10YR 5/4	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/20/15	DR206	1	0-40	10YR 5/4	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/20/15	DR207	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/20/15	DR208	1	0-35	10YR 5/4	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	7/20/15	DR209	1	0-10	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact large cobbles.
-	7/20/15	DR210	1	0-10	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact large cobbles.
-	7/21/15	DR215	1	0-30	10YR 6/2	light brownish gray	Clay Loam	-	-	Negative	Terminated at compact soil.
-	7/21/15	DR216	1	0-10	10YR 6/2	light brownish gray	Clay Loam	-	-	Negative	Terminated at compact soil.
-	7/21/15	DR217	1	0-10	10YR 6/4	light yellowish brown	Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	7/21/15	DR217	2	10-30	7.5YR 6/4	light brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR223	1	0-35	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR224	1	0-30	10YR 5/2	grayish brown	Silty Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/22/15	DR225	1	0-30	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR226	1	0-50	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR227	1	0-35	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR228	1	0-35	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR229	1	0-35	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/22/15	DR230	1	0-30	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/17/15	DR231	1	0-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/17/15	DR232	1	0-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	Terminated at depth.
-	8/17/15	DR233	1	0-50	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/17/15	DR234	1	0-50	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/17/15	DR234	2	50-55	5YR 7/3	pink	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/17/15	DR235	1	0-20	7.5YR 6/4	light brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/17/15	DR236	1	0-10	5YR 6/6	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/17/15	DR236	1	0-20	7.5YR 6/4	light brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/17/15	DR238	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/17/15	DR238	1	0-10	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	
-	8/17/15	DR239	1	0-30	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/17/15	DR239	2	30-35	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/17/15	DR244	1	0-30	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/18/15	DR25	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	8/19/15	DR253	1	0-10	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/19/15	DR254	1	0-100	10YR 8/3	very pale brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/19/15	DR255	1	0-100	10YR 8/3	very pale brown	Sand	-	-	Negative	Terminated at depth.
-	8/19/15	DR256	1	0-30	7.5YR 5/4	brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at disturbance.
-	8/19/15	DR257	1	0-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/19/15	DR258	1	0-10	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/19/15	DR258	2	10-15	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/19/15	DR259	1	0-30	10YR 6/3	pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at large root.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/18/15	DR26	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	8/19/15	DR260	1	0-15	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	
-	8/19/15	DR260	2	15-20	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/19/15	DR261	1	0-10	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/19/15	DR262	1	0-100	10YR 7/3	very pale brown	Sandy Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	8/19/15	DR263	1	0-25	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered.
-	8/19/15	DR263	2	25-30	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/19/15	DR264	1	0-20	10YR 4/6	dark yellowish brown	Clay Loam	5-10%	Mottles	Negative	
-	8/19/15	DR264	2	20-25	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/19/15	DR265	1	0-30	7.5YR 7/6	reddish yellow	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/20/15	DR266	1	0-50	10YR 8/3	very pale brown	Silt	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/20/15	DR266	2	50-55	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/20/15	DR267	1	0-20	10YR 8/3	very pale brown	Silt	1-5%	Pebbles	Negative	
-	8/20/15	DR267	2	20-25	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/20/15	DR268	1	0-15	10YR 8/3	very pale brown	Silt	1-5%	Pebbles	Negative	
-	8/20/15	DR268	2	15-20	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/20/15	DR269	1	0-30	10YR 7/3	very pale brown	Sandy Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at disturbed.
-	8/20/15	DR270	1	0-10	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/20/15	DR271	1	0-65	5YR 7/3	pink	Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/20/15	DR271	2	65-100	10YR 6/4	light yellowish brown	Sand	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	8/20/15	DR272	1	0-30	10YR 7/3	very pale brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/21/15	DR273	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	8/21/15	DR274	1	0-20	5YR 7/6	reddish yellow	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	8/21/15	DR274	2	20-50	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/21/15	DR274	3	50-55	5YR 6/6	reddish yellow	Clay Loam	1-5%		Negative	No cultural material encountered. Terminated at basal clay.
-	8/21/15	DR276	1	0-25	10YR 6/2	light brownish gray	Sandy Clay Loam	1-5%	Mottles, Pebbles	Negative	No cultural material encountered.
-	8/21/15	DR276	2	25-30	5YR 5/6	yellowish red	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/21/15	DR277	1	0-20	10YR 6/2	light brownish gray	Sandy Clay Loam	1-5%	Mottles, Pebbles	Negative	
-	8/21/15	DR277	2	20-25	5YR 5/6	yellowish red	Clay Loam	5-10%	Mottles	Negative	Terminated at basal clay.
-	8/24/15	DR278	1	0-25	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/24/15	DR279	1	0-20	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	6/18/15	DR28	1	0-20	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/18/15	DR28	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	8/24/15	DR280	1	0-15	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/24/15	DR281	1	0-15	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/24/15	DR282	1	0-10	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/24/15	DR283	1	0-15	10YR 4/4	dark yellowish brown	Silt Loam	10-20%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/24/15	DR284	1	0-20	10YR 6/4	light yellowish brown	Silt Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/25/15	DR285	1	0-100	10YR 7/3	very pale brown	Silt	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	8/25/15	DR286	1	0-100	10YR 7/3	very pale brown	Silt	1-5%	Pebbles	Negative	Terminated at depth.
-	8/25/15	DR287	1	0-80	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at large vertical root.
-	8/25/15	DR288	1	0-50	7.5YR 8/3	pink	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at disturbed by existing pl.
-	8/25/15	DR289	1	0-100	10YR 7/3	very pale brown	Silt	1-5%	Pebbles	Negative	Terminated at depth.
-	8/25/15	DR290	1	0-50	10YR 8/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/25/15	DR290	2	50-55	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/25/15	DR291	1	0-30	10YR 8/3	very pale brown	Sandy Loam	-	-	Negative	
-	8/25/15	DR291	2	30-35	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/26/15	DR292	1	0-50	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/26/15	DR292	2	50-55	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	DR293	1	0-100	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	8/26/15	DR294	1	0-70	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/26/15	DR294	2	70-75	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/26/15	DR295	1	0-50	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/26/15	DR295	2	50-60	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/26/15	DR296	1	0-30	5YR 6/6	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	8/26/15	DR296	2	30-40	5YR 6/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	DR297	1	0-25	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/26/15	DR297	2	25-30	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/26/15	DR298	1	0-30	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/26/15	DR298	2	30-35	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/26/15	DR299	1	0-70	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/27/15	DR300	1	0-50	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/27/15	DR300	2	50-55	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	DR301	1	0-35	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/27/15	DR301	2	35-40	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/27/15	DR302	1	0-10	10YR 7/6	yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	8/27/15	DR302	2	10-60	10YR 8/1	white	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	8/27/15	DR302	3	60-65	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	DR302	1	0-50	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/27/15	DR302	2	50-55	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/27/15	DR304	1	0-30	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/27/15	DR304	2	30-35	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/27/15	DR305	1	0-70	10YR 8/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	8/27/15	DR305	2	70-75	5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/28/15	DR306	1	0-30	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/28/15	DR307	1	0-30	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/28/15	DR309	1	0-30	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/28/15	DR310	1	0-20	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/28/15	DR312	1	0-10	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/28/15	DR312	1	0-30	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
-	6/18/15	DR32	1	0-20	10YR 5/6	yellowish brown	Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/19/15	DR33	1	0-10	10YR 4/4	dark yellowish brown	Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/19/15	DR34	1	0-10	10YR 4/4	dark yellowish brown	Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/19/15	DR35	1	0-10	10YR 4/4	dark yellowish brown	Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/19/15	DR36	1	0-10	7.5YR 5/6	strong brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	DR37	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	DR38	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/22/15	DR39	1	0-15	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR40	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	10/26/15	DR400	1	0-50	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/26/15	DR400	2	50-60	10YR 6/1	gray	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/26/15	DR401	1	0-25	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/26/15	DR401	2	25-35	5YR 5/8	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/26/15	DR402	1	0-50	10YR 6/3	pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/26/15	DR402	2	50-60	5YR 7/3	pink	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/26/15	DR403	1	0-100	10YR 6/3	pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	10/26/15	DR405	1	0-60	10YR 6/3	pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	10/26/15	DR405	2	60-65	5YR 7/3	pink	Clay Loam	-	-	Negative	Terminated at basal clay.
-	10/26/15	DR406	1	0-35	10YR 6/3	pale brown	Sandy Loam	1-5%	Pebbles	Negative	
-	10/26/15	DR406	2	35-40	5YR 7/3	pink	Clay Loam	-	-	Negative	Terminated at basal clay.
-	10/26/15	DR406	1	0-100	10YR 6/3	pale brown	Sandy Loam	1-5%	Pebbles	Negative	Terminated at depth.
-	6/22/15	DR41	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	10/27/15	DR413	1	0-40	5YR 5/8	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/27/15	DR414	1	0-40	7.5YR 6/4	light brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	10/27/15	DR414	2	40-45	5YR 5/8	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/27/15	DR415	1	0-50	10YR 6/6	brownish yellow	Sandy Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	10/27/15	DR416	1	0-25	10YR 4/4	dark yellowish brown	Loam	-	-	Negative	No cultural material encountered.
-	10/27/15	DR416	2	25-35	5YR 5/8	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/27/15	DR417	1	0-50	10YR 6/3	pale brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	DR424	1	0-30	5YR 4/4	reddish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	DR425	1	0-100	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
-	10/29/15	DR426	1	0-100	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	Terminated at depth.
-	6/22/15	DR44	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR45	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR46	1	0-20	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR47	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/22/15	DR48	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR49	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	12/1/15	DR500	1	0-40	10YR 5/6	yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR500	2	40-50	7.5YR 5/8	strong brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	DR501	1	0-15	10YR 5/6	yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR501	2	15-20	7.5YR 5/6	strong brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	12/1/15	DR501	3	20-50	10YR 4/6	dark yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR501	4	50-60	10YR 5/6	yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR501	5	60-65	7.5YR 5/6	strong brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	DR502	1	0-40	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR502	2	40-50	10YR 4/8		Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	DR503	1	0-100	10YR 5/6	yellowish brown	Sand	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	12/1/15	DR504	1	0-10	10YR 5/6	yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	
-	12/1/15	DR504	2	10-15	7.5YR 5/6	strong brown	Clay Loam	-	-	Negative	
-	12/1/15	DR504	3	15-30	10YR 4/6	dark yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/1/15	DR504	4	30-35	10YR 5/6	yellowish brown	Loamy Sand	1-5%	Pebbles	Negative	
-	12/1/15	DR504	5	35-40	7.5YR 5/6	strong brown	Clay Loam	-	-	Negative	Terminated at basal clay.
-	12/1/15	DR505	1	0-20	5YR 5/6	yellowish red	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	12/1/15	DR505	2	20-30	10YR 5/4	yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	12/1/15	DR505	3	30-40	5YR 5/6	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	DR506	1	0-20	5YR 5/6	yellowish red	Clay Loam	1-5%	Gravels, Pebbles	Negative	
-	12/1/15	DR506	2	20-40	10YR 5/4	yellowish brown	Sandy Loam	-	-	Negative	
-	12/1/15	DR506	3	40-50	5YR 5/6	yellowish red	Clay Loam	-	-	Negative	Terminated at basal clay.
-	12/1/15	DR507	1	0-20	5YR 5/6	yellowish red	Clay Loam	1-5%	Gravels, Pebbles	Negative	
-	12/1/15	DR507	2	20-60	10YR 5/4	yellowish brown	Sandy Loam	-	-	Negative	
-	12/1/15	DR507	3	60-70	5YR 5/6	yellowish red	Clay Loam	-	-	Negative	Terminated at basal clay.
-	12/1/15	DR508	1	0-30	10YR 6/1	gray	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	DR509	1	0-30	10YR 4/3	brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	12/2/15	DR509	2	30-40	5YR 4/6	yellowish red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/2/15	DR510	1	0-20	10YR 4/3	brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	
-	12/2/15	DR510	2	20-30	5YR 4/6	yellowish red	Clay Loam	1-5%	Gravels	Negative	Terminated at basal clay.
-	12/2/15	DR511	1	0-50	10YR 4/6	dark yellowish brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at water table.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/2/15	DR512	1	0-30	10YR 4/3	brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	12/2/15	DR512	2	30-35	5YR 4/6	yellowish red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/2/15	DR513	1	0-25	10YR 4/3	brown	Sandy Loam	1-5%	Gravels, Pebbles	Negative	
-	12/2/15	DR513	2	25-35	5YR 4/6	yellowish red	Clay Loam	1-5%	Gravels	Negative	Terminated at basal clay.
-	12/2/15	DR514	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	DR515	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/2/15	DR516	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/4/15	DR517	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/4/15	DR518	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/5/15	DR519	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/5/15	DR520	1	0-100	10YR 7/3	very pale brown	Sandy Loam		Gravels	Negative	No cultural material encountered. Terminated at depth.
-	12/5/15	DR521	1	0-45	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	12/5/15	DR521	2	45-55	7.5YR 6/3	light brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/5/15	DR522	1	0-80	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	
-	12/5/15	DR522	2	80-90	7.5YR 6/3	light brown	Clay Loam	-	-	Negative	Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/5/15	DR523	1	0-35	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	
-	12/5/15	DR523	2	35-45	7.5YR 6/3	light brown	Clay Loam	-	-	Negative	Terminated at basal clay.
-	12/5/15	DR524	1	0-45	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	
-	12/5/15	DR524	2	45-55	7.5YR 6/3	light brown	Clay Loam	-	-	Negative	Terminated at basal clay.
-	12/5/15	DR525	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	12/5/15	DR526	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact cobbles.
-	12/5/15	DR527	1	0-30	10YR 4/4	dark yellowish brown	Silty Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/5/15	DR528	1	0-30	10YR 4/4	dark yellowish brown	Silty Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	6/22/15	DR54	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR55	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR56	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/22/15	DR57	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR58	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	DR59	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR60	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/23/15	DR61	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
-	6/23/15	DR61	2	10-30	7.5YR 5/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	DR62	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR63	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR64	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR65	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	
-	6/23/15	DR65	2	5-30	7.5YR 5/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR66	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR67	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR68	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/23/15	DR69	1	0-20	10YR 5/6	yellowish brown	Clay Loam	5-10%	Calcium Carbonate, Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	DR70	1	0-30	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	DR71	1	0-15	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/24/15	DR72	1	0-15	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/24/15	DR73	1	0-20	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Pebbles	Negative	No cultural material encountered.
-	6/24/15	DR73	2	20-40	10YR 6/3	pale brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/24/15	DR76	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/24/15	DR77	1	0-30	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/24/15	DR78	1	0-30	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	6/25/15	DR87	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/25/15	DR88	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	6/26/15	DR89	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	DR91	1	0-15	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
-	6/26/15	DR92	1	0-25	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
-	6/26/15	DR93	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
-	6/26/15	DR94	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/26/15	DR95	1	0-10	7.5YR 4/6	strong brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
-	6/26/15	DR95	2	10-30	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	DR96	1	0-10	7.5YR 4/6	strong brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	
-	6/26/15	DR96	2	10-35	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/26/15	DR97	1	0-10	7.5YR 4/6	strong brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	
-	6/26/15	DR97	2	10-25	7.5YR 6/4	light brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	KH01	1	0-35	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at large rocks and compact soil.
-	6/29/15	KH02	-	-	-	-	-	-	-	-	Not excavated, bedrock.
-	6/29/15	KH04	1	0-15	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.
-	6/29/15	KH05	1	0-5	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels	Negative	No cultural material encountered.
-	6/29/15	KH05	2	5-30	10YR 4/2	dark grayish brown	Clay	-	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	KH06	1	0-5	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels	Negative	
-	6/29/15	KH06	2	5-35	10YR 4/2	dark grayish brown	Clay	-	Cobbles, Large Rock Frags	Negative	Terminated at basal clay.
-	6/29/15	KH07	1	0-10	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels	Negative	
-	6/29/15	KH07	2	10-30	10YR 4/2	dark grayish brown	Clay	-	Cobbles, Large Rock Frags	Negative	Terminated at basal clay.
-	6/30/15	KH10	1	0-30	10YR 4/2	dark grayish brown	Clay	-	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	KH11	1	0-20	10YR 4/4	dark yellowish brown	Clay	-	Cobbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/30/15	KH11	2	20-30	10YR 4/2	dark grayish brown	Clay	-	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	KH12	1	0-30	10YR 4/2	dark grayish brown	Clay	-	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	KH13	1	0-35	10YR 4/2	dark grayish brown	Clay	-	None	Negative	Terminated at basal clay.
-	6/30/15	KH14	1	0-35	10YR 4/2	dark grayish brown	Clay	-	None	Negative	Terminated at basal clay.
-	7/1/15	KH15	1	0-35	10YR 4/2	dark grayish brown	Clay	1-5%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at basal clay.
-	7/2/15	KH16	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	-	None	Negative	No cultural material encountered.
-	7/2/15	KH16	2	30-60	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	6/22/15	KS01	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	KS02	1	0-15	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	Terminated at bedrock.
-	6/22/15	KS03	1	0-20	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	Terminated at bedrock.
-	6/22/15	KS04	1	0-5	10YR 2/2	very dark brown	Clay Loam	10-20%	Cobbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	KS05	1	0-20	10YR 2/2	very dark brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	KS09	1	0-10	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	KS10	1	0-3	10YR 2/1	black	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	6/22/15	KS11	1	0-3	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/25/15	KS112	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/25/15	KS113	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	8/25/15	KS114	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	Terminated at compact soil.
-	8/25/15	KS115	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/25/15	KS116	1	0-5	10YR 3/1	very dark gray	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/25/15	KS117	1	0-5	10YR 3/1	very dark gray	Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.
-	8/25/15	KS118	1	0-5	5YR 2.5/2	dark reddish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	8/25/15	KS119	1	0-10	5YR 2.5/2	dark reddish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
-	6/22/15	KS12	1	0-5	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	8/25/15	KS122	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	8/26/15	KS123	1	0-5	10YR 3/1	very dark gray	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/26/15	KS124	1	0-5	10YR 3/1	very dark gray	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/26/15	KS126	1	0-5	10YR 3/1	very dark gray	Clay Loam	-	Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/26/15	KS127	1	0-5	10YR 3/1	very dark gray	Clay Loam	-	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS128	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	8/27/15	KS128	2	5-20	10YR 3/2	very dark grayish brown	Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at degrading sterile soil.
-	8/27/15	KS129	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	8/27/15	KS129	2	5-20	10YR 3/2	very dark grayish brown	Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at degrading sterile soil.
-	6/22/15	KS13	1	0-4	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	8/27/15	KS130	1	0-8	10YR 3/1	very dark gray	Clay Loam	-	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS131	1	0-8	10YR 3/1	very dark gray	Clay Loam	-	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS132	1	0-8	10YR 3/1	very dark gray	Clay Loam	-	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS133	1	0-8	10YR 3/1	very dark gray	Clay Loam	-	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS134	1	0-10	10YR 3/1	very dark gray	Clay Loam	-		Negative	No cultural material encountered. Terminated at compact soil.
-	8/28/15	KS134	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/27/15	KS135	1	0-10	10YR 3/1	very dark gray	Clay Loam	-		Negative	No cultural material encountered. Terminated at compact soil.
-	8/27/15	KS135	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/28/15	KS136	1	0-5	10YR 3/1	very dark gray	Clay Loam	-		Negative	Terminated at compact soil.
-	8/28/15	KS137	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/28/15	KS137	1	0-10	10YR 3/1	very dark gray	Clay Loam	-		Negative	No cultural material encountered. Terminated at compact soil.
-	8/28/15	KS138	1	0-10	10YR 2/2	very dark brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/22/15	KS14	1	0-5	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at bedrock.
-	8/31/15	KS142	1	0-20	10YR 5/3	brown	Clay Loam	>20%	Calcium Carbonate, Gravels, Large Rock Frags	Negative	
-	8/31/15	KS143	1	0-25	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	KS144	1	0-25	10YR 5/4	yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	KS145	1	0-20	10YR 5/4	yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	8/31/15	KS146	1	0-25	10YR 4/3	brown	Loam		Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	KS147	1	0-10	10YR 3/1	very dark gray	Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/1/15	KS148	1	0-25	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	KS149	1	0-25	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Gravels, Large Rock Frags, Pebbles	Negative	Terminated at compact soil.
-	9/1/15	KS150	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	KS151	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	KS152	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	KS153	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Gravels, Large Rock Frags	Negative	Terminated at compact soil.
-	9/2/15	KS161	1	0-10	10YR 4/3	brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS162	1	0-10	10YR 4/3	brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS163	1	0-10	10YR 4/3	brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS164	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Cobbles, Pebbles	Negative	No cultural material encountered.
-	9/2/15	KS164	2	10-25	10YR 4/3	brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS165	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	10-20%	Cobbles, Pebbles	Negative	No cultural material encountered.
-	9/2/15	KS165	2	10-25	10YR 4/3	brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/2/15	KS166	1	0-25	10YR 6/2	light brownish gray	Silty Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS167	1	0-15	10YR 4/3	brown	Silty Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS168	1	0-15	10YR 4/3	brown	Silty Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	KS169	1	0-20	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	6/22/15	KS17	1	0-5	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	9/3/15	KS170	1	0-20	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	KS175	1	0-15	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	KS176	1	0-15	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	KS177	1	0-15	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	KS178	1	0-5	10YR 5/2	grayish brown	Loam	-	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at disturbed.
-	9/9/15	KS179	1	1-15	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/22/15	KS18	1	0-20	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS180	1	1-15	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/9/15	KS181	1	1-15	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS182	1	0-5	10YR 2/1	black	Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS182	1	0-15	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at compact soil.
-	9/9/15	KS183	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS184	1	0-15	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS185	1	0-15	10YR 2/1	black	Clay Loam	1-5%	Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	KS186	1	0-20	10YR 2/1	black	Clay Loam	1-5%	Gravels, Large Rock Frags, Pebbles	Negative	Terminated at compact soil.
-	9/10/15	KS187	1	0-25	10YR 2/1	black	Clay Loam	-	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	KS188	1	0-25	10YR 2/1	black	Clay Loam	-	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	KS189	1	0-30	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	6/22/15	KS19	1	0-15	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	KS190	1	0-35	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/11/15	KS192	1	0-3	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/11/15	KS193	1	0-25	10YR 2/1	black	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/11/15	KS194	1	0-25	10YR 2/1	black	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS195	1	0-15	10YR 3/2	very dark grayish brown	Silty Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at disturbed.
-	9/14/15	KS196	1	0-15	10YR 3/2	very dark grayish brown	Silty Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at disturbed.
-	9/14/15	KS197	1	0-20	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Large Rock Frags, Pebbles	Negative	No cultural material encountered.
-	9/14/15	KS197	2	20-25	10YR 2/2	very dark brown	Silty Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS198	1	0-20	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Large Rock Frags, Pebbles	Negative	No cultural material encountered.
-	9/14/15	KS198	2	20-25	10YR 2/2	very dark brown	Silty Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS199	1	0-20	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Large Rock Frags, Pebbles	Negative	No cultural material encountered.
-	9/14/15	KS199	2	20-25	10YR 2/2	very dark brown	Silty Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS200	1	0-10	10YR 4/1	dark gray	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS201	1	0-15	10YR 4/1	dark gray	Clay Loam	1-5%	Large Rock Frags	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	KS202	1	0-25	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/14/15	KS203	1	0-25	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	KS204	1	0-15	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	KS205	1	0-10	10YR 4/1	dark gray	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	KS209	1	0-15	10YR 5/2	grayish brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	KS210	1	0-15	10YR 5/2	grayish brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/21/15	KS214	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/21/15	KS215	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/21/15	KS216	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/25/15	KS350	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/25/15	KS351	1	0-15	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/13/15	KS500	1	0-5	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	11/13/15	KS507	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/13/15	KS508	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/13/15	KS509	1	0-8	10YR 2.5/2		Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	11/13/15	KS510	1	0-10	10YR 2.5/2		Clay	1-5%	Gravels	Negative	Terminated at basal clay.
-	11/17/15	KS515	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS516	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS517	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS518	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS519	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS519	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS520	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	KS521	1	0-5	10YR 2/1	black	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	12/2/15	KS600	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	KS601	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.
-	12/2/15	KS604	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	KS605	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/2/15	KS606	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	KS607	1	0-5	2.5Y 5/2	grayish brown	Clay		-	Negative	No cultural material encountered. Terminated at compact soil.
-	11/30/15	MC01	1	0-30	10YR 6/3	pale brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at water table.
-	11/30/15	MC02	1	0-20	7.5YR 5/6	strong brown	Sandy Clay	>20%	Mottles	Negative	No cultural material encountered.
-	11/30/15	MC02	2	20-50	10YR 4/2	dark grayish brown	Sand	1-5%	Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	11/30/15	MC03	1	0-15	7.5YR 5/6	strong brown	Sandy Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	11/30/15	MC04	1	0-30	10YR 5/2	grayish brown	Sandy Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at hydric soil.
-	11/30/15	MC05	1	0-100	10YR 7/3	very pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	11/30/15	MC06	1	0-50	10YR 5/3	brown	Sand	1-5%	Clay nodules	Negative	No cultural material encountered. Terminated at water table.
-	11/30/15	MC07	1	0-50	10YR 5/4	yellowish brown	Sand	5-10%	Gravels	Negative	No cultural material encountered. Terminated at water table.
-	11/30/15	MC08	1	0-30	10YR 6/3	pale brown	Sand	1-5%	Mottles	Negative	No cultural material encountered. Terminated at water table.
-	11/30/15	MC09	1	0-30	10YR 6/1	gray	Clay Loam	-	-	Negative	Terminated at compact soil.
-	12/1/15	MC10	1	0-15	7.5YR 4/4	brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	12/1/15	MC10	2	15-25	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/1/15	MC11	1	0-30	7.5YR 4/4	brown	Sandy Clay	-	-	Negative	
-	12/1/15	MC11	2	30-35	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	Terminated at basal clay.
-	12/1/15	MC12	1	0-50	10YR 5/4	yellowish brown	Sandy Clay	5-10%	Gravels	Negative	No cultural material encountered. Terminated at hydric soil.
-	12/1/15	MC13	1	0-30	10YR 4/4	dark yellowish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/1/15	MC14	1	0-40	10YR 5/4	yellowish brown	Sand	>20%	Mottles	Negative	No cultural material encountered. Terminated at water table.
-	12/1/15	MC15	1	0-30	10YR 3/2	very dark grayish brown	Clay	10-20%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/1/15	MC16	1	0-30	10YR 3/2	very dark grayish brown	Clay	10-20%	Cobbles	Negative	Terminated at compact soil.
-	12/1/15	MC17	1	0-30	10YR 3/1	very dark gray	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/1/15	MC18	1	0-30	10YR 3/1	very dark gray	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	MC19	1	0-60	10YR 3/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	MC20	1	0-50	10YR 3/4	dark yellowish brown	Clay Loam	-	-	Negative	Terminated at compact soil.
-	12/4/15	MC21	1	0-60	10YR 5/3	brown	Sand	5-10%	Nodules of clay subsoil	Negative	No cultural material encountered.
-	12/4/15	MC21	2	60-70	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/4/15	MC22	1	0-25	7.5YR 3/4	dark brown	Sand	10-20%	Nodules of clay subsoil	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/4/15	MC22	2	25-30	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/4/15	MC23	1	0-100	7.5YR 4/4	brown	Sand	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	12/4/15	MC24	1	0-40	7.5YR 4/4	brown	Sand	1-5%	Pebbles	Negative	No cultural material encountered.
-	12/4/15	MC24	2	40-50	10YR 5/8	yellowish brown	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	12/4/15	MC25	1	0-40	7.5YR 4/4	brown	Sand	1-5%	Pebbles	Negative	
-	12/4/15	MC25	2	40-45	10YR 5/8	yellowish brown	Sandy Clay	1-5%	Pebbles	Negative	Terminated at basal clay.
-	12/4/15	MC26	1	0-25	7.5YR 5/4	brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.
-	12/4/15	MC26	2	25-30	5YR 4/4	reddish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/4/15	MC27	1	0-25	7.5YR 5/4	brown	Sand	1-5%	Gravels	Negative	
-	12/4/15	MC27	2	25-30	5YR 4/4	reddish brown	Sandy Clay	-	-	Negative	Terminated at basal clay.
-	12/4/15	MC28	1	0-30	10YR 3/2	very dark grayish brown	Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/4/15	MC29	1	0-30	10YR 3/2	very dark grayish brown	Clay	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	12/4/15	MC30	1	0-30	10YR 3/2	very dark grayish brown	Clay	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	12/7/15	MC31	1	0-40	10YR 3/4	dark yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	12/7/15	MC32	1	0-40	10YR 3/4	dark yellowish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at dense roots.
-	12/7/15	MC33	1	0-30	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/7/15	MC33	2	30-35	7.5YR 5/6	strong brown	Sandy Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	12/7/15	MC34	1	0-80	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at water table.
-	12/7/15	MC35	1	0-40	10YR 3/3	dark brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at hydric soil.
-	12/7/15	MC36	1	0-30	10YR 3/3	dark brown	Sandy Clay	10-20%	Mottles	Negative	Terminated at hydric soil.
-	8/31/15	MCC01	1	0-15	7.5YR 4/6	strong brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/31/15	MCC01	2	15-25	7.5YR 4/6	strong brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MCC02	1	0-35	7.5YR 7/3	pink	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/31/15	MCC02	2	35-45	5YR 6/8	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MCC03	1	0-35	7.5YR 7/3	pink	Sandy Loam	-	-	Negative	
-	8/31/15	MCC03	2	35-45	5YR 6/8	reddish yellow	Sandy Clay Loam	-	-	Negative	Terminated at basal clay.
-	8/31/15	MCC04	1	0-45	7.5YR 7/3	pink	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/31/15	MCC04	2	40-50	5YR 6/8	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MCC05	1	0-10	7.5YR 6/3	light brown	Sand	-	-	Negative	No cultural material encountered.
-	8/31/15	MCC05	2	10-20	7.5YR 5/8	strong brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	8/31/15	MCC09	1	0-100	7.5YR 5/8	strong brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/31/15	MCC10	1	0-15	7.5YR 6/8	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/1/15	MCC11	1	0-30	7.5YR 5/8	strong brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	9/1/15	MCC11	2	30-40	2.5YR 4/8	red	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/1/15	MCC12	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/1/15	MCC12	2	30-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	MCC13	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	
-	9/1/15	MCC13	2	30-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	9/1/15	MCC14	1	0-35	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	
-	9/1/15	MCC14	2	35-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	9/1/15	MCC15	1	0-45	10YR 4/1	dark gray	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	MCC16	1	0-40	10YR 4/1	dark gray	Clay	1-5%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	9/1/15	MCC17	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	
-	9/1/15	MCC17	2	30-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	9/2/15	MCC18	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	MCC19	1	0-35	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	9/2/15	MCC20	1	0-35	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	9/2/15	MCC21	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/2/15	MCC22	1	0-40	10YR 4/2	dark grayish brown	Silt Loam	-	-	Negative	No cultural material encountered.
-	9/2/15	MCC22	2	40-50	10YR 5/8	yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/2/15	MCC23	1	0-30	10YR 4/2	dark grayish brown	Silt Loam	-	-	Negative	
-	9/2/15	MCC23	2	30-40	10YR 5/8	yellowish brown	Silty Clay	-	-	Negative	Terminated at basal clay.
-	9/2/15	MCC24	1	0-30	7.5YR 5/8	strong brown	Silt Loam	-	-	Negative	No cultural material encountered.
-	9/2/15	MCC24	2	30-40	10YR 3/1	very dark gray	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/2/15	MCC25	1	0-30	7.5YR 5/8	strong brown	Silt Loam	-	-	Negative	
-	9/2/15	MCC25	2	30-40	10YR 3/1	very dark gray	Sandy Clay Loam	-	-	Negative	Terminated at basal clay.
-	9/2/15	MCC26	1	0-25	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	9/2/15	MCC27	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	
-	9/2/15	MCC28	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	MCC29	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	9/2/15	MCC30	1	0-30	10YR 4/2	dark grayish brown	Clay	-	-	Negative	Terminated at compact soil.
-	9/2/15	MCC31	1	0-35	7.5YR 5/6	strong brown	Silt Loam	-	-	Negative	No cultural material encountered.
-	9/2/15	MCC31	2	35-40	10YR 3/1	very dark gray	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/3/15	MCC32	1	0-25	7.5YR 6/6	reddish yellow	Silt	-	-	Negative	No cultural material encountered.
-	9/3/15	MCC32	2	25-35	5YR 5/8	yellowish red	Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/3/15	MCC33	1	0-10	7.5YR 6/6	reddish yellow	Silt	-	-	Negative	
-	9/3/15	MCC33	2	10-20	5YR 5/8	yellowish red	Clay Loam	1-5%	Mottles	Negative	Terminated at basal clay.
-	9/3/15	MCC34	1	0-25	10YR 3/1	very dark gray	Clay	-	Mottles	Negative	No cultural material encountered. Terminated at hydric wetland soil.
-	9/3/15	MCC35	1	0-25	10YR 3/1	very dark gray	Clay	-	Mottles	Negative	Terminated at hydric wetland soil.
-	9/4/15	MCC36	1	0-25	10YR 3/1	very dark gray	Clay Loam	>20%	Mottles	Negative	No cultural material encountered. Terminated at disturbed.
-	9/3/15	MCC40	1	0-15	10YR 4/2	dark grayish brown	Silt Loam	-	-	Negative	No cultural material encountered.
-	9/3/15	MCC40	2	15-20	7.5YR 4/6	strong brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/6/15	MN01	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	7/6/15	MN04	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	7/6/15	MN05	1	0-50	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
-	7/6/15	MN06	1	0-50	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
-	7/6/15	MN06	1	0-50	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
-	7/6/17	MN06	1	0-50	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
-	7/6/15	MN07	1	0-15	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
-	7/7/15	MN08	1	0-40	10YR 5/1	gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/7/15	MN09	1	0-60	10YR 5/1	gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/7/15	MN10	1	0-40	10YR 5/1	gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/4/15	MN100	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MN101	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MN102	1	0-100	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/4/15	MN104	1	0-30	10YR 5/2	grayish brown	Sandy Loam	5-10%	Mottles	Negative	No cultural material encountered.
-	8/4/15	MN104	2	30-40	10YR 5/6	yellowish brown	Sandy Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/7/15	MN11	1	0-40	10YR 5/1	gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/5/15	MN112	1	0-30	10YR 5/2	grayish brown	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/5/15	MN113	1	0-30	10YR 4/4	dark yellowish brown	Silt Loam	1-5%	Organics	Negative	No cultural material encountered. Terminated at basal clay.
-	8/5/15	MN115	1	0-45	10YR 5/2	grayish brown	Sandy Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at gravel.
-	7/7/15	MN12	1	0-40	10YR 5/1	gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MN122	1	0-100	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/6/15	MN124	1	0-50	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/6/15	MN124	2	50-60	10YR 5/6	yellowish brown	Sandy Clay		Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/7/15	MN13	1	0-40	10YR 2/1	black	Silty Clay	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at dense gravel.
-	8/6/15	MN131	1	0-10	10YR 5/3	brown	Silt Loam	1-5%	Gravels, Mottles	Negative	No cultural material encountered.
-	8/6/15	MN131	2	10-30	10YR 5/6	yellowish brown	Clay Loam	1-5%	Mottles, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MN133	1	0-30	7.5YR 5/8	strong brown	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MN134	1	0-20	10YR 4/4	dark yellowish brown	Silty Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/6/15	MN134	2	20-30	10YR 5/8	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MN139	1	0-10	10YR 5/1	gray	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/7/15	MN14	1	0-40	10YR 2/1	black	Silty Clay	-	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at dense gavels.
-	8/6/15	MN140	1	0-10	10YR 5/1	gray	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/7/15	MN141	1	0-30	7.5YR 6/8	reddish yellow	Sandy Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/7/15	MN142	1	0-100	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/7/15	MN144	1	0-30	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/7/15	MN144	2	30-40	7.5YR 6/8	reddish yellow	Sandy Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/10/15	MN147	1	0-40	10YR 5/8	yellowish brown	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/10/15	MN149	1	0-10	-	-	-	-	-	-	No data available.
-	8/10/15	MN149	2	10-25	-	-	-	-	-	-	No data available.
-	7/8/15	MN15	1	0-40	10YR 5/1	gray	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/10/15	MN154	1	0-100	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/10/15	MN157	1	0-25	10YR 5/3	brown	Silt Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/11/15	MN158	1	0-30	10YR 5/3	brown	Sandy Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/11/15	MN159	1	0-30	10YR 5/3	brown	Silt Loam	1-5%	Mottles	Negative	No cultural material encountered.
-	8/11/15	MN159	2	30-100	10YR 5/2	grayish brown	Sandy Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/11/15	MN160	1	0-30	10YR 5/3	brown	Sand	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/11/15	MN161	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/12/15	MN164	1	0-100	10YR 5/2	grayish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/12/15	MN166	1	0-30	10YR 5/6	yellowish brown	Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/12/15	MN167	1	0-50	10YR 4/6	dark yellowish brown	Sandy Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	MN17	1	0-30	10YR 4/6	dark yellowish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/12/15	MN171	1	0-40	10YR 5/2	grayish brown	Silt Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/13/15	MN174	1	0-100	10YR 5/1	gray	Sandy Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at depth.
-	8/14/15	MN187	1	0-40	10YR 7/2	light gray	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/14/15	MN189	1	0-100	10YR 7/2	light gray	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	7/8/15	MN19	1	0-30	10YR 5/1	gray	Silty Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/17/15	MN194	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/17/15	MN197	1	0-30	10YR 5/6	yellowish brown	Silty Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/17/15	MN202	1	0-15	10YR 5/2	grayish brown	Loamy Sand	1-5%	Gravels	Negative	No cultural material encountered.
-	8/17/15	MN202	2	15-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/17/15	MN210	1	0-30	10YR 5/6	yellowish brown	Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/30/15	MN217	1	0-30	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/30/15	MN218	1	0-30	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/19/15	MN222	1	0-100	10YR 5/2	grayish brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/19/15	MN225	1	0-30	10YR 5/6	yellowish brown	Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/19/15	MN231	1	0-30	10YR 5/3	brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/20/15	MN234	1	0-50	10YR 5/6	yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/20/15	MN236	1	0-100	10YR 5/6	yellowish brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	7/9/15	MN24	1	0-30	10YR 4/1	dark gray	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/21/15	MN240	1	0-100	10YR 5/3	brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/21/15	MN243	1	0-30	7.5YR 7/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/24/15	MN245	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at dense gravels.
-	8/25/15	MN253	1	0-10	10YR 5/2	grayish brown	Silt Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/25/15	MN254	1	0-100	10YR 5/3	brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/26/15	MN264	1	0-30	7.5YR 5/6	strong brown	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/27/15	MN267	1	0-50	7.5YR 5/6	strong brown	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	MN268	1	0-100	10YR 5/3	brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/28/15	MN274	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MN283	1	0-20	7.5YR 4/6	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	8/31/15	MN283	2	20-25	7.5YR 5/6	strong brown	Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MN285	1	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	-	Negative	No cultural material encountered.
-	8/31/15	MN285	2	50-60	7.5YR 5/6	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	MN292	1	0-100	7.5YR 6/8	reddish yellow	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
-	9/1/15	MN293	1	0-50	7.5YR 5/8	strong brown	Sandy Loam	1-5%	Gravels, None	Negative	No cultural material encountered. Terminated at basal clay.
-	9/1/15	MN294	1	0-40	10YR 3/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	MN295	1	0-35	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/1/15	MN295	2	35-45	10YR 3/1	very dark gray	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/10/15	MN30	1	0-30	10YR 5/1	gray	Silty Clay	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/2/15	MN304	1	0-60	7.5YR 5/8	strong brown	Loamy Sand	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/2/15	MN304	2	60-70	10YR 4/1	dark gray	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/3/15	MN315	1	0-30	10YR 5/6	yellowish brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at disturbed.
-	9/3/15	MN316	1	0-30	10YR 7/2	light gray	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/3/15	MN318	1	0-30	10YR 4/1	dark gray	Clay Loam	10-20%	Mottles, None	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MN326	1	0-30	7.5YR 5/6	strong brown	Loamy Sand	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MN329	1	0-25	10YR 4/1	dark gray	Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MN332	1	0-50	10YR 5/2	grayish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/9/15	MN333	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MN335	1	0-30	10YR 4/4	dark yellowish brown	Sandy Clay	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at dense gravels.
-	7/10/15	MN34	1	0-10	10YR 5/1	gray	Silty Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MN340	1	0-30	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	9/9/15	MN340	2	30-40	10YR 4/6	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/10/15	MN342	1	0-25	10YR 5/2	grayish brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/10/15	MN345	1	0-100	7.5YR 5/4	brown	Loamy Sand	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at depth.
-	9/10/15	MN348	1	0-30	7.5YR 6/8	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/11/15	MN350	1	0-100	7.5YR 3/2	dark brown	Loamy Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	9/11/15	MN355	1	0-35	7.5YR 4/6	strong brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/11/15	MN358	1	0-20	7.5YR 5/6	strong brown	Sandy Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/10/15	MN36	1	0-35	10YR 5/1	gray	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/27/15	MN39	1	0-30	10YR 5/1	gray	Silty Clay Loam	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/27/15	MN40	1	0-50	10YR 5/1	gray	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered.
-	7/27/15	MN40	2	50-60	10YR 5/1	gray	Silty Clay Loam	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	MN400	1	0-30	10YR 3/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered.
-	10/28/15	MN400	2	30-45	10YR 5/4	yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	MN401	1	0-45	10YR 5/3	brown	Loamy Sand	-	-	Negative	No cultural material encountered.

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/28/15	MN401	2	45-50	7.5YR 6/8	reddish yellow	Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	10/28/15	MN402	1	0-35	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN403	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN404	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN405	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN406	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN407	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN408	1	0-36	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/28/15	MN409	1	0-30	10YR 3/3	dark brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	7/27/15	MN41	1	0-40	10YR 5/1	gray	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/29/15	MN410	1	0-60	10YR 4/6	dark yellowish brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	MN411	1	0-35	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	10/29/15	MN412	1	0-35	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/29/15	MN413	1	0-30	10YR 2/1	black	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at dense gravels.
-	10/30/15	MN416	1	0-30	10YR 4/6	dark yellowish brown	Loamy Sand	5-10%	Cobbles, Gravels	Negative	No cultural material encountered.
-	10/30/15	MN416	2	30-40	7.5YR 6/8	reddish yellow	Clay Loam	5-10%	Gravels, Mottles, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/27/15	MN45	1	0-10	10YR 5/1	gray	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MN52	1	0-10	10YR 5/1	gray	Silt Loam	10-20%	Calcium Carbonate, Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MN53	1	0-10	10YR 5/1	gray	Silt Loam	10-20%	Calcium Carbonate, Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MN54	1	0-35	10YR 3/1	very dark gray	Sandy Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MN55	1	0-10	10YR 5/6	yellowish brown	Silty Clay	1-5%	Calcium Carbonate, Mn and Fe inclusions	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/28/15	MN56	1	0-10	10YR 5/6	yellowish brown	Silty Clay	1-5%	Calcium Carbonate, Mn and Fe inclusions	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MN60	1	0-20	10YR 5/6	yellowish brown	Silty Clay	5-10%	Calcium Carbonate, Fe inclusions	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MN61	1	0-5	10YR 5/1	gray	Loamy Sand	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MN62	1	0-40	10YR 5/1	gray	Loamy Sand	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MN67	1	0-45	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MN72	1	0-70	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/30/15	MN73	1	0-50	10YR 5/6	yellowish brown	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/30/15	MN74	1	0-25	10YR 5/1	gray	Silt Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MN75	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/31/15	MN75	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/31/15	MN76	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/31/15	MN76	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/31/15	MN77	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/31/15	MN77	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/31/15	MN78	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/31/15	MN78	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/31/15	MN79	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/31/15	MN79	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/31/15	MN80	1	0-40	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered.
-	7/31/15	MN80	2	40-60	10YR 4/4	dark yellowish brown	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MN81	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MN82	1	0-15	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/31/15	MN82	2	15-30	10YR 2/2	very dark brown	Silty Clay	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/3/15	MN83	1	0-20	10YR 6/1	gray	Silt Loam	-	Calcium Carbonate	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MN86	1	0-60	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MN89	1	0-30	10YR 5/3	brown	Silt Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MN90	1	0-10	10YR 5/1	gray	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/3/15	MN90	2	10-50	10YR 5/6	yellowish brown	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MN92	1	0-10	10YR 5/1	gray	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/3/15	MN92	2	10-30	10YR 5/6	yellowish brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MN95	1	0-50	10YR 5/2	grayish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/4/15	MN95	2	50-60	10YR 5/6	yellowish brown	Clay Loam	1-5%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP02	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	5-10%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP03	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	5-10%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP04	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	5-10%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP05	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	5-10%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP06	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	5-10%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP10	3	0-30	10YR 4/4	dark yellowish brown	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	MP11	2	0-20	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered.
-	6/29/15	MP11	3	0-30	10YR 4/4	dark yellowish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP12	1	0-80	10YR 4/4	dark yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/30/15	MP12	2	80-90	10YR 4/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at depth.
-	6/30/15	MP13	1	0-40	10YR 5/2	grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP14	1	0-10	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered.
-	6/30/15	MP14	2	20-30	10YR 5/2	grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP15	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP16	1	0-20	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered.
-	6/30/15	MP16	2	20-30	10YR 5/2	grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP17	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	MP18	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	Terminated at basal clay.
-	7/1/15	MP20	1	0-40	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/1/15	MP21	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	Terminated at basal clay.
-	7/2/15	MP22	1	0-35	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/2/15	MP23	1	0-35	10YR 4/2	dark grayish brown	Silty Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/13/15	MS01	1	0-40	7.5YR 2.5/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/13/15	MS02	1	0-30	7.5YR 2.5/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/13/15	MS03	1	0-30	7.5YR 2.5/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/13/15	MS04	1	0-30	10YR 4/2	dark grayish brown	Clay	5-10%	Calcium Carbonate, Gravels, Mottles	Negative	No cultural material encountered. Terminated at ancient, biiturbated uplabd clay with high caco3 % by 30 cmbs.
-	7/13/15	MS05	1	0-25	10YR 4/2	dark grayish brown	Clay	5-10%	Calcium Carbonate, Gravels, Mottles	Negative	Terminated at ancient, biiturbated uplabd clay with high caco3 % by 30 cmbs.
-	7/13/15	MS06	1	0-45	7.5YR 2.5/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/13/15	MS07	1	0-45	10YR 4/2	dark grayish brown	Clay	1-5%	Calcium Carbonate, Pebbles, Snail shell frags	Negative	No cultural material encountered. Terminated at thick upland clay; non-depositional environment.
-	7/13/15	MS08	1	0-30	10YR 2/1	black	Clay	1-5%	Gravels, Pebbles, Snail shell	Negative	No cultural material encountered. Terminated at compact soil.
-	7/14/15	MS09	1	0-4	10YR 4/2	dark grayish brown	Clay	>20%	Cobbles	Negative	No cultural material encountered. Terminated at dense channel deposits.
-	7/14/15	MS10	1	0-5	10YR 4/2	dark grayish brown	Clay	>20%	Cobbles	Negative	Terminated at dense channel deposits.
-	8/4/15	MS100	1	0-30	10YR 6/2	light brownish gray	Sand	5-10%	Gravels	Negative	No cultural material encountered.
-	8/4/15	MS100	2	30-34	10YR 7/2	light gray	Sand	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MS101	1	0-25	10YR 6/2	light brownish gray	Sand	5-10%	Gravels	Negative	

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/4/15	MS101	2	25-27	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at compact soil.
-	8/4/15	MS102	1	0-20	10YR 6/2	light brownish gray	Sand	5-10%	Gravels	Negative	
-	8/4/15	MS102	2	20-25	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at compact soil.
-	8/5/15	MS103	1	0-25	10YR 6/2	light brownish gray	Sand	5-10%	Gravels	Negative	
-	8/5/15	MS103	2	25-30	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at compact soil.
-	8/5/15	MS104	1	0-30	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/5/15	MS105	1	0-30	10YR 5/3	brown	Sand	>20%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	8/5/15	MS106	1	0-20	10YR 5/4	yellowish brown	Sand	10-20%	Gravels	Negative	No cultural material encountered.
-	8/5/15	MS106	2	20-30	5YR 4/6	yellowish red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/5/15	MS107	1	0-20	10YR 6/2	light brownish gray	Sand	5-10%	Gravels	Negative	
-	8/5/15	MS107	2	20-25	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at compact soil.
-	8/6/15	MS108	1	0-90	5YR 5/4	reddish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.
-	8/6/15	MS108	2	90-94	2.5YR 4/6	red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MS109	1	0-110	10YR 7/3	very pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/6/15	MS112	1	0-25	7.5YR 3/4	dark brown	Sandy Clay	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MS113	1	0-30	10YR 5/4	yellowish brown	Sandy Loam	>20%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/6/15	MS114	1	0-10	10YR 4/3	brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/6/15	MS114	2	10-12	7.5YR 4/6	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MS115	1	0-75	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Cobbles	Negative	No cultural material encountered.
-	8/6/15	MS115	2	75-77	10YR 4/4	dark yellowish brown	Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MS116	1	0-15	10YR 6/2	light brownish gray	Sand	10-20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	8/7/15	MS117	1	0-30	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/7/15	MS117	2	30-33	7.5YR 4/6	strong brown	Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/7/15	MS118	1	0-25	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	
-	8/7/15	MS118	2	25-28	7.5YR 4/6	strong brown	Clay	10-20%	Mottles	Negative	Terminated at basal clay.
-	8/7/15	MS119	1	0-15	2.5YR 4/6	red	Sandy Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/7/15	MS120	1	0-15	2.5YR 4/6	red	Sandy Clay	1-5%	Gravels	Negative	Terminated at basal clay.
-	8/7/15	MS121	1	0-20	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	
-	8/7/15	MS121	2	20-30	7.5YR 4/6	strong brown	Clay	10-20%	Mottles	Negative	Terminated at basal clay.
-	8/10/15	MS123	1	0-75	10YR 6/3	pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/10/15	MS123	2	75-77	10YR 5/6	yellowish brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/10/15	MS124	1	0-50	10YR 6/3	pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/10/15	MS124	2	50-53	7.5YR 3/2	dark brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/6/15	MS125	1	0-75	10YR 4/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/6/15	MS125	2	75-80	10YR 4/4	dark yellowish brown	Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/10/15	MS125	1	0-25	10YR 6/3	pale brown	Sandy Loam	1-5%	Gravels	Negative	
-	8/10/15	MS125	2	25-30	10YR 5/6	yellowish brown	Sandy Clay	10-20%	Mottles	Negative	Terminated at basal clay.
-	8/10/15	MS126	1	0-100	10YR 7/2	light gray	Sand	1-5%	Mottles	Negative	No cultural material encountered. Terminated at depth.
-	8/10/15	MS127	1	0-100	10YR 7/2	light gray	Sand	1-5%	Mottles	Negative	Terminated at depth.
-	8/10/15	MS128	1	0-100	10YR 7/2	light gray	Sand	1-5%	Mottles	Negative	Terminated at depth.
-	8/10/15	MS129	1	0-40	10YR 7/2	light gray	Sand	1-5%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at bedrock.
-	7/14/15	MS13	1	0-10	10YR 4/2	dark grayish brown	Silt Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/11/15	MS130	1	0-50	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/11/15	MS130	2	50-100	10YR 5/4	yellowish brown	Sandy Loam			Negative	No cultural material encountered. Terminated at depth.
-	8/11/15	MS131	1	0-25	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	8/11/15	MS131	2	25-30	7.5YR 4/6	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/11/15	MS132	1	0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/11/15	MS133	1	0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%	Mottles	Negative	Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/11/15	MS134	1	0-20	10YR 5/4	yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/11/15	MS134	2	20-30	7.5YR 4/6	strong brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/12/15	MS136	1	0-50	10YR 7/3	very pale brown	Sandy Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	8/12/15	MS136	2	50-52	10YR 5/8	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/12/15	MS137	1	0-45	10YR 7/3	very pale brown	Sandy Loam	1-5%	Cobbles, Gravels	Negative	
-	8/12/15	MS137	2	45-47	10YR 5/8	yellowish brown	Sandy Clay	-	-	Negative	Terminated at basal clay.
-	8/12/15	MS138	1	0-20	10YR 5/3	brown	Sandy Loam	5-10%	Gravels	Negative	No cultural material encountered.
-	8/12/15	MS138	2	20-24	2.5YR 3/4	dark reddish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/12/15	MS139	1	0-20	10YR 5/3	brown	Sandy Loam	5-10%	Gravels	Negative	
-	8/12/15	MS139	2	20-25	2.5YR 3/4	dark reddish brown	Sandy Clay	-	-	Negative	Terminated at basal clay.
-	7/14/15	MS14	1	0-20	10YR 4/2	dark grayish brown	Silt Loam	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/12/15	MS140	1	0-35	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	8/12/15	MS141	1	0-10	10YR 5/3	brown	Sandy Loam	5-10%	Gravels	Negative	
-	8/12/15	MS141	2	10-15	2.5YR 3/4	dark reddish brown	Sandy Clay	-	-	Negative	Terminated at basal clay.
-	8/12/15	MS142	1	0-43	10YR 6/3	pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/12/15	MS143	1	0-100	10YR 5/4	yellowish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/13/15	MS146	1	0-100	10YR 7/2	light gray	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/13/15	MS147	1	0-100	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	8/13/15	MS149	1	0-40	10YR 6/3	pale brown	Sandy Loam	>20%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at mixed colluvium.
-	7/14/15	MS15	1	0-15	10YR 4/2	dark grayish brown	Silt Loam	5-10%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	8/14/15	MS151	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	8/14/15	MS152	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS153	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS154	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS155	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS156	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS157	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS157	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	8/14/15	MS158	1	0-100	10YR 7/2	light gray	Sand	-	-	Negative	Terminated at depth.
-	9/8/15	MS159	1	0-40	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/15/15	MS16	1	0-40	10YR 3/1	very dark gray	Clay	1-5%	Pebbles, Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	MS160	1	0-10	7.5YR 5/6	strong brown	Sandy Loam	10-20%	Gravels	Negative	No cultural material encountered.
-	9/8/15	MS160	2	10-12	7.5YR 5/8	strong brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MS161	1	0-7	2.5YR 5/6	red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MS162	1	0-30	10YR 5/3	brown	Sandy Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at dense iron mang frags.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/8/15	MS163	1	0-30	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/8/15	MS163	2	30-33	10YR 4/3	brown	Sandy Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	MS164	1	0-15	10YR 4/3	brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/9/15	MS165	1	0-65	10YR 3/2	very dark grayish brown	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MS166	1	0-35	10YR 3/2	very dark grayish brown	Sandy Clay	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MS167	1	0-30	10YR 3/2	very dark grayish brown	Sandy Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/9/15	MS167	2	30-70	10YR 4/3	brown	Sandy Clay Loam	1-5%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MS168	1	0-70	10YR 3/2	very dark grayish brown	Sandy Clay	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	MS169	1	0-65	10YR 4/3	brown	Sandy Clay	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/15/15	MS17	1	0-30	10YR 3/1	very dark gray	Clay	5-10%	Cobbles, Gravels, Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	MS170	1	0-100	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	9/10/15	MS171	1	0-100	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	Terminated at depth.
-	9/10/15	MS172	1	0-100	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	Terminated at depth.
-	9/10/15	MS173	1	0-50	10YR 6/3	pale brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.
-	9/10/15	MS173	2	50-53	7.5YR 5/6	strong brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/10/15	MS174	1	0-45	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/10/15	MS174	2	45-50	7.5YR 5/8	strong brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/10/15	MS175	1	0-30	10YR 4/3	brown	Sandy Loam	5-10%	Gravels	Negative	No cultural material encountered.
-	9/10/15	MS175	2	30-40	7.5YR 5/8	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/11/15	MS176	1	0-50	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/11/15	MS176	2	50-100	10YR 6/3	pale brown	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
-	9/11/15	MS177	1	0-45	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	9/11/15	MS178	1	0-60	10YR 6/3	pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/11/15	MS178	2	60-65	7.5YR 5/8	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/11/15	MS179	1	0-10	2.5YR 4/6	red	Clay	5-10%	Large Rock Frags	Negative	No cultural material encountered. Terminated at basal clay.
-	7/15/15	MS18	1	0-40	10YR 3/1	very dark gray	Clay	1-5%	Pebbles, Roots	Negative	Terminated at compact soil.
-	9/11/15	MS180	1	0-20	10YR 4/2	dark grayish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
-	9/11/15	MS180	1	0-25	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/14/15	MS180	2	25-40	10YR 6/3	pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	MS180	2	20-30	10YR 3/1	very dark gray	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/14/15	MS181	1	0-25	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	
-	9/14/15	MS181	1	0-25	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	
-	9/14/15	MS181	2	25-30	10YR 3/1	very dark gray	Sandy Clay	-	-	Negative	Terminated at compact soil.
-	9/14/15	MS181	2	25-30	10YR 3/1	very dark gray	Sandy Clay	-	-	Negative	Terminated at compact soil.
-	9/14/15	MS182	1	0-30	10YR 5/4	yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	9/14/15	MS182	2	30-35	7.5YR 4/6	strong brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/14/15	MS183	1	0-15	10YR 5/2	grayish brown	Silt Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at dense gravel.
-	9/14/15	MS184	1	0-5	10YR 5/2	grayish brown	Silt Loam	>20%	Cobbles, Gravels	Negative	Terminated at dense gravel.
-	9/14/15	MS185	1	0-15	10YR 5/2	grayish brown	Silt Loam	>20%	Cobbles, Gravels	Negative	Terminated at dense gravel.
-	9/15/15	MS186	1	0-30	10YR 4/3	brown	Sandy Clay Loam	10-20%	Mottles	Negative	No cultural material encountered.
-	9/15/15	MS186	2	30-90	10YR 5/6	yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	9/15/15	MS186	3	90-94	10YR 4/2	dark grayish brown	Sandy Clay Loam	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/15/15	MS187	1	0-25	10YR 5/4	yellowish brown	Sandy Loam	>20%	Pebbles	Negative	No cultural material encountered.
-	9/15/15	MS187	2	25-27	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/15/15	MS188	1	0-30	-	-	-	-	-	-	No data available.
-	9/15/15	MS188	2	30-35	-	-	-	-	-	-	No data available.
-	9/15/15	MS189	1	0-50	10YR 6/3	pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	9/15/15	MS189	2	50-53	10YR 5/6	yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/15/15	MS19	1	0-40	10YR 3/1	very dark gray	Clay	1-5%	Pebbles, Roots	Negative	Terminated at compact soil.
-	9/16/15	MS197	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
-	9/16/15	MS198	1	0-85	10YR 7/3	very pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	9/16/15	MS198	2	85-90	10YR 5/6	yellowish brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	9/16/15	MS199	1	0-40	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at dense cobbkes and gravels.
-	7/15/15	MS20	1	0-30	7.5YR 2.5/1	black	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
-	9/16/15	MS200	1	0-30	10YR 6/3	pale brown	Sandy Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/16/15	MS200	2	30-33	10YR 3/2	very dark grayish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/17/15	MS203	1	0-40	10YR 5/1	gray	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/17/15	MS204	1	0-30	10YR 5/1	gray	Clay	1-5%	Cobbles, Gravels	Negative	Terminated at compact soil.
-	9/17/15	MS205	1	0-30	10YR 5/2	grayish brown	Clay	10-20%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/18/15	MS207	1	0-30	10YR 4/4	dark yellowish brown	Sandy Clay Loam	1-5%	Calcium Carbonate	Negative	No cultural material encountered.
-	9/18/15	MS207	2	30-40	10YR 3/4	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/15/15	MS21	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/15/15	MS22	1	0-40	10YR 3/1	very dark gray	Clay	1-5%	Pebbles, Roots	Negative	Terminated at compact soil.
-	7/15/15	MS23	1	0-35	10YR 3/1	very dark gray	Clay	1-5%	Pebbles, Roots	Negative	Terminated at compact soil.
-	7/16/15	MS26	1	0-30	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/16/15	MS26	2	30-33	7.5YR 2.5/1	black	Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/16/15	MS27	1	0-35	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/16/15	MS28	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/16/15	MS29	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/16/15	MS30	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/16/15	MS31	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/16/15	MS32	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/16/15	MS33	1	0-10	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/17/15	MS34	1	0-20	10YR 4/2	dark grayish brown	Clay	>20%	Cobbles, Gravels, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/17/15	MS35	1	0-10	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	No cultural material encountered. Terminated at ancient lag gravel deposits.
-	7/17/15	MS36	1	0-10	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.
-	7/17/15	MS37	1	0-5	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.
-	7/17/15	MS38	1	0-5	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.
-	7/17/15	MS39	1	0-8	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/17/15	MS40	1	0-5	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.
-	7/17/15	MS41	1	0-15	10YR 6/3	pale brown	Silt Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at very dense gravel.
-	7/17/15	MS42	1	0-4	10YR 4/2	dark grayish brown	Sandy Clay	>20%	-	Negative	Terminated at ancient lag gravel deposits.
-	7/24/15	MS45	1	0-45	10YR 3/1	very dark gray	Clay Loam	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/24/15	MS46	1	0-50	10YR 3/1	very dark gray	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at compact soil.
-	7/24/15	MS47	1	0-50	10YR 3/1	very dark gray	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at compact soil.
-	7/24/15	MS48	1	0-40	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	7/24/15	MS48	2	40-45	10YR 4/3	brown	Clay	>20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/24/15	MS49	1	0-35	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Negative	
-	7/24/15	MS50	1	0-10	10YR 3/1	very dark gray	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/24/15	MS51	1	1-15	10YR 3/1	very dark gray	Clay	-	-	Negative	Terminated at compact soil.
-	7/24/15	MS52	1	0-10	10YR 3/1	very dark gray	Clay	-	-	Negative	Terminated at compact soil.
-	7/27/15	MS54	1	0-45	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/27/15	MS55	1	0-35	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	7/27/15	MS56	1	0-30	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	7/27/15	MS57	1	0-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/27/15	MS58	1	0-40	10YR 3/1	very dark gray	Clay	5-10%	Gravels	Negative	Terminated at compact soil.
-	7/30/15	MS60	1	0-20	10YR 6/3	pale brown	Silt Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MS61	1	0-25	10YR 5/3	brown	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	7/28/15	MS61	2	25-28	10YR 4/2	dark grayish brown	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MS62	1	0-30	10YR 3/1	very dark gray	Clay	10-20%	Mottles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MS63	1	0-45	10YR 4/2	dark grayish brown	Clay			Negative	No cultural material encountered. Terminated at compact soil.
-	7/28/15	MS64	1	0-35	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
-	7/28/15	MS64	2	35-40	10YR 6/2	light brownish gray	Sandy Loam	5-10%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at calcareous subsoil.
-	7/28/15	MS65	1	0-45	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/28/15	MS65	2	45-50	7.5YR 6/4	light brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/28/15	MS66	1	0-20	10YR 5/3	brown	Silt Loam	1-5%	Gravels	Negative	
-	7/30/15	MS67	1	0-20	10YR 4/3	brown	Silty Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MS68	1	0-30	10YR 6/3	pale brown	Silt	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at extremely dense gravel.
-	7/30/15	MS74	1	0-20	10YR 4/2	dark grayish brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/30/15	MS75	1	0-45	7.5YR 5/6	strong brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/30/15	MS77	1	0-10	10YR 4/3	brown	Sandy Loam	>20%	Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MS78	1	0-15	10YR 4/3	brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at sterile with high gravel content.
-	7/31/15	MS79	1	0-30	10YR 3/2	very dark grayish brown	Sandy Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MS80	1	0-30	10YR 3/2	very dark grayish brown	Sandy Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
-	7/31/15	MS81	1	0-65	10YR 3/1	very dark gray	Sandy Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/31/15	MS82	1	0-60	10YR 3/1	very dark gray	Sandy Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/31/15	MS83	1	0-90	10YR 3/1	very dark gray	Sandy Clay Loam	1-5%	Mottles	Negative	No cultural material encountered. Terminated at depth.
-	7/31/15	MS84	1	0-30	10YR 4/3	brown	Sandy Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MS85	1	0-15	7.5YR 5/6	strong brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/3/15	MS85	2	15-30	10YR 4/3	brown	Sandy Loam	-	-	Negative	No cultural material encountered.
-	8/3/15	MS85	3	30-55	10YR 5/4	yellowish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MS86	1	0-30	10YR 6/3	pale brown	Sand	-	-	Negative	No cultural material encountered.
-	8/3/15	MS86	2	30-33	10YR 4/3	brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/3/15	MS87	1	0-45	2.5YR 4/6	red	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/3/15	MS88	1	0-5	10YR 4/3	brown	Sandy Loam	5-10%	Roots	Negative	No cultural material encountered.
-	8/3/15	MS88	2	5-15	2.5YR 5/6	red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/3/15	MS89	1	0-30	10YR 6/3	pale brown	Sand	-	-	Negative	No cultural material encountered.
-	8/3/15	MS89	2	30-35	2.5YR 5/6	red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/3/15	MS90	1	0-25	10YR 4/2	dark grayish brown	Clay	1-5%	Mottles	Negative	No cultural material encountered.
-	8/3/15	MS90	2	25-30	10YR 4/6	dark yellowish brown	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/3/15	MS91	1	0-10	10YR 6/3	pale brown	Silt Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/3/15	MS92	1	0-25	10YR 5/4	yellowish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MS96	1	0-25	10YR 4/2	dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	8/4/15	MS96	2	25-32	10YR 5/4	yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MS97	1	0-30	10YR 5/2	grayish brown	Clay Loam	5-10%	Gravels, Manganese staining, red	Negative	No cultural material encountered. Terminated at compact soil.
-	8/4/15	MS98	1	0-25	10YR 7/2	light gray	Sand	5-10%	Gravels	Negative	No cultural material encountered.
-	8/4/15	MS98	2	25-27	2.5YR 4/6	red	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/4/15	MS99	1	0-20	10YR 7/2	light gray	Sand	5-10%	Gravels	Negative	
-	8/4/15	MS99	2	20-23	2.5YR 4/6	red	Clay	-	-	Negative	Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/16/15	RW01	1	0-10	5YR 3/2	dark reddish brown	Clay	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW02	1	0-20	10YR 2/2	very dark brown	Clay Loam	10-20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW03	1	0-10	10YR 2/2	very dark brown	Clay	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW05	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Large Rock Frags	Negative	No cultural material encountered. Terminated at large rocks.
-	6/16/15	RW06	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW07	1	0-5	10YR 2/2	very dark brown	Clay	-	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW08	1	0-5	10YR 2/2	very dark brown	Clay	-	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW09	1	0-5	10YR 2/2	very dark brown	Clay	-	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW10	1	0-5	10YR 2/2	very dark brown	Clay	-	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	RW100	1	0-10	7.5YR 3/3	dark brown	Clay	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	RW101	1	0-20	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/29/15	RW101	2	20-30	7.5YR 3/3	dark brown	Clay	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	RW102	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Gravels	Negative	No cultural material encountered.
-	6/29/15	RW102	2	10-20	7.5YR 3/3	dark brown	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	RW103	1	0-5	7.5YR 3/3	dark brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	RW104	1	0-10	7.5YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/16/15	RW11	1	0-5	10YR 2/2	very dark brown	Clay	-	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/30/15	RW113	1	0-20	10YR 3/1	very dark gray	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/30/15	RW113	2	20-30	10YR 4/1	dark gray	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	RW114	1	0-20	10YR 3/1	very dark gray	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/30/15	RW114	2	20-30	10YR 4/1	dark gray	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	RW115	1	0-30	10YR 2/1	black	Clay	10-20%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	RW116	1	0-20	10YR 3/1	very dark gray	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/30/15	RW116	2	20-30	10YR 4/1	dark gray	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	RW117	1	0-15	10YR 4/1	dark gray	Clay Loam	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/30/15	RW117	2	15-30	10YR 5/2	grayish brown	Clay	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/30/15	RW118	1	0-20	10YR 3/1	very dark gray	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/30/15	RW118	2	20-30	10YR 4/1	dark gray	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	7/1/15	RW119	1	0-20	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	7/1/15	RW119	2	20-30	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/2/15	RW121	1	0-40	10YR 2/1	black	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered.
-	7/2/15	RW121	2	40-45	10YR 2/1	black	Clay	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW122	1	0-30	10YR 3/4	dark yellowish brown	Clay	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW123	1	0-15	10YR 3/2	very dark grayish brown	Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW124	1	0-20	10YR 2/2	very dark brown	Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW125	1	0-30	10YR 3/2	very dark grayish brown	Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW126	1	0-30	10YR 3/2	very dark grayish brown	Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW127	1	0-30	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/8/15	RW127	2	30-35	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	7/8/15	RW128	1	0-10	10YR 2/1	black	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW129	1	0-30	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	7/8/15	RW129	2	30-35	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	7/8/15	RW130	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	7/8/15	RW131	1	0-20	10YR 3/3	dark brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/17/15	RW21	1	0-10	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/17/15	RW22	1	0-20	10YR 2/2	very dark brown	Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/17/15	RW28	1	0-5	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	6/17/15	RW29	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	8/25/15	RW313	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at super compaction.
-	8/25/15	RW314	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at super compaction.
-	8/25/15	RW315	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at super compaction.
-	8/25/15	RW316	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at super compaction.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/25/15	RW317	1	0-10	10YR 3/1	very dark gray	Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/25/15	RW319	1	0-10	5YR 2.5/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/18/15	RW32	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	8/25/15	RW320	1	0-10	5YR 2.5/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	8/25/15	RW322	1	0-20	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/25/15	RW323	1	0-20	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	RW325	1	0-30	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	RW326	1	0-30	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	RW327	1	0-30	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	RW328	1	0-30	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/26/15	RW329	1	0-30	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW330	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW331	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/27/15	RW332	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW333	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW334	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW335	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	-	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW336	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW337	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/27/15	RW338	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/28/15	RW339	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/28/15	RW340	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/28/15	RW341	1	0-20	10YR 3/2	very dark grayish brown	Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	RW344	1	0-20	10YR 6/3	pale brown	Silty Clay	1-5%	Calcium Carbonate, Snail shell variety	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	RW345	1	0-20	10YR 6/3	pale brown	Silt Loam	1-5%	Snail shell variertt	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	8/31/15	RW345	2	20-30	10YR 6/3	pale brown	Silty Clay Loam	5-10%	Calcium Carbonate, Snail shell variety	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	RW346	1	0-20	10YR 6/3	pale brown	Silt Loam	1-5%	Snail shell variertt	Negative	No cultural material encountered.
-	8/31/15	RW347	1	0-10	10YR 3/1	very dark gray	Clay Loam	1-5%	Snail shell variety	Negative	No cultural material encountered.
-	8/31/15	RW347	2	10-20	10YR 3/1	very dark gray	Clay	1-5%	Snail shell vatiety	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	RW348	1	0-10	10YR 5/3	brown	Clay Loam	>20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	8/31/15	RW349	1	0-30	10YR 3/1	very dark gray	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	8/31/15	RW350	1	0-20	10YR 4/3	brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at disturbed.
-	9/1/15	RW351	1	0-20	10YR 5/3	brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW352	1	0-10	10YR 4/3	brown	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered.
-	9/1/15	RW352	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW353	1	0-10	10YR 4/3	brown	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered.
-	9/1/15	RW353	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW354	1	0-10	10YR 4/3	brown	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered.
-	9/1/15	RW354	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/1/15	RW355	1	0-10	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/1/15	RW355	2	10-15	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW356	1	0-10	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/1/15	RW356	2	10-15	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW357	1	0-10	10YR 4/2	dark grayish brown	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
-	9/1/15	RW357	2	10-15	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW358	1	0-20	10YR 4/3	brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW359	1	0-20	10YR 4/3	brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW360	1	0-20	10YR 4/3	brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW361	1	0-20	10YR 4/3	brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/1/15	RW362	1	0-20	10YR 3/2	very dark grayish brown	Sandy Clay Loam	>20%	Gravels	Negative	No cultural material encountered. Terminated at disturbance.
-	9/2/15	RW362	1	0-15	10YR 4/3	brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW363	1	0-15	10YR 4/3	brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW363	1	0-20	10YR 3/2	very dark grayish brown	Sandy Clay Loam	>20%	Gravels	Negative	No cultural material encountered. Terminated at disturbance.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/2/15	RW364	1	0-20	10YR 6/2	light brownish gray	Silty Clay Loam	10-20%	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW365	1	0-20	10YR 6/2	light brownish gray	Silty Clay Loam	10-20%	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW366	1	0-20	10YR 6/2	light brownish gray	Silty Clay Loam	10-20%	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW367	1	0-20	10YR 6/2	light brownish gray	Silty Clay Loam	10-20%	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW368	1	0-20	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW369	1	0-20	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/2/15	RW370	1	0-20	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/4/15	RW372	1	0-15	10YR 2/2	very dark brown	Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/4/15	RW373	1	0-20	10YR 4/3	brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	RW374	1	0-10	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	RW375	1	0-10	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	RW376	1	0-10	10YR 5/2	grayish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/8/15	RW377	1	0-5	10YR 6/3	pale brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/8/15	RW378	1	0-20	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	RW379	1	0-20	10YR 2/1	black	Clay	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/8/15	RW380	1	0-20	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	9/9/15	RW381	1	0-20	10YR 2/1	black	Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	RW382	1	0-10	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	RW383	1	0-10	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	RW384	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/9/15	RW385	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	RW386	1	0-30	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	RW387	1	0-30	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	RW388	1	0-30	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	RW389	1	0-40	10YR 3/1	very dark gray	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	9/10/15	RW390	1	0-20	10YR 3/1	very dark gray	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/11/15	RW391	1	0-20	10YR 2/1	black	Clay	1-5%	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/11/15	RW392	1	0-30	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/11/15	RW393	1	0-30	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/11/15	RW394	1	0-30	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW395	1	0-30	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW396	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW397	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW398	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW399	1	0-10	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	6/19/15	RW40	1	0-30	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	9/14/15	RW400	1	0-10	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW401	1	0-10	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/14/15	RW402	1	0-5	10YR 4/2	dark grayish brown	Clay Loam	>20%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/15/15	RW403	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	RW404	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	9/15/15	RW405	1	0-30	2.5YR 4/2	weak red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/15/15	RW408	1	0-30	2.5YR 4/2	weak red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	RW409	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	6/19/15	RW41	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	9/16/15	RW410	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	RW411	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	RW412	1	0-20	10YR 2/1	black	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	RW413	1	0-20	10YR 2/1	black	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/16/15	RW414	1	0-20	10YR 2/1	black	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/21/15	RW415	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/21/15	RW416	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	9/21/15	RW417	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	10/7/15	RW418	1	0-20	2.5YR 4/2	weak red	Clay Loam	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	10/7/15	RW419	1	0-30	2.5YR 4/1	dark reddish gray	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
-	6/19/15	RW42	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	10/7/15	RW420	1	0-20	2.5YR 4/2	weak red	Clay Loam	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	6/19/15	RW43	1	0-30	10YR 3/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Gravels, Mottles, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/19/15	RW44	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW45	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW46	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW47	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW48	1	0-20	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW49	1	0-20	10YR 2/1	black	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/23/15	RW50	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW51	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW52	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW53	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW54	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW55	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/23/15	RW56	1	0-30	10YR 3/2	very dark grayish brown	Clay	10-20%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at disturbed hydrochloride soils.
-	6/24/15	RW59	1	0-20	10YR 2/1	black	Clay	1-5%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/24/15	RW60	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	RW61	1	0-10	10YR 2/1	black	Clay Loam	10-20%	Calcium Carbonate, Gravels, Bailing string and mulch	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	RW62	1	0-5	10YR 3/2	very dark grayish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	RW64	1	0-30	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/24/15	RW65	1	0-20	10YR 4/3	brown	Clay Loam	>20%	Calcium Carbonate, Gravels, Mottles, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	RW67	1	0-20	10YR 2/1	black	Clay	0%	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/24/15	RW68	1	0-20	10YR 2/1	black	Clay	0%	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/24/15	RW69	1	0-20	10YR 2/1	black	Clay	0%	None	Negative	No cultural material encountered. Terminated at basal clay.
-	6/24/15	RW70	1	0-20	10YR 2/1	black	Clay	0%	None	Negative	No cultural material encountered. Terminated at basal clay.
-	11/13/15	RW700	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	6/24/15	RW71	1	0-20	10YR 2/1	black	Clay	0%	None	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/13/15	RW710	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/13/15	RW711	1	0-10	10YR 3/1	very dark gray	Clay Loam	>20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/13/15	RW712	1	0-10	10YR 3/1	very dark gray	Clay Loam	>20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
-	11/13/15	RW713	1	0-30	10YR 3/2	very dark grayish brown	Clay	>20%	Calcium Carbonate, Gravels, Mottles	Negative	No cultural material encountered. Terminated at mottled and caco3.
-	11/13/15	RW714	1	0-25	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	11/13/15	RW714	2	25-30	10YR 3/2	very dark grayish brown	Clay	5-10%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	11/17/15	RW715	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	RW716	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	RW717	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	RW718	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	11/17/15	RW719	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	RW720	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/17/15	RW721	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
-	11/30/15	RW730	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	11/30/15	RW731	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	11/30/15	RW731	2	20-25	10YR 6/2	light brownish gray	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	11/30/15	RW732	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	11/30/15	RW732	2	20-25	10YR 6/2	light brownish gray	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	11/30/15	RW733	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
-	11/30/15	RW733	2	20-25	10YR 6/2	light brownish gray	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	RW736	1	0-15	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	12/1/15	RW737	1	0-15	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/1/15	RW742	1	0-30	10YR 3/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Mottles	Negative	No cultural material encountered. Terminated at basal clay.
-	12/1/15	RW743	1	0-15	10YR 2/1	black	Clay Loam	>20%	Cobbles, Large Rock Frags, Tree roots	Negative	No cultural material encountered. Terminated at bedrock.
-	12/1/15	RW744	1	0-15	10YR 2/1	black	Clay Loam	>20%	Cobbles, Large Rock Frags, Tree roots	Negative	No cultural material encountered. Terminated at bedrock.
-	12/3/15	RW746	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW747	1	0-30	10YR 3/2	very dark grayish brown	Clay Loam	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW748	1	0-10	10YR 2/1	black	Clay	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW749	1	0-10	10YR 2/1	black	Clay	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW750	1	0-10	10YR 2/1	black	Clay	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW752	1	0-10	10YR 2/1	black	Clay	10-20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	RW755	1	0-30	10YR 3/1	very dark gray	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	12/3/15	RW756	1	0-30	10YR 3/1	very dark gray	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
-	12/8/15	RW757	1	0-30	10YR 4/1	dark gray	Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/8/15	RW758	1	0-30	10YR 4/1	dark gray	Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.

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-	12/8/15	RW759	1	0-40	10YR 4/2	dark grayish brown	Sandy Clay Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/8/15	RW760	1	0-50	10YR 4/3	brown	Sandy Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/8/15	RW761	1	0-50	10YR 4/3	brown	Sandy Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	12/8/15	RW762	1	0-30	10YR 4/1	dark gray	Loam	5-10%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
-	6/25/15	RW81	1	0-20	10YR 3/3	dark brown	Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/25/15	RW82	1	0-20	10YR 4/3	brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/25/15	RW82	2	20-25	2.5yr 6/4		Clay	5-10%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/25/15	RW83	1	0-20	10YR 3/3	dark brown	Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/26/15	RW84	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	RW85	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	RW86	1	0-30	10YR 2/1	black	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/26/15	RW87	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	RW88	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	6/26/15	RW89	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	RW93	1	0-20	10YR 2/2	very dark brown	Clay Loam	-	-	Negative	No cultural material encountered.
-	6/26/15	RW93	2	20-30	10YR 3/3	dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
-	6/26/15	RW94	1	0-10	7.5YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	6/26/15	RW95	1	0-10	7.5YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	RW97	1	0-30	10YR 3/2	very dark grayish brown	Clay	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
-	6/29/15	RW98	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	6/29/15	RW99	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
-	9/22/15	SMM01	1	0-5	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	9/25/15	SMM02	1	0-20 cm	2.5Y 2.5/1	black	Clay Loam	>20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at a dense concentration of large cobbles was encountered..
-	12/3/15	SMM100	1	0-15	10YR 2/1	black	Clay	5-10%	Cobbles, Pebbles	Negative	Terminated at compact soil.
-	12/3/15	SMM101	1	10-Jan	10YR 4/1	dark gray	Clay	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM102	1	0-10	10YR 4/1	dark gray	Clay	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/3/15	SMM103	1	0-10	10YR 4/1	dark gray	Clay	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM104	1	0-10	10YR 4/2	dark grayish brown	Clay	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM105	1	0-25	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM106	1	0-20	10YR 2/1	black	Clay	>20%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM107	1	15-Jan	10YR 2/1	black	Clay	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	11/30/15	SMM75	1	0-35	10YR 2/1	black	Clay Loam	-	Calcium Carbonate, Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	11/30/15	SMM76	1	0-20	10YR 2/1	black	Clay Loam	5-10%	Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	11/30/15	SMM77	1	0-20	10YR 2/1	black	Clay Loam	>20%	Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	11/30/15	SMM79	1	0-20	10YR 4/1	dark gray	Clay Loam	10-20%	Calcium Carbonate, Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	12/1/15	SMM80	1	0-20	10YR 3/3	dark brown	Clay Loam	>20%	Gravels, Large Rock Frags, Pebbles, Large roots	Negative	No cultural material encountered. Terminated at very large roots.
-	12/1/15	SMM81	1	0-15	10YR 2/1	black	Clay Loam	>20%	Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at very large rock fragments.
-	12/1/15	SMM82	1	0-20	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles, Large roots	Negative	No cultural material encountered. Terminated at very large rock fragments and roots.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	12/2/15	SMM91	1	0-20	10YR 2/1	black	Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	SMM92	1	0-10	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	SMM94	1	0-25	10YR 4/3	brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at depth.
-	12/2/15	SMM95	1	0-30	10YR 4/1	dark gray	Clay Loam	1-5%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at compact soil.
-	12/2/15	SMM96	1	0-20	10YR 4/1	dark gray	Clay	>20%	Cobbles, Mottles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM98	1	0-10	10YR 2/1	black	Clay	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	12/3/15	SMM99	1	0-10	10YR 2/1	black	Clay	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/23/15	SS01	1	0-45	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Rootlets	Negative	No cultural material encountered.
-	7/23/15	SS01	2	45-65	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/23/15	SS02	1	0-50	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Rootlets	Negative	
-	7/23/15	SS02	2	50-60	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.
-	7/23/15	SS03	1	0-45	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Rootlets	Negative	
-	7/23/15	SS03	2	45-50	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.

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-	7/23/15	SS04	1	0-45	10YR 4/3	brown	Clay Loam	1-5%	Gravels, Rootlets	Negative	No cultural material encountered.
-	7/23/15	SS04	2	45-55	10YR 6/4	light yellowish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
-	7/23/15	SS05	1	0-45	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered.
-	7/23/15	SS05	2	45-55	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/23/15	SS06	1	0-40	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	
-	7/23/15	SS06	2	40-55	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/23/15	SS07	1	0-45	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	
-	7/23/15	SS07	2	45-50	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/23/15	SS08	1	0-38	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	
-	7/23/15	SS08	2	38-45	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	7/23/15	SS09	1	0-35	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	
-	7/23/15	SS09	2	35-45	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
-	10/9/15	SS100	1	0-30	7.5YR 5/6	strong brown	Clay	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	10/9/15	SS101	1	0-30	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Mottles, Rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	10/9/15	SS102	1	0-30	10YR 5/6	yellowish brown	Sandy Loam	1-5%	Mottles, Rootlets	Negative	Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
-	10/9/15	SS103	1	0-30	10YR 5/4	yellowish brown	Sandy Loam	1-5%	Roots	Negative	No cultural material encountered. Terminated at compact soil.
-	10/9/15	SS104	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	10/9/15	SS105	1	0-40	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Rootlets	Negative	Terminated at compact soil.
-	10/9/15	SS106	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Rootlets	Negative	Terminated at compact soil.
-	10/9/15	SS107	1	0-55	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Rootlets	Negative	Terminated at compact soil.
-	7/24/15	SS14	1	0-15	10YR 2/1	black	Clay	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at compact soil.
-	7/24/15	SS15	1	0-15	10YR 2/1	black	Clay	1-5%	Rootlets	Negative	Terminated at compact soil.
-	7/24/15	SS16	1	0-15	10YR 2/1	black	Clay	1-5%	Rootlets	Negative	Terminated at compact soil.
-	7/24/15	SS17	1	0-15	10YR 2/1	black	Clay	1-5%	Rootlets	Negative	Terminated at compact soil.
-	7/24/15	SS18	1	0-15	10YR 2/1	black	Clay	1-5%	Rootlets	Negative	Terminated at compact soil.
-	7/24/15	SS19	1	0-30	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
-	7/6/15	DR130	1	0-20	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
41BP818	10/28/15	AY22	1	0-50	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	14: Flake (secondary), Flake (tertiary), Other Prehistoric
41BP818	10/28/15	AY22	2	50-60	5YR 5/8	yellowish red	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Negative	No cultural material encountered. Terminated at gravel. impass.
41BP818	10/28/15	AY23	1	0-10	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	6: Flake (secondary), Flake (tertiary), Other Prehistoric [3 tertiary, 1 secondary, 2 shatter]

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/28/15	AY23	2	10-20	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	4: Flake (tertiary) [3 tertiary, 1 shatter]
41BP818	10/28/15	AY23	3	20-30	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	3: Flake (tertiary)
41BP818	10/28/15	AY23	4	30-40	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	3: Flake (tertiary)
41BP818	10/28/15	AY23	5	40-50	5YR 5/8	yellowish red	Sandy Clay	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/28/15	AY24	1	0-10	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	13: Flake (tertiary), Other Prehistoric [7 tertiary flakes, 6 shatter]
41BP818	10/28/15	AY24	2	10-20	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	27: Flake (secondary), Flake (tertiary), Other Prehistoric [2 secondary, 7 shatter, 18 tertiary]
41BP818	10/28/15	AY24	3	20-30	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	20: Flake (tertiary), Other Prehistoric, Projectile Point [1 point frag, 11 tertiary, 7 shatter]
41BP818	10/28/15	AY24	4	30-40	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	31: Flake (secondary), Flake (tertiary), Other Prehistoric [19 tertiary, 7 secondary, 5 shatter]
41BP818	10/28/15	AY24	5	40-50	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	20: Flake (secondary), Flake (tertiary), Other Prehistoric [1 shatter, 1 secondary, 18 tertiary]
41BP818	10/28/15	AY24	6	50-60	7.5YR 3/4	dark brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	2: Flake (secondary), Flake (tertiary) Terminated at gravel impass.
41BP818	10/29/15	AY25	1	0-10	7.5YR 4/4	brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	8: Flake (tertiary), Other Prehistoric [4 tertiary, 4 shatter]

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	AY25	2	10-20	7.5YR 4/4	brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	17: Flake (secondary), Flake (tertiary), Other Prehistoric [9 tertiary, 1 secondary, 7 shatter]
41BP818	10/29/15	AY25	3	20-30	7.5YR 4/4	brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	9: Flake (tertiary), Other Prehistoric [8 tertiary, 1 shatter]
41BP818	10/29/15	AY25	4	30-40	7.5YR 4/4	brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	4: Flake (tertiary), Other Prehistoric [3 tertiary, 1 shatter]
41BP818	10/29/15	AY25	5	40-50	7.5YR 4/4	brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	4: Flake (tertiary), Other Prehistoric [3 tertiary, 1 shatter] Terminated at gravel impass.
41BP818	10/28/15	AY26	1	0-40	7.5YR 3/4	dark brown	Sandy Clay Loam	10-20%	Gravels, Pebbles	Positive	2: Flake (tertiary) [0-15 cmbs 2 flakes]
41BP818	10/28/15	AY26	2	40-45	5YR 5/8	yellowish red	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD01	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Positive	3: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD01	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Positive	5: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD01	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Positive	1: Flake (secondary)
41BP818	10/29/15	BD01	4	40-50	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Gravels, Pebbles	Positive	1: Flake (secondary)
41BP818	10/29/15	BD01	5	40-50	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Gravels, Pebbles	Positive	1: Flake (secondary)
41BP818	10/29/15	BD01	6	50-60	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Gravels, Pebbles	Positive	3: Flake (secondary), Flake (tertiary) Terminated at depth.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	BD02	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	Pebbles	Positive	6: Flake (tertiary)
41BP818	10/29/15	BD02	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	Pebbles	Positive	2: Flake (tertiary)
41BP818	10/29/15	BD02	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	Pebbles	Positive	1: Flake (tertiary)
41BP818	10/29/15	BD02	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	Pebbles	Positive	2: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD02	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD02	6	50-60	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD03	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	Pebbles	Positive	18: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD03	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	4: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD03	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	2: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD03	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	Pebbles	Positive	2: Core, Flake (tertiary)
41BP818	10/29/15	BD03	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD03	6	50-60	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD04	1	0-10	10YR 6/4	light yellowish brown	Silt	5-10%	-	Positive	1: Flake (tertiary)

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	BD04	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD04	3	20-25	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD04	4	25-40	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD04	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD04	6	50-60	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD06	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	Pebbles	Positive	13: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD06	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	2: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD06	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	4: Flake (tertiary)
41BP818	10/29/15	BD06	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	19: Flake (primary), Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD06	5	40-50	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	11: Flake (primary), Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD06	6	50-60	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	4: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	BD06	7	60-70	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	1: Flake (secondary)
41BP818	10/29/15	BD06	8	70-75	10YR 6/4	light yellowish brown	Sandy Loam	5-10%	-	Positive	2: Flake (secondary), Flake (tertiary)

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	BD06	9	75-90	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
41BP818	10/29/15	BD07	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	1: Flake (utilized) [Possibly biface base]
41BP818	10/29/15	BD07	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	1: Flake (tertiary)
41BP818	10/29/15	BD07	3	20-30	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD07	4	30-40	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD07	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD07	6	50-60	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD08	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	1-5%		Positive	1: Flake (tertiary)
41BP818	10/29/15	BD08	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	1-5%		Negative	No cultural material encountered.
41BP818	10/29/15	BD08	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	1-5%		Negative	No cultural material encountered.
41BP818	10/29/15	BD08	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD08	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD08	6	50-60	5YR 6/4	light reddish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	BD09	1	0-10	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	BD09	2	10-20	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD09	3	20-30	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD09	4	30-40	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered.
41BP818	10/29/15	BD09	5	40-50	10YR 3/2	very dark grayish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at too saturated.
41BP818	10/29/15	BM39	1	0-70	10YR 5/4	yellowish brown	Sandy Clay	-	-	Positive	3: Flake (primary) Terminated at soil change.
41BP818	10/28/15	DR418	1	0-50	10YR 6/6	brownish yellow	Sandy Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	5: Flake (tertiary), Other Prehistoric [2 shatter 20-40 cmbs, 3 TF 40-50 cmbs]
41BP818	10/28/15	DR418	2	50-60	5YR 6/6	reddish yellow	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/28/15	DR419	1	0-50	10YR 6/6	brownish yellow	Sandy Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	11: Flake (secondary), Flake (tertiary) [1 TF @ 10-20; 1 TF 20-30; 1 PF 3 TF @ 30-40; 5 TF @ 40-50]
41BP818	10/28/15	DR419	2	50-60	5YR 6/6	reddish yellow	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/28/15	DR420	1	0-40	10YR 5/6	yellowish brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	1: Flake (tertiary) [1 TF @ 10-20 cmbs]
41BP818	10/28/15	DR420	2	40-45	5YR 6/6	reddish yellow	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/28/15	DR421	1	0-45	10YR 5/4	yellowish brown	Sandy Clay Loam	1-5%	Pebbles	Positive	4: Flake (secondary), Flake (tertiary), Other Prehistoric [1 TF, 1 shatter @ 20-30; 1 TF, 1 shatter @ 30-40]

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/28/15	DR421	2	45-55	10YR 4/3	brown	Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP818	10/29/15	DR422	1	0-40	10YR 4/3	brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	10: Flake (tertiary), Other Prehistoric [1 shatter, 1 TF @0-20; 7 TF @ 20-30; 1 shatter 30-40]
41BP818	10/29/15	DR422	2	40-50	5YR 4/4	reddish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	DR423	1	0-50	10YR 4/3	brown	Sandy Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	15: Flake (tertiary), Other Prehistoric [1 SF, 1 TF, 1 FCR @ 0-20; 2 TF @ 20-30; 1 TF @ 30-40; 5 TF, 4 FCR @ 40-50]
41BP818	10/29/15	DR423	2	50-55	5YR 4/4	reddish brown	Clay Loam	1-5%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	MN414	1	0-45	10YR 5/4	yellowish brown	Sandy Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	2: Flake (tertiary)
41BP818	10/29/15	MN414	2	45-55	10YR 5/6	yellowish brown	Sandy Clay	5-10%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	MN415	1	0-45	10YR 3/2	very dark grayish brown	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	PO01	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Pebbles	Positive	3: Flake (secondary), Flake (tertiary)
41BP818	10/29/15	PO01	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Pebbles	Positive	1: Core
41BP818	10/29/15	PO01	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Cobbles, Pebbles	Positive	1: Flake (secondary)
41BP818	10/29/15	PO01	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	>20%	Cobbles, Pebbles	Positive	1: Flake (tertiary) Terminated at too many pebbles to get the auger through.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP818	10/29/15	PO02	1	0-10	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	Pebbles	Positive	2: Flake (secondary)
41BP818	10/29/15	PO02	2	10-20	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	3: Flake (tertiary)
41BP818	10/29/15	PO02	3	20-30	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Positive	1: Flake (tertiary)
41BP818	10/29/15	PO02	4	30-40	10YR 6/4	light yellowish brown	Sandy Loam	10-20%	-	Negative	No cultural material encountered.
41BP818	10/29/15	PO02	5	40-50	5YR 4/6	yellowish red	Sandy Clay Loam	10-20%	-	Negative	No cultural material encountered.
41BP818	10/29/15	PO02	6	50-60	5YR 4/6	yellowish red	Sandy Clay Loam	10-20%	-	Negative	No cultural material encountered.
41BP818	10/29/15	PO02	7	60-70	5YR 4/6	yellowish red	Sandy Clay Loam	10-20%	-	Negative	No cultural material encountered.
41BP818	10/29/15	PO02	8	70-80	5YR 4/6	yellowish red	Sandy Clay Loam	10-20%	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP818	10/29/15	PO03	1	0-30	10YR 2/2	very dark brown	Silty Clay	-	-	Positive	1: Flake (tertiary)
41BP818	10/29/15	PO03	2	30-45	10YR 2/1	black	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
41BP818	10/29/15	PO03	3	45-60	10YR 2/1	black	Clay	1-5%	Gravels, Mottles	Negative	No cultural material encountered. Terminated at compact soil.
41BP915	7/14/15	DR163	1	0-30	7.5YR 4/6	strong brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Positive	3: Other Prehistoric [1 primary flake, 1 tertiary microflake, 1 cultural shatter 20-30cmbs] Terminated at large cobbles.
41BP915	7/14/15	DR164	1	0-20	10YR 4/6	dark yellowish brown	Loam	>20%	Cobbles, Gravels, Pebbles	Positive	8: Flake (primary), Flake (tertiary), Other Prehistoric [4 shatter 0-10cmbs, 1 Tf, 1 Pf, 2 shatter 10-20 cmbs] Terminated at large cobbles.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP915	7/14/15	DR165	1	0-5	7.5YR 5/6	strong brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at large cobbles.
41BP915	7/14/15	DR166	1	0-10	7.5YR 5/6	strong brown	Sandy Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at large cobbles.
41BP915	7/14/15	MS11	1	0-30	10YR 4/2	dark grayish brown	Clay	>20%	Cobbles, Gravels	Positive	34: Flake (secondary), Flake (tertiary), Other Prehistoric [70% gravel; 0-10: 3 secondary, 3 tertiary flakes; 10-20: 6 primary, 1 secondary, 7 tertiary flakes; 20-30: 9 primsry, 6 tertiary flakes] Terminated at dense gravels and cobbles.
41BP915	7/14/15	MS12	1	0-25	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Positive	24: Flake (primary), Flake (secondary), Flake (tertiary) [0-10: 1 primary, 9 tertiary; 10-20: 10 trtyisry; 20-25: 4 tertiary] Terminated at dense gravel and cobbles.
41BP916	7/15/15	DR182	1	0-40	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Pebbles	Positive	8: Flake (primary), Flake (tertiary), Other Prehistoric [3 chert shatter 0-10, 1 Tf 1 BR 10-20, 2 shatter 1 BR 20-30, 1 Pf 30-40]
41BP916	7/15/15	DR182	2	40-50	10YR 3/1	very dark gray	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP916	7/16/15	DR183	1	0-35	10YR 5/2	grayish brown	Clay Loam	5-10%	Cobbles, Pebbles	Positive	108: Flake (primary), Flake (secondary), Flake (tertiary), Other Prehistoric [Burned lithic flakes and chert cobbles, lithic surface 0-10cmbs. Likely close to concentration. 57 flakes and shatter 0-10, 29 flakes and shatter 10-20, 14 for 20-30, 8 for 30-40]

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP916	7/16/15	DR183	2	35-45	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Cobbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP916	7/16/15	DR184	1	0-35	10YR 5/2	grayish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP916	7/16/15	DR185	1	0-30	10YR 5/2	grayish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP916	7/15/15	MS24	1	0-40	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels, Pebbles, Burned rock, charred wood, midden debris	Positive	242: Flake (primary), Flake (secondary), Flake (tertiary), Flake (utilized), Other Prehistoric [1-10cm: 113 deb and fcr, one edge mod flake; 10-20cm: 77 deb and fcr; 20-30: 41 deb and fcr; 30-40: 10 deb and fcr; also about 40 rounded cobbles total, some cracked]
41BP916	7/15/15	MS24	2	40-50	7.5YR 2.5/1	black	Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at sterile clay.
41BP916	7/16/15	MS25	1	0-30	10YR 3/1	very dark gray	Clay Loam	>20%	Cobbles, Gravels	Positive	3: Flake (primary), Flake (tertiary) [10-20cm: 2 flakes, 1 primaty, 1 tertiary; 20-30cm: 1 tertiary flake]
41BP916	7/16/15	MS25	2	20-30	7.5YR 2/1		Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at sterile clay.
41BP917	7/21/15	AJ12	1	0-10	10YR 8/3	very pale brown	Sandy Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP917	7/21/15	AJ12	2	10-20	10YR 8/3	very pale brown	Sandy Loam	10-20%	Gravels, Pebbles	Positive	2: Flake (secondary), Flake (tertiary)
41BP917	7/21/15	AJ12	3	20-30	10YR 8/3	very pale brown	Loamy Sand	10-20%	Gravels, Pebbles	Positive	3: Flake (primary), Flake (secondary), Flake (tertiary)
41BP917	7/21/15	AJ12	4	30-40	10YR 8/3	very pale brown	Loamy Sand	10-20%	Gravels, Pebbles	Positive	6: Chipped Stone Tool, Flake (tertiary)

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP917	7/21/15	AJ12	5	40-50	10YR 8/3	very pale brown	Loamy Sand	10-20%	Cobbles, Gravels, Pebbles	Positive	2: Flake (secondary), Flake (tertiary)
41BP917	7/21/15	AJ12	6	0-60	10YR 8/3	very pale brown	Loamy Sand	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP917	7/21/15	AJ13	1	0-10	10YR 8/3	very pale brown	Loamy Sand	5-10%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP917	7/21/15	AJ13	2	10-20	10YR 8/3	very pale brown	Loamy Sand	5-10%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP917	7/21/15	AJ13	3	20-30	10YR 8/3	very pale brown	Loamy Sand	5-10%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP917	7/21/15	AJ13	4	30-40	10YR 8/3	very pale brown	Loamy Sand	5-10%	Gravels, Pebbles	Positive	3: Flake (tertiary)
41BP917	7/21/15	AJ13	5	40-50	10YR 8/3	very pale brown	Loamy Sand	5-10%	Gravels, Pebbles	Positive	3: Flake (tertiary)
41BP917	7/21/15	AJ13	6	50-60	10YR 8/3	very pale brown	Loamy Sand	10-20%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP917	7/21/15	AJ13	7	60-70	10YR 8/3	very pale brown	Loamy Sand	10-20%	Gravels, Pebbles	Positive	1: Flake (tertiary)
41BP917	7/21/15	AJ13	8	70-80	10YR 8/3	very pale brown	Loamy Sand	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP917	7/21/15	AJ14	1	0-30	10YR 5/1	gray	Sandy Clay	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP917	7/21/15	DR211	1	0-40	10YR 6/2	light brownish gray	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
41BP917	7/21/15	DR212	1	0-50	10YR 8/3	very pale brown	Sandy Loam	5-10%	Pebbles	Positive	12: Flake (secondary), Flake (tertiary), Other Prehistoric [2 FCR, 2 Tf 0-10; 1 FCR, 1 Tf, 2 shatter 10-20; 2 FCR 20-30; 2 FCR 30-40] Terminated at compact large cobbles.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP917	7/21/15	DR213	1	0-80	10YR 8/3	very pale brown	Sandy Loam	5-10%	Pebbles	Positive	13: Flake (primary), Flake (secondary), Flake (tertiary), Other Prehistoric [2 Tf, 2 shatter 10-20; 1 utilized Tf 20-30; 1 Pf, 2 Tf 30-40; 1 Sf, 2 Tf 40-50; 1 Tf 50-60; 1 Tf, 1 shatter 70-80]
41BP917	7/21/15	DR213	2	80-90	5YR 6/6	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP917	7/21/15	DR214	1	0-50	10YR 7/3	very pale brown	Sandy Loam	5-10%	Pebbles	Positive	3: Flake (tertiary), Other Prehistoric [1 Tf 30-40; 1 Tf, 1 shatter 40-50]
41BP917	7/21/15	DR214	2	50-65	5YR 6/6	reddish yellow	Sandy Clay	1-5%	Pebbles	Positive	1: Other Prehistoric [Charcoal flecks, 1 shatter 50-60] Terminated at basal clay.
41BP918	7/30/15	MN68	1	0-40	10YR 5/1	gray	Silt Loam	-	Cobbles, Gravels, Pebbles	Positive	71: Biface, Flake (tertiary) [0-10 : 27 tertiary 1 secondary 10-20: 32 tertiary 2 secondary 1 biface 20-35: 13 tertiary 1 secondary] Terminated at compact soil.
41BP918	7/30/15	MN69	1	0-10	10YR 5/1	gray	Silt Loam	1-5%	Pebbles	Negative	No cultural material encountered.
41BP918	7/30/15	MN69	2	10-35	10YR 5/1	gray	Silt Loam	10-20%	Cobbles, Gravels	Positive	10: Flake (tertiary) [10-20: 4 tertiary 20-35: 6 tertiary] Terminated at compact soil.
41BP918	7/30/15	MN70	1	15-25	10YR 2/2	very dark brown	Clay Loam	1-5%	None	Negative	No cultural material encountered. Terminated at basal clay.
41BP918	7/30/15	MN70	1	0-15	10YR 5/1	gray	Silt Loam	1-5%	Pebbles	Positive	2: Flake (tertiary) Terminated at basal clay.
41BP918	7/30/15	MN71	1	0-10	10YR 5/1	gray	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered.
41BP918	7/30/15	MN71	2	10-25	10YR 5/1	gray	Silt Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP918	7/30/15	MS69	1	0-30	10YR 4/3	brown	Silt Loam	>20%	-	Positive	275: Flake (primary), Flake (secondary), Flake (tertiary), Other Prehistoric [0-20cm: 65 flakes and shatter; 20-30cm: 210 flakes and shatter; total of about 50 burned limestone frags from 0-30cn, not included in artifsct total.]
41BP918	7/30/15	MS70	1	0-30	10YR 4/3	brown	Silt Loam	>20%	Cobbles, Gravels	Positive	28: Flake (tertiary), Other Prehistoric [0-10cm: 13 flakes and shatter; 10-20cm: 8 flakes; 20-30cm: 6 flakes and shatter] Terminated at dense gravel.
41BP918	7/30/15	MS71	1	0-20	10YR 4/3	brown	Silty Clay	>20%	-	Positive	2: Flake (tertiary) [Extremely dense gracel at surface possibly due yo disturbance] Terminated at compact soil.
41BP918	7/30/15	MS72	1	0-30	10YR 4/3	brown	Silt Loam	>20%	Cobbles, Gravels	Positive	2: Flake (tertiary) Terminated at compact soil.
41BP918	7/30/15	MS73	1	0-25	10YR 6/3	pale brown	Silty Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41BP919	8/4/15	MN96	1	0-100	10YR 5/2	grayish brown	Sandy Loam	1-5%	Gravels	Positive	4: Flake (tertiary) [60-70: 1 tertiary 70-80: 3 tertiary] Terminated at depth.
41BP919	8/4/15	MN97	1	0-100	10YR 5/3	brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at depth.
41BP919	8/4/15	MN99	1	0-100	10YR 5/2	grayish brown	Sandy Loam	1-5%	Gravels	Positive	1: Flake (tertiary) [1 tertiary flake] Terminated at depth.
41BP919	8/4/15	MS93	1	0-100	10YR 5/3	brown	Sandy Loam	1-5%	Gravels, Mottles	Positive	4: Flake (tertiary) [30-40cmbs: 2 coarse-grained chert flakes; 40-50 cmbs: 1 coarse-grained chert flake; 70-80cmbs: 1 fine grained, heat treatrd chert flake] Terminated at depth.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP919	8/4/15	MS94	1	0-50	10YR 6/3	pale brown	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered.
41BP919	8/4/15	MS94	2	50-55	10YR 4/6	dark yellowish brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP919	8/4/15	MS95	1	0-60	10YR 5/4	yellowish brown	Sandy Loam	-	-	Positive	2: Flake (tertiary) [0-20cm: 2 transuscent chert flakes, lt brown]
41BP919	8/4/15	MS95	2	60-75	10YR 6/3	pale brown	Sandy Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP919	8/4/15	MS95	2	75-80	10YR 6/3	pale brown	Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	7/21/15	AJ18	1	0-30	10YR 7/1	light gray	Sandy Clay	1-5%	Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP920	7/21/15	AJ19	1	0-10	10YR 8/1	white	Sandy Clay	5-10%	Gravels, Pebbles	Negative	No cultural material encountered.
41BP920	7/21/15	AJ19	2	10-20	10YR 7/2	light gray	Sandy Clay	5-10%	Gravels, Pebbles	Positive	2: Flake (primary), Flake (secondary), Other Prehistoric
41BP920	7/21/15	AJ19	3	20-30	10YR 7/2	light gray	Sandy Clay	5-10%	Gravels, Pebbles	Positive	7: Flake (primary), Flake (secondary), Projectile Point [2 PF; 2 SF; 2 TF; 1 PP; Large burned, highly oxidized stone] Terminated at compact soil.
41BP920	7/21/15	AJ20	1	0-15	10YR 8/1	white	Clay	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP920	7/21/15	AJ21	1	1-30	10YR 6/6	brownish yellow	Sandy Clay	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP920	7/21/15	DR218	1	0-30	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Positive	5: Flake (secondary), Flake (tertiary) [2 Tf, 1 Sf 0-10; 1Tf 10-20; 1 Tf 20-30]

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP920	7/21/15	DR218	2	30-35	2.5YR 5/8	red	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	7/21/15	DR219	1	0-20	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
41BP920	7/21/15	DR219	2	20-25	2.5YR 5/8	red	Clay Loam	5-10%	Mottles	Negative	Terminated at basal clay.
41BP920	7/21/15	DR220	1	0-25	7.5YR 7/3	pink	Sandy Loam	1-5%	Pebbles	Positive	6: Flake (tertiary) [3 Tf 10-20; 3 Tf 20-25]
41BP920	7/21/15	DR220	2	25-35	5YR 5/8	yellowish red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	7/21/15	DR221	1	0-20	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	
41BP920	7/21/15	DR221	2	20-30	2.5YR 5/8	red	Clay Loam	5-10%	Mottles	Negative	Terminated at basal clay.
41BP920	7/22/15	DR222	1	0-50	10YR 5/3	brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP920	8/18/15	DR245	1	0-15	7.5YR 7/3	pink	Sandy Loam	5-10%	Pebbles	Negative	No cultural material encountered.
41BP920	8/18/15	DR245	2	15-20	5YR 4/6	yellowish red	Sandy Clay	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	DR246	1	0-32	10YR 5/4	yellowish brown	Sandy Loam	5-10%	Pebbles, Burned rock fragments 2%	Positive	30: Ceramic (prehistoric), Flake (secondary), Flake (tertiary) [0-10: 1 Pf, 3 Tf; 10-20: 7 Tf; 20-30: 17 Tf, 1 Pf; 30-35: 1 Tf, 1 earthenware]
41BP920	8/18/15	DR246	2	32-35	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	DR247	1	0-20	7.5YR 5/6	strong brown	Sandy Clay Loam	1-5%	Pebbles, Burned rock frags 2%	Positive	19: Flake (secondary), Flake (tertiary) [12 Tf, 1 Sf, 1 Pf 0-10; 5 Tf 10-20]
41BP920	8/18/15	DR247	2	20-27	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP920	8/18/15	DR248	1	0-25	7.5YR 5/6	strong brown	Sandy Clay Loam		Pebbles	Positive	6: Flake (tertiary), Flake (utilized) [0-10: 1 Tf microflake; 10-20: 4 Tf, 1 utilized Tf]
41BP920	8/18/15	DR248	2	25-27	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	DR249	1	0-25	7.5YR 5/6	strong brown	Sandy Clay Loam	1-5%	Pebbles	Positive	1: Flake (tertiary) [1 Tf 10-20]
41BP920	8/18/15	DR249	2	25-27	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	DR250	1	0-25	7.5YR 5/6	strong brown	Sandy Clay Loam	1-5%	Pebbles	Negative	No cultural material encountered.
41BP920	8/18/15	DR250	2	25-30	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	DR251	1	0-20	7.5YR 5/6	strong brown	Sandy Clay Loam	1-5%	Pebbles	Negative	
41BP920	8/18/15	DR251	2	20-25	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	Terminated at basal clay.
41BP920	8/18/15	DR252	1	0-20	7.5YR 5/6	strong brown	Sandy Clay Loam	1-5%	Pebbles	Positive	7: Flake (primary), Flake (tertiary) [0-10: 1Pf, 2 Tf; 10-20: 4 Tf]
41BP920	8/18/15	DR252	2	20-30	5YR 4/4	reddish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	MN213	1	0-25	10YR 5/6	yellowish brown	Silt Loam	1-5%	Gravels	Positive	4: Flake (tertiary) [10-20: 4 tertiary flakes] Terminated at basal clay.
41BP920	8/18/15	MN214	1	0-30	10YR 5/6	yellowish brown	Silt Loam	1-5%	Gravels	Positive	8: Flake (tertiary) Terminated at bedrock.
41BP920	8/18/15	MN215	1	0-30	10YR 5/6	yellowish brown	Silt Loam	1-5%	Gravels	Positive	25: Flake (tertiary) [0-10: 5 tertiary 10-20: 10 tertiary 20-30: 9] Terminated at basal clay.
41BP920	8/18/15	MN216	1	0-20	2.5 YR 5/6	red	Silty Clay	-	-	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP920	8/18/15	MN216	2	20-30	2.5YR 6/8	light red	Clay Loam	-	-	Positive	1: Flake (tertiary) [1 biface thinning flake] Terminated at basal clay.
41BP920	8/18/15	MN217	1	0-35	7.5YR 5/6	strong brown	Silt Loam	1-5%	Gravels	Positive	2: Flake (tertiary) [20-30: 2 tertiary flakes] Terminated at basal clay.
41BP920	8/18/15	MN218	1	0-40	7.5YR 5/6	strong brown	Silt Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
41BP920	8/18/15	MN219	-	-	-	-	-	-	-	-	No data available.
41BP920	8/18/15	MN220	1	0-30	7.5YR 5/6	strong brown	Silt Loam	1-5%	Gravels	Positive	3: Flake (tertiary) [0-10: 1 10-20: 1 20-30: 1] Terminated at basal clay.
41BP920	8/18/15	MN221	1	0-30	7.5YR 5/6	strong brown	Silt Loam	1-5%	Gravels, Road gravel from adjacent road	Positive	2: Flake (tertiary), Other Historic [0-10: 1 tertiary flake, 1 brick fragment] Terminated at dense road gravels.
41BP921	8/6/15	MN127	1	0-30	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Positive	1: Glass [1 fragment brown glass]
41BP921	8/6/15	MN127	2	30-35	10YR 5/6	yellowish brown	Sandy Clay	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41BP921	8/6/15	MN128	1	0-30	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Positive	3: Glass [0-10cm : 3 frag window pane glass]
41BP921	8/6/15	MN128	2	30-40	10YR 5/3	brown	Sandy Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
41BP921	8/6/15	MN129	1	0-20	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Negative	No cultural material encountered.
41BP921	8/6/15	MN129	2	20-30	10YR 5/6	yellowish brown	Sandy Clay	1-5%	Mottles, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP921	8/6/15	MS110	1	0-60	10YR 7/3	very pale brown	Sand	1-5%	Gravels	Positive	8: Ceramic (historic), Glass, Metal [0-20cm: 1 wire nail (rusty, detail unknown), painted porcelain tea cup fragment, 1 whiteware plate base frag, 1 amber bottle glass frag, 2 clear lamp glass frags; 20-40cm: 1 undecorated whitware, 1 whiteware frag w/green transfer print (likely same piece)]
41BP921	8/6/15	MS110	2	60-63	10YR 5/4	yellowish brown	Sandy Clay	10-20%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP921	8/6/15	MS111	1	0-100	10YR 7/3	very pale brown	Sand	1-5%	Gravels	Positive	22: Glass, Metal [0-20: 9 clear window glass, 2 oxidized winwdow glass, 1 rusty nail or bolt; 20-40: 1 unknown rusty metal, 4 clsmear window glass, 1 clesr bottle base; 40-60: 1 lamp glass; 60-80: 2 clear window glass] Terminated at depth.
41BP922	8/21/15	DR275	1	0-30	7.5YR 7/6	reddish yellow	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41BP923	9/3/15	MCC37	1	0-100	7.5YR 6/4	light brown	Sand	-	-	Positive	5: Ceramic (historic), Flake (tertiary) [3 tertiary flakes & 1 whiteware frag 0-25 cmbs & 1 tertiary flake 25-35.] Terminated at depth.
41BP923	9/3/15	MCC38	1	0-100	7.5YR 6/4	light brown	Sand	-	-	Positive	3: Flake (tertiary), Glass [1clear bottle glass fragment 0-30 cmbs & 2 tertiary flakes 30-50 cmbs] Terminated at depth.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BP923	9/3/15	MCC39	1	0-65	7.5YR 4/6	strong brown	Sand	-	-	Negative	No cultural material encountered.
41BP923	9/3/15	MCC39	2	65-70	10YR 6/8	brownish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BP923	9/3/15	MN321	1	0-100	7.5YR 5/6	strong brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
41BP923	9/3/15	MN322	1	0-35	7.5YR 5/6	strong brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
41BU115	8/31/15	MCC06	1	0-10	7.5YR 6/8	reddish yellow	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BU115	8/31/15	MCC07	1	0-10	7.5YR 6/8	reddish yellow	Clay	-	-	Negative	Terminated at basal clay.
41BU115	8/31/15	MCC08	1	0-15	7.5YR 5/8	strong brown	Sandy Loam	-	-	Positive	1: Glass [Glass at 10 cmbs.] Terminated at basal clay.
41BU115	8/31/15	MN289	1	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	-	Negative	Terminated at basal clay.
41BU115	8/31/15	MN290	1	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	-	Negative	Terminated at basal clay.
41BU115	8/31/15	MN291	1	0-50	7.5YR 7/2	pinkish white	Loamy Sand	-	-	Negative	Terminated at basal clay.
41BX2096	6/16/15	DR03	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Pebbles	Positive	1: Other Prehistoric [1 small chert shatter] Terminated at bedrock.
41BX2096	6/16/15	DR04	1	0-10	10YR 3/3	dark brown	Clay Loam	10-20%	Cobbles, Large Rock Frags	Positive	1: Other Prehistoric [Cultural shatter] Terminated at bedrock.
41BX2096	6/16/15	DR05	1	0-10	10YR 3/3	dark brown	Clay Loam	10-20%	Cobbles, Large Rock Frags, Pebbles	Negative	Terminated at bedrock.
41BX2096	6/16/15	RW04	1	0-15	10YR 2/2	very dark brown	Clay	>20%	Cobbles, Gravels	Positive	10: Flake (secondary) [Cobbles at surface. 5 secondary, 5 shatter] Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BX2097	6/17/15	DR14	1	0-25	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags	Positive	1: Chipped Stone Tool [Secondary flake crude unifacial CST] Terminated at bedrock.
41BX2097	6/17/15	DR15	1	0-15	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Large Rock Frags	Positive	1: Flake (utilized) Terminated at bedrock.
41BX2097	6/17/15	DR17	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX2097	6/17/15	DR18	1	0-15	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Large Rock Frags, Pebbles	Positive	1: Flake (secondary) Terminated at bedrock.
41BX2097	6/17/15	DR19	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock. Shovel test number duplicated.
41BX2097	6/17/15	RW15	1	0-30	10YR 2/2	very dark brown	Clay	-	-	Positive	2: Other Prehistoric [2 shatter chert] Terminated at bedrock.
41BX2097	6/17/15	RW16	1	0-20	10YR 3/3	dark brown	Clay Loam	-	-	Positive	4: Other Prehistoric [4 chert shatter]
41BX2097	6/17/15	RW16	2	20-25	7.5YR 3/3	dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BX2097	6/17/15	RW17	1	0-10	10YR 3/3	dark brown	Clay Loam	-	-	Positive	1: Flake (utilized)
41BX2097	6/17/15	RW17	2	10-15	7.5YR 3/3	dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BX2097	6/17/15	RW18	1	0-10	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered.
41BX2097	6/17/15	RW18	2	10-15	7.5YR 3/3	dark brown	Clay	1-5%	Roots	Negative	No cultural material encountered. Terminated at basal clay.
41BX2098	6/17/15	DR19	-	-	-	-	-	-	-	-	No data available. Shovel test number duplicated.
41BX2098	6/17/15	RW19	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BX2099	6/17/15	RW20	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX2100	6/17/15	DR21	1	0-20	10YR 4/4	dark yellowish brown	Clay Loam	1-5%	Gravels, Pebbles	Positive	1: Flake (primary)
41BX2100	6/17/15	DR21	2	20-30	7.5YR 4/6	strong brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BX2100	6/17/15	DR22	1	0-20	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Positive	3: Flake (primary) [Flakes found 0-20]
41BX2100	6/17/15	DR22	2	20-30	7.5YR 4/6	strong brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41BX2100	6/17/15	DR23	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
41BX2100	6/17/15	RW23	1	0-25	10YR 3/3	dark brown	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered.
41BX2100	6/17/15	RW23	2	25-30	7.5YR 3/3	dark brown	Clay	-	-	Positive	1: Other Prehistoric [1 chert shatter] Terminated at basal clay.
41BX2100	6/17/15	RW24	1	0-10	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
41BX2100	6/17/15	RW25	1	0-10	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
41BX2100	6/17/15	RW26	1	0-10	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
41BX2100	6/17/15	RW27	1	0-5	10YR 3/3	dark brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at bedrock.
41BX2101	6/17/15	DR24	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Cobbles, Gravels, Pebbles	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BX2101	6/17/15	RW30	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41BX2101	6/17/15	RW31	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41BX2101	12/1/15	RW745	1	0-5	10YR 2/1	black	Clay Loam	>20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41BX2101	12/1/15	SMM85	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at large rock fragments.
41BX2101	12/1/15	SMM86	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Gravels, Large Rock Frags	Negative	Terminated at large rock fragments.
41BX2102	6/16/15	DR01	1	0-20	10YR 4/4	dark yellowish brown	Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX2103	6/18/15	DR27	-	-	-	-	-	-	-	-	No data available.
41BX2103	6/18/15	RW34	1	0-5	10YR 2/1	black	Clay Loam	10-20%	Calcium Carbonate, Gravels	Positive	1: Flake (utilized) Terminated at bedrock.
41BX2103	6/18/15	RW35	1	0-20	10YR 2/1	black	Clay Loam	10-20%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX2104	6/18/15	DR29	1	0-10	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Positive	7: Flake (tertiary), Other Prehistoric [3 flakes, 4 burned rock (0-7.5cmbs)]
41BX2104	6/18/15	DR29	2	10-20	10YR 7/3	very pale brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BX2104	6/18/15	DR30	1	0-15	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
41BX2104	6/18/15	DR30	2	15-30	10YR 7/3	very pale brown	Clay Loam	-	-	Negative	Terminated at basal clay.
41BX2104	6/18/15	RW36	1	0-10	10YR 2/2	very dark brown	Clay Loam	10-20%	Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX2104	6/18/15	RW37	1	0-20	10YR 2/2	very dark brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BX2104	6/18/15	RW37	2	20-30	10YR 3/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BX2104	6/18/15	RW38	1	0-20	10YR 2/2	very dark brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered.
41BX2104	6/18/15	RW38	2	20-30	10YR 3/4	dark yellowish brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41BX2105	6/22/15	DR41	1	0-15	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2105	6/22/15	DR42	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Positive	1: Flake (utilized) Terminated at bedrock.
41BX2105	6/22/15	DR43	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2105	6/22/15	KS06	1	0-15	10YR 2/2	very dark brown	Clay	1-5%	Pebbles	Negative	Terminated at bedrock.
41BX2105	6/22/15	KS07	1	0-5	10YR 2/2	very dark brown	Clay	1-5%	Pebbles	Negative	Terminated at bedrock.
41BX2105	6/22/15	KS08	1	0-7	10YR 2/2	very dark brown	Clay Loam	5-10%	Large Rock Frags, Roots	Negative	No cultural material encountered. Terminated at bedrock.
41BX2106	6/22/15	DR50	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2106	6/22/15	DR51	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2106	6/22/15	DR52	1	0-5	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2106	6/22/15	DR53	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2106	6/22/15	KS15	1	0-5	10YR 2/2	very dark brown	Clay Loam	1-5%	Cobbles, Pebbles	Negative	Terminated at bedrock.
41BX2106	6/22/15	KS16	-	-	-	-	-	-	-	-	No data available.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41BX91	6/16/15	DR13	1	0-16	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
41BX91	6/16/15	RW12	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at gravel lens.
41BX91	6/16/15	RW13	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41BX91	6/16/15	RW14	1	0-5	10YR 2/1	black	Clay Loam	>20%	Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM392	6/24/15	DR74	1	0-35	10YR 7/4	very pale brown	Clay Loam	>20%	Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
41CM392	6/24/15	DR75	1	0-15	10YR 7/4	very pale brown	Clay Loam	>20%	Pebbles	Negative	Terminated at bedrock.
41CM392	6/24/15	RW66	1	0-20	2.5yr 4/4		Silty Clay Loam	5-10%	Gravels	Negative	No cultural material encountered.
41CM392	6/24/15	RW66	2	20-30	2.5ry 4/4		Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	DR79	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	DR80	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
41CM394	6/25/15	DR81	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
41CM394	6/25/15	DR82	1	0-10	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM394	6/25/15	DR83	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at bedrock.
41CM394	8/24/15	KS100	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS101	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS102	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS103	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS104	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS105	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS106	-	-	-	-	-	-	-	-	No data available.
41CM394	8/24/15	KS107	-	-	-	-	-	-	-	-	No data available.
41CM394	8/25/15	KS120	1	0-5	5YR 2.5/2	dark reddish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
41CM394	8/25/15	KS121	1	0-5	5YR 2.5/2	dark reddish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
41CM394	8/24/15	RW300	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Positive	2: Flake (secondary) Terminated at bedrock.
41CM394	8/24/15	RW301	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW302	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW303	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW304	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW305	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW306	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM394	8/24/15	RW307	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/24/15	RW308	1	0-10	5YR 3/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	8/25/15	RW321	1	0-10	5YR 2.5/2	dark reddish brown	Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	RW73	1	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	RW74	1	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	RW75	1	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	RW76	1	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM394	6/25/15	RW77	1	0-10	7.5YR 3/4	dark brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM395	6/25/15	DR84	1	0-20	7.5YR 4/4	brown	Loam	1-5%	Pebbles	Negative	No cultural material encountered.
41CM395	6/25/15	DR84	2	20-35	5YR 6/4	light reddish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM395	6/25/15	DR85	1	0-20	7.5YR 4/4	brown	Loam	1-5%	Pebbles	Negative	
41CM395	6/25/15	DR85	2	20-25	5YR 6/4	light reddish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	Terminated at bedrock.
41CM395	6/25/15	DR86	1	0-50	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41CM395	6/25/15	RW79	1	0-15	10YR 3/3	dark brown	Clay Loam	5-10%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM395	6/25/15	RW80	1	0-20	10YR 3/3	dark brown	Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41CM396	6/26/15	RW90	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM396	6/26/15	RW91	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM396	6/26/15	RW92	1	0-10	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Calcium Carbonate, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM397	6/26/15	DR98	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
41CM397	6/26/15	DR99	1	0-5	10YR 4/4	dark yellowish brown	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	Terminated at bedrock.
41CM397	6/26/15	RW96	1	0-20	10YR 2/2	very dark brown	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41CM398	6/29/15	KH03	1	0-30	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
41CM399	6/29/15	DR106	1	0-35	10YR 4/4	dark yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at bedrock.
41CM399	6/29/15	DR107	1	0-35	7.5YR 4/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at compact soil.
41CM399	6/29/15	DR108	1	0-30	7.5YR 4/4	brown	Clay Loam	1-5%	Gravels, Pebbles	Negative	Terminated at compact soil.
41CM399	6/29/15	MP07	1	0-10	10YR 4/2	dark grayish brown	Silty Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered.
41CM399	6/29/15	MP07	2	20-20	10YR 4/2	dark grayish brown	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered.
41CM399	6/29/15	MP07	3	20-30	10YR 4/2	dark grayish brown	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM399	6/29/15	MP08	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
41CM399	6/29/15	MP09	1	0-30	10YR 4/2	dark grayish brown	Silty Clay	1-5%	Gravels	Negative	Terminated at basal clay.
41CM400	6/29/15	KH08	1	0-5	10YR 5/4	yellowish brown	Clay Loam	-	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered.
41CM400	6/29/15	KH08	2	5-40	10YR 4/2	dark grayish brown	Clay	-	Gravels, Pebbles	Positive	1: Flake (tertiary) Terminated at basal clay.
41CM400	6/29/15	KH09	1	0-20	10YR 5/6	yellowish brown	Clay Loam	-	Cobbles, Gravels, Large Rock Frags	Positive	4: Flake (tertiary) Terminated at bedrock.
41CM400	6/29/15	RW105	1	0-10	7.5YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW106	-	-	-	-	-	-	-	-	No data available.
41CM400	6/29/15	RW107	1	0-10	7.5YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW108	1	0-10	7.5YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW109	1	0-10	7.5YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW110	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW111	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM400	6/29/15	RW112	1	0-5	10YR 2/2	very dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CM401	8/24/15	KS108	-	-	-	-	-	-	-	-	No data available.
41CM401	8/24/15	KS109	-	-	-	-	-	-	-	-	No data available.
41CM401	8/24/15	KS110	-	-	-	-	-	-	-	-	No data available.
41CM401	8/24/15	KS111	-	-	-	-	-	-	-	-	No data available.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM401	8/24/15	RW309	1	0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM401	8/24/15	RW310	1	0-10	10YR 5/4	yellowish brown	Sandy Clay Loam	>20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CM401	8/24/15	RW311	1	0-15	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered. Terminated at basal clay.
41CM401	8/24/15	RW312	1	0-15	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered. Terminated at basal clay.
41CM404	12/1/15	RW738	1	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered.
41CM404	12/1/15	RW738	2	25-30	7.5YR 4/4	brown	Clay	10-20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
41CM404	12/1/15	RW739	1	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered.
41CM404	12/1/15	RW739	2	25-30	7.5YR 4/4	brown	Clay	10-20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
41CM404	12/1/15	RW740	1	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered.
41CM404	12/1/15	RW740	2	25-30	7.5YR 4/4	brown	Clay	10-20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
41CM404	12/1/15	RW741	1	0-25	10YR 3/4	dark yellowish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels	Negative	No cultural material encountered.
41CM404	12/1/15	RW741	2	25-30	7.5YR 4/4	brown	Clay	10-20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at basal clay.
41CM404	12/1/15	SMM83	1	0-15	10YR 4/2	dark grayish brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CM404	12/1/15	SMM83	2	15-30	2.5Y 6/6	olive yellow	Clay Loam	>20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at sterol soil.
41CM404	12/1/15	SMM84	1	0-10	10YR 4/3	brown	Clay Loam	5-10%	Cobbles, Pebbles	Negative	No cultural material encountered.
41CM404	12/1/15	SMM84	2	20-Oct	2.5Y 6/6	olive yellow	Clay Loam	>20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at sterol soil.
41CW162	7/2/15	DR126	1	0-15	10YR 5/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
41CW162	7/2/15	DR127	1	0-15	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
41CW162	7/6/15	DR128	1	0-15	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
41CW162	7/6/15	DR128	1	0-15	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
41CW162	7/6/15	MN02	1	0-15	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at bedrock.
41CW162	7/6/15	MN03	1	0-10	10YR 2/1	black	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CW163	9/28/15	KM01	1	0-35	10YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41CW163	9/28/15	KM02	1	0-35	10YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at compact soil.
41CW163	9/28/15	KM03	1	0-26	10YR 3/3	dark brown	Clay Loam	>20%	Cobbles, Gravels	Negative	Terminated at compact soil.
41CW163	7/23/15	MS43	1	0-20	10YR 3/1	very dark gray	Clay	>20%	Calcium Carbonate, Gravels, Pebbles, Snail shell frags, roots	Positive	20: Flake (tertiary) [0-20: 20 tertiary chert flakes] Terminated at dense gravel and cobbles, bedrock?.
41CW163	7/23/15	MS44	1	0-20	10YR 3/1	very dark gray	Clay	>20%	-	Positive	1: Flake (tertiary), Flake (utilized) [Very gravelly] Terminated at dense gravel.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CW163	7/23/15	SS10	1	0-35	10YR 4/3	brown	Clay Loam	10-20%	Gravels, Pebbles	Negative	
41CW163	7/23/15	SS10	2	35-45	10YR 6/4	light yellowish brown	Clay Loam	5-10%	Gravels, Pebbles	Negative	Terminated at compact soil.
41CW163	7/23/15	SS11	1	0-30	10YR 3/4	dark yellowish brown	Clay Loam	10-20%	Gravels	Positive	66: Core, Flake (primary), Flake (secondary), Flake (tertiary), Projectile Point [Lvl 1: one core, 2 primary, 6 secondary, 32 tertiary Lvl 2: one point, 2 primary, 4 secondary, 6 tertiary Lvl 3: one primary, 4 secondary, 7 tertiary] Terminated at bedrock.
41CW163	7/23/15	SS12	1	0-35	10YR 4/3	brown	Loam	10-20%	Gravels, Pebbles	Negative	No cultural material encountered. Terminated at bedrock.
41CW163	7/23/15	SS13	1	0-35	10YR 4/3	brown	Loam	10-20%	Gravels, Pebbles	Negative	Terminated at bedrock.
41CW164	7/27/15	MN46	1	0-40	10YR 2/2	very dark brown	Clay Loam	>20%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41CW164	7/27/15	MS59	1	0-40	10YR 3/1	very dark gray	Clay	1-5%	Calcium Carbonate, Gravels	Positive	88: Flake (tertiary), Other Prehistoric [0-20: 84 flakes and shatter (mostly tertiary); 20-40: 4 flakes] Terminated at compact soil.
41CW165	8/28/15	DR308	1	0-30	10YR 3/3	dark brown	Clay Loam	10-20%	Calcium Carbonate, Cobbles, Gravels	Negative	Terminated at compact soil.
41CW166	9/15/15	KS207	1	0-15	2.5YR 4/2	weak red	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41CW166	9/15/15	RW406	1	0-30	2.5YR 4/2	weak red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CW166	9/15/15	RW407	1	0-30	2.5YR 4/2	weak red	Clay Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41CW167	9/16/15	AG21	1	0-35	10YR 2/1	black	Clay	10-20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	47: Ceramic (historic), Glass, Metal [See memo on tablet] Terminated at compact soil.
41CW167	9/17/15	AG26	1	0-20	10YR 2/1	black	Clay	10-20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	5: Glass, Metal [3 clear glass; 1 cobalt glass; 1 square nail fragment]
41CW167	9/17/15	AG26	2	20-40	10YR 2/1	black	Clay	10-20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	5: Glass, Metal [3 clear glass; 2 wire nails; 1 UID nail fragment] Terminated at compact soil.
41CW167	9/17/15	AG27	1	0-20	10YR 2/1	black	Clay	>20%	Cobbles, Gravels, Large Rock Frags, Pebbles	Positive	4: Glass, Metal [2 clear glass; 1 amber glass; 1 wire nail fragment] Terminated at fire ants.
41CW167	9/17/15	MS206	1	0-40	10YR 3/1	very dark gray	Clay Loam	10-20%	Cobbles, Gravels	Positive	14: Ceramic (historic), Glass, Metal, Other Historic [0-20cmbs: 1 wire nail, 1 screw top mason jar neck frag, 3 clesr glass vessle frags, 1 mang-bleached glass, 3 white ware; 30-35cmbs: 1 mang-bleached glass base frag, 2 ckesr bottle glsss, 2 mortar frags] Terminated at compact soil.
41CW168	10/7/15	RW421	1	0-35	2.5YR 4/2	weak red	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
41CW168	10/7/15	RW422	1	0-40	2.5YR 4/2	weak red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
41CW168	10/7/15	RW423	1	0-10	2.5YR 4/2	weak red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CW168	10/7/15	RW424	1	0-40	2.5YR 4/2	weak red	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
41CW168	10/8/15	RW425	1	0-35	2.5YR 4/2	weak red	Silty Clay Loam	-	-	Negative	No cultural material encountered. Terminated at compact soil.
41CW168	10/7/15	SMM50	1	0-25	10YR 4/3	brown	Clay Loam	1-5%	Mottles, Roots	Positive	6: Ceramic (historic), Glass, Metal [Color of the soil is a dark grayish brown. The soil is very dry and compact. Shovel test was located in a drainage area between two rolling hills.] Terminated at compact soil.
41CW169	11/13/15	KS501	1	0-5	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	KS502	1	0-10	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Positive	5: Ceramic (historic), Glass, Metal [2 round nails, metal blade frag, irridecent glass, chert pot lid and charcole chunks] Terminated at bedrock.
41CW169	11/13/15	KS503	1	0-10	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	KS504	1	0-10	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered.
41CW169	11/13/15	KS504	2	10-20	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	KS504	3	20-30	10YR 2/1	black	Clay Loam	5-10%	Cobbles	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	KS505	1	0-5	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41CW169	11/13/15	KS506	1	0-5	10YR 2/1	black	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW702	1	0-15	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Positive	2: Glass [2 iridescent glass bottle frag] Terminated at bedrock.
41CW169	11/13/15	RW703	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW704	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW705	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW706	1	0-15	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Positive	3: Glass [1 porceline, 1 clear bottle glass, 1 light aqua green bottle glass] Terminated at bedrock.
41CW169	11/13/15	RW707	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW708	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41CW169	11/13/15	RW709	1	0-10	10YR 2/2	very dark brown	Clay Loam	>20%	Eroding bedrock	Negative	No cultural material encountered. Terminated at bedrock.
41GU177	8/31/15	KS139	1	0-10	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Gravels	Positive	13: Flake (tertiary), Projectile Point
41GU177	8/31/15	KS139	2	10-20	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Roots, cac03,robdota shell	Positive	6: Flake (secondary), Flake (tertiary)
41GU177	8/31/15	KS139	3	20-30	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Calcium Carbonate, Gravels, Pebbles	Positive	9: Flake (tertiary)

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41GU177	8/31/15	KS139	4	30-40	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Calcium Carbonate, Large Rock Frags	Positive	15: Flake (tertiary)
41GU177	8/31/15	KS139	5	40-50	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Positive	10: Flake (tertiary) [Mussel shell]
41GU177	8/31/15	KS139	6	50-60	10YR 3/2	very dark grayish brown	Clay Loam	-	-	Positive	6: Flake (tertiary)
41GU177	8/31/15	KS139	7	70-80	10YR 3/2	very dark grayish brown	Clay Loam	1-5%	Calcium Carbonate	Positive	5: Flake (tertiary) Terminated at depth.
41GU177	8/31/15	KS140	1	0-25	10YR 5/3	brown	Clay Loam	>20%	Calcium Carbonate, Gravels, Large Rock Frags	Negative	No cultural material encountered.
41GU177	8/31/15	KS140	2	25-30	10YR 4/2	dark grayish brown	Clay Loam	>20%	Calcium Carbonate, Cobbles, Gravels	Negative	No cultural material encountered. Terminated at sterile soil/compact.
41GU177	8/31/15	KS141	1	0-30	10YR 5/3	brown	Clay Loam	>20%	Calcium Carbonate, Gravels, Large Rock Frags	Negative	
41GU177	8/31/15	RW342	1	0-30	10YR 4/2	dark grayish brown	Silty Clay Loam	-	-	Negative	No cultural material encountered.
41GU177	8/31/15	RW342	2	30-80	10YR 4/2	dark grayish brown	Silt Loam	5-10%	Snailshell and tree roots	Positive	5: Flake (tertiary) [5 tertiary chert flakes, 4 cultural shatter, one burned flake with potmarks.] Terminated at depth.
41GU177	8/31/15	RW343	1	0-20	10YR 4/3	brown	Silty Clay Loam	5-10%	Variety of snail shell	Negative	No cultural material encountered.
41GU177	8/31/15	RW343	2	20-40	10YR 4/3	brown	Silty Clay Loam	>20%	Variety of snail shell	Positive	1: Flake (tertiary) [Super compact] Terminated at compact soil.
41GU178	11/30/15	RW734	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41GU178	11/30/15	RW734	2	20-25	10YR 6/2	light brownish gray	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41GU178	11/30/15	RW735	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	10-20%	Cobbles, Gravels	Negative	No cultural material encountered.
41GU178	11/30/15	RW735	2	20-25	10YR 6/2	light brownish gray	Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41GU178	11/30/15	SMM78	1	0-25	10YR 4/1	dark gray	Clay Loam	>20%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at compact soil.
41GU179	12/2/15	KS602	1	0-25	10YR 2/1	black	Clay Loam	1-5%	Gravels	Positive	1: Ceramic (historic) [Loose black clay loam from 0-10 cm. Then gets very compact after 10 cm. Artifact found within top 10 cm.] Terminated at compact soil.
41GU179	12/2/15	SMM92	1	0-10	10YR2/1	black	Clay Loam	1-5%	Gravels	Negative	Terminated at compact soil.
41GU179	12/2/15	SMM93	1	0-20	10YR 2/1	black	Clay Loam	1-5%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41GU180	12/3/15	RW753	1	0-20	10YR 2/1	black	Clay	5-10%	Calcium Carbonate, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41GU180	12/3/15	RW754	1	0-20	10YR 2/1	black	Clay	5-10%	Calcium Carbonate, Gravels, Pebbles	Negative	No cultural material encountered. Terminated at basal clay.
41GU180	12/3/15	SSM105	1	0-25	10YR2/1	black	Clay	10-20%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.
41GU181	12/8/15	RW763	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41GU181	12/8/15	RW764	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41GU181	12/8/15	RW765	1	0-20	10YR 4/2	dark grayish brown	Clay Loam	>20%	Cobbles, Gravels	Negative	No cultural material encountered. Terminated at compact soil.
41LE332	8/13/15	MN175	1	0-100	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Positive	3: Flake (tertiary) [0-10: 2 tertiary 20-30: 1 tertiary] Terminated at depth.
41LE332	8/13/15	MN176	1	0-60	10YR 5/2	grayish brown	Sand	1-5%	Gravels	Positive	1: Flake (tertiary) [0-10: 1 tertiary flake]
41LE332	8/13/15	MN176	2	60-70	7.5YR 6/8	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE332	8/13/15	MN177	1	0-30	10YR 5/1	gray	Sandy Loam	1-5%	Gravels	Negative	No cultural material encountered. Terminated at basal clay.
41LE332	8/13/15	MN178	1	0-100	10YR 5/1	gray	Sand	-	-	Negative	No cultural material encountered. Terminated at depth.
41LE332	8/13/15	MS144	1	0-100	10YR 5/4	yellowish brown	Sand	1-5%	Gravels	Positive	1: Flake (tertiary) [90-100 cmbs: 1 xhunky, burned interior flske] Terminated at depth.
41LE332	8/13/15	MS145	1	0-10	10YR 5/4	yellowish brown	Sand	10-20%	Gravels, Large Rock Frags	Negative	No cultural material encountered. Terminated at bedrock.
41LE333	8/13/15	MN181	1	0-100	10YR 5/3	brown	Sand	1-5%	Gravels	Positive	9: Flake (tertiary) [0-10: 6 10-20: 2 30-40: 1] Terminated at depth.
41LE333	8/13/15	MN182	1	0-100	10YR 6/2	light brownish gray	Sandy Loam	1-5%	Gravels	Positive	2: Flake (tertiary) [0-10: 1 tertiary 50-60: 1] Terminated at depth.
41LE333	8/13/15	MN183	-	-	-	-	-	-	-	-	No data available.
41LE333	8/13/15	MS148	1	0-85	10YR 6/3	pale brown	Sand	1-5%	Gravels	Positive	2: Flake (primary), Flake (tertiary) [0-20cm: 1 tertiary flske; 70-80cm: 1 primary flake] Terminated at tree root impass.
41LE334	8/17/15	DR240	1	0-15	10YR 7/3	very pale brown	Sandy Loam	-	-	Positive	1: Flake (tertiary)

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41LE334	8/17/15	DR240	2	15-20	5YR 6/8	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	DR241	1	0-50	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Positive	1: Flake (tertiary) [TF @ 40-50]
41LE334	8/17/15	DR241	2	50-55	5YR 5/6	yellowish red	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	DR242	1	0-30	10YR 5/4	yellowish brown	Sandy Loam	5-10%	Charcoal fragments	Negative	No cultural material encountered.
41LE334	8/17/15	DR242	2	30-50	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
41LE334	8/17/15	DR242	3	50-55	5YR 6/6	reddish yellow	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	DR243	1	0-40	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Negative	No cultural material encountered.
41LE334	8/17/15	DR243	2	40-45	5YR 6/6	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	MN203	1	0-30	10YR 5/2	grayish brown	Silt Loam	-	-	Positive	2: Flake (tertiary) [0-10: 2 tertiary]
41LE334	8/17/15	MN203	2	30-40	10YR 5/6	yellowish brown	Clay Loam	5-10%	Mottles	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	MN204	1	0-40	10YR 5/2	grayish brown	Loamy Sand	-	-	Positive	1: Flake (tertiary)
41LE334	8/17/15	MN204	2	40-50	7.5YR 6/8	reddish yellow	Sandy Clay	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE334	8/17/15	MN205	1	0-50	10YR 5/2	grayish brown	Loamy Sand	-	-	Positive	1: Flake (tertiary) [0-10: 1 tertiary] Terminated at basal clay.
41LE335	9/15/15	AG12	1	0-40	10YR 5/3	brown	Sand	5-10%	Mottles, Rootlets	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41LE335	9/15/15	AG12	2	40-100	10YR 3/3	dark brown	Sand	1-5%	Iron	Positive	11: Flake (primary), Flake (secondary), Flake (tertiary) [Flakes found starting at approx. 65 cmbs and continuing throughiut level.]
41LE335	9/15/15	AG12	3	100-110	10YR 3/3	dark brown	Sand	5-10%	Mottles	Negative	No cultural material encountered. Terminated at depth.
41LE335	9/15/15	AG13	1	0-55	10YR 6/3	pale brown	Sand	1-5%	Rootlets, iron	Positive	2: Flake (secondary) [Flakes found starting at approx. 20cmbs]
41LE335	9/15/15	AG13	2	55-110	10YR 4/3	brown	Sand	1-5%	Iron	Positive	6: Flake (secondary), Other Prehistoric [4 flakes, 1 petrified wood, 1 burned nut shell] Terminated at depth.
41LE335	9/15/15	AG14	1	0-60	10YR 6/3	pale brown	Sand	1-5%	Pebbles, Rootlets	Negative	No cultural material encountered.
41LE335	9/15/15	AG14	2	60-100	10YR 4/3	brown	Sand	1-5%	Iron	Positive	4: Flake (secondary) [Flakes found throughout level] Terminated at depth.
41LE335	9/15/15	MS190	1	0-70	-	-	-	-	-	-	No data available.
41LE335	9/15/15	MS190	2	70-72	-	-	-	-	-	-	No data available.
41LE335	9/15/15	MS191	1	0-90	10YR 5/4	yellowish brown	Sandy Loam	5-10%	Mottles	Negative	No cultural material encountered.
41LE335	9/15/15	MS191	2	90-100	10YR 4/2	dark grayish brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
41LE335	9/15/15	MS192	1	0-100	10YR 4/2	dark grayish brown	Sandy Loam	-	-	Positive	8: Flake (tertiary), Other Prehistoric [20-30cm: 3 tertiary flakes; 60-80cm: 2 tertiary flakes, 1 red ochre; 90-100cm: 2 tertiary flakes] Terminated at depth.
41LE335	9/15/15	MS193	1	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20%	Mottles	Positive	2: Flake (tertiary) [50-60cmbs: 2 flakes] Terminated at depth.
41LE335	9/15/15	MS194	1	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20%	Mottles	Positive	1: Flake (tertiary) [50-60cm: 1 flake] Terminated at depth.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41LE335	9/15/15	MS195	1	0-100	10YR 3/2	very dark grayish brown	Sandy Loam	10-20%	Mottles	Positive	20: Flake (tertiary), Other Prehistoric [9 flakes and 11 buened sandsrone fragments fron 20-100 cmbams] Terminated at depth.
41LE335	9/15/15	MS196	1	0-50	-	-	-	-	-	-	No data available.
41LE335	9/15/15	MS196	2	50-55	-	-	-	-	-	-	No data available.
41LE336	10/27/15	AY08	1	0-55	7.5YR 5/4	brown	Sandy Loam	10-20%	-	Positive	1: Flake (tertiary) [Flake at 10-20 cmbs]
41LE336	10/27/15	AY08	2	55-60	7.5YR 5/8	strong brown	Sandy Clay Loam	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY09	1	0-100	7.5YR 5/4	brown	Sandy Loam	5-10%	Many roots	Positive	1: Flake (tertiary) [Broken flake at 55-65 cmbs] Terminated at depth.
41LE336	10/27/15	AY10	1	0-45	7.5YR 5/4	brown	Sandy Loam	5-10%	Many roots	Negative	No cultural material encountered.
41LE336	10/27/15	AY10	2	45-50	7.5YR 5/8	strong brown	Sandy Clay	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY11	1	0-70	7.5YR 5/4	brown	Sandy Loam	1-5%	Many roots	Negative	No cultural material encountered.
41LE336	10/27/15	AY11	2	70-75	7.5YR 7/8	reddish yellow	Sandy Clay Loam	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY12	1	0-75	7.5YR 5/4	brown	Sandy Loam	10-20%	Roots	Positive	3: Flake (tertiary) [1 flake 35-45, 1 flake 55-65, 1 flake 60-75]
41LE336	10/27/15	AY12	2	75-80	7.5YR 5/8	strong brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY13	1	0-65	7.5YR 5/4	brown	Sandy Loam	1-5%	Pebbles, Roots	Negative	No cultural material encountered.
41LE336	10/27/15	AY13	2	65-70	7.5YR 7/6	reddish yellow	Sandy Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY14	1	0-40	7.5YR 3/4	dark brown	Sandy Loam	1-5%	Pebbles, Roots	Negative	No cultural material encountered.

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Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41LE336	10/27/15	AY14	2	40-45	7.5YR 7/8	reddish yellow	Sandy Clay Loam	1-5%	Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/27/15	AY15	1	0-55	7.5YR 3/4	dark brown	Sandy Loam	1-5%	Roots	Negative	No cultural material encountered.
41LE336	10/27/15	AY15	2	55-60	7.5YR 7/8	reddish yellow	Sandy Clay	10-20%	Mottles, Rootlets	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/26/15	DR407	1	0-100	10YR 7/3	very pale brown	Sandy Loam	1-5%	Pebbles	Positive	2: Flake (tertiary) [1 micro TF @ 40-50 cmbs, 1 heated TF @ 50-60 cmbs] Terminated at depth.
41LE336	10/26/15	DR408	1	0-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Positive	1: Other Prehistoric [Organic carbon rich lens 75-85 cmbs, two flecks of charcoal in screen, charcoal stains observed within lens. Possible thermal feature.] Terminated at depth.
41LE336	10/26/15	DR409	1	0-80	10YR 7/3	very pale brown	Sandy Loam	-	-	Positive	1: Flake (secondary) [SF found @ interface to clay horizon @70-80cmbs]
41LE336	10/26/15	DR409	2	80-90	10YR 8/3	very pale brown	Clay Loam	-	-	Negative	No cultural material encountered. Terminated at basal clay.
41LE336	10/26/15	DR410	1	0-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Positive	1: Flake (tertiary), Other Prehistoric [1 TF @ 50-60 cmbs, found within same scoop as think diffuse charcoal fleck lens @50-60.] Terminated at depth.
41LE336	10/26/15	DR411	1	0-50	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered.
41LE336	10/26/15	DR411	2	50-60	10YR 4/4	dark yellowish brown	Sandy Loam	1-5%	Plant detritus and red clay (5YR5/8) nodules	Negative	No cultural material encountered.

Appendix B - Shovel Test Data

Site No.	Date Recorded	Shovel Test No.	Level	Depth (cm)	Munsell	Soil Color	Soil Texture	Inclusions	Inclusion Types	Positive/ Negative	Comments/Reason for Termination
41LE336	10/26/15	DR411	3	60-100	10YR 7/3	very pale brown	Sandy Loam	-	-	Negative	No cultural material encountered. Terminated at depth.
41LE336	10/26/15	DR412	1	0-40	10YR 4/4	dark yellowish brown	Sandy Clay Loam	>20%	Mottles, Clay loam chunks	Negative	No cultural material encountered. Terminated at extremely disturbed.
IF02	7/2/15	DR126	1	0-40	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	No cultural material encountered.
IF02	7/6/15	DR126	2	40-100	10YR 7/3	very pale brown	Sandy Loam	5-10%	Calcium Carbonate	Negative	No cultural material encountered. Terminated at depth.
IF02	7/2/15	DR127	1	0-40	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
IF02	7/6/15	DR127	1	0-40	10YR 5/4	yellowish brown	Loam	1-5%	Pebbles	Negative	
IF02	7/6/15	DR127	2	40-100	10YR 7/3	very pale brown	Sandy Loam	5-10%	Calcium Carbonate	Negative	Terminated at depth.
IF02	7/2/15	MP24	1	0-30	10YR 5/4	yellowish brown	Silt Loam	1-5%	Snail shells	Positive	1: Flake (secondary)
IF02	7/2/15	MP24	2	30-100	10YR 5/4	yellowish brown	Silt Loam	1-5%	Snail shell	Positive	1: Flake (secondary) Terminated at depth.
IF02	7/2/15	MP25	1	0-30	10YR 4/2	dark grayish brown	Silt Loam	-	-	Negative	No cultural material encountered.
IF02	7/2/15	MP25	2	30-100	10YR 5/4	yellowish brown	Silt Loam	1-5%	Snail shells	Negative	No cultural material encountered. Terminated at depth.
IF02	7/2/15	MP26	1	0-30	10YR 4/2	dark grayish brown	Silt Loam	-	-	Negative	
IF02	7/2/15	MP26	2	30-100	10YR 5/4	yellowish brown	Silt Loam	1-5%	Snail shells	Negative	Terminated at depth.
IF03	7/13/15	DR158	1	0-30	10YR 2/2	very dark brown	Clay Loam	5-10%	Cobbles, Gravels, Pebbles	Negative	Terminated at compact soil.