

Phase I Cultural Resources Survey for the Laredo Gateway Industrial Railway, LLC – Construction and Operation Exemption – Line of Railroad, Webb County, Texas



Prepared By:

Matt Lyons and Ricky Yates



March 2026

**Phase I Cultural Resources Survey for the Laredo
Gateway Industrial Railway, LLC – Construction and
Operation Exemption – Line of Railroad in
Webb County, Texas**

Docket No. FD 36847

Authored By:

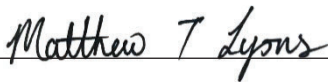
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A handwritten signature in cursive script that reads "Matthew T. Lyons". The signature is written in black ink and is positioned above a horizontal line.

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March 2026

Not Intended for Public Release

Management Summary

Laredo Gateway Industrial Railway, LLC (LGIR) intends to file a petition in Docket No. FD 36847 seeking authorization from the Surface Transportation Board (the Board) for construction and operation of approximately 2.6 miles of a new common carrier rail line in Webb County, Texas. As part of the approval process, the Board's Office of Environmental Analysis (OEA) is preparing an Environmental Assessment (EA) that will assess the potential environmental impacts of the proposed line on historic properties, in accordance with Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 306108), the Section 106 implementing regulations (36 C.F.R. Part 800), and the Board's environmental regulations (49 C.F.R. Part 1105).

OEA defined the Area of Potential Effects (APE) for the proposed project in accordance with 36 C.F.R. Part 800 and 49 C.F.R. § 1105.8. The project APE encompasses all areas where project implementation may cause direct or indirect effects to historic properties and measures approximately 260.5 acres (ac), or 101.4 hectares [ha]. The Above-Ground APE consists of the project footprint and a 250-foot (ft), or 76-meter (m) buffer of the project footprint. The Below-Ground APE consists of only the area where ground disturbance is expected to occur as a result of constructing the proposed line, and measures approximately 69.1 ac (27.9 ha).

During surveys between September 22 and 28, 2025, VHB was able to investigate most of the 69-ac (27.9 ha) Below-Ground APE via shovel testing and pedestrian survey. During the course of survey work, VHB investigated 318 transect shovel tests [REDACTED]. Of these 330 shovel tests, 276 were negative for cultural materials and 64 could not be excavated and were recorded as "No Dig." No Dig locations consisted of areas with standing water, impenetrable vegetation consisting of dense mesquite and prickly pear cacti, or graded ditch areas paralleling existing roads. [REDACTED]

[REDACTED]

The historic resources survey resulted in the identification of three historic resources within the Above-Ground APE. These included the Meridian Highway (W-01), the Union Pacific Railroad (W-02), and one agricultural resource (W-03). A segment of the Meridian Highway located in Nebraska is currently listed on the NRHP (ID #01001273); however, the segment between Encinal and Laredo (LS-1775), including the section within the APE, was previously classified as non-contributing in the *Meridian Highway Context* (2016). As a result of the current survey, Resources W-02 and W-03 are recommended not eligible for the NRHP under Criteria A, B, and C. It is recommended that LGIR adhere to an Unanticipated Discoveries plan in the unlikely event that previously unrecorded or unidentified archaeological features or deposits are encountered during construction. Since all historic resources and archaeological sites identified within the project APE are recommended as either not eligible for listing in the NRHP or as lacking significant data potential, the undertaking would not result in adverse effects to any known eligible or listed NRHP property. No additional cultural resource investigations are recommended for this project.

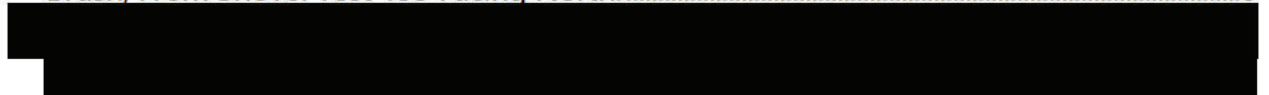
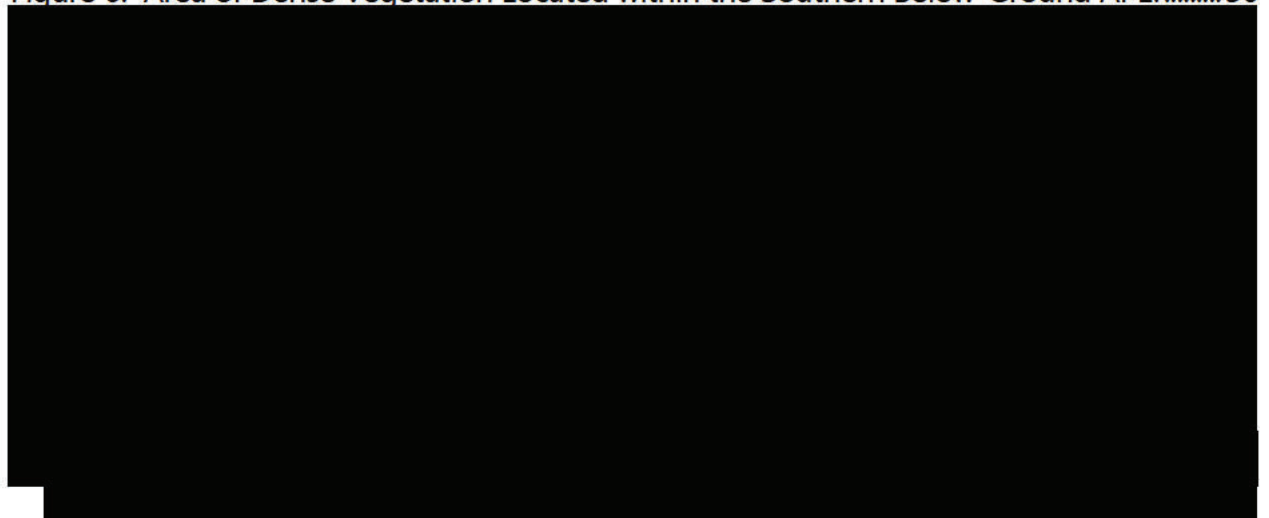
Table of Contents

Management Summary	i
List of Figures	iii
List of Tables	iii
1.0 Introduction	1
1.1 Project APE and Scope of Work.....	2
2.0. Environmental Context.....	5
2.1 Physiography.....	5
2.2 Soils in the Survey Area	5
2.3 Flora and Fauna.....	6
2.4 Regional Pleistocene and Holocene Environment	8
2.5 Modern Environmental Setting and Current Land Use.....	8
3.0 Cultural Context.....	10
3.1 Pre-Clovis (pre-10000 B.C.)	10
3.2 Paleoindian Period (circa [ca.] 10000 – 8000 B.C.)	10
3.3 Archaic Period (8000 B.C. – 800 A.D.)	11
Early Archaic Period (6000 – 2500 B.C.)	12
Middle Archaic Period (2500 – 500 B.C.).....	13
Late Archaic Period (500 B.C. – 1200 A.D.)	13
3.4 Late Prehistoric Period (A.D. 800 – 1519).....	14
3.5 Spanish Texas (A.D. 1519 – 1820).....	14
3.6 Historic Texas (A.D. 1820 – Present).....	17
4.0 Background Research	22
4.1 Previous Archaeological Sites and Surveys.....	22
4.2 Previous Historic Sites and Surveys.....	24
5.0 Methods.....	25
5.1 Background Research.....	25
5.2 Field Methods	26
5.3 Laboratory Methods and Artifact Curation	27
5.4 National Register of Historic Places Evaluation Criteria	28
6.0 Cultural Resources Survey Results	30
6.1 Archaeological Survey Results.....	3
6.2 Historic Resources Survey Results	42
6.2.1 LS-1775 (Revisit)- Meridian Highway	42
6.2.2 W-02 – Union Pacific Railroad	44
6.2.3 W-03 – Agricultural Resource	46
7.0 Summary of Findings.....	48
References Cited	50

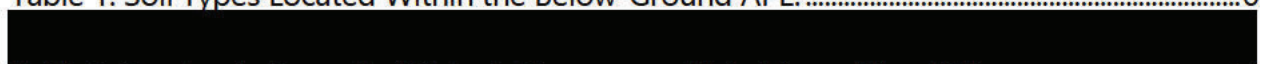
Appendix A: Resume of the Principal Investigator

Appendix C: Unanticipated Discoveries Statement

List of Figures

Figure 1. The APE Depicted on the 1980 Callaghan Ranch South, Texas, 1985 Laredo Texas East, and 1980 Orvil, Texas USGS Topographic Quadrangles (USGS 1980a; USGS 1980b; USGS 1985).....	3
Figure 2. The APE Depicted on Aerial Photography.....	4
Figure 3. Soils Within the APE.....	7
Figure 4. Overview of Modern Environment in the APE Depicting Prickly Pear and Mesquite Brush, From Shovel Test 133 Facing North.....	9
	
Figure 6. Area of Dense Vegetation Located within the Southern Below-Ground APE.....	30
	
Figure 18. Results of the Historic Resources Survey.....	43
Figure 19. View of W-01, Facing Northeast Along the Frontage Road, with Views of the North and Southbound Lanes of I-35 to the East.....	44
Figure 20. View of W-02, Facing southwest along the former International & Great Northern Railroad, with views of I-35 and the Frontage Road to the west.....	45
Figure 21. View of W-03, Facing West towards open sided shed.....	47

List of Tables

Table 1. Soil Types Located Within the Below-Ground APE.....	6
	
Table 3. Previously Recorded Historic Resources within 1 km of the APE.....	24
Table 4. Historic Resources Recorded Within the Above-Ground APE.....	42

1.0 Introduction

Laredo Gateway Industrial Railway, LLC (LGIR) intends to file a petition in Docket No. FD 36847 seeking authorization from the Surface Transportation Board (the Board) for construction and operation of approximately 2.6 miles of a new common carrier rail line in Webb County, Texas (Figures 1 and 2). As part of the approval process, the Board's Office of Environmental Analysis (OEA) is preparing an Environmental Assessment (EA) that will assess the potential environmental impacts of the proposed line on historic properties, in accordance with Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 306108), the Section 106 implementing regulations (36 C.F.R. Part 800), and the Board's environmental regulations (49 C.F.R. Part 1105).

Between September 22 and 28, 2025, on behalf of OEA, Vanasse Hangen Brustlin, Inc. (VHB) conducted a Phase I cultural resources survey in support of the EA and Section 106 consultation process. The proposed line would consist of three sections. The eastern section would feature two tracks connecting to the existing UP mainline via a wye (triangular junction). In the middle section, the line would widen into a small rail yard consisting of four interconnected tracks, two of which would be used to drop off, store, and pick up rail cars. Past the Yard, in the third section, one track would continue to the north (North Leg). At its northern end, it would be stub-ended. A 12-foot wide, paved access road would run parallel to the entire length of the proposed line, including both branches of the wye, the south of the yard, and the North Leg. Including the access road and all tracks, the total project footprint would range from approximately 60 feet wide for the eastern section and the North Leg to approximately 135 feet wide for the Yard. To support construction activities, LGIR has identified six staging areas. Both the footprint of the proposed line and the staging areas were surveyed.

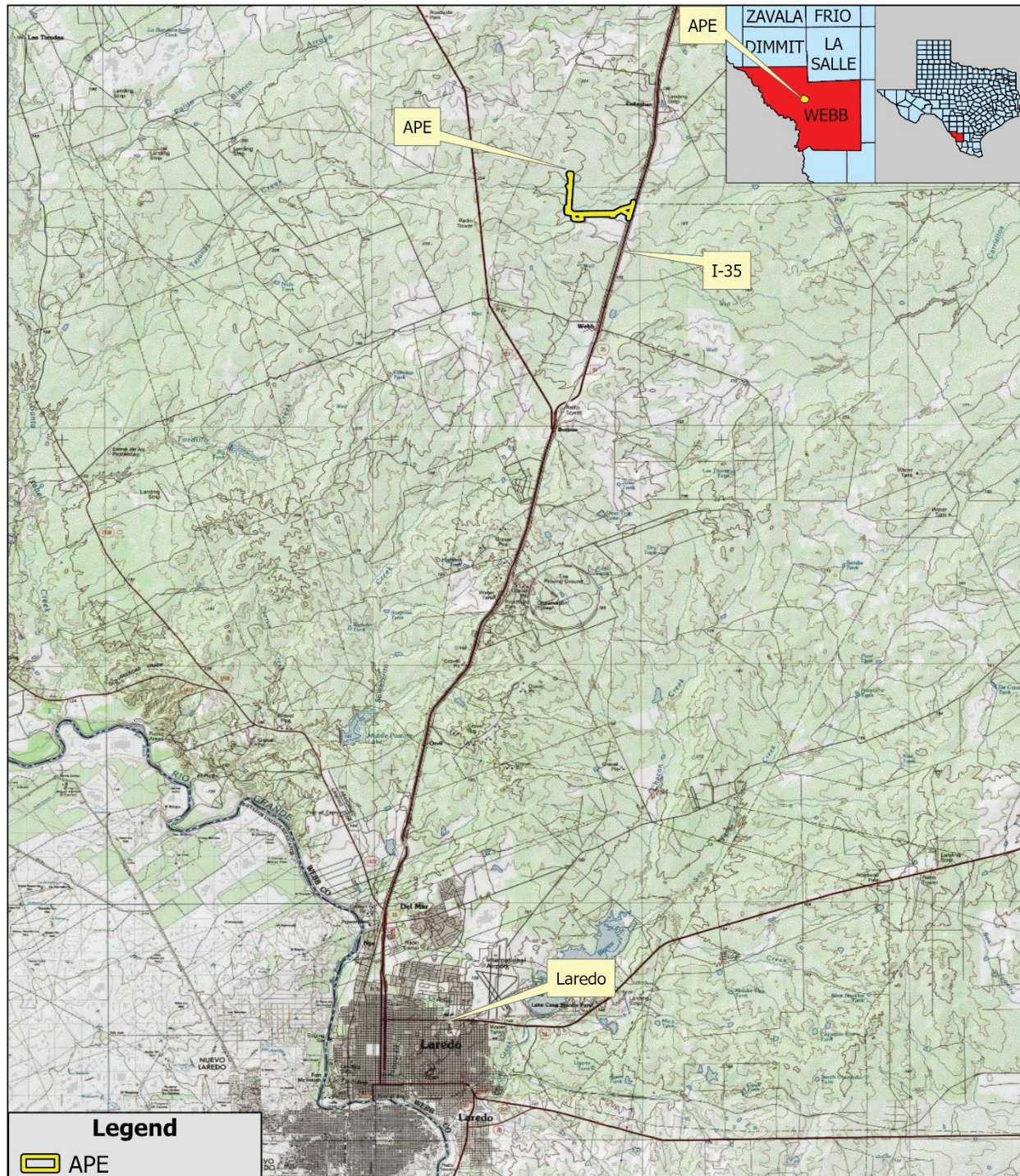
On behalf of OEA, VHB conducted the cultural resources survey documented in this report in compliance with Section 106 of the NHPA. All work was conducted by personnel qualified under the Secretary of the Interior's Professional Qualification Standards (36 C.F.R. Part 61 – Standards and Guidelines for Archaeology and Historic Preservation) and consistent with the guidelines established by the Council of Texas Archeologists (CTA) as detailed in *Intensive Terrestrial Survey Guidelines* (2020). As a requirement under NHPA, archaeological, as well as historic, resources that may be located within a project's Area of Potential Effects (APE) must be assessed for cultural significance utilizing criteria set forth by the National Register of Historic Places (NRHP).

1.1 Project APE and Scope of Work

OEA defined the APE for the proposed project in accordance with 36 C.F.R. Part 800 and 49 C.F.R. § 1105.8. The APE encompasses all areas where project implementation may cause direct or indirect effects to historic properties and measures approximately 260.5 acres (ac), or 101.4 hectares (ha). The Above-Ground APE consists of the project footprint and a 250-foot (ft), or 76-meter (m) buffer of the project footprint. The Below-Ground APE consists only of the area where ground disturbance is expected to occur as a result of constructing the proposed line and measures approximately 69.1 ac (27.9 ha). The Below-Ground APE was subjected to Phase I Archaeological Survey only while the Above-Ground APE was subjected to historic resources survey.

The primary tasks involved in completing the cultural resources survey were background research, field survey, artifact analysis, and technical report preparation. Background research included a review of previously conducted surveys and regional cultural resources data, and relevant local and regional histories. Data obtained during the background research phase of the investigation formed the basis of the environmental and cultural settings chapters of this report. This information also provided the necessary framework for developing the survey methods and the rubric for evaluating cultural resources identified during fieldwork. Archaeological field investigations included pedestrian survey and shovel testing. Data obtained during the field survey was compiled to present conclusions and support evidence sufficient in scope to enable recommendations for the future management of identified cultural resources. VHB performed the cultural resources survey between September 22 and September 28, 2025. Archaeologist Matt Lyons led the fieldwork as Principal Investigator supported by Joshua Davis and Matthew Thurston. Historic architectural fieldwork was completed by lead archaeologist Matt Lyons between September 22 and September 28, 2025, with remote support from historian and co-author Ricky Yates. The historic architectural fieldwork consisted of pedestrian survey and historic resources 45-years-old or older were photographed, mapped, and described in notes to assist in describing material, style, and construction details.

This report is organized into seven chapters, including this introduction (Chapter 1.0). Chapter 2.0 presents the environmental context. Chapter 3.0 presents the cultural background context. Chapter 4.0 presents the survey background and research context. Chapter 5.0 presents the methods employed for the survey. Chapter 6.0 presents the results of the cultural resources survey. Chapter 7.0 concludes with a summary of findings. Following the references cited, [REDACTED]; Appendix B contains the Principal Investigator's resume; and Appendix C contains the resume of the co-author.

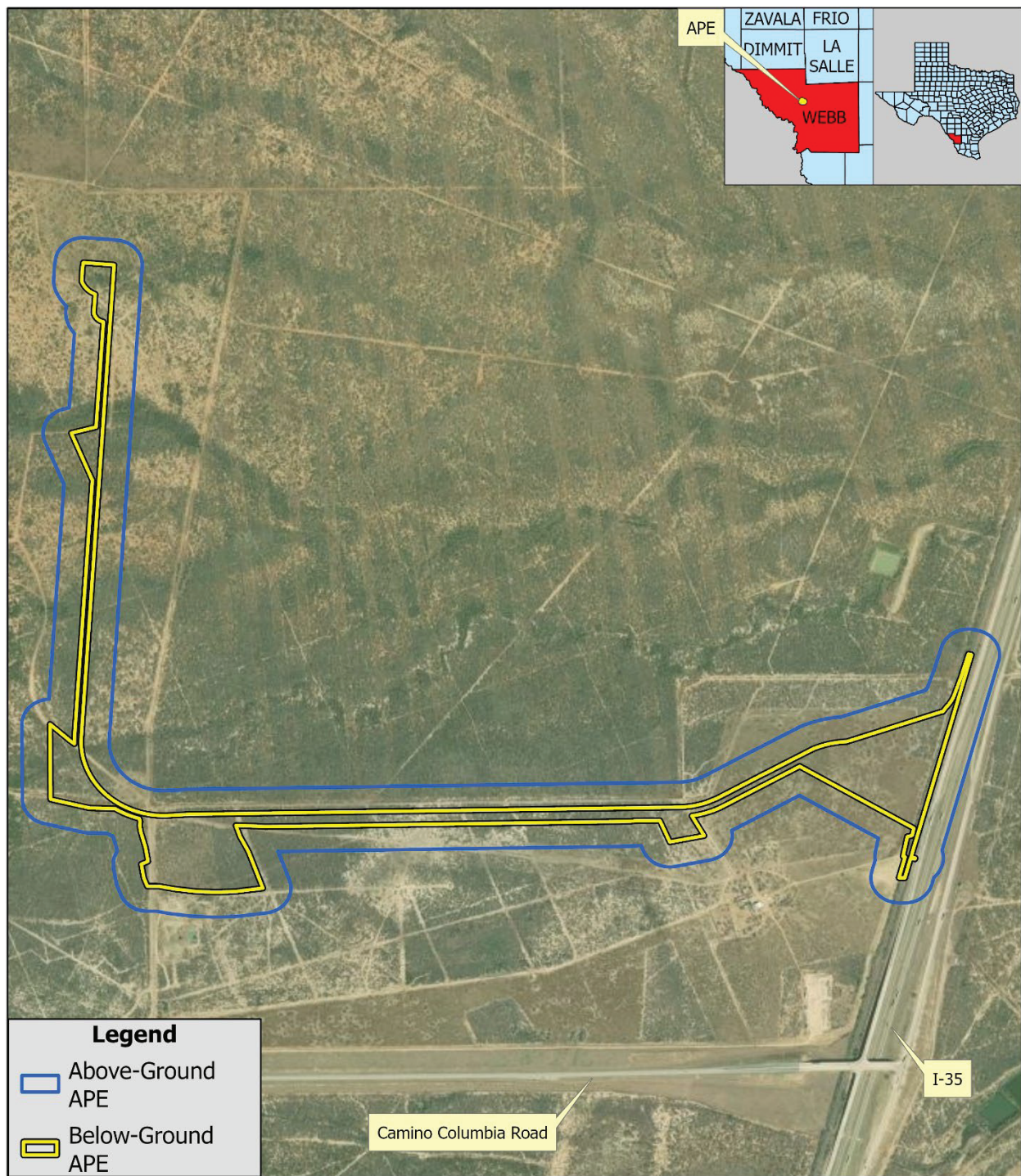


VHB Project #: 38984.00
Project Name: Phase I Cultural Resources
Survey of the LGIR Project, Webb County, Texas



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Figure 1. The APE Depicted on the 1980 Callaghan Ranch South, Texas, 1985 Laredo Texas East, and 1980 Orvil, Texas USGS Topographic Quadrangles (USGS 1980a; USGS 1980b; USGS 1985).



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Survey of the LGIR Project, Webb County, Texas

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Figure 2. The APE Depicted on Aerial Photography.

2.0. Environmental Context

This chapter provides a discussion of the effective environment of the APE. The effective environment is defined as the physical environment (physiography, soils, and climate) as well as those biotic components (flora and fauna) that may have influenced precontact and historic peoples land usage in the area.

2.1 Physiography

Webb County is located within the Southern Texas Plains physiographic province. The Southern Texas Plains extends north and south within the southwest portion of Texas (Griffith et al. 2004). The province is bordered by the Gulf Coastal Plain to the south, the Edwards Plateau province to the north, and the East Central Plains to the east. Specifically, the APE is located within the Rio Grande River Floodplain and Terraces district. This district is formed by the Rio Grande River basin, which drains northwest to southeast. Landforms are characterized by the flat floodplain of the Rio Grande River and elevated landforms along the Rio Grande Rift, through which the river flows. Slopes along the terraces can be steep where erosion has cut through Holocene and Pleistocene alluvium and terrace deposits.

The APE is immediately drained by an unnamed stream located near the central portion of the APE. The intermittent stream drains eastwards into Carrizitos Creek, a tributary of the Rio Grande located approximately 15 kilometers (km) east of the APE. Along that route, it also appears to drain into one or more natural sinks.

2.2 Soils in the Below-Ground APE

Seven soil series are located within the Below-Ground APE (USDA 2024; Table 1; Figure 3). Catarina clay soils comprise approximately 25.5 ac, or 37 percent, of the Below-Ground APE. These soils are characterized by moderately well-drained clays derived from silty calcareous alluvial deposits up to two meters in depth. Brystal fine sandy loams are located in approximately 12.8 ac, or 20 percent, of the Below-Ground APE and consist of well-drained fine sandy clay loams derived from weathered sandstone that extend up to two meters in depth. Moglia and Palafox clay loams respectively comprise approximately 10.6 and 9.4 ac, or 15 and 14 percent, of the Below-Ground APE. Both soil types are defined by well-drained clay loams that extend approximately a meter in depth and are derived from calcareous alluvial deposits. The remaining soil series represent marginal proportions of the Below-Ground APE.

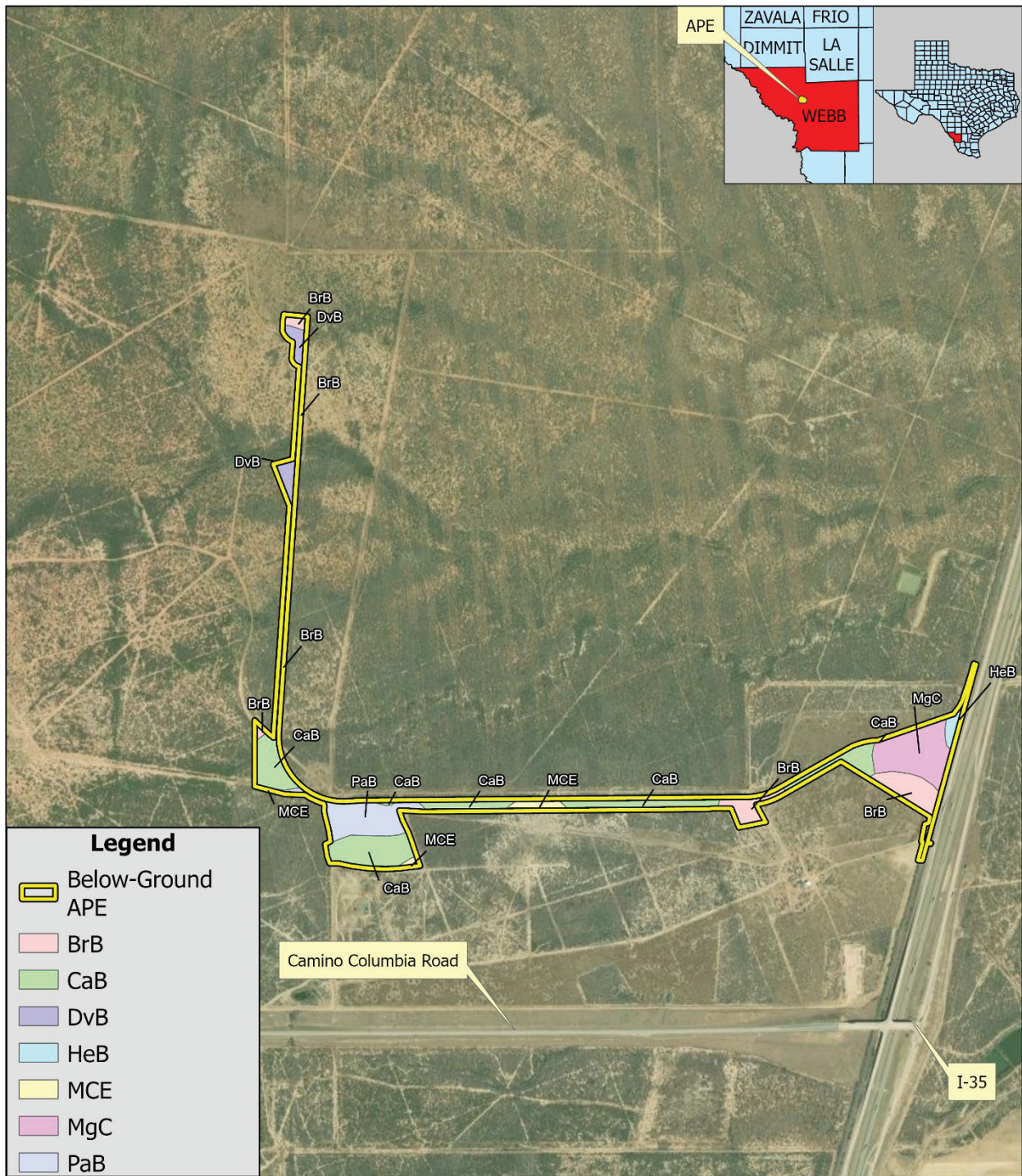
Table 1. Soil Types Located Within the Below-Ground APE.

Unit Symbol	Unit Name	Drainage	Acres in Below-Ground APE	Percent of Below-Ground APE
CaB	Catarina Clay, 0 to 3 Percent Slopes	Moderately Well Drained	25.5	36.8%
BrB	Brystal Fine Sandy Loam, 0 to 3 Percent Slopes	Well Drained	13.8	20.0%
MgC	Moglia Clay Loam, 1 to 5 Percent Slopes	Well Drained	10.6	15.3%
PaB	Palafox Clay Loam, 0 to 3 Percent Slopes	Well Drained	9.4	13.6%
DvB	Duval Very Fine Sandy Loam, 0 to 3 Percent Slopes	Well Drained	5.56	8.0%
MCE	Maverick-Catarina Complex, Gently Rolling	Well Drained	2.6	3.7%
HeB	Hebbronville Loamy Fine Sand, 0 to 2 Percent Slopes	Well Drained	1.8	2.7%
Total			69.1	100%

2.3 Flora and Fauna

The Southern Texas Plains have been modified from their natural flora by historic pasturing and ranching practices. What was once rolling grassland plains is now populated by thorny brush species such as acacia, huisache, ceniza, mesquite, and blackbrush. Yuccas and prickly pear cactus are common throughout the region in arid upland soils. In wetter lowland soils, black mimosa, black willow, common and giant reed species are present.

The Southern Texas Plains supports diverse species of mammals, birds, fish, reptiles, and amphibians. Likely, a wider variety of fauna was available for exploitation during the precontact and early historic habitation of this area. Common modern fauna includes white-tailed deer, boar, jackrabbits, javelina, caracara, Texas tortoise, indigo snake, groove-billed anis, pygmy owl, and burrowing toad. Less common mammals include the jaguarundi, ocelot, and white-nosed coati (TPWD 2024). Fish found in creeks and rivers include bluegill, black crappie, largemouth bass, catfish, yellow sucker, gar, and minnows. Several varieties of snakes are present, including the corn snake, indigo snake, Texas longnose snake, and diamondback rattlesnake.



VHB Project #: 38984.00
Project Name: Phase I Archaeological Resource
Survey of the LGIR Project, Webb County, Texas



Earthstar Geographics

Figure 3. Soils Within the APE.

2.4 Regional Pleistocene and Holocene Environment

Palaeoclimatological research provides data on the precontact environment of the APE. The Pleistocene-Holocene transition was marked by a climatic episode known as the Younger Dryas (10800 – 9700 B.C.), a reversal of general warming trends and a return to glacial-like conditions. The Younger Dryas was presumably caused by a freshwater influx into the North Atlantic or Arctic Ocean (Broecker 2006; Broecker and Denton 2012; Broecker et al. 1988; Tarasov and Peltier 2005). In the Southeast of the United States, a shift in vegetation occurred to species adapted to cooler, moister conditions, including alder, beech, and white pine (Hussey 1993; LaMoreaux et al. 2009; Meeks and Anderson 2012; Watts 1975; Williams et al. 2004). During each glacial stadial of the Late Quaternary, including the Younger Dryas, riverine dunes formed along drainages. These riverine dunes line the north and east sides of many southeast-trending streams and are likely the result of highly variable river discharge during glacial intervals. Flooding restricted vegetation growth near river channels, resulting in large areas of exposed sand subject to eolian mobilization during dry, windy seasons. During the late Pleistocene, more than 30 genera of mammals went extinct across the continent. In the Southeast, this included large mammals such as mammoths and mastodons (Haynes 2009).

During much of the last 10,000 years, a somewhat xeric forest probably covered much of Texas (Sheehan et al. 1985; Wharton 1989). As climate continued to warm, increased moisture favored the northward advance of the oak-hickory forest. By the mid-Holocene, the oak-hickory forest was gradually being replaced by pine-dominated woodlands. From 4,000 years Before Present (BP) to the present, the upland vegetation of the Southeast was characterized by a thinning of the deciduous forests. Hickory and gums were generally less prevalent, with alder and ragweed increasing in representation in the palynological record (Delcourt and Delcourt 1979; Sheehan et al. 1985). This forest thinning suggests an increase in human-related land activities (i.e., timbering, farming). Similarly, the importance and overall increase in pine species in the forest during this time would have depended on several factors, including fire, land clearing, and soil erosion (Plummer 1975; Sheldon 1983).

As American Indians and Euroamericans began to modify their environment, native species spread into new areas. Immigrant species introduced by migrating populations spread with the development of agriculture. Floristic diversity probably became more widespread and more uniform as native habitats were changed to cultivated ones.

2.5 Modern Environmental Setting and Current Land Use

The APE is characterized by undeveloped swaths of land. The easternmost portions intersect with the graded and developed portions of I-35 and its associated frontage road, while the

entirety of the APE west of this intersection consists of undeveloped agricultural land swathed in mesquite and prickly pear cactus (Figure 4). Numerous dirt and gravel access roads are present within the APE. Portions of the APE may have previously been utilized as agricultural fields, but no crop rows or planted crop areas were observed during fieldwork.



Figure 4. Overview of Modern Environment in the APE Depicting Prickly Pear and Mesquite Brush, From Shovel Test 133 Facing North.

3.0 Cultural Context

This chapter summarizes the precontact and historic cultural context of the Southern Texas Plains Region, focusing (when feasible) on the Rio Grande Valley and Terraces physiographic province in Maverick County. Cultural history prior to European contact in this region of Texas consists of three broad periods: the Paleoindian, Archaic, and Late Precontact periods. Each is individually defined by the presence of artifacts, features, burial practices, and settlement patterns that exhibit common characteristics reflective of the era.

3.1 Pre-Clovis (pre-10000 B.C.)

The earliest human occupations in North America roughly coincide with the end of the Late Pleistocene and early onset of the Holocene (Maggard and Stackelbeck 2008). Early radio-carbon dates at the Monte Verde Site in Southern Chile puts the known human occupation of the Americas to at least 11000 B.C. (Dillehay 1989). Human migration to the southern extents of South America has led some archaeologists to speculate that an initial entry into North America may have occurred around 15000 B.C. Occupations prior to this time are a matter of some debate among archaeologists, though it is generally accepted that significant advances in human adaptation corresponds roughly with the end of the Pleistocene epoch and the beginning of the warmer Holocene. During this time, lithic tools may have consisted of large, unfluted, lanceolate blades such as those found at Meadowcroft rock shelter in western Pennsylvania. These types of points were identified within strata exhibiting relative radio-carbon dates of 10800 to 9300 B.C. (Adovasio et al. 1980).

3.2 Paleoindian Period (circa [ca.]10000 – 8000 B.C.)

The first well-documented inhabitants of North America are understood to have been relatively mobile, with a subsistence strategy based on migratory (and now extinct) large animals such as mastodons, although they are known to have relied on plant and smaller animal food resources as well. Settlements are thought to have included small temporary camps and less common base camps, occupied by loosely organized bands. Paleoindians selected high quality lithic materials for tools and key diagnostics of this period are fluted and unfluted lanceolate projectile points/knives (PP/K). Formal flake tools such as endscrapers, graters, retouched blades, and burins, as well as unifacial and bifacial knives, are also associated with the Paleoindian period.

The Early Paleoindian period is dominated by the Clovis culture. The Clovis culture is primarily known through the distinctive large, fluted lanceolate projectile points that have been found at various archaeological sites in North America. Over the course of the Paleoindian period, these large Clovis point forms underwent a general reduction in size, with true fluting being

replaced by basal thinning. The large size of Clovis points is believed to have been a necessity of hunting large megafauna such as mammoth. Given the open nature of the landscape of the Texas Plains Region, no Clovis points have been found in association with preserved megafauna remains and points are often found as surface presentations with unclear preservation contexts (Hester 2004).

The later Paleoindian period appears to include both the Dalton and Folsom cultures in Texas (Wyckoff and Bartlett 1995). Dalton forms are typically broad, thin, triangular bifaces with deeply concave bases and shallow side notches that are similar in shape to a fish tail (Coe 1964; Tankersley 1996). Folsom PP/Ks are often characterized by a very large and wide flute that can extend almost the full width of the blade. The diversification of point forms and other lithic technologies of the later Paleoindian period suggests that cultural preferences and distinction were becoming well established.

Of these, stemmed varieties indicated hafting technology that suggest usage as projectiles for smaller game species like deer rather than large megafauna, or as a hafted knife blade (Bousman et al. 2004).

Paleoindian settlement patterns are a topic of much debate because no evidence of structures or long-term camps has been recorded in the region. Several models of Paleoindian settlement patterns exist, each with a different focus driving the pattern. Some researchers (e.g., Gardner 1983) think that access to high-quality lithic raw materials was the basis of Paleoindian settlement. Other researchers (e.g., Anderson and Faught 1998) believe Paleoindians exploited specific areas. Some researchers (e.g., Kelly and Todd 1988) think Paleoindians were nomadic, following the movements of large game species. Wyckoff and Bartlett (1995) theorize that the difference between the Dalton and Folsom PP/K forms was indicative of their respective settlement adaptations, with the larger Folsom PP/Ks being more suitable to hunting large bison in the western grasslands of the state and the more refined Dalton more suitable to hunting deer in the eastern woodlands.

3.3 Archaic Period (8000 B.C. – 800 A.D.)

The Archaic Period exhibits an increase in the density and horizontal dispersal of archaeological remains across the landscape. It is characterized by a reliance on both animals and wild plant resources, which became increasingly stabilized and broad-based over time. Archaic peoples are presumed to have still been highly mobile, making use of seasonally available resources in different areas of the United States. Group size gradually increased during this period, culminating in more diverse social groups in the Late Archaic.

The technology of the Archaic peoples appears to have become progressively more diverse and complex than that of Paleoindian peoples. Over the course of the Archaic Period, for example, increasing numbers of artifact and tool types appear, such as groundstone woodworking and plant processing implements, carved and polished stone bowls, atlatl weights, and stone pipes and beads (Griffin 1967; Jennings 1975). Regional differentiation in PP/K and other artifact styles also occur, suggesting the emergence and elaboration of local cultural traditions. This cultural variability is thought to be partially related to localized differences in environment and subsistence resources, and to an increasing population, with a concomitant circumscription of group territories and mobility (Ford 1974).

In its most common expression, the Archaic Period is generally viewed as one in which the predominantly big-game hunting of the Paleoindian period was replaced by a more generalized or diffuse hunting and gathering way of life (Griffin 1967; Cleland 1976). The Archaic was a relatively long and successful period of foraging adaptation, with subsistence based on hunting, fishing, and the collection of wild plant resources. Due to its length, in Texas, the Archaic Period is generally divided into three phases: Early (6000 – 2500 B.C.), Middle (2500 – 500 B.C.), and Late (500 B.C. – 800 A.D.). It is important to note that these dates are general span classifications to facilitate discussion and are often specifically debated by archaeologists.

Early Archaic Period (6000 – 2500 B.C.) – During the Early Archaic Period, the vegetation matrix of the United States consisting of mixed coniferous forest was replaced by mixed hardwood communities dominated by oak, elm, and hickory with an understory of shade-tolerant herbaceous plants (Kay 1982). A modern faunal assemblage was in place following the extinction of the Pleistocene megafauna (Meltzer 1999). Social organization and settlement patterns in the Early Archaic Period likely followed the Band-Macroband settlement model, resulting in nomadic to seminomadic band-sized units of about 50 to 100 people. The Early Archaic PP/K styling is typified by the Corner-Notched tradition, named for the shapes of the PP/K used to recognize and date these occupations. Basal-notched PP/K forms co-occur with corner-notched forms towards the later portion of the Early Archaic (Hester 2004). These new projectile forms were markedly smaller and more refined than those of the preceding period and are thought to reflect the megafauna extinction and a shift to smaller game subsistence as well as the procurement and utilization of more plants and grains.

The Early Archaic Period in the Southern Plains Region of Texas manifests mostly in the form of open campsites, which represent temporary or seasonal occupations of a locale where Early Archaic hunter-gatherers could exploit natural resources. Burned rock features, quarries, and point caches are common representations of an Early Archaic site in the region

(Collins 2004).

Middle Archaic Period (2500 – 500 B.C.) – During the Middle Archaic Period, the cool, dryer conditions of the Early Holocene gave way to the warmer, moist climate of the mid-Holocene Hypsithermal interval. The Middle Archaic saw a continuation of Early Archaic practices and utilization of a variety of terrestrial flora and faunal resources as well as aquatic resources, depending on seasonal availability. Likewise, settlement patterns during the Middle Archaic still followed the same small, specialized camp/large base camp dichotomy. It is hypothesized that groups of 25 to 50 individuals moved frequently about the landscape, maintaining few standing social obligations with other groups in order to maximize mobility and flexibility (O'Brien 1980).

Archaeologically, the transition from the Early Archaic to the Middle Archaic is characterized by the appearance of stemmed, rather than notched, PP/Ks, and the appearance of groundstone tools, including atlatl weights, hand axes, and grinding implements. The latter types of tools are a clear indication that foraging and utilizing plant resources became more important in that period. A study of cultural materials from several sites indicates a Middle Archaic cultural horizon identified as the Calf Creek complex extended from the Ozark Plateau in Oklahoma, Arkansas, and Missouri, across the plains (Wyckoff and Bartlett 1995). The Middle Archaic Calf Creek complex overlaps the Early Archaic and is considered the product of a distinct culture, rather than elements of other assemblages (Neal and Drass 1998). Calf Creek assemblages in Texas include thinly bladed PP/K forms that may have been used to hunt bison, which still existed in the region at the time (Collins 2004). Large concentrations of burned rock features, like hearths and ovens, indicate more substantial occupation of campsite locales.

Late Archaic Period (500 B.C. – 1200 A.D.) – The Late Archaic Period in the Southern Texas Plains Region was a time of considerable population growth, regional adaptation, and increase in inter-regional exchange of raw materials (Walthall et al. 1982). Reliance on riverine resources was a feature of this period, and settlement centered along river terraces, floodplains, and hilly areas in close proximity to floodplains (Hester 2004).

The diversity of aquatic and floral resources that were exploited drove the advancement of PP/K and lithic toolkit technologies (Early and Sabo 1990).

Late Archaic PP/Ks include stemmed or notched styles, and lithic toolkits include a wider range of specialized tools, including various scrapers, drills, gouges, choppers, and grinding/nutting stones. This diverse lithic toolkit reflects the increasingly diverse range of

floral and faunal resources exploited by people of the Late Archaic Period, including rodents, turtles, fish, shellfish, deer, and small woodland game (Hester 2004). Unifacial scrapers, awls, drills, and graters suggest hide processing and woodworking, while metates, or grinding stones, reflect the exploitation of wild mast and bean species as part of the Late Archaic diet. Late Archaic PP/K traditions are marked by a transition from stemmed styles in the early Late Archaic to diverse notched styles, particular basal and corner notched types, as the period progresses. These types typically decrease in size from the early to later portions of the Late Archaic and represent a shift in hunting subsistence practices and an increase in trade and social interaction with other cultural groups throughout the region. The Late Archaic lifeways in the South Central Plains of Texas never developed into the socio-political complexes that define the Woodland and Late Prehistoric periods in the central and southeastern United States.

3.4 Late Prehistoric Period (A.D. 800 – 1519)

The early parts of the Late Prehistoric period in the Southern Plains Region are more of a continuation of the Late Archaic tradition in terms of resource exploitation and inter-regional trade. The introduction of the bow and arrow circa 500 A.D. shifted PP/K styles away from larger atlatl or dart technologies into strictly small-form, triangular notched projectile points that were hafted to arrow shafts. The introduction of the Toyah cultural horizon into this region, spreading south from the central plains and then west from central Texas, brought a widespread shift in cultural material technology (Collins 2004). The eponymous Toyah PP/K style consists of small, triangular arrow points with side notches for hafting. Large, thin bifacial tools, unifacial scrapers, and prismatic blade types accompany the Toyah PP/Ks in the lithic toolkit of the Late Prehistoric Period; these points are associated with the exploitation of bison, which had recently returned to the region.

Pottery was first introduced into the region circa A.D. 1200 during the Late Prehistoric Period. Bone-tempered pottery, amorphously grouped as part of the Leon Plain tradition, first appears in the region and was introduced via trade or social interaction with groups situated in Central Texas. Vessel forms take the shape of bowls or straight-sided jars (Hester and Hill, Jr. 1974). Although a ceramic tradition was established for the region, ceramics as a whole are not commonly found in sites in the Southern Plains Region, representing a marginal technology amongst Late Prehistoric peoples of the area. Traditional lifeways in the region would persist until the arrival of Europeans circa 1519 A.D.

3.5 Spanish Texas (A.D. 1519-1820)

The first Europeans to set foot in modern day Texas were Spanish conquistadors seeking to expand the footprint of Spain in the Americas. Previous conquests of Caribbean Islands,

South America, and Central America prompted expeditions into the American Southeast. The earliest entrada into Texas came as part of the ill-fated expedition of Panfilo de Narvaez in 1528, which resulted in the death of almost all of the 400 participants. Sailing along the Gulf Coast in crudely made boats after an overland march through Florida resulted in significant casualties. A series of storms scattered the remnants of the expedition near the mouth of the Mississippi River. The second-in-command, Cabeza de Vaca, and approximately 40 others, were stranded on an island outside of Galveston, Texas.

After narrowly avoiding succumbing to a deadly illness that spread among the survivors, De Vaca spent four years traveling along the Texas coastal plain. A novelty amongst the native peoples of Texas, he traded goods like conch shells and red ochre in exchange for faith healer services, prayers, and blessings (Chipman and Joseph 2010:31). In an attempt to reach Spanish colonial outposts in modern-day Mexico, De Vaca traveled west towards the Guadalupe River, where he met three additional survivors of the Narvaez Expedition. The four were enslaved by a native group named the Mariames in 1534. For eighteen months, the Spanish would travel with the Mariames throughout south Texas before being able to depart for Spanish outposts in Mexico. They passed south of present-day Laredo, Texas, and followed the Rio Grande River northwards toward El Paso, traveled through the American southwest and then southwards into Mexico towards the Gulf of California. In 1536, they reconnected with their countrymen. De Vaca chronicled his travels in his memoirs, published later that year. His writings present a detailed ethnohistory of Texas natives that includes indigenous place names, tribal names, traditions, and customs.

Subsequent entradas into Texas by Spanish conquistadors were driven by rumors of wealth relayed by De Vaca after his journey (Chipman and Joseph 2010: 40). An expedition by Hernando De Soto in 1539 that began in Florida briefly entered east Texas before turning back towards the Mississippi River and back to Mexico. In 1540, Hernando de Alvarado led a small detachment from Francisco Coronado's expedition in New Mexico and entered the northern Texas Panhandle on his way towards the Great Plains. The failure of these expeditions, both from high casualties in conflict with native groups and the lack of promised wealth to plunder, discouraged future Spanish conquistadors from venturing into Texas.

For the next century, Spanish colonial governors, military forces, ranchers, miners, and clergymen focused on expanding their territorial footprint in Mexico, which steadily grew north towards the Rio Grande River (Chipman and Joseph 2010: 44). The Spanish occupation of present-day New Mexico in 1598 resulted in occasional forays into west and north Texas via a ford of the Rio Grande River at modern-day El Paso. A Pueblo Indian revolt against the Spanish at Sante Fe and its surrounding settlements in 1680 forced Spanish occupiers out of the region, pushing them south into Texas. They established a community at El Paso as a

base for reconquering New Mexico, countering French attempts to found colonies along the Gulf Coast and serving as the furthest outpost of Colonial Spain in North America.

The Spanish ventured east into Texas, mostly as forays to assert Spanish control against the encroachment of French traders and colonists from present-day Louisiana (Chipman and Joseph 2010: 60). By 1726, Spain had constructed four fortified brick and wood fortresses, or *presidios*, between present-day San Antonio and Nacogdoches to repel French forces and occupancy claims in the region. The Catholic Church established missions in the areas around these *presidios* in an attempt to convert native peoples to Christianity. San Antonio became the provincial capital of Spanish Texas. Guarded by a *presidio*, positioned within a fertile floodplain for settlements, and centrally located between Spanish holdings in Mexico and French Louisiana, it remained the seat of Spanish power in the region for the next century.

By the mid-eighteenth century, Spain had created the province of Nuevo Santander as the northeastern-most region of New Spain. This province encompassed areas that today form parts of the Mexican states of Tamaulipas and Nuevo León, as well as a section of southern Texas, including the site of present-day Laredo in the United States. Established during the 1740s and 1750s, Nuevo Santander was part of Spain's broader strategy to secure and expand its northern frontier under the direction of colonizer José de Escandón (Weddle 2026).

To colonize and populate these northern lands, Spanish authorities relied heavily on military campaigns designed to pacify and subjugate American Indian communities and to impose religious indoctrination on the peoples living along the Gulf Coast and extending inland northward beyond the Rio Grande. In 1755, Tomás Sánchez de la Barrera y Garza established the settlement of Villa de San Agustín de Laredo after receiving permission from José de Escandón to create a new community about thirty miles upriver from Nuestra Señora de los Dolores Hacienda, south of the current APE in what is now Zapata County, on the north bank of the Rio Grande (Weddle 2026).

Ongoing conflict with native groups like the Comanche and Apache bands who would raid settlements, missions and ranches spurred the Spanish to continually develop and fortify the interior of Spanish Texas (Chipman and Joseph 2010: 148). Three additional *presidios* had been constructed in central and north-central Spanish Texas by 1760, as more Europeans relocated to develop ranches and farms. Catholic missionaries had established a wide band of missions throughout the state in their attempt to Christianize the native populations of Texas, which was met with increasing resistance as Spain moved north into Texas. Spain's alliance with France during the French and Indian War in 1762 led later that same year to the transfer to Spain of French Louisiana, which the Spanish renamed "Luisiana."

Although Spain now had complete control of the North American continent west of the Mississippi River, the planned establishment of a prospering Spanish Texas was challenged. As the longstanding conflict with France had been resolved by the acquisition of Luisiana, *presidios* fell into disrepair from a lack of upkeep, endemic corruption by commanders, and a century of persistent conflict with native groups unwilling to tolerate Spanish colonization. The Spanish Empire viewed the English and Russian claims on the eastern and western coasts of North America, respectively, as a greater threat than conflicts with native groups within Texas, resulting in inadequate military support for the *presidio* network and their affiliated settlements and missions. Persistent raids by the Apache and Comanche resulted in thousands of deaths of Spanish colonists in the latter half of the eighteenth century. Additional conflicts on the European mainland between the French Republic and Spain in 1795 resulted in the Treaty of Aranjuez in 1801, which restored Luisiana back to French control, further constricting the territory and governance of Spanish Texas.

By 1803, fewer than 3,000 Spanish nationals lived in Spanish Texas and only two *presidios* remained (Chipman and Joseph 2010: 230). Revolutions in Spain percolated into the Americas and nationalist movements to establish Mexican independence began in the early nineteenth century. Independence uprisings led by Miguel Hidalgo y Costilla and Ignacio Allende in 1810 began a decade-long revolutionary civil war that resulted in the formation of an independent Mexican state in 1821. Spanish Texas became part of the new nation of Mexico, ending 300 years of Spanish claim on the region.

3.6 Historic Texas (A.D. 1820 – Present)

In 1820, Laredo, and the area that would become Webb County, was one of the northernmost settlements in the Spanish province of Nuevo Santander. The Mexican Revolution, which began in 1810 and succeeded in 1821, resulted in the region gaining its independence from the Spanish Empire. At this time, either the Spanish or Mexican state exercised little authority in the cattle ranching region surrounding Laredo, and “as early as 1819, 37 of the 44 ranches in the vicinity of Laredo had been abandoned for fear of Indian attack” (Leffler and Long 2019). Despite intermittent conflict with indigenous groups and bandits, Hispanic colonization of the area continued during the early Mexican era; “between 1828 and 1831 one hacienda and 23 ranchos were established near Laredo, and 100 parcels of common pastureland were assigned to various individuals” (Leffler and Long 2019).

During this period between the Mexican Revolution (1810 – 1821) and the Mexican American War (1846 – 1848), the area experienced increased ranching activities and the cycles of settler-indigenous violence that accompanied that expansion, all the while receiving little aid from the Mexican government. By 1836, the city of Laredo had around 2,000 citizens (City of Laredo). The year 1836 ushered further political instability to the region located north of the

Rio Grande and south of the Nueces Rivers, due to the success of the Texas Revolution (1835 – 1836). Laredo came to be at the center of the Nueces Strip, territory which was claimed both by the states of Mexico and Texas with neither exercising authority or enforcing the rule of law; however, "...residents remained primarily loyal to the Republic of Mexico" (Leffler and Long 2019).

On January 18, 1840, Antonio Canales declared the Republic of the Rio Grande in Laredo. This short-lived independent state, occupying both sides of the Rio Grande River, was founded in part as a reaction to the property seizures inflicted on the local populace by the Mexican Army under Santa Anna on its northward march into the Texas Revolution. This state required the support of the Republic of Texas to counter Mexico; however, the Republic of Texas required Mexico to recognize its independence. Unwilling to anger Mexico, only informal support was offered by the Republic of Texas, and the Republic of the Rio Grande was reincorporated into Mexico by November 1840. Following a defeat at the Battle of Saltillo, General Antonio Canales surrendered and rejoined the Mexican Army under Santa Anna, leading to the dissolution of the republic (Lindheim 1964).

Laredo was captured by the Anglo-Americans in 1846 during the Mexican American War and was incorporated as the seat of the newly established Webb County in May 1848. These events caused an exodus of Hispanic citizens to the Mexican side of the Rio Grande, founding Nuevo Laredo. The Treaty of Guadalupe Hidalgo (1848) established the border at the Rio Grande River and guaranteed the land rights of the former Mexican citizens (Pletcher and de la Teja 2022).

Once American control of the formerly disputed region between the Rio Grande and Nueces River had been established, the U.S. Army founded Camp Crawford at Laredo to protect the local ranches from continued widespread banditry and indigenous raids. Camp Crawford was developed into Fort McIntosh by 1850 (City of Laredo). Military presence and the coming American Civil War spurred further ranch development; "The [Civil War] helped to invigorate ranching in Webb County. Only 2,987 cattle had been reported in the county in 1859, and only 1,340 in 1860; but by 1866 there were almost 30,000 cattle and 43,000 sheep. The raising of livestock remained at the center of the economy until the early twentieth century" (City of Laredo). The boom in sheep ranching continued, and by 1878 "there were an estimated 239,000 sheep and goats, and 9,000 cattle on the Webb County ranges" (City of Laredo).

In 1881, the International & Great Northern Railroad (I&GN) and the Corpus Christi and Rio Grande (Texas Mexican) Railroad arrived in Laredo, providing connections to the Gulf Coast and Midwest (Moore et al. 2016). By 1885, the I&GN connected to the Mexican National Railway at Laredo, industrializing the "Gateway to Mexico." As a result, the population boomed from 3,531 to 11,319 citizens during the decade of the 1880s (City of Laredo). The

development of the rail network enabled new industries to develop, increased the rate of immigration to Webb County, and stimulated the historic agricultural economy by industrializing farm-to-market connections and spurring higher livestock capacities. These trends led to demographic changes in the county; “After 1881 the number of Anglo-Americans began to increase, and by 1900 they represented one-fourth of the population of 21,851” (Leffler and Long 2019). Similarly, there was an influx of upper-class Mexicans fleeing the revolutions of 1910 – 1917 who invested their capital into the economy of Webb County (City of Laredo). The new rail network resulted in changing patterns of settlement with towns established along rail lines supplanting ranching communities that had been dispersed throughout the county.

An active coal mining industry was established to supply the rail network and burgeoning industries of the Rio Grande Valley, centered on Charles Wright’s Cannel Coal Company in the community of Dolores (Leffler and Long 2019). Coal mining activities in the communities of Minera and Darwin were also made profitable by “the completion of the Rio Grande and Eagle Pass narrow gauge to the mines” (Thompson 1986).

By 1898, large scale irrigation was introduced throughout the Rio Grande Valley and to Webb County utilizing water pumps which were powered by wind, gas, or electricity. This agricultural innovation encouraged further Anglo-American immigration who converted grazing lands into farmland growing cotton, onions, and corn (Leffler and Long 2019). These agricultural shifts had lasting effects on the landscape and economy, as “well into the twentieth century, onion production remained a vital part of the Laredo economy” (Thompson 1986).

The economic development of the final quarter of the 19th century encouraged the growth of the civic infrastructure of Laredo, reflecting the hydraulic and transportation developments that were occurring in greater Webb County. In 1883, “the Laredo Waterworks ... was contracted by the city to construct and maintain a waterworks system. One-hundred hydrants were installed, and water was sold to the public” (Thompson 1986). Soon, Laredo would have “the first electric streetcars west of the Mississippi. Because the streetcars also ran across the bridge to Nuevo Laredo, it was the also the first international electric street railway” (Thompson 1986). Further civic development occurred at the behest of the Laredo Improvement Company (c. 1888), which “was founded in 1888 by a number of prominent Laredoans. The company which promoted commerce, industry, and lured immigrants to the border was also one of the largest land corporations in the nation” (Thompson 1986).

Disease, political violence, and labor unrest accompanied these rapid developments in Laredo and Webb County. The construction of the first Webb County Courthouse in May 1882 inspired “a strike by brick masons demanding wages of three dollars a day” (Thompson 1986).

Class divisions were reflected by the two dominant political parties, the “Botas” (boots) and “Guaraches” (sandals) representing the ownership and labor classes of the region (Segovia 2020). The rivalry erupted into violence during the Laredo Election Riot of 1886, where “possibly 30 people died and 45 or more were injured” in what was “one of the biggest gun battles in the entire history of the American West” (Woods 2016). The violence was quelled with the arrival of U.S. Infantry from Fort McIntosh reinforced by Texas militia and Rangers arriving two days later (Woods 2016). In 1894, the two parties united, forming the Independent Club, which went on to dominate border politics until 1978” (Woods 2016).

In October 1898, a smallpox epidemic broke out amongst “the poorer barrios of the city along Zacate Creek,” and “by the end of January 1899, more than 100 cases of smallpox had been reported in Laredo” (Cuellar 2022). Local officials took extreme measures including “house-to-house vaccination and fumigation, the burning of all questionable clothing and personal effects that could not be fumigated, and the establishment of a field hospital ... referred to as the ‘pesthouse’” (Cuellar 2022). By March 1899, the Hispanic populace was beginning to chafe at the repressive actions, resulting in the Texas Rangers and U.S. Cavalry riding out to enforce the quarantines, incinerations, and vaccinations. The situation devolved into a riot, with dozens of arrests, repression of the free press, gunshot wounds sustained by the local populace and Rangers, and the killing of local community leader Agapito Herrera, whose body would lie in state at the headquarters of the Independent Club (Thompson 1986).

Despite the social, political, and public health issues of the period, the economy of Webb County continued to diversify and develop into the early 20th Century. Oil was discovered in Webb County in 1908 by L.A. and Edward J. Reiser, leading to an oil boom in the 1920s. Oil would eventually replace coal as the predominant mode of energy production by the dawn of the Second World War, with the Cannel Coal Company shutting its doors in 1939 (Leffler and Long 2019). The shift towards petroleum resulted in the depopulation of the former coal mining communities; “in 1910, Dolores, one of the largest mining camps, had a population of over 1,000. By 1930, with the closing of the mines, only twenty citizens could be counted” (Thompson 1986). Mining activities were recentered on the production and smelting of antimony, and in 1937, the Foundry Workers’ Union of Laredo was established by “Tejano mine workers employed at the Antimony Foundry in Laredo, Texas” (The University of Texas at Arlington Libraries (UTA); Foundry Workers' Union Records AR34.1.1). The union aimed to “defend against patronal exploitation, abuse, and discrimination” and eventually joined the International Union of Mine, Mill, and Smelter Workers of the C.I.O.” (UTA; Foundry Workers’ AR43.1.1).

The confluence of industry, agriculture, and transportation primed Webb County to “serve as an important training center for United States military forces” (Leffler and Long 2019) at the dawn of the Second World War. Fort McIntosh was expanded and served as the local

National Guard Base (Leffler and Long 2019). The Laredo Army Airfield (later Laredo Air Force Base) was established on 1,500 acres of rangeland northwest of Laredo. This base hosted the Central School for Flexible Gunnery and “trained thousands of soldiers for the European and Pacific theaters” (Leffler and Long 2019). Until its closure in 1973, “Laredo Air Force Base turned out hundreds of pilots for the Air Force” (Thompson 1986).

The mid-20th-century marked a consolidation of agriculture and a shift away from the early-20th-century farm expansion which had resulted in an “all time high of 522 [farms] in 1930, [which] fell to 327 by 1950;” by “2002, the county had 568 farms and ranches, 94 percent of which were devoted to pasture” (Leffler and Long 2019). The population of Laredo grew from 39,274 to 176,575 between 1940 and 2000 (Texas Almanac 2000). To serve the growing population of Laredo and Webb County, two post-secondary schools were opened between 1947 and 1969, Laredo Junior College and Texas A&M International University (Thompson 1986).

4.0 Background Research

Prior to performing fieldwork, VHB conducted background research to construct a history of archaeological investigations in the area. VHB consulted the Texas Archaeological Sites Atlas. Background research also included examination of all archaeological site forms and previous undertakings conducted within a 1 km radius of the APE. [REDACTED]

VHB also conducted background research to construct a history of historic resource surveys in the area. VHB consulted the Texas Historic Sites Atlas and Texas Historical Commission Historic Resources Survey Library (updated 4/1/2025). The review of existing information on previously identified historic properties revealed that no proposed National Register nominations, National Historic Landmarks, individual properties or districts listed on the National Register of Historic Places, Historical Markers, Recorded Texas Historic Landmarks (RTHL), or State Antiquities Landmarks (SAL), existed within the APE. The previously identified Meridian Highway segment LS-1775 (Encinal to Laredo) surveyed as part of the *Meridian Highway Historic Context* (2016) was identified within the project APE (Table 3 and Figure 5).

4.1 Previous Archaeological Sites and Surveys

Available information on past survey methodologies is limited, as the Texas Archaeological Site Atlas does not host archaeological survey reports. [REDACTED]

[REDACTED]									
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
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[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



4.2 Previous Historic Sites and Surveys

According to a review of the Texas Historic Sites Atlas, the APE was included in the 1980 Webb County Cultural Resources Survey (SurveyID 335/403). However, Atlas notes that the location of the survey forms and photographs is unknown.

In 2016, the Meridian Highway project team prepared a historic context for the Meridian Highway and completed an accompanying historic resources survey on behalf of the Texas Historic Commission and the TxDOT. The project traced the evolution of the Meridian Highway from the period of early settlement through the completion of the interstate highway system. The previously identified Meridian Highway segment LS-1775 (Encinal to Laredo) surveyed as part of the *Meridian Highway Historic Context* (2016) was identified within the project APE. This resource was previously classified as a non-contributing segment due to the repaving and widening of the road segment in Appendix A of the *Meridian Highway Survey Report* (2016).

Table 3. Previously Recorded Historic Resources within 1 km of the APE.

Resource Number	Previously Recorded Site Number	Year Built	Address	Type	Current NRHP Eligibility
W-01	LS-1775	1916	Frontage Road/Meridian Highway	Road	Ineligible

5.0 Methods

The primary objectives of the archaeological survey were to identify any previously unrecorded archaeological sites within the Below-Ground APE, assess their integrity, and evaluate those sites through the application of NRHP criteria. Ancillary objectives included the identification of any previously recorded archaeological sites within a 1 km radius of the APE, and the compilation of all relevant cultural information pertaining to the APE's surroundings. Tasks performed to accomplish these objectives included background investigations, field survey, and the application of the NRHP eligibility criteria. Recovered artifacts were subjected to laboratory analysis. Methods employed for each of these tasks are described below.

The primary objectives of the historic resources survey were to identify any previously unrecorded historic resources within the Above-Ground APE, assess their integrity, and evaluate those sites through the application of NRHP criteria. Tasks performed to accomplish these objectives included background investigations, field survey, and the application of the NRHP eligibility criteria. Methods employed for each of these tasks are described below.

5.1 Background Research

Background research was conducted in order to reconstruct the history of occupation and land use within the APE. The purpose of this initial effort was to identify many previously recorded archaeological resources which may have been located within the APE. In addition, background research included an examination of all archaeological site forms and previous cultural resources undertakings conducted within a 1 km radius of the APE. All relevant cultural studies and historic studies pertaining to the APE and the immediate area were consulted. Compiled bibliographies of all relevant previous surveys were consulted and references procured for historical context information.

Background research was conducted in order to identify any previously recorded historic sites and identify buildings in the Texas Historic Sites Atlas and Texas Historical Commission Historic Resources Survey Library (updated 4/1/2025). Dates of construction for the resources included in this survey were found in the Webb County Appraisal District portal. In cases where the Webb County Appraisal District did not provide a date of construction for a structure, historic aerial imagery of the APE dating from 1935 and 1959 (Historic Aerials) was used to approximate the date of construction of the historic structure. Newspaper research was conducted through the digital archives of the *Laredo Daily Times* and *Plainview Herald*.

5.2 Field Methods

Archaeological fieldwork was conducted through two primary methods: 1) surface inspection and 2) shovel testing of the Below-Ground APE where possible. In general, shovel tests were excavated at 30-meter intervals along transects spaced 30 meters apart. Shovel testing was not conducted in areas that were flooded, paved, developed, within active railroad right-of-way, or on hillside slopes greater than 20 degrees. Shovel tests measured 30 centimeters (cm) in diameter and were excavated to a depth of at least 80 centimeters below surface (cmbs) or at least 10 cm into sterile subsoil. Shovel test pits were spaced along transects and excavated by natural soil horizons. All excavated soils were sifted using 6.4-millimeter (¼-inch) mesh for uniform artifact recovery. Standardized data for each shovel test were collected on forms and in notebooks; information recorded consisted of depth, Munsell soil color for each soil stratum, and the number and type of each artifact encountered, if applicable. Once excavated, the walls of each shovel test were inspected for artifacts, features, and other indications of an archaeological site. All excavated shovel tests were backfilled upon completion.

Artifacts were collected in 0.3-millimeter plastic bags, which were labeled with provenience information, including either the state or field site number, as appropriate; shovel test number; stratum number; and depth from which artifacts were recovered. Sketch maps were made of areas and shovel test transects, as needed. Representative photographs of the project APE were taken to document the general topography, vegetation, and environmental condition of the APE. Upon recovery of cultural materials, the find was assigned a sequential bag number. Positive shovel tests were further investigated by the excavation of additional shovel tests at 15-meter intervals in every cardinal direction using a grid pattern until two negative shovel tests at close interval were encountered.

For the purposes of the survey, an archaeological site is a concentration of artifacts, ecofacts, or modifications to the landscape that are associated with past human activity and retain their context. An archaeological site must contain artifacts or features at least 50 years old, and meet any of the following descriptive criteria:

1. An area yielding three or more artifacts from the same broad cultural period (i.e., historic or prehistoric) on the surface within a 30-meter radius;
2. A shovel test that produces one artifact and at least one surface artifact from the same broad cultural period within a 20-meter radius from that shovel test;
3. An area with visible or historically recorded cultural features (e.g., shell midden, cemetery, rockshelter, chimney fall, brick walls, piers, earthwork, etc.).

Locations with two or fewer artifacts found within a 30-meter radius and not containing features or ruins are classified as an Isolated Find (IF). Isolated finds are, by definition, not considered eligible for listing in the NRHP. For cases where an isolated find is unique and potentially may be considered eligible for inclusion in the NRHP, it should be defined as a site. Deposits of cultural artifacts that have no integrity, such as road fill, stream gravels, or other situations where artifacts clearly are re-deposited, also should be considered isolated finds.

Pedestrian surveys were undertaken to locate historic resources 45 years old or older within the APE, defined as the footprint of the proposed project and the viewshed of the immediately surrounding parcels. Each identified resource was photographed, mapped, and described in notes to assist in describing material, style, and construction details. Based on the information collected on each resource, VHB evaluated the structures using the NRHP significance criteria in 36 C.F.R. § 60.4. These criteria define eligible cultural resources as buildings, structures, objects, sites, and districts that have integrity of location, design, setting, materials, workmanship, feeling, and association and that meet one or more criteria pertaining to historic events, historic persons, architectural distinction, or ability to yield important information about the past (most often considered for archaeological resources). More on the NRHP criteria and aspects of integrity can be found below.

5.3 Laboratory Methods and Artifact Curation

Upon field survey completion, artifacts were transported to the VHB laboratory located in Tucker, Georgia. Artifact bags were checked against bag lists created in the field to confirm receipt of all excavated/recovered material. Artifacts were washed, sorted, and divided by class/type and assigned a catalog number. Artifacts were placed in resealable polyethylene bags with catalog tags and bag information enclosed. Artifact bags were placed in archival stable acid-free boxes.

Analysis of the artifacts focused on determining specific cultural and temporal affiliations. Precontact artifacts were initially sorted into categories based on material (i.e., lithics, ceramics, and other). Lithic analysis focused on assigning typology based on Cambron and Hulse (1986) and Justice (1987). Debitage analysis followed Bradbury and Carr (1995). Raw material identification followed Skriván and King (1983).

All provenience and catalog information was compiled in an Excel database. Diagnostic artifacts were labeled using a two-coat method (i.e., the “sandwich technique”) using small, acid-free paper labels, permanent black ink, and Acryloid B-72 lacquer. All artifacts were placed in resealable polyethylene bags with enclosed provenience information printed on acid-free paper tags. Artifact bags were placed in archival stable acid-free boxes. All field

notes, photographs, and other information produced throughout the course of this survey are being temporarily stored at the VHB's Atlanta facilities. Following finalization of the report, related materials will be submitted to the curation facilities at the Center for Archaeological Studies at Texas State University. This facility meets the standards defined in 36 C.F.R. Part 79, Curation of Federally-Owned and Administered Collections; Final Rule.

5.4 National Register of Historic Places Evaluation Criteria

The data obtained from the survey was evaluated based on the NRHP criteria for eligibility. These criteria are specified in the Department of the Interior Regulations, 36 C.F.R. § 60.4, Criteria for Evaluation. According to Regulation 36 C.F.R. § 60.4, cultural resources can be determined eligible if they:

- A. Are associated with events that have made a significant contribution to the broad pattern of history;
- B. Are associated with the lives of persons significant in the past;
- C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possesses high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction, or;
- D. Have yielded, or are likely to yield, information important to prehistory or history.

Any particular cultural resource may be eligible under one or more of the above criteria. Criteria A, B, and C, however, are most commonly applied to buildings, structures, districts, or non-archaeological sites (e.g., historic landscapes). Though many cultural resources or properties eligible under Criteria A, B, and C may have archaeological deposits, individual archaeological sites are most frequently evaluated and considered eligible specifically under Criterion D. The NRHP evaluation criteria are employed for any historic properties (including archaeological sites) that are 50 years of age or older. Therefore, any resource that has a demonstrated age of at least 50 years may be evaluated. More recent historic properties may be eligible if they demonstrate exceptional significance (Sherfy and Luce n.d.). In addition to the above criteria, the NRHP also stipulates that to be eligible, a property or archaeological site must possess integrity of location, design, setting, materials, workmanship, feeling, and association. According to the National Register Bulletin *How to Apply the National Register Criteria for Evaluation*, integrity is defined as the resource's ability to convey its significance (Andrus and Shrimpton 1990). For a resource to retain sufficient historic integrity, it must possess several, and usually most, of the following seven aspects:

1. *Location* – The place where the historic property was constructed or the place where the historic event occurred.

2. *Design* – The combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting* – The physical environment of a historic property. Setting includes elements such as topographic features, open space, viewshed, landscape, vegetation, and artificial features.
4. *Materials* – The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. *Workmanship* – The physical evidence of the labor and skill of a particular culture or people during any given period in history.
6. *Feeling* – A property's expression of the aesthetic or historic sense of a particular period of time.
7. *Association* – The direct link between an important historic event or person and a historic property. Under Criterion D, it is measured in the strength of association between data and important research questions.

Integrity is considered relative to whatever significance the archaeological site or historic resource can still adequately convey. While it is possible to apply the above aspects of integrity to archaeological sites or historic resources, there are no universally applied standards. Sites must be evaluated within their respective historic contexts.

6.0 Cultural Resources Survey Results

6.1 Archaeological Survey Results

VHB investigated the entirety of the 69-ac (27.9 ha) Below-Ground APE via shovel testing and pedestrian survey. Most of the Below-Ground APE is situated within upland flats that contain a shallow topsoil of silty clay loam underlain by compact silty clay. Vegetation throughout the Below-Ground APE consisted of dense stands of scrub brush with acacia, prickly pear, mesquite, and huisache. [REDACTED]

[REDACTED] 276 were negative for cultural materials and 64 could not be excavated and were recorded as "No Dig." No Dig locations consisted of areas with standing water, impenetrable vegetation consisting of dense mesquite and prickly pear cacti, or graded ditch areas paralleling existing roads. This area of impenetrable vegetation was present in the southern portion of the Below-Ground APE (Figure 6; see Results Survey Map 4 of 8). This portion of the Below-Ground APE is being optioned for use as a lay-down yard.



Figure 6. Area of Dense Vegetation Located within the Southern Below-Ground APE.

6.2 Historic Resources Survey Results

VHB conducted a historic resources survey of the Above-Ground APE in September of 2025. As a result, three historic resources were identified and surveyed (Table 4; Figure 18). Table 4 lists the type of the identified historic resources within the Above-Ground APE, along with their address, date of construction, survey specific resource number, and NRHP eligibility recommendation.

Table 4. Historic Resources Recorded Within the Above-Ground APE .

Resource Number	Year Built	Address	Type	NRHP Eligibility Recommendation
W-01 (LS-1775)	1916	Frontage Road/Meridian Highway	Road	Listed; non-contributing within the APE
W-02	1886	N/A	Railroad	Ineligible
W-03	1976	19010 I-35, Laredo, TX 78041	Agricultural Resource	Ineligible

6.2.1 W-01 (Revisit)- Meridian Highway

W-01 is a segment of the current I-35 and associated Frontage Road, which was constructed beginning in 1916 as a segment of the historic Meridian Highway, an early auto trail that terminated in Laredo, TX. Currently, the resource consists of the divided four-lane I-35, with two travel lanes in the southbound and northbound directions, divided by a grassed median, and flanked by two, two-lane bi-directional frontage roads. All road surfaces are paved with non-historic asphalt (Figure 19). W-01 was previously identified as the Encinal to Laredo segment (LS-1775) of the Meridian Highway in the *Meridian Highway Historic Context* (2016).

W-01 is associated with the transportation history of Webb County, Texas; however, numerous non-historic alterations such as paving and widening, both within and outside of the Above-Ground APE, have resulted in a loss of historic integrity of the Encinal to Laredo segment (LS-1775). This segment of the Meridian Highway was previously classified as non-contributing to the NRHP listed Meridian Highway under Criterion A for transportation or Criterion C for engineering in Appendix A of the *Meridian Highway Survey Report* (2016).

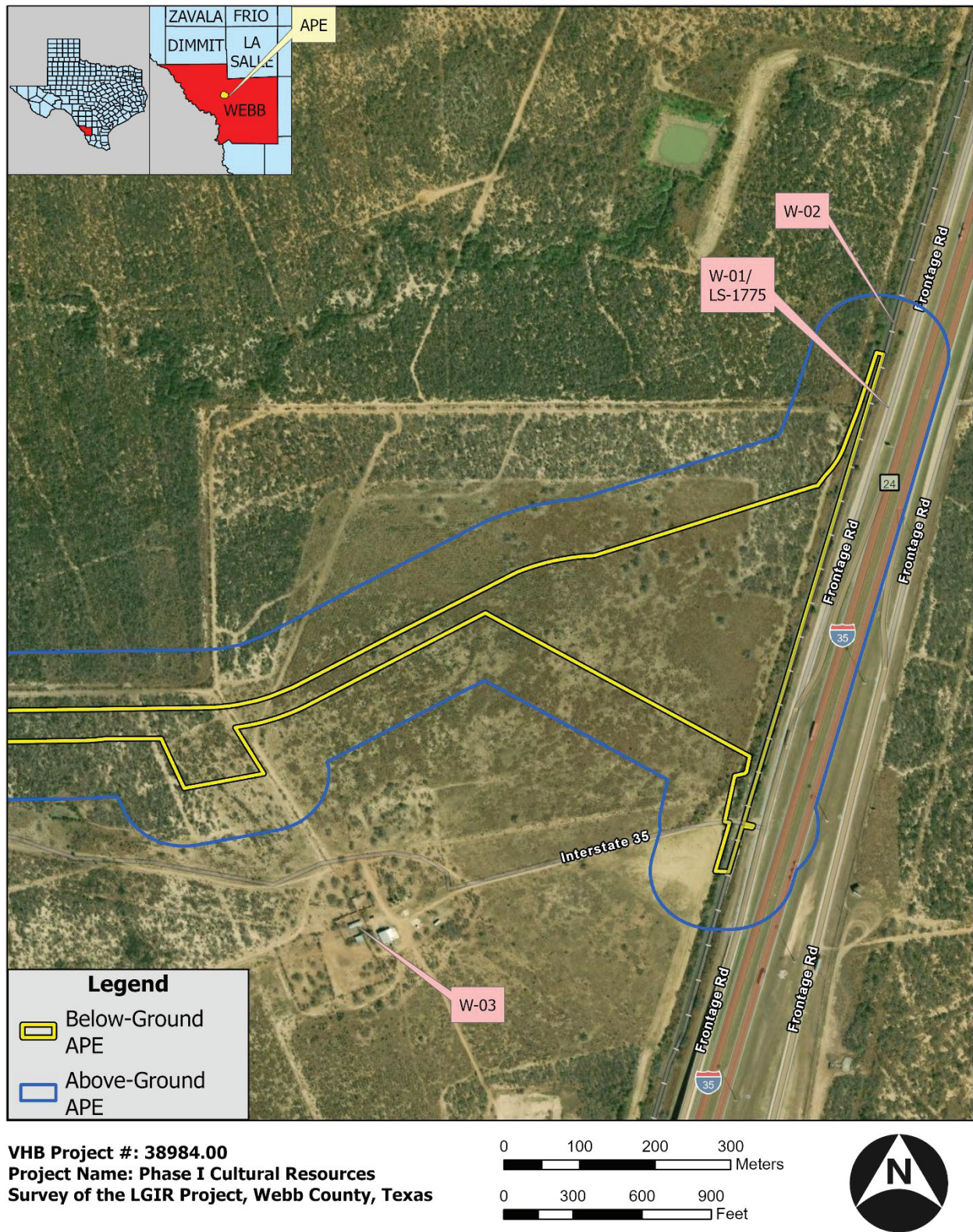


Figure 18. Results of the Historic Resources Survey.



Figure 19. View of W-01, Facing Northeast Along the Frontage Road, with Views of the North and Southbound Lanes of I-35 to the East.

6.2.2 W-02 – Union Pacific Railroad

W-02 is a segment of the Union Pacific Railroad that was originally constructed in 1881 as a segment of the International & Great Northern Railroad (I&GN). The resource consists of a single rail line resting on stone ballast (Figure 20). The railroad sits adjacent to the highway, which was not present when it was initially constructed. In the early 1960's, the Meridian Highway was developed into I-35, which introduced a separated highway with multiple travel lanes into the historic setting of the railroad (*Laredo Daily Times*). In the year 2000, Farm to Market Road 255 was converted into the Camino Columbia Toll Road, resulting in the construction of a non-historic overpass that crosses W-02 and I-35 (*Plainview Herald*). W-02 is associated with the transportation history of Laredo, Texas and the greater Webb County area. The I&GN was one of the earliest railroads to reach Laredo. Additionally, the Corpus Christi and Rio Grande Railroad (later Texas Mexican Railway Company) also reached Laredo in 1881, providing connections to the port at Corpus Christi and to the fledgling Mexican national rail network (Moore et al. 2016: 226).

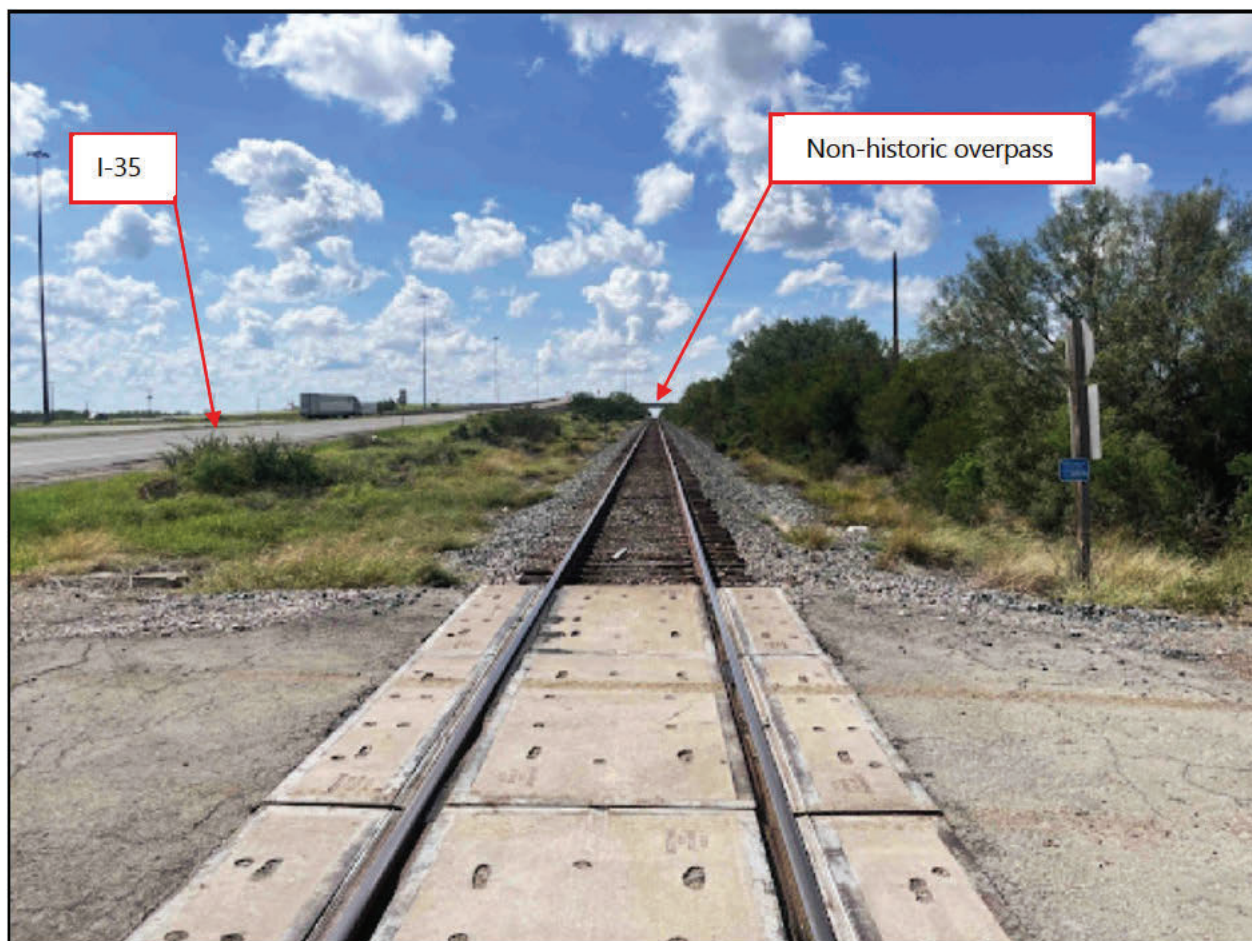


Figure 20. View of W-02, Facing southwest along the former International & Great Northern Railroad, with views of I-35 and the Frontage Road to the west.

The Rio Grande and Pecos Railway was chartered in Laredo the following year, 1882, and was built to transport coal from the Santo Thomas Mine to the markets of Laredo (TSHA, Handbook of Texas). W-02 was thus a single component of a rail network that concurrently developed in Laredo and throughout Texas, providing connections to the Midwest, Mexico, and the Gulf Coast. Due to the I&GN being constructed on the most direct route between San Antonio and Laredo, the Meridian Highway (W-01) would follow its path between the two cities; however, numerous non-historic alterations to the resources setting, both within and outside of the APE, have resulted in a loss of historic integrity. Within the APE, I-35 was constructed in the early 1960's, adding two separated travel lanes approximately 150 feet east of the resource. Outside of the Above-Ground APE, within view of the project area, a non-historic overpass crossing the rail line was constructed circa 2000, when Farm to Market Road 255 was converted into the private Camino Columbia Toll Road. These developments result in the loss of W-02's historic setting. Additionally, there is no supporting historic rail infrastructure within or near the Above-Ground APE, such as passenger stations, freight depots, or rail yards that would visually distinguish W-02 as a historic rail segment. Consequently, W-02 is recommended ineligible for listing under Criterion A. Background

research did not reveal any association with significant individuals involved with the construction of this resource, thus, W-02 is recommended ineligible for listing under Criterion B. Further, there is no indication that the San Antonio - Laredo subdivision of the I&GN Railroad had any unique or innovative engineering qualities as a standard gauge railway; therefore, W-02 is recommended ineligible for listing under Criterion C. Lastly there are no indications that the resource is likely to yield information on important research questions in history or prehistory. Therefore, there was no basis for evaluating the property under Criterion D. W-02 is recommended ineligible for the NRHP.

6.2.3 W-03 – Agricultural Resource

W-03 is a historic agricultural resource located at 19010 I-35, Laredo, TX 78041 (see Figure 18). The property is approximately 162 acres in size and includes a non-historic residence, three historic open-sided sheds, two historic above ground cisterns, a historic animal enclosure, and the surrounding agricultural landscape. According to the Webb County appraisal district, the non-historic residence was constructed in 1990, and the historic open-sided sheds were constructed in 1976. These dates of construction are corroborated by the building materials and construction methods observed during the field survey, such as modern dimensional lumber, galvanized lag screws, and non-historic metal roofing material. In a 1935 aerial image, the earliest available of the area, a gable-roofed house with a T-shaped plan and shed roofed porch is visible amongst the cluster of buildings (Historic Aerials 1935). The log fence which was observed during the field survey (Figure 21), appears to follow the same layout pictured in 1935 and is likely the oldest extant structure on the property. By 1959, according to aerial imagery, the historic farmhouse had been demolished (Historic Aerials 1959). The three agricultural outbuildings dated to 1976 by the Webb County appraisal district consist of two open-sided shed-roofed outbuildings on the north and south sides of the fenced enclosure, and an open-sided gable-roofed outbuilding in the center of the enclosure (Figure 20). All three outbuildings are uniformly roofed with non-historic corrugated metal and framed with a variety of wooden pilings and manufactured tubular metal. Two above-ground concrete cisterns sit to the northeast of the enclosure, opposite a dirt drive, with the remnants of a windmills lattice tower lacking its blade nearby. The cisterns and tower likely date to the mid-twentieth-century based on the towers' construction using manufactured aluminum tubing and steel angle. The non-historic residence is a frame building comprehensively sheathed in non-historic standing seam metal, with an open sided porch on the east elevation. W-03 appears to have been associated with historic ranching and agricultural practices and was therefore evaluated for listing on the NRHP under Criterion A. However, W-03 no longer retains its historic agricultural landscape, an intact historic farmhouse, or intact historic outbuildings. The original extent of the property appears to have been subdivided by 2006, according to the Webb County Appraisal District, resulting in a loss of the historic extents of the resource. The historic farmhouse was demolished by 1959, based



Figure 21. View of W-03, Facing West towards open sided shed.

on historic aerial imagery, and the mid-20th century outbuildings have been altered with non-historic metal roofing (Historic Aerials 1959). Therefore, the resource lacks the requisite components to convey a strong association with historic agricultural practices and is recommended ineligible for listing under Criterion A. Background research did not reveal an association with any significant individuals; thus, WM-03 is recommended ineligible for listing under Criterion B. The main dwelling on the property is a non-historic frame building lacking any architectural detail, while the remaining historic structures on the property are agricultural outbuildings lacking material integrity or evidence of any unique building practices. Therefore, W-03 is recommended ineligible for listing under Criterion C. Lastly, there are no indications that the resource is likely to yield information on important research questions in history or prehistory. Therefore, there was no basis for evaluating the property under Criterion D. W-03 is recommended ineligible for the NRHP.

7.0 Summary of Findings

VHB investigated the approximately 69-ac (27.9 ha) Below-Ground APE via systematic shovel testing and pedestrian survey. Most of the Below-Ground APE is situated within upland flats that contain a shallow topsoil of silty clay loam underlain by compact silty clay. Vegetation throughout the Below-Ground APE consisted of dense stands of scrub brush with acacia, prickly pear, mesquite, and huisache. [REDACTED]

No Dig locations consisted of areas with standing water, impenetrable vegetation consisting of dense mesquite and prickly pear cacti, or graded ditch areas paralleling existing roads. This area of impenetrable vegetation was present in the southern portion of the Below-Ground APE. This portion of the Below-Ground APE is being optioned for use as a lay-down yard. While no shovel tests were positive for cultural materials, the survey identified one newly recorded archaeology resource (site 41WB1035).

[REDACTED]

The historic resources survey resulted in the identification of three historic resources within the Above-Ground APE. These included the Meridian Highway (W-01; Figure 18), the Union Pacific Railroad (W-02; Figure 19), and one agricultural resource (W-03; Figure 20). W-01 was previously classified as a non-contributing segment of the Meridian Highway in the *Meridian Highway Context* (2016). The remaining two historic resources (W-02; W-03) were recommended ineligible for listing on the NRHP under Criteria A, B, and C as a result of this report.

Shovel testing included the systematic excavation of shovel tests supplemented by pedestrian overland survey wherever feasible within the Below-Ground APE. This

methodology was sufficient to investigate all accessible portions of the APE; however, areas of dense vegetation and heavy overgrowth could not be examined particularly in the southern portion of the Below-Ground APE within a planned laydown yard. In total, 276 shovel tests were excavated within the 69.1-acre Below-Ground APE during the current survey. According to current CTA standards, "for projects between 25 and 200 contiguous acres in size, at least 50 STs should be excavated for the first 25 acres plus at least one ST per every five acres over 25 acres." The current survey therefore meets and exceeds the currently accepted standards for archaeological survey of contiguous acreage in Texas. Although VHB considers it unlikely that the inaccessible portions of the Below-Ground APE contain significant, intact, or NRHP-eligible archaeological features and/or deposits, the entire Below-Ground APE could not be systematically investigated. It is recommended that LGIR adhere to an Unanticipated Discoveries plan in the unlikely event that previously unrecorded or unidentified archaeological features or deposits are encountered during construction. A copy of this plan is provided in Appendix C of this report.

[REDACTED]

[REDACTED] No additional cultural resource investigations are recommended for this project.

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Appendix A: Artifact Catalog

Appendix B: Resume of the Principal Investigator

Appendix C: Unanticipated Discoveries Statement
