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Cultural Resource Survey of 2.23 Miles (11,780 Feet) for Proposed Construction and Improvements to an Overhead Electric Transmission Line Located in El Paso, El Paso County, Texas

Michael A. Stowe

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Cultural Resource Survey of 2.23 Miles (11,780 Feet) for Proposed Construction and Improvements to an Overhead Electric Transmission Line Located in El Paso, El Paso County, Texas

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**Cultural Resource Survey of 2.23 Miles (11,780 Feet) for
Proposed Construction and Improvements to an Overhead
Electric Transmission Line Located in El Paso,
El Paso County, Texas**

**Prepared By:
Michael A. Stowe, M.A., RPA,
Principal Investigator**

Submitted to:

**Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711-2276**

Prepared For:

**El Paso Electric Company
P.O. Box 982
El Paso, Texas 79960**

Submitted by

**Advanced Archaeological Solutions (ADAS)
1021 Calle Contendo
Las Cruces, New Mexico 88011
ADAS Report Number 17-423
Texas Antiquities Permit Number #8150**

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**www.adarchsolutions.com
info@adarchsolutions.com**

TABLE OF CONTENTS

INTRODUCTION.....	1
ENVIRONMENTAL SETTING.....	5
CULTURE HISTORY	5
Paleo-Indian Period	5
Archaic Period.....	6
Formative Period	7
Mesilla Phase.....	7
Doña Ana Phase	7
El Paso Phase	8
Historic Period.....	8
PREVIOUS RESEARCH.....	9
METHODS.....	9
RESULTS OF INVESTIGATIONS.....	10
RECOMMENDATIONS	10
APPENDIX	10

LIST OF FIGURES

Figure 1. USGS 1:24:000 Project area map showing both survey segments..	2
Figure 2. Project Area showing close-up of southern survey segment	3
Figure 3. Project Area showing close-up of Northern survey segment.....	4
Figure 4. Overview of southern survey segment located near UTEP.....	11
Figure 5. Overview of southern survey segment located near UTEP. Note sloped terrain	11
Figure 6. Overview of southern survey segment located near UTEP. Note sloped terrain.	12
Figure 7. Overview of southern survey segment located near UTEP. Note sloped terrain.	12
Figure 8. Overview of northern survey segment located just west of I10.....	12
Figure 9. Overview of northern survey segment located just west of I10.....	13
Figure 10. Overview of northern survey segment located just west of I10.....	14
Figure 11. Overview of northern survey segment located just west of I10.....	14

INTRODUCTION

On September 23 and 24, 2017, Advanced Archaeological Solutions (ADAS) conducted a linear right-of-way (ROW) survey of two separate segments of overhead electric transmission line corridor area that total 2.23 miles (11,780 linear feet) located within the City of El Paso, El Paso County, Texas (Figures 1-3).

The Project consists of two parallel single circuit transmission lines in El Paso County, Texas and Doña Ana County, New Mexico. The first segment is located just west of the University of Texas at El Paso Main campus and measures 6,910 linear feet (Figure 2), the second segment is located slightly north of this segment and west of Interstate Highway 10 and measures 4,870 linear feet. Each of the two segments measures roughly 150 feet wide to cover the proposed improvement/construction corridor (50 feet) as well as a 50 foot buffer to either side for a total survey ROW buffer area of 150 feet. The proposed project will include the design to rebuild each line with new, taller, double-circuit, self-supporting, steel tangent and/or dead-end structures. Several segments of the Project have been previously permitted and constructed. The Project is a combination of a rebuild on existing right-of-way (ROW) and new construction.

All existing structures are steel monopoles, wooden H-frames, or three-pole dead ends. Replacement structures and new construction will be steel monopoles or two-pole structures. The new structures will be 70 to 105 feet tall, which is approximately 30 to 50 feet higher than the existing structures. The ROW width for the project varies, but will be approximately 150 feet. Impacts to the ROW are expected to include heavy machinery traffic and drilling at proposed transmission structure locations. Foundations of the existing structures will be cut down below grade and backfilled.

Beginning on the north end of the Project, portions of proposed Structures 16 to 21 B and 22 A/B to 31 A/B are on Parcel 1 owned by TxDOT. The State-owned Parcel 1 has been largely disturbed by concrete production and concrete waste disposal activities. This property was also historically quarried as visible on the Smelertown U.S. Geological Services topographic map (see attached EP Electric project maps).

The Project crosses two parcels owned by the City of El Paso Water Utilities. These City-owned properties are the site of a water reclamation facility. However, there may be undisturbed portions of the ROW within these parcels and ADAS recommends survey of these parcels.

Parcel 3 includes Structures 51 A/B to 56 A/B. Most of this parcel that intersects the project has been graded and developed into parking lots for UTEP. Only undeveloped and ungraded portions of the ROW in this south area are recommended for survey. It is this section of the line that also intersects site 41EP497. Little is known about this site from Texas Atlas, but it is located in a UTEP parking lot and presumed to be disturbed. Your office has requested construction monitoring of proposed Structures 55 A/B because they are in close proximity to the site location. The remaining six parcels at the south end of the Project are owned by UTEP and are developed. These parcels are not recommended for survey for archeological resources.

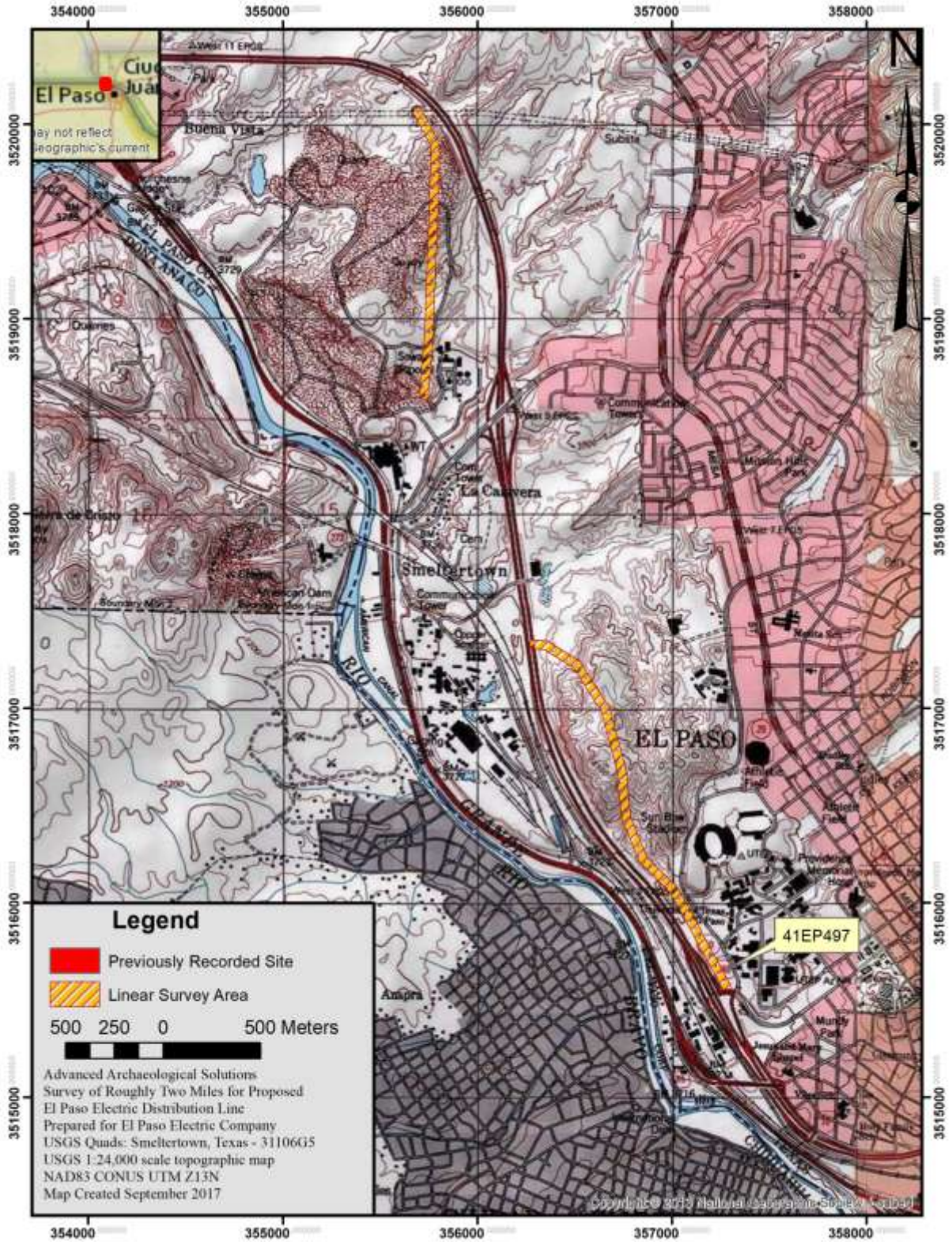


Figure 1. USGS 1:24:000 Project area map showing both survey segments.

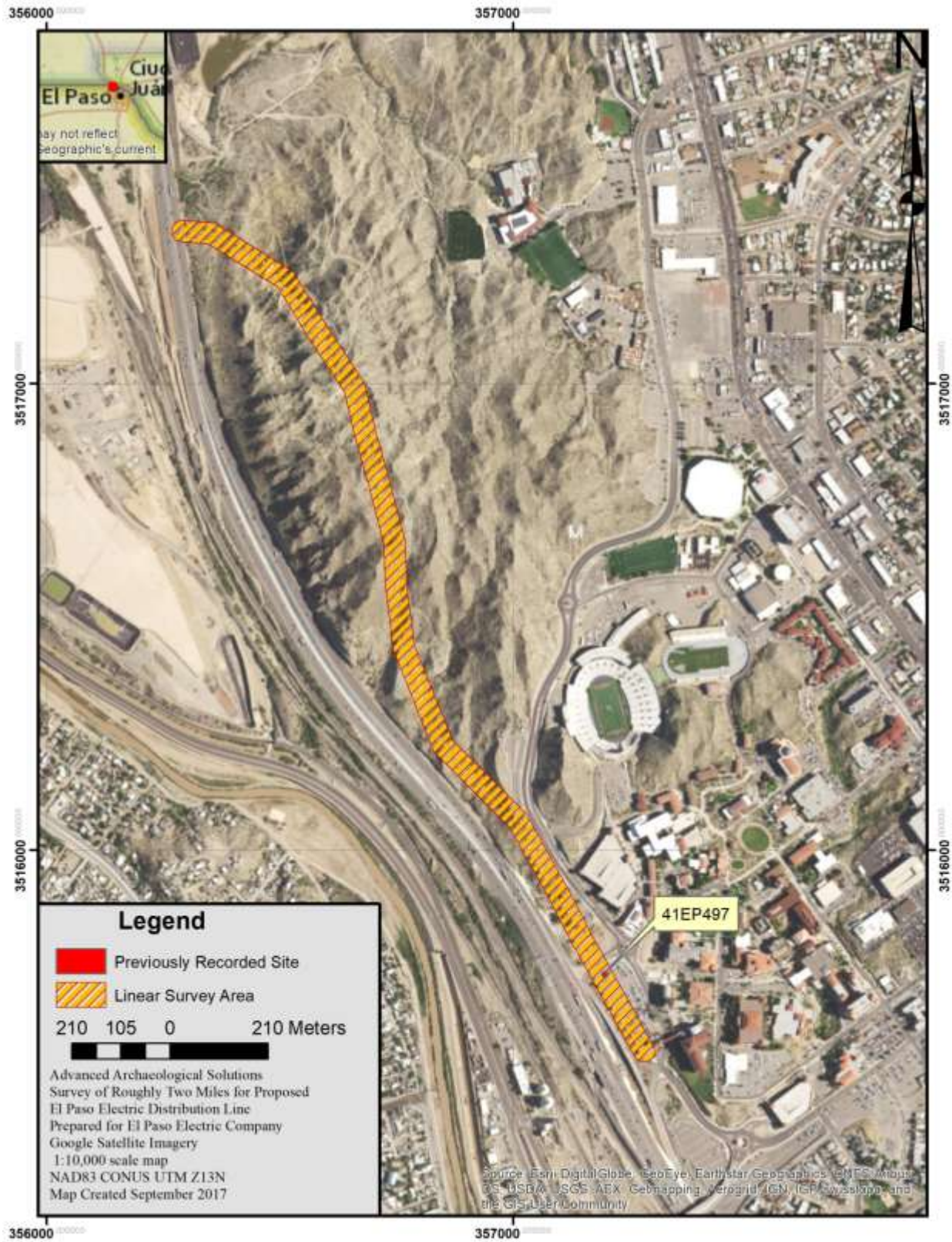


Figure 2. Project Area showing close-up of southern survey segment.

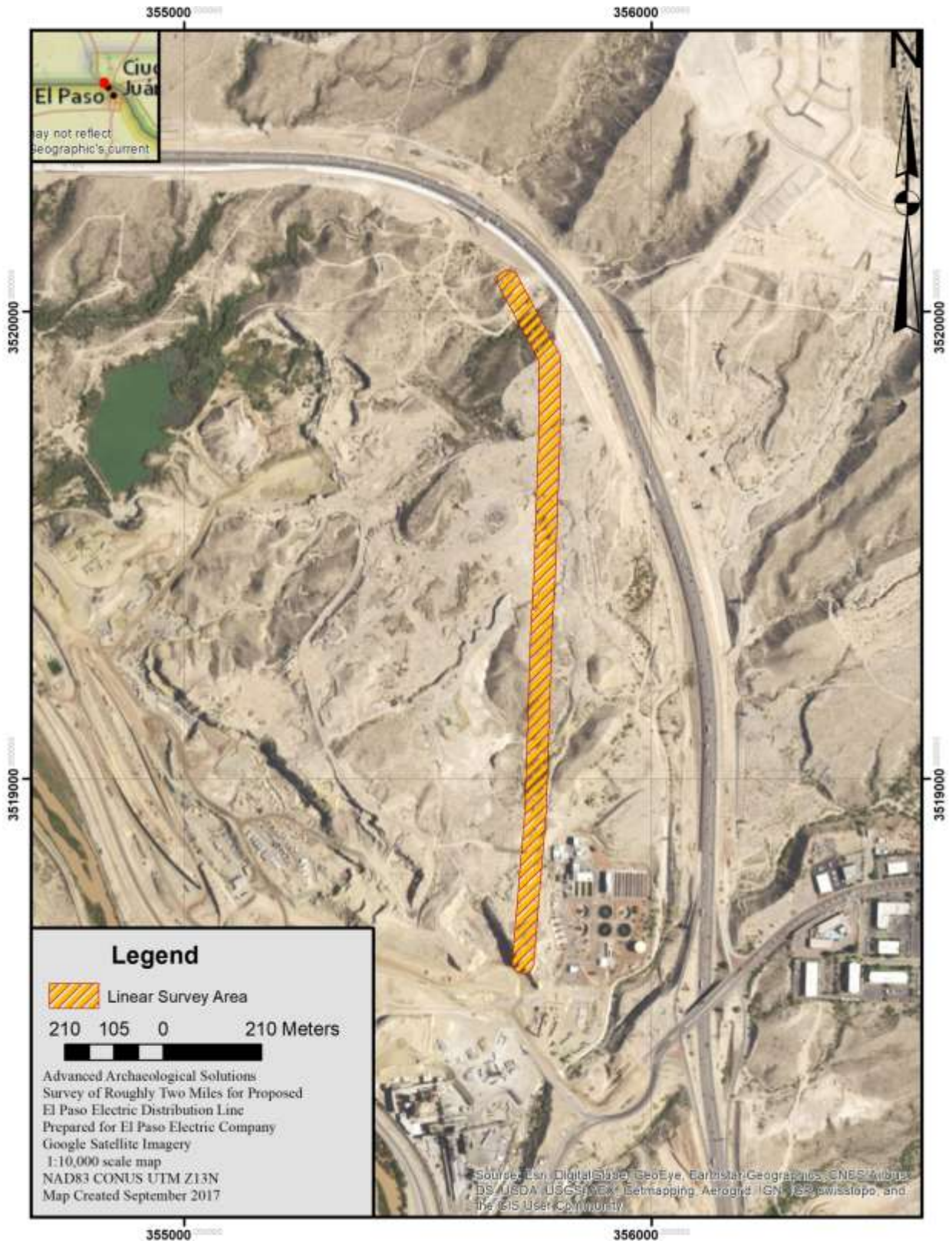


Figure 2. Project Area showing close-up of Northern survey segment.

ENVIRONMENTAL SETTING

The project area is located within an extremely eroded and heavily disturbed desert landscape that is dominated by bedrock and mountainous areas (southern portion of survey area) and heavily bladed and modified alluvial outwashes (northern portion of survey area) that extends from the foothills of the Franklin Mountains. The soils consist of a compact sandy loam interspersed with sparse loose gravels. Ground cover (vegetation) throughout the project area is light to moderate (in the southern portion of the project area) and nonexistent in the northern portion of the project area due to recent blading activities. The biotic community is roughly comprised of primarily mesquite, creosote, prickly pear, and assorted upland range grasses and forbs. The geomorphic integrity within the project area is noted as extremely poor based on the lack of intact soils as well as the level of mechanical disturbance noted throughout the proposed project area. Elevation is estimated between 3800-4220-ft above mean sea level (amsl).

CULTURE HISTORY

Due to the lack of cultural resources located during this survey, a detailed culture history will not be supplied. Instead, only a brief discussion of the prominent known occupations for this region of far west Texas will be presented to the reader. These include the Paleoindian, Archaic, Formative, and Historic periods. During the last 25 years, archaeological research in cultural resource management projects in southern New Mexico has provided extensive information on the past use of the region from the Paleoindian period through the present Euro-American era.

The research seems to indicate a gradual increase in population size and a slow reduction in mobility from the Paleoindian to the late Formative (El Paso phase) periods. Site sizes increase as do the number of sites and the quantity and diversity of artifacts. Economic strategies shift from small mobile hunting groups to larger agricultural communities. More permanent occupations occur later in the chronological sequence, but it is unclear if a year-round, sedentary settlement system ever became established prehistorically in the region.

Paleoindian Period (10,000-6000 B.C.)

The Paleoindian period reflects a highly specialized subsistence strategy of big-game hunting by small mobile groups during the Late Pleistocene period. The earliest occupation, termed Clovis (10,000-9000 B.C.), is poorly represented in this area. Clovis period economy focused on hunting the now extinct mammoth, bison, camel, and horse as well as smaller fauna. The large,

fluted spear point is distinctive of the Clovis period, and it has been recorded in the form of isolated occurrences throughout the region.

Better represented in the region, by both isolated projectile points and archaeological sites, is the Folsom complex (9000-8500 B.C.). Folsom complex archaeological evidence is represented by distinctive fluted spear points, which are regionally diminutive compared to those found elsewhere throughout North America. Environmental changes and hunting resulted in the extinction of mammoth and other Pleistocene fauna. The Folsom and later Midland complex was a modification of previous subsistence technologies to exploit bison and other, smaller fauna. Folsom period artifacts found in the region included items associated with stone tool manufacturing, hunting, butchering, and hide processing.

By the end of the Paleoindian period (approximately 8500-6000 B.C.), peoples associated with the Plano tradition occupied the area. Subsistence economies still focused on big game hunting, tool kits reflected different groups or task specialists that include the Angostura, Agate Basin, Plainview, and Cody complexes. Plano tradition projectile points are unfluted with distinctive collateral or transverse-parallel pressure flaking. Campsites of this type have been found along permanent water supplies and at spring sources in lower elevations.

Archaic Period (6000 B.C.-A.D. 200)

The Archaic period represents a shift from big game hunting economy to a broad-spectrum subsistence strategy. The Archaic economy is based on hunting and gathering, with emphasis on seed gathering and a reliance on mobility to exploit a variety of biotic communities throughout the Basin and Range Province. Hunting focused on small animals and some use of larger ungulates such as deer and pronghorn. Archaic period archaeological remains are found in a greater variety of topographic settings than those from the Paleoindian period, reflecting the different subsistence practices. During the Archaic, there is a trend toward less effective moisture. Plant and animal life adapted to this drying. Human groups modified their subsistence practices to exploit various biotic zones. Oftentimes, the use of these areas was tied to the season of the year.

Archaic site affiliations are typically based on projectile points considered indicative of the period. These were fixed to a wooden shaft and used in conjunction with the atlatl, a dart-

throwing device used for hunting and warfare. The Archaic period is when groundstone tools were introduced. One-handed manos, used with slab and basin metates, were used to process seeds, plants, and animal matter. The introduction of agriculture was an important factor in the shift from mobile hunting and gathering units to sedentary aggregated populations. The Archaic is also when more permanent structures were built; these are, however, very ephemeral when compared to the structures of the subsequent period.

Formative Period (A.D. 200-1400)

The Formative period in the Southwest is traditionally marked by the advent of the use of ceramics. In this area, the Formative peoples are considered the Jornada branch of the Mogollon culture. Based on both surface structures and ceramic types, the Formative period is generally divided into three phases: Mesilla, Doña Ana, and El Paso.

Mesilla Phase (A.D. 200-1000)

The Mesilla phase is distinguished from the Archaic by the presence of brownware ceramics. Pottery-producing, early pithouse villages were established near the mouths of canyons and on higher alluvial terraces where dry-land and flood-land agriculture was utilized. By A.D. 1000, village-dwelling populations were employing an agricultural subsistence economy. El Paso Brownware is characteristic of the Mesilla Phase. Other intrusive ceramic types appeared in the area sometime between 700-800 A.D.; these include San Francisco Red and Mimbres Boldface Black-on-white. The occurrence of these wares indicates that there was some interaction between the neighboring groups. Toward the end of the Mesilla phase, El Paso Bichrome and Mimbres Classic Black-on-white appear in the site assemblages. Projectile point styles are also sometimes used to identify Mesilla phase sites; however, since many of the Late Archaic point styles are associated with the early Formative period as well, ceramics are a better temporal indicator.

Doña Ana Phase (A.D. 1100-1200)

The Doña Ana phase is defined as an approximately 100-year transition period between the Mesilla and the later El Paso phase. Most important is the transition from pithouse to surface structures. Sites of this phase contain ceramics and projectile points that can be assigned to both Mesilla and El Paso phases. No clearly defined Doña Ana phase site has been documented, and

the appropriateness of defining this transition as a separate chronological phase remains in question.

El Paso Phase (A.D. 1200-1400)

The El Paso phase is the most recent prehistoric occupation in the region and is the best documented. Subsistence relied heavily on intensive farming and was supplemented with hunting, particularly of smaller game, and gathering of native plant materials. Squash, corn, and beans are cultigens commonly recovered from these sites, as well as a variety of native plant remains such as mesquite, yucca, acorns, and cacti. El Paso phase residential sites are found along large drainages, basin floors, and alluvial fans. Pueblos are found along the Rio Grande and both the western and eastern margins of the Hueco Bolson. Larger sites, greater artifact densities, and clustered settlement patterns are typical of this phase.

Indicative of this phase is the presence of locally manufactured, painted ceramics known as El Paso Polychrome. Intrusive ceramics include Chupadero Black-on-white, Three Rivers Red-on-terracotta, and Lincoln Black-on-red, all from the north; Ramos Polychrome, from the south; and polychromes from the west. Around A.D. 1400, large agricultural settlements seem to be abandoned in the area. Athapaskans (Apaches) from the north moved into the region of the Middle Rio Grande and native populations changed substantially by the time of the Spanish Entrada in A.D. 1540.

Historic Period (A.D. 1450-Present)

Exploration of this region of the continent did not occur until 1541 during an expedition lead by Francisco Vazquez de Coronado. Numerous indigenous peoples were encountered, however the Apache are identified as the most noteworthy. It was not until 1845 that the first settlement was established in the Tularosa basin. After this date, numerous expeditions by the United States led to more permanent settlements throughout southern New Mexico.

PREVIOUS RESEARCH AND METHODOLOGY

Prior to survey, the Texas Historical Commission (THC) Archeological Sites Atlas was inspected to determine if any previously identified historic properties were present within the proposed survey parcel. Previously recorded cultural resources within 1 mile of the proposed portions of the Project are discussed below. Review of the Texas Historical and Archeological Sites Atlas (Atlas) in October 2016, February and September of 2017, New Mexico Cultural Resource Information System (NMCRIIS) in 2017, and New Mexico Archaeological Records Management Section (ARMS) in 2017 revealed 71 previously recorded cultural resources within 1 mile of the portions of the Project that are not yet permitted and completed. The 1-mile radius includes both El Paso County, Texas and Doña Ana County, New Mexico, and includes: Thirty-one NRHP-listed properties and Districts, Five Recorded Texas Historic Landmarks or State Antiquities Landmarks, The El Paso & Southwestern Railway Rio Grande Bridge listed on the New Mexico State Register, Three Recorded Texas Historic Landmarks: the Burges House, Old Main on the campus of University of Texas El Paso (UTEP), and the Wallace Apartments, The El Paso Centennial Museum on the campus of UTEP, a Texas State Antiquities Landmark, Nineteen additional Texas Historical Markers not listed on a National or State register, Fifteen additional archaeological sites not listed on a State or National register or with unknown register status.

While many cultural resources are within 1 mile of the Project, only two are intersected by the Project. A portion of the Project is within the boundaries of the Elephant Butte Irrigation District, an NRHP District. The Project also intersects the archaeological site 41EP497, which is currently in a parking lot on the campus of UTEP. Visual impacts from the Project on NRHP and State register/ Landmark-eligible or listed resources are anticipated to be consistent with impacts from existing infrastructure and the existing transmission line where the project closely follows the existing alignment.

Archeological survey of the two segments of linear ROW was conducted by one professional archeologist walking transects spaced at 15-meter intervals, covering 100 percent of the project area. Several representative views of the project area were photographed. No artifacts were observed or collected during the survey. No major alluviation has occurred across the project area and surface visibility is high due to a lack of vegetation and severe surface erosion (i.e. wind erosion and sheetwashing). Additionally, large portions of the survey area were dominated by exposed bedrock and steep slopes (southern portion) or by heavily eroded and mechanically bladed surface area (northern portion). Water erosion, through sheetwashing activities has also impacted the area by exposing Pleistocene age soils, indicating the geoarchaeological context of

the project area is shallow and that surface visibility of cultural deposits and artifact assemblages should be high, and that significant features or deposits would be detected through surface observations. Therefore, it was recommended that subsurface shovel testing would not be required as a site detection and discovery method.

To distinguish between archaeological sites and isolated occurrences, three criteria were utilized as standard measures for evaluating the significance of cultural manifestations in the project area: artifact density, artifact diversity, and potential for buried deposits. Artifact scatters of less than 10 artifacts per 100 meters square, and single undatable features with no subsurface integrity and no associated artifacts were recorded as isolated occurrences.

RESULTS OF INVESTIGATIONS

No cultural sites or isolated occurrences were encountered in the 2.23 mile linear survey corridor. The southern linear segment of the project area is located in a highly sloped and mountainous terrain with many portions of exposed bedrock (Figures 4-7). It is clear from the terrain that prehistoric cultural activity or sites in this area are extremely unlikely. The northern portion of the project is located just west of Interstate 10 and within a portion of terrain that has clearly been impacted by modern ground disturbance and sheet washing due to its proximity to the City of El Paso and various unknown activities in the area. Commercial and residential development surrounds the corridor and this development has most certainly impacted the parcel, even to the point that the ground appears to have been mechanically bladed sometime in the past given the considerably level nature of the terrain. Numerous two-track and bladed roads cross and bisect the project area (Figure 8-11).

The observed geomorphology revealed that the project area maintains poor soil integrity, indicating a very low probability for the presence of significant buried prehistoric cultural remains.

RECOMMENDATIONS

No cultural resource sites or isolated cultural occurrences were encountered in the proposed project area. Accordingly, it is recommended that the proposed undertaking will have no effect on prehistoric or historic properties and that the proposed project may proceed without further archeological review. However, in the rare and unusual case that buried cultural materials are encountered, construction should be halted immediately in the location of the discovery. In addition, Advanced Archaeological Solutions and the Texas State Historic Preservation Office should be contacted to determine a proper course of action.



Figure 4. Overview of southern survey segment located near UTEP.



Figure 5. Overview of southern survey segment located near UTEP. Note sloped terrain.



Figure 6. Overview of southern survey segment located near UTEP. Note sloped terrain.



Figure 7. Overview of southern survey segment located near UTEP. Note sloped terrain..



Figure 8. Overview of northern survey segment located just west of I10.



Figure 9. Overview of northern survey segment located just west of I10.

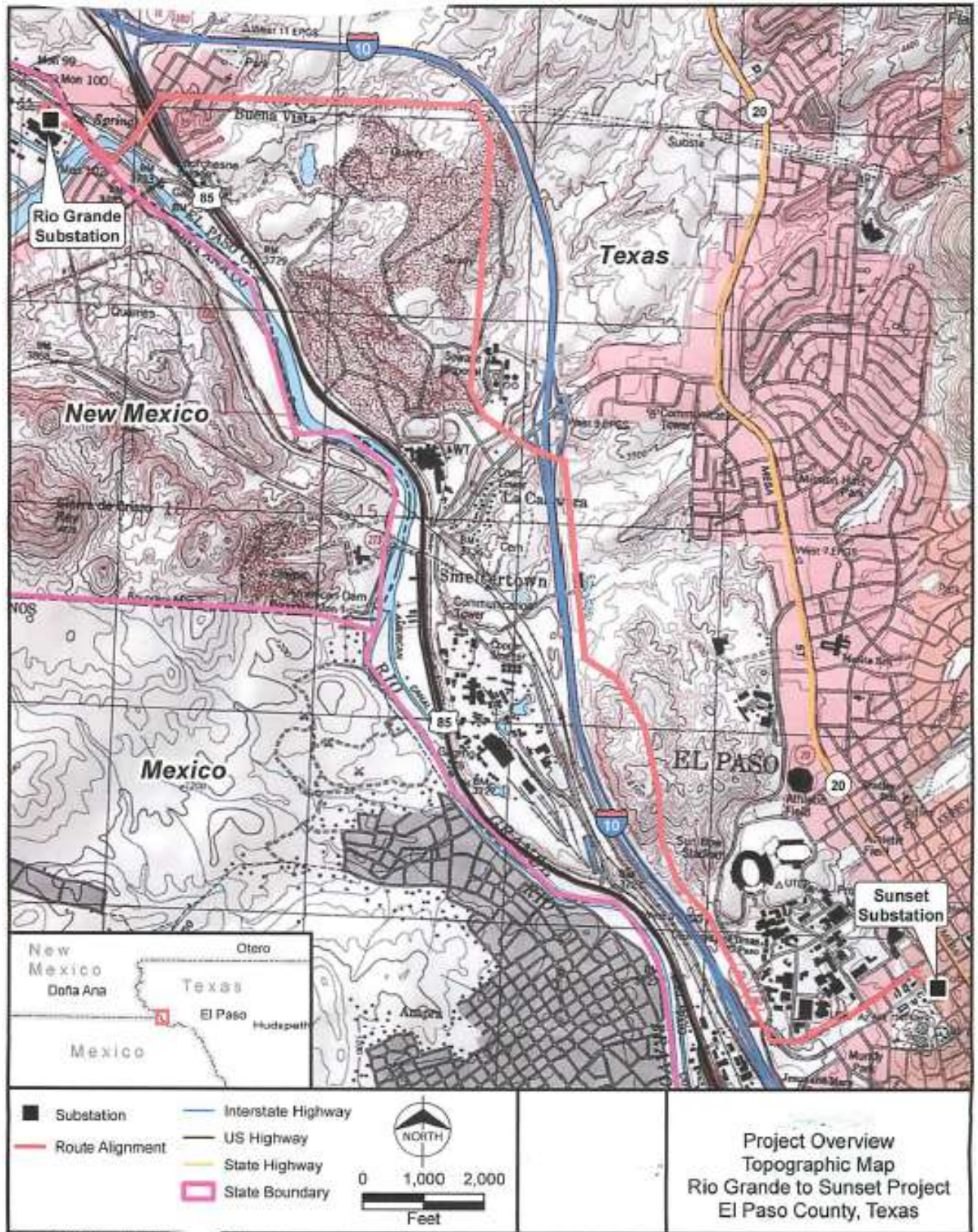


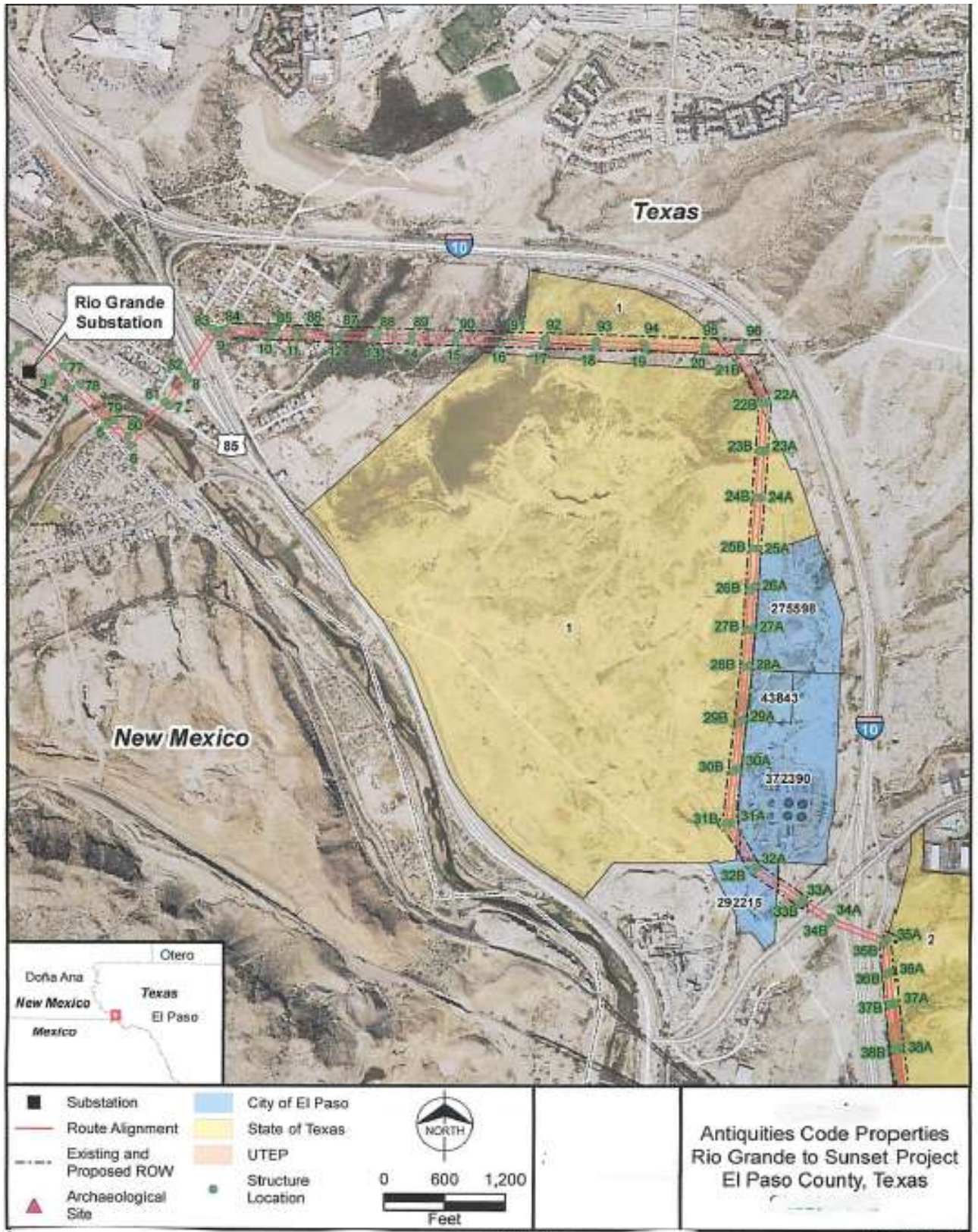
Figure 10. Recent building material dumping episode (facing northwest), note new rock wall.

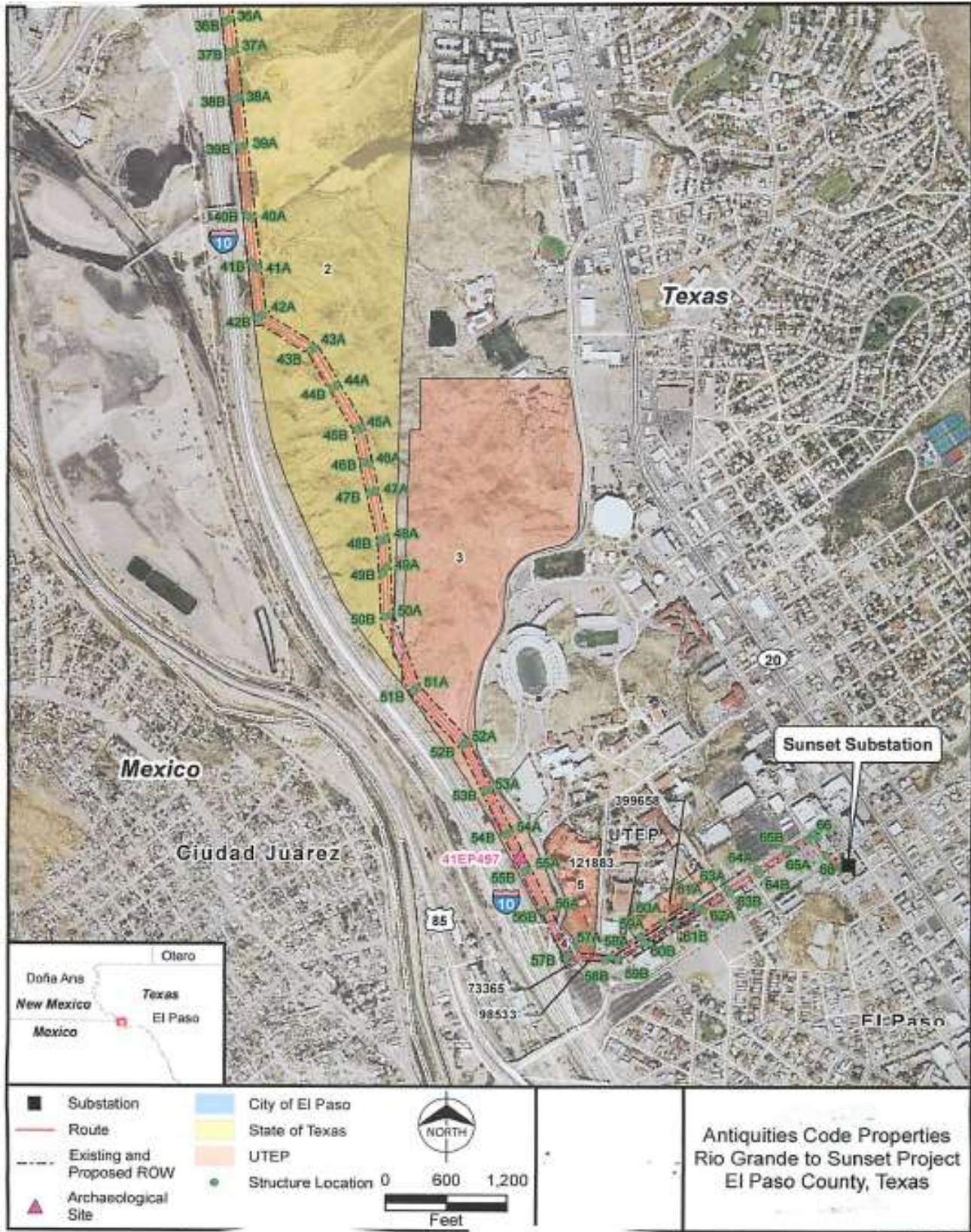


Figure 11. Bladed areas noted throughout northern portion of project area (facing southeast).

APPENDIX







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