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Cultural Resources Survey of the Proposed Franklin 1A Elevated Storage Tank and Access Road, El Paso County, Texas

Maria Hroncich Conner

Katherine Jones

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Cultural Resources Survey of the Proposed Franklin 1A Elevated Storage Tank and Access Road, El Paso County, Texas

Texas Antiquities Permit No. 8114

Submitted to:

David Camarena Garces

Texas Historical Commission Archeology Division P.O. Box 12276, Austin, TX 78711-2276

Emile Couroux

ESSCO Environmental, Inc. 1000 Newman Street El Paso, TX 79902

Submitted by:

Maria Hroncich-Conner and Katherine Jones Principal Investigator: Peter C. Condon Versar Inc. 4725 Ripley Drive, Space A El Paso, Texas 79922



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ABSTRACT

On 25 July 2017, Versar Inc. performed a pedestrian survey for the proposed Franklin 1A Elevated Storage Tank and access road. The inventory followed the standards outlined under THC's *Archaeological Survey Standards for Texas* and *Rules of Practice and Procedure for the Antiquities Code of Texas* for 3.0-acres of land in northeast El Paso, El Paso County, Texas. The proposed survey area is positioned southeast of U.S. Highway 54 approximately 1.0-mile south of the Stan Roberts and U.S. Highway 54 intersection. The area of potential effect is on property owned by the El Paso Water-Public Service Board, a sub-entity of the City of El Paso. The project goal was to identify all prehistoric and historic archaeological sites in the survey parcel and make National Register of Historic Places (NRHP) eligibility recommendations for any newly discovered cultural properties. The survey documented no archaeological sites and only two isolated finds. Due to the lack of cultural resources, and a general absence of geomorphic/cultural context, no further work is recommended for the APE proposed for the Franklin 1A Elevated Storage Tank and access road.

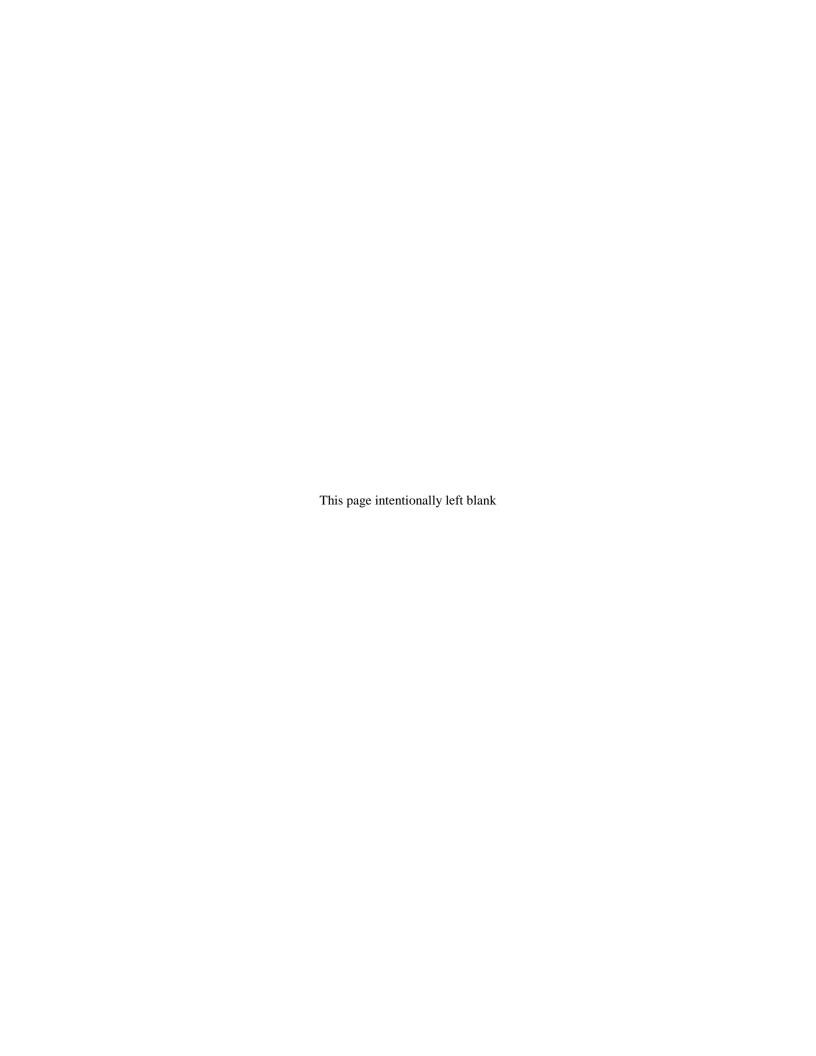
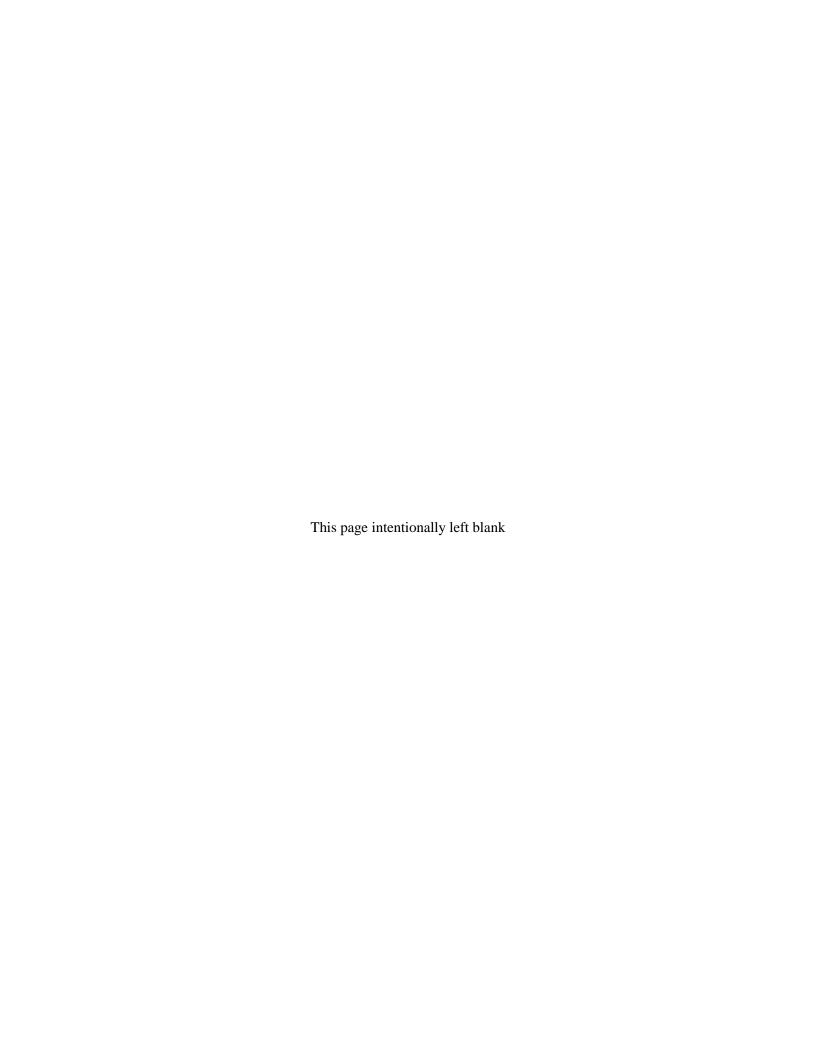


TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1-1
CHAPTER 2 CULTURAL, ENVIRONMENTAL, AND GEOMORPHIC CONTEXT	2-1
CHAPTER 3 PREVIOUS RESEARCH AND METHODOLOGY	3-1
BACKGROUND HISTORY AND ESTIMATED SITE COUNTS FIELD SURVEY AND SITE DOCUMENTATION PROCEDURES Prefield Research Pedestrian Transect Survey	3-1
CHAPTER 4 RESULTS OF INVESTIGATION	
SUBSURFACE LEVEL OF EFFORT: SHOVEL TESTS	4-1
CHAPTER 5 SUMMARY AND RECOMMENDATIONS	5-1
REFERENCES	R-1
APPENDIX A LOCATION MAPS USGS 1:24,000	A-1



LIST OF FIGURES AND TABLES

Figure 1-1. Map showing the proposed survey parcel within El Paso County, Texas	. 1-2
Figure 2-1. Photograph showing the general environmental condition of the project area,	
looking east.	.2-1
Figure 4-1. Map of project area, shovel test pits, and isolated occurrences.	.4-2
Figure 4-2. Northwest portion go the survey parcel, looking west toward U.S. Highway 54	.4-3
Figure 4-3. Southern portion of the survey parcel looking north-northeast along U.S. Highway	
54	.4-3
Figure 4-4. Isolated Occurrence 1, a unimarginal black chert tool.	.4-4
Figure 4-5. Isolated Occurrence 2, a tan-brown bimarginal chert tool.	.4-4
Figure 4-6. Stratigraphic sequences exposed in Shovel Tests 1-3.	.4-5
Figure 4-7. Image showing Shovel Test 1 and 2 excavated within the survey parcel, looking	
southwest and west, respectively	.4-6
Figure 4-8. Image showing Shovel Test 3, looking west	.4-6
A 1. Map showing location of the Project Area at 1:24,000 scale	A-1
A 2. Map showing location of the Project Area at 1:24,000 scale	

CHAPTER 1 INTRODUCTION

Essco Environmental, Inc. contracted with Versar, Inc, to conduct a cultural resources inventory of 3.0-acres in El Paso County, Texas. The proposed survey area is positioned southeast of U.S. Highway 54, approximately 1.0-mile southwest of the Stan Roberts and the U.S. Highway 54 intersection. (Figure 1-1). The area of potential effect is on property owned by the El Paso Water-Public Service Board, a sub-entity of the City of El Paso. The proposed impact to the municipal lands, which entails the construction of an elevated water storage tank and access road, has generated the requirement for a Texas Antiquities Permit and cultural resource inventory. As such, the project goal was to identify all prehistoric and historic archaeological sites in the survey parcel and develop National Register of Historic Places (NRHP) eligibility recommendations for any newly discovered sites.

On July 25, 2017, archaeologists with Versar Inc. carried out the inventory of the 3.0-acres in northeast El Paso. Versar employed a pedestrian transect method for inventorying the landscape and documenting artifact concentrations and features which represent potential sites. This method used global positioning system (GPS)-based locational data, along with integrated ArcPad Software and tabulated attribute pull-down menus. The integration of the pedestrian survey and digital recording techniques provided a complete and consistent inventory of visible cultural resources within the survey parcel. The inventory identified no archaeological sites and two isolated occurrences.

As such, this document presents the methods and results of the investigations conducted during the survey process. As presented, Chapter 1 provides a general summary of the undertaking. Chapter 2 presents a brief overview of the environmental and cultural setting of the study area. Chapter 3 summarizes previous work conducted on the site and the methods utilized during this project. Chapter 4 presents the results of the survey and Chapter 5 includes a summary of these investigations and recommendations for future work. Appendix A provides a 1:24,000 scale map of the project area.

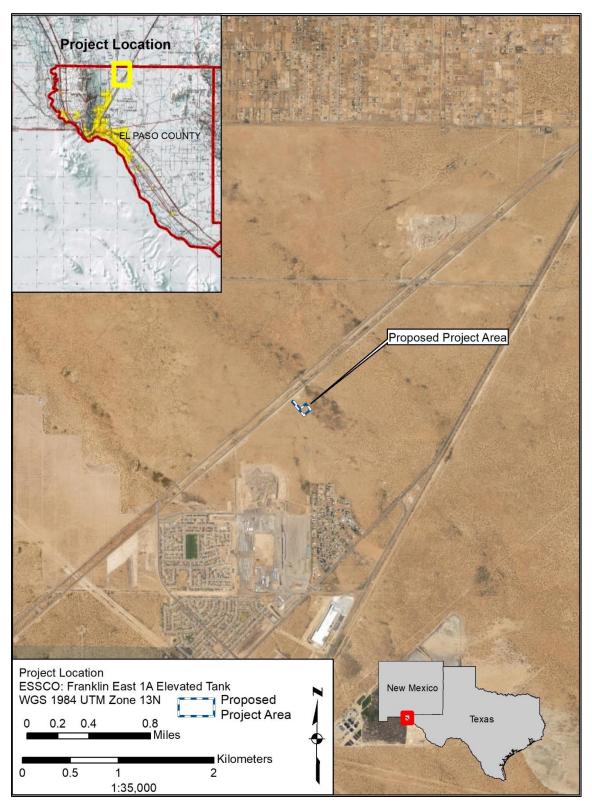


Figure 1-1. Map showing the proposed survey parcel within El Paso County, Texas.

CHAPTER 2 CULTURAL, ENVIRONMENTAL, AND GEOMORPHIC CONTEXT

A cultural and environmental overview of the project area has been presented in several previous publications. For a more detailed overview of the regional prehistory and historical sequences associated with the region, the reader is referred to Goar et al. (2006), Miller, Kenmotsu, and Landreth (2009), and Swanson et al. (2014). In brief, the project area lies along the eastern margins of the Franklin Mountains within a low-gradient alluvial fan that empties onto the Hueco Bolson. The survey parcel falls within the Mexican Highland Section of the Basin and Range physiographic province (Fenneman 1931) and prehistorically within the Jornada Mogollon region of south-central New Mexico (Lehmer 1948).

Current landforms consist of poorly-developed mesquite-stabilized dune fields, areas of interdunal deflation, and shallow sand sheets characterized by gravelly alluvium (Figure 2-1). Impacts to the parcel currently noted result from ongoing eolian and erosional deflation and previous highway development; a graded easement parallels the current survey corridor. The soils throughout the project area consist of unconsolidated eolian sediments, light tan sandy loams, and low to moderate amounts of alluvium-related gravels and cobbles.



Figure 2-1. Photograph showing the general environmental condition of the project area, looking east.

The vegetative community in the area is described as a desert scrubland and is dominated by mesquite (*Prosopis glandulosa*). The mesquite is generally found on coppice-dune formations, which range from 0.5-to-1.0 m in height. Other vegetation includes four-wing saltbush (*Atriplex canescens*), soaptree yucca (*Yucca elata*), tarbush (*Flourensia cernua*), broom snakeweed (*Gutierrezia sarothrae*), Russian thistle (*Salsola kali*), and dropseed (*Sporobolus cryptandrus*) (Powell 1998).

The proposed construction will impact 3.0-acres of land adjacent to U.S. Highway 54 on lands owned by the City of El Paso. Visibility approximates 80 percent. Impacts to the parcel are currently noted, resulting from past development and public access.

CHAPTER 3 PREVIOUS RESEARCH AND METHODOLOGY

BACKGROUND HISTORY AND ESTIMATED SITE COUNTS

Previous investigations are primarily limited to surveys covering the lands south of the proposed inventory parcel (Goar et al. 2006; Swanson et al. 2014; Condon ARMS electronic database query 11 July 2017). The most relevant being a 2014 survey carried out by Geo-Marine, Inc., on a 5.79 mile water line survey south of, and eventually intersecting, the current survey parcel; one archaeological site (41EP5741) was encountered during the waterline improvement project (Swanson et al. 2014). In addition, Condon and Jones (2016) completed a survey of the North 2 Elevated Storage Tank and access road; this survey also connects to the 5.79 mile waterline along U.S Highway 54 (see Swanson et al. 2014). No sites fall within a one-quarter mile radius of the proposed project area, the closest being 41EP2929 (~1.2-km to the north). No previously recorded sites are present in the current survey parcel.

FIELD SURVEY AND SITE DOCUMENTATION PROCEDURES

In accordance with the intensive survey parameters set forth by the CTA and approved by the Texas THC, the following field procedures were implemented during the survey.

Prefield Research

The staff at Versar Inc., El Paso, Texas conducted a comprehensive search of the online Texas Atlas database, obtaining existing Texas Archaeological Research Laboratory site files and researching pertinent literature to identify any previously recorded prehistoric and historic sites within the survey parcel. In addition, aerial photographs, USGS 7.5- minute quadrangles, geologic maps, and soil survey maps were examined prior to the field investigation. These additional research avenues augmented the background research and provided relevant information on topography, soils, vegetation, geology, the local environment, and levels of development within the vicinity of the project area. A thorough search revealed no sites within a one-quarter mile of the proposed survey parcel.

Pedestrian Transect Survey

Versar carried out the pedestrian survey using a 10-m (~32 ft.) transect interval. The proposed access road survey covered 10-m on either side of the access road center line. The water tank inventory started in the southwestern portion of the parcel; survey crews worked in a north-to-south direction. The survey process was contiguous leaving no unsurveyed areas remaining within the corridor. The amount of area covered, including recording time did not exceed a rate of 15 acres per person, per eight hour day calculated for the entirety of the project; ground visibility approximates 80 percent.

In order to effectively accomplish the survey Versar provided two experienced personnel to carry out this task: one Project Archaeologist and one field technician. Each crew member was equipped

with a Trimble XT handheld GPS unit with integrated ArcPad data dictionaries to document cultural materials. The Versar personnel who participated in the survey completed the Versar mandated onsite safety training. In addition, each member read and understood the safety protocol outlined for this project (e.g., orange safety vests, eye protection, and safety tail gate meetings). No subsurface investigations were carried out.

Artifact collections during survey were restricted to rare or diagnostic items with each individually plotted on the appropriate site and project area map. Rare artifacts would include unbroken projectile points, whole vessels, decorated ceramics of exotic manufacture (e.g., Casas Grande pottery), and items of personal adornment (e.g., turquoise pendants, shell/bone beads, or shell bracelets). All items that fall under the collection protocol would be photographed with a scale and the location plot recorded using a Trimble XT GPS unit; all collections would be documented and follow policies outlined under CTA guidelines. If warranted, collections would be curated at the Texas Archaeological Research Laboratory, Austin, Texas. If warranted, a curation form, curation packet with original forms, and final technical report deliverables will be sent to the Texas Archaeological Research Laboratory, Austin, Texas upon review and concurrence by the THC.

CHAPTER 4 RESULTS OF INVESTIGATION

This project entailed an intensive pedestrian survey of a 3.0-acre parcel in El Paso County, Texas. The survey was confined to the access road corridor and water tank footprint, which run perpendicular to U.S. Highway 54 (Figure 4-1). The condition of the project area appeared to be generally intact; however, the far western margins of the access road corridor closest to the highway exhibited a higher level of disturbance. In these areas, disturbance from road expansion, drainage, and maintenance were clearly evident (Figure 4-2 and Figure 4-3). Moreover, eolian deflation and alluvial action has, over time, removed and redistributed sediments, creating deflation basins and gravel deposits throughout the project area. Low-to-medium sized mesquite-stabilized coppice dunes anchor sediments in the parcel. Ephemeral rills and several shallow arroyos have impacted the landscape. Dune margins and exposed dune facies were closely examined for evidence of buried cultural deposits. No archaeological sites were identified; two isolated occurrences were encountered.

Two isolated finds were documented during the survey, both located in the central portion of the proposed water tank footprint, each within 5-m of the other. The first isolated occurrence is a black chert unimarginal tool (Figure 4-4). This tool was exhibited non-overlapping flake scars and was produced from a piece of angular debris. It measured 4.5 cm in size and was expediently produced.

The second isolated occurrence was a bimarginal chert tool (Figure 4-5). This tool was made from a more homogenous, less coarse tan-brown chert and measured approximately 8-cm in length. Platform preparation is visible along the proximal end; several extending flake scars are also present. The edge preparation and overlapping flake scars suggest, that prior to detachment, this piece was one edge of a core. Post-detachment modification resulted in the shaping of the distal end as evidenced by the sharp edge angle and supporting flake scars. No other artifacts were encountered during the survey. Both artifacts were thoroughly documented in-field and no further action is recommended.

Finally, in order to assess the potential for buried archaeological deposits and examine the contextual integrity of the project area, three shovel tests were excavated within the proposed footprint of the Franklin 1A elevated water tank (Figure 4-6). All sediments removed from the shovel tests were screened through 1/8th-inch hardware mesh. The shovel tests did not reveal any buried archaeological remains. The stratigraphic data are presented below.

SUBSURFACE LEVEL OF EFFORT: SHOVEL TESTS

Shovel Test 1 was placed in the northwest corner of the survey parcel in an area characterized by low-lying coppice dunes and interspersed with sandsheets (Figure 4-7). Maximum depth was 12-cm, with the first 6-cm consisting of unconsolidated sandy sediments followed by 6-cm of semi-compact silty sand with caliche flecking. No cultural materials were encountered.

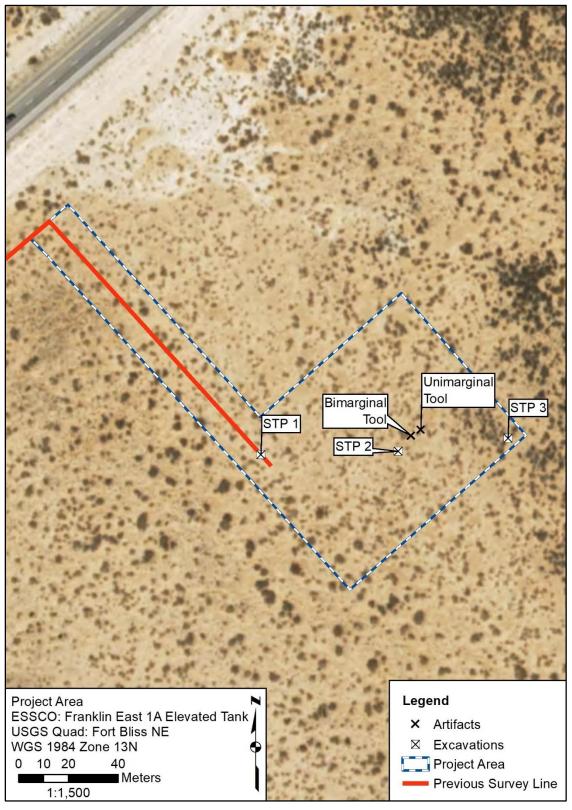


Figure 4-1. Map of project area, shovel test pits, and isolated occurrences.



 $Figure\ 4-2.\ Northwest\ portion\ go\ the\ survey\ parcel,\ looking\ west\ toward\ U.S.\ Highway\ 54.$



Figure 4-3. Southern portion of the survey parcel looking north-northeast along U.S. Highway 54.



Figure 4-4. Isolated Occurrence 1, a unimarginal black chert tool.



Figure 4-5. Isolated Occurrence 2, a tan-brown bimarginal chert tool.

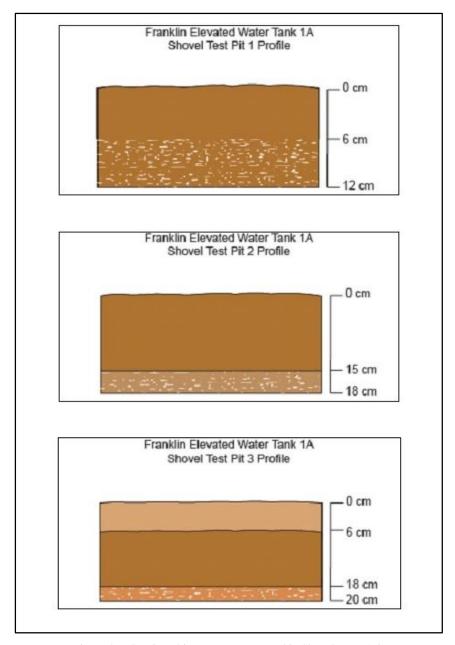


Figure 4-6. Stratigraphic sequences exposed in Shovel Tests 1-3.

Shovel Test 2 was placed near the center of a survey parcel in a sandsheet between several low-lying dunes (Figure 4-7). Maximum depth was 18-cm, with the first 15-cm consisting of unconsolidated sands, followed by 3-cm of lighter brown, calcic, semi-compact sediments. No cultural materials were encountered.

Shovel Test 3 was placed in the southeastern corner of the project area in an area with increased vegetation at the base of a small dune (Figure 4-8). Maximum depth was 20-cm, with the first 6-cm consisting of light brown loose sands, followed by12-cm of dark brown, more consolidated sand, with the last 2-cm characterized by a semi-compact calcic stratum of light red, silty sand. No cultural materials were encountered.





Figure 4-7. Image showing Shovel Test 1 and 2 excavated within the survey parcel, looking southwest and west, respectively.



Figure 4-8. Image showing Shovel Test 3, looking west.

CHAPTER 5 SUMMARY AND RECOMMENDATIONS

On behalf of ESSCO Environmental, Inc., Versar, Inc. carried out an intensive archaeological survey of 3.0-acres in El Paso County, Texas. The proposed survey area is positioned southeast of U.S. Highway 54 approximately 1.0-mile southwest of the Stan Roberts and U.S. Highway 54 intersection. The area of potential effect is on property owned by the El Paso Water-Public Service Board, a sub-entity of the City of El Paso. The proposed impact to the municipal lands, which entails the construction of an elevated water storage tank and access road, generated the requirement for a Texas Antiquities Permit and cultural resource inventory.

The survey parcel encompassed an area of low-gradient alluvial landforms which were characterized by poorly-developed dune fields, eolian deflation, and modern redistribution of sediments. As documented in Goar et al. (2006), Swanson et al. (2014), and Condon and Jones (2016) this dynamic environment has been influenced by both alluvial impacts and modern disturbances resulting in the movement and displacement of sediments and possibly artifacts. The stratigraphic sequence exposed in the shovel tests further strengthens this interpretation. The presence of only two artifacts within the survey parcel potentially points toward a dynamic landscape resulting in the loss contextual integrity.

The near absence of cultural deposits and the highly reworked and eroded nature of the project area, indicates that the parcel holds little contextual integrity in regard to the presence and preservation of human activity. As such, the intensive survey resulted in the recording of no archaeological sites and only two isolated occurrences.

It is recommended that the information potential of the isolated occurrences has been exhausted through documentation, and no further work is merited. Based upon the results of this process, Versar recommends that the proposed development of the Franklin 1A Elevated Storage Tank and access road will not have an adverse effect on any historic properties within the proposed APE.

REFERENCES

Fenneman, N. M.

1931 Physiography of the Western United States. McGraw Hill, New York.

Condon, Peter C. and Katherine Jones

2016 Cultural Resources Survey of the Proposed North 2 Elevated Storage Tank and Access Road, El Paso County, Texas. Report prepared for ESSCO Environmental Inc., for the El Paso Water Utilities-Public Service Board. Texas Antiquities Permit No. 7831.

Goar, T. R., E. Perez, T. Howell, H.C. Higgins, and P. Mullen

2006 Cultural Resources Survey for the Proposed SFPP El Paso to Phoenix Pipeline Expansion, Segments A and Portions of Segment B, El Paso County, Texas. Report prepared for WSA, Inc., by TRC Environmental, Albuquerque, New Mexico. TRC Report Number 49194.

Lehmer, D.J.

1948 *The Jornada Branch of the Mogollon*. University of Arizona Social Science Bulletin No. 17. University of Arizona, Tucson.

Miller, M.R., N.A. Kenmotsu, and M.R. Landreth, editors

2009 Significance and Research Standards for Prehistoric Archaeological Sites at Fort: A Design for the Evaluation, Management, and Treatment of Cultural Resources. Fort Bliss Historic and Natural Resources Report No. 05-16, Directorate of Public Works, Environmental Division, U.S. Army Air Defense Artillery Center and Fort Bliss, El Paso.

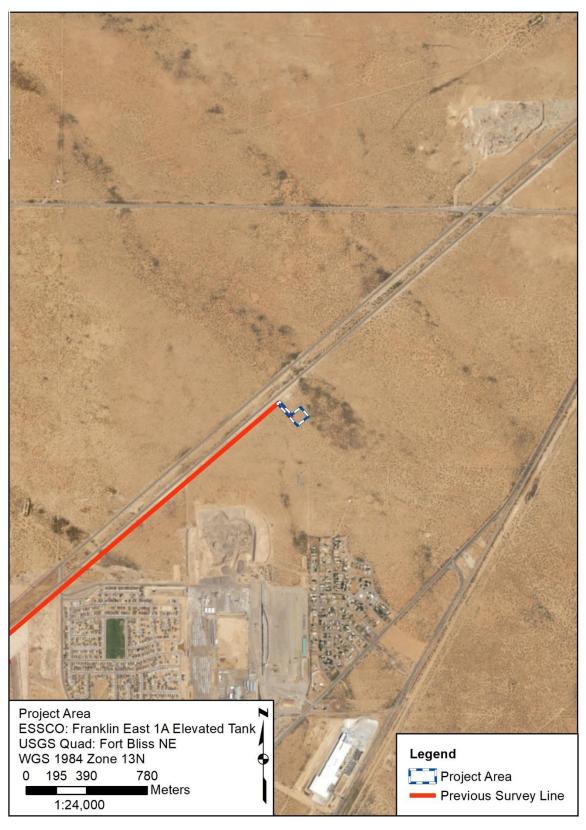
Powell, A. M.

1998 Trees and Shrubs of the Trans-Pecos and Adjacent Areas. University of Texas Press, Austin.

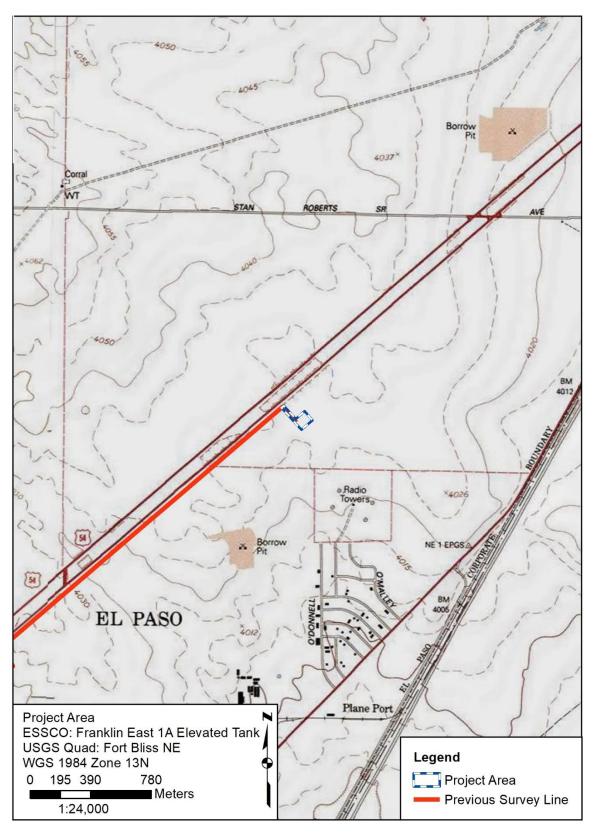
Swanson, M, C. Hoffmeyer, J. Arias, and P. C. Condon

2014 Cultural and Environmental Resources Survey of 5.79 Miles for a Proposed Waterline Installation, El Paso Water Utilities-Public Service Board, El Paso County, Texas. Report prepared by Versar-GMI, Inc., for the El Paso Water Utilities-Public Service Board, Land Management Division. Versar-GMI Report No. 826EP.

APPENDIX A LOCATION MAPS USGS 1:24,000



A 1. Map showing location of the Project Area at 1:24,000 scale.



A 2. Map showing location of the Project Area at 1:24,000 scale.