



CONSERVATION EASEMENT DOCUMENTATION REPORT

The 41-Acre El Pico Property

Webb County, Texas

Report Compiled by:

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Field Work Conducted: December 10, 2024

EDR Issued: January 2025

To establish and document condition of the property at the time of the Initiation of the easement in an effort to protect the conservation easement interests in perpetuity as required by 26 CFR Ch.1 §1.70A-14

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Appendices

- Appendix A: Landowner Questionnaire
- Appendix B: List of Preparers
- Appendix C: Cultural Resources Background Review

Acknowledgement of the Property Owner

We acknowledge that this Easement Documentation Report accurately reflects the goals of the conservation easement and the current condition and use of the property.

This report is an accurate representation of the 41-acre El Pico Property at the time of the transfer of the Conservation Easement to The Valley Land Fund.

The 41-acre El Pico Property

Ricardo de Anda

Date: _____

Witnessed By

Date: _____

Background Information

Address of the Property

The 41-acre El Pico Property consists of 41.6 acres of land located in Webb County, Texas. Driving directions to the property are as follows: From the intersection of FM 1472 and El Pico Road, take El Pico Road west approximately 3.6 miles to the entrance of the property. The entrance to the 41-acre El Pico Property will be on the left (south) side of El Pico Road. The legal description of the property is as follows:

Being a 41.60 acre tract of land, made up of a 15.84 acre tract of land, under fence, called to be a 16.0 acre tract of land, conveyed by deed recorded in Volume 1250, Page 142, Deed Records, Webb County, Texas, and a 25.6418 acre tract of land, described by deed recorded in Volume 472, Page 184, Deed Records, Webb County, Texas, situated in the Porcion 14, Jose Guajardo, Abstract 56, Webb County, Texas

Contact Information

Owner:

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Laredo, Texas 78045
Email: deandalaw@gmail.com
Phone: (956) 740-1998

Grantee/Attn:

Debralee Rodriguez, Executive Director:
The Valley Land Fund
2400 N. 10th Street, Suite A
McAllen, Texas 78501
Email: debralee@valleylandfund.com
Phone: (956) 686-6429

Historical Information Concerning the Easement

Information about the historic uses and conditions of the site was obtained through review of aerial photographs and interviews with the current property owner. Additional information was obtained during field observations from the ecological baseline study.

Based on anecdotal information provided by the site representative, the 41-acre El Pico Property has historically been used for residential purposes. Currently, no environmental liens or restrictions (other than publicly documented utility, right of way, or other public easements described in the conservation easement) are in force on the property.

Purposes and Goals

The purpose of the Conservation Easement is to preserve and protect the conservation values listed in the section below. Any use of the Property inconsistent with the Purpose is prohibited.

Conservation Values

The conservation values of the property to be preserved through the easement are the following:

1. Uniqueness of the Property to the area;
2. The intensity of land development in the vicinity of the Property;
3. The protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem;
4. The protection of archaeological sites and land that has cultural significance;
5. The consistency of the proposed open space use with public programs for conservation in the region, including farmland and forestland; and
6. The likelihood that development of the Property would lead to or contribute to degradation of the scenic, natural, or historic character of the area.

Zoning

Zoning is not applicable to this property. Additional information concerning the owner's rights, use restrictions, and other issues are found in the Conservation Easement document.

MAPS AND SITE PLANS

On the pages that follow, maps (Figures 1-6) are provided to assist the reader in familiarizing themselves with the property, its operations, and geo-physical features.

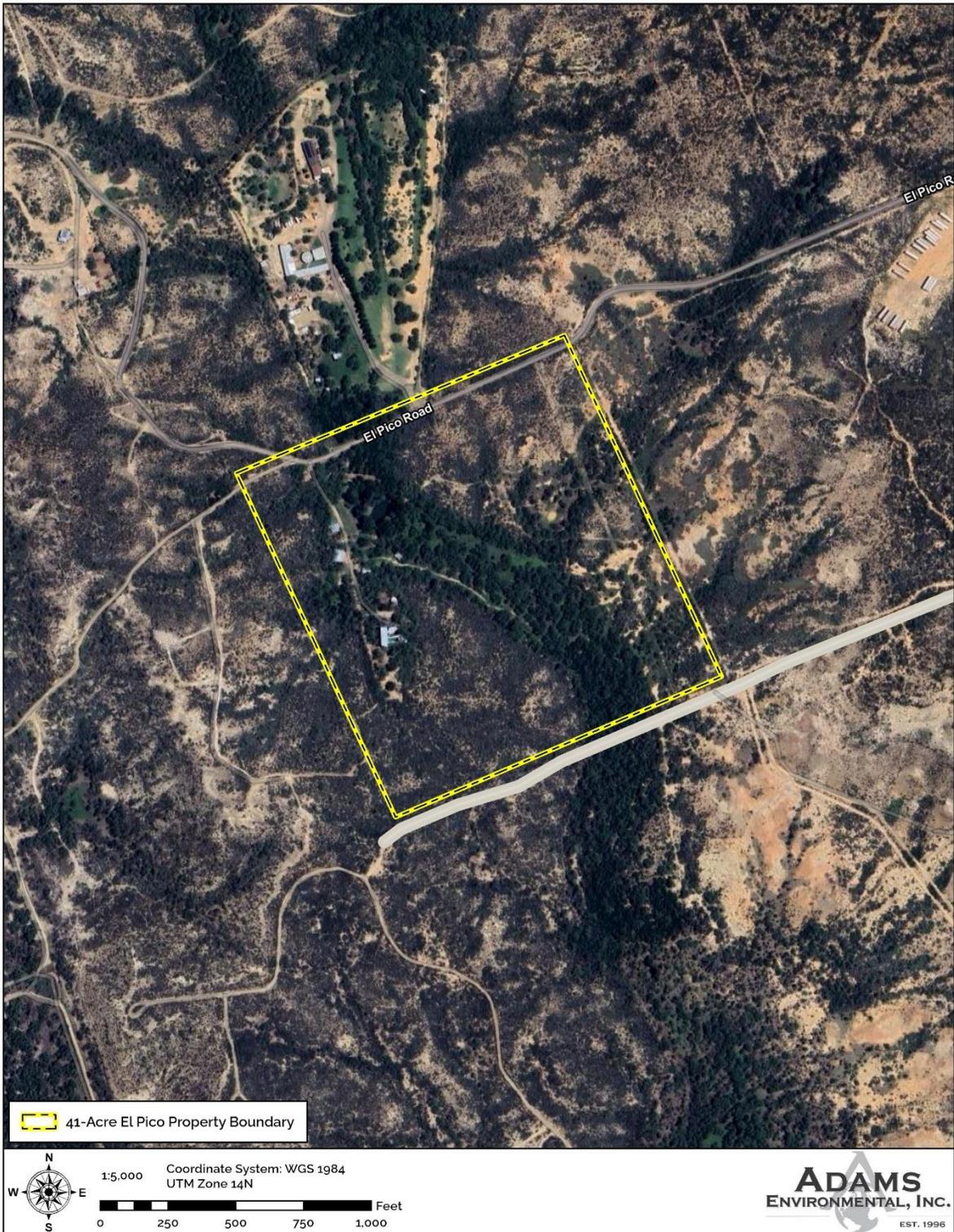


Figure 1. No Development Zones (NDZ) and Building Envelopes on the 41-Acre El Pico Property
(Imagery Source: Google, 2018)

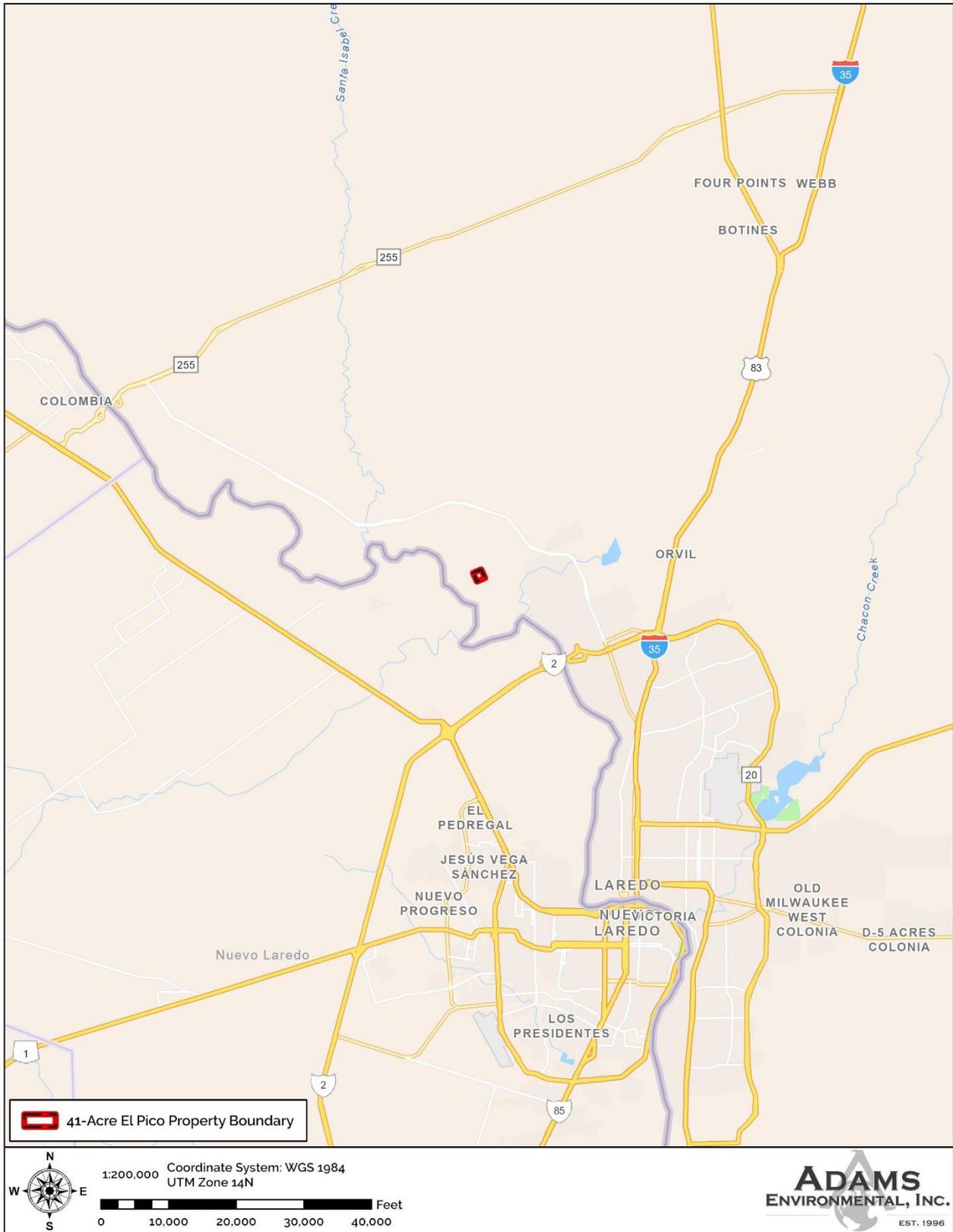


Figure 2. The location of the 41-Acre El Pico Property in relation to Laredo, TX
 (Source: ESRI, 2024)

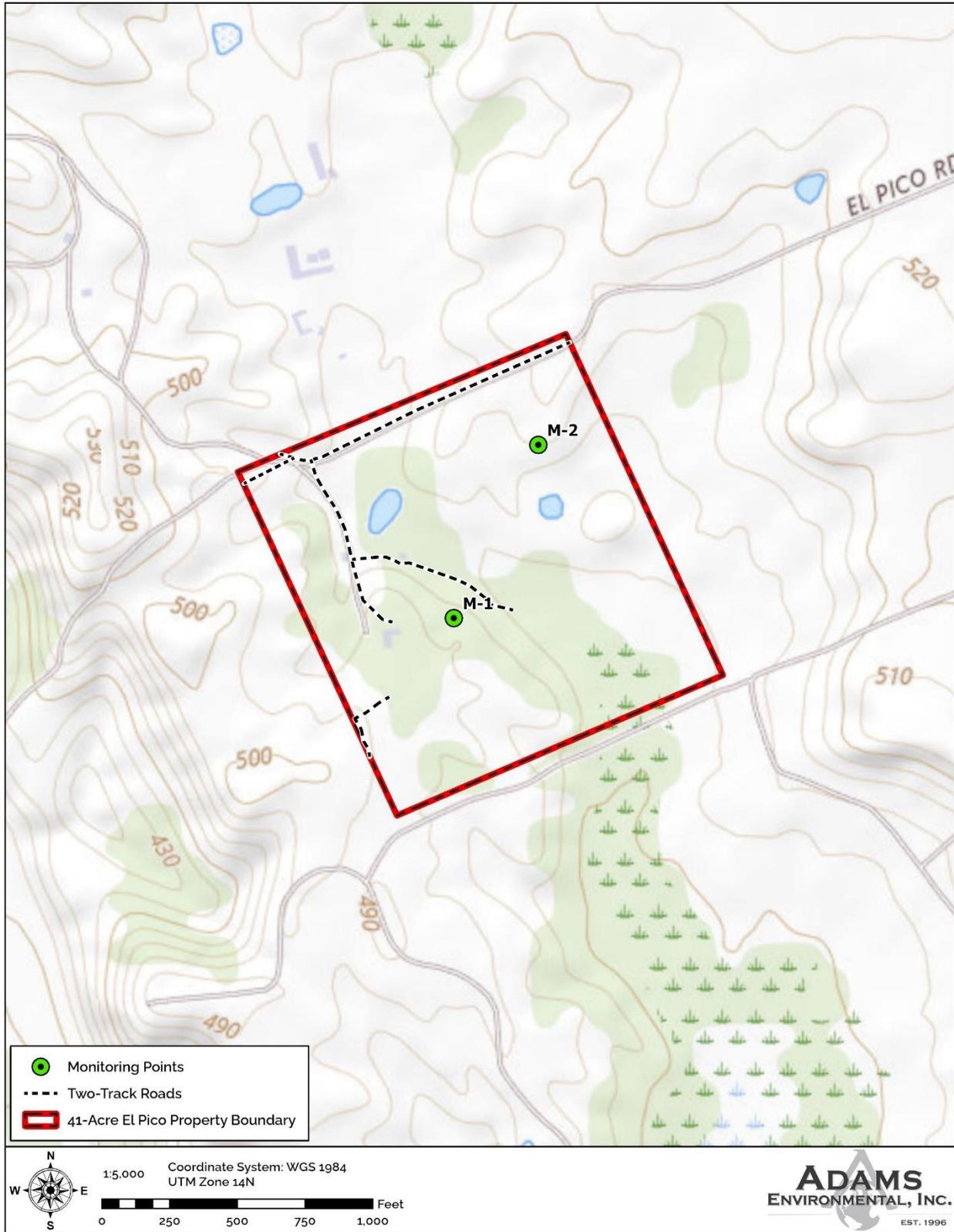


Figure 3. Topographic map showing the location of Monitoring Points and vehicle trails on the Property
 (Source: 2019 Cuervo Creek TX 7.5 Minute USGS Topographic Maps)

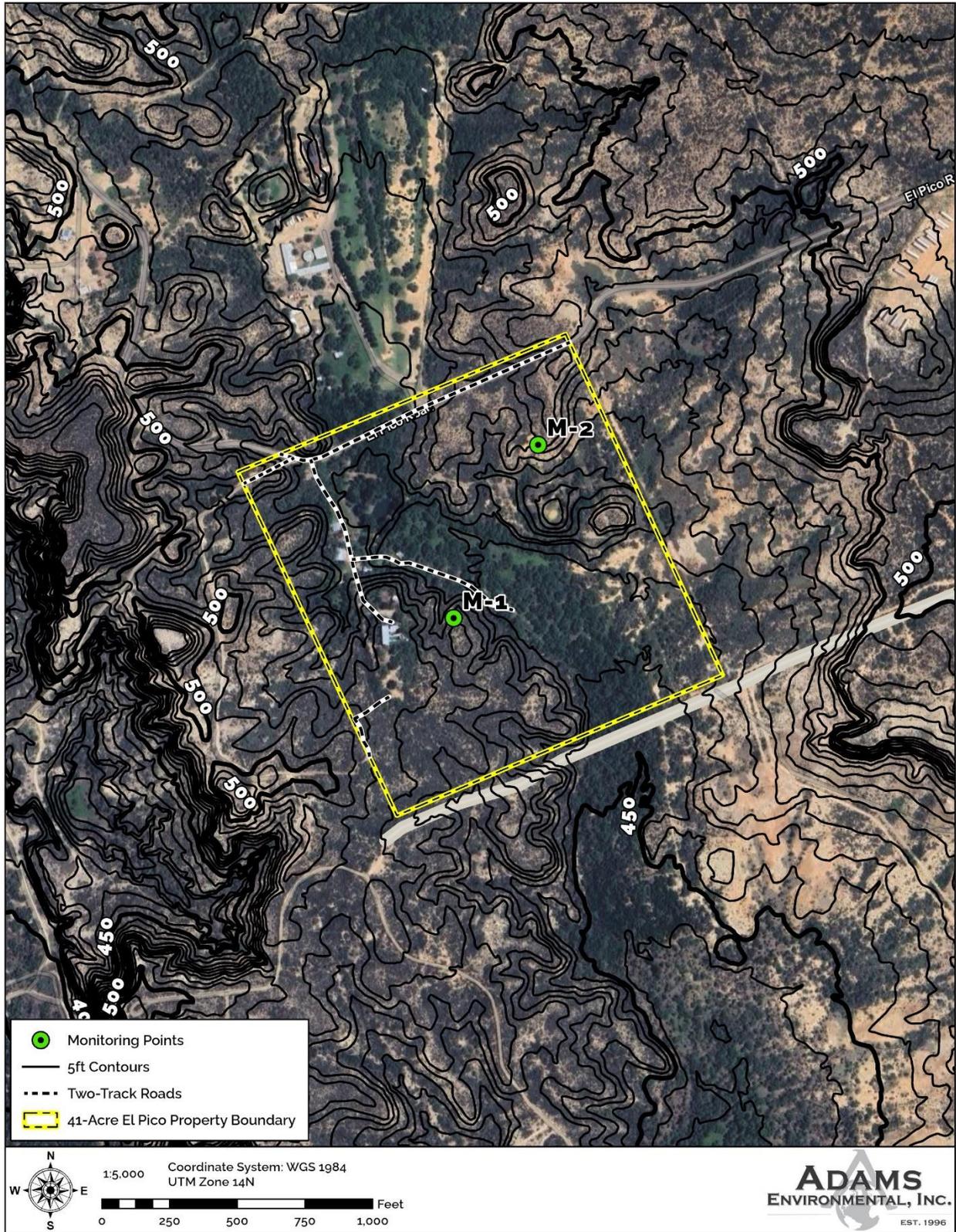


Figure 4. Elevation map showing Monitoring Points on the 41-Acre El Pico Property
 (Source: Google, 2024)



Figure 5. Satellite imagery showing the location of manmade features on the Property (Source: Google, 2024)



Figure 6. Satellite imagery showing the locations of septic tanks on the 41-Acre El Pico Property (Source: Google, 2024)

Physical and Ecological Features Applicable to the Easement

Man-Made Features

The 41-acre El Pico Property has been developed with structures to accommodate the residential and recreational uses of the property, but many acres of the property remain in its natural state. Developments include 11 structures detailed in **Table 1**. No water wells are located on the property. Three septic tanks are located on the property in association with these developments. (**Figure 6 and Table 3**).

Impervious cover on the property associated with vertical structures is approximately 11,390 ft² (0.26 acres). Two stock tanks are located on the property. One of the tanks is lined and comprises approximately 6,200 ft² (0.14 acres) of impervious cover. Total impervious cover (excluding gravel, caliche, and earthen roads) on the property comprises approximately 0.98% of the entire property (**Table 2**). **Figure 5** shows the general location of these features on the property.

No additional building improvements except those associated with the features listed below were identified on the subject property.

Table 1. Structure Number, Type, and Area (approximated from simple field and GIS measurements)

Structure Number	Type	Approximated Area (Sq Ft)
S-1	House	930
S-2	Barn	1,800
S-3	Cottage House	510
S-4	Animal Shed	780
S-5	Main Residence (including surrounding concrete and pool)	5,850
S-6	Concrete Pad	400
S-7	Stone Fire Pit	310
S-8	Pool House	100
S-9	Dog Kennel	220
S-10	Water Tank/Cistern	350
S-11	Cistern Pump Slab and Covering	140
Approximated Total Area		11,390 ft² (0.26 acres)

Table 2. Impervious Cover on the Property

Type	Approximated Area
Structures	11,390 ft ² (0.26 acres)
Lined Stock Tank	6,200 ft ² (0.14 acres)
Total Impervious Cover	17,590 ft² (0.40 acres)

Table 3. Water wells and septic tanks located on the 41-Acre El Pico Property

Water Wells	
None Observed	
Septic Tanks	
Name	Active/Inactive
Septic Tank 1	Active
Septic Tank 2	Active
Septic Tank 3	Active

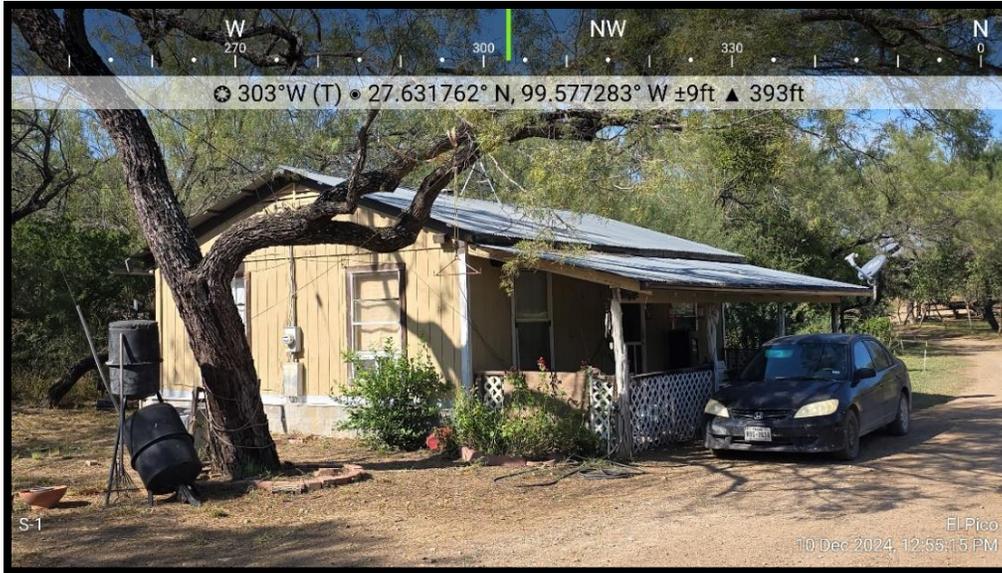


Photo 1. House located at point S-1 in Figure 5



Photo 2. Barn located at point S-2 in Figure 5

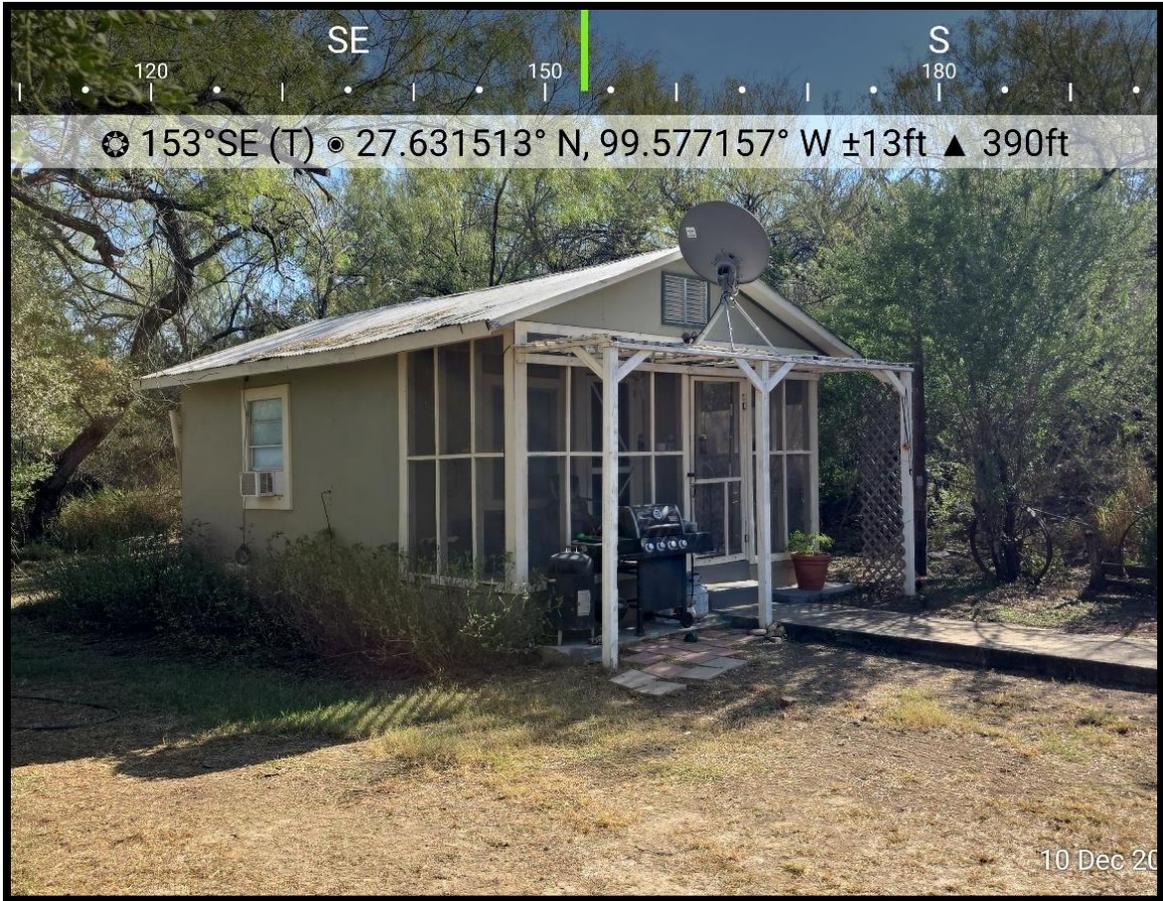


Photo 3. Cottage house located at point S-3 in Figure 5

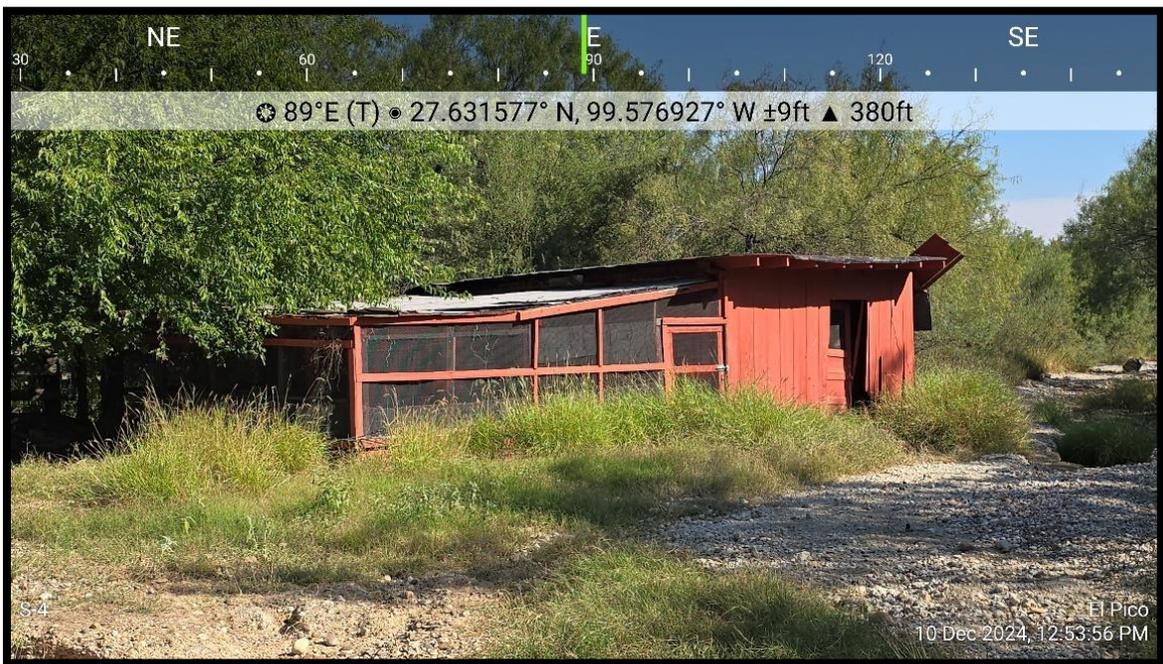


Photo 4. Animal shed located at point S-4 in Figure 5



Photo 5. Main residence located at point S-5 in Figure 5



Photo 6. Concrete pad located at point S-6 in Figure 5



Photo 7. Stone fire pit located at point S-7 in Figure 5

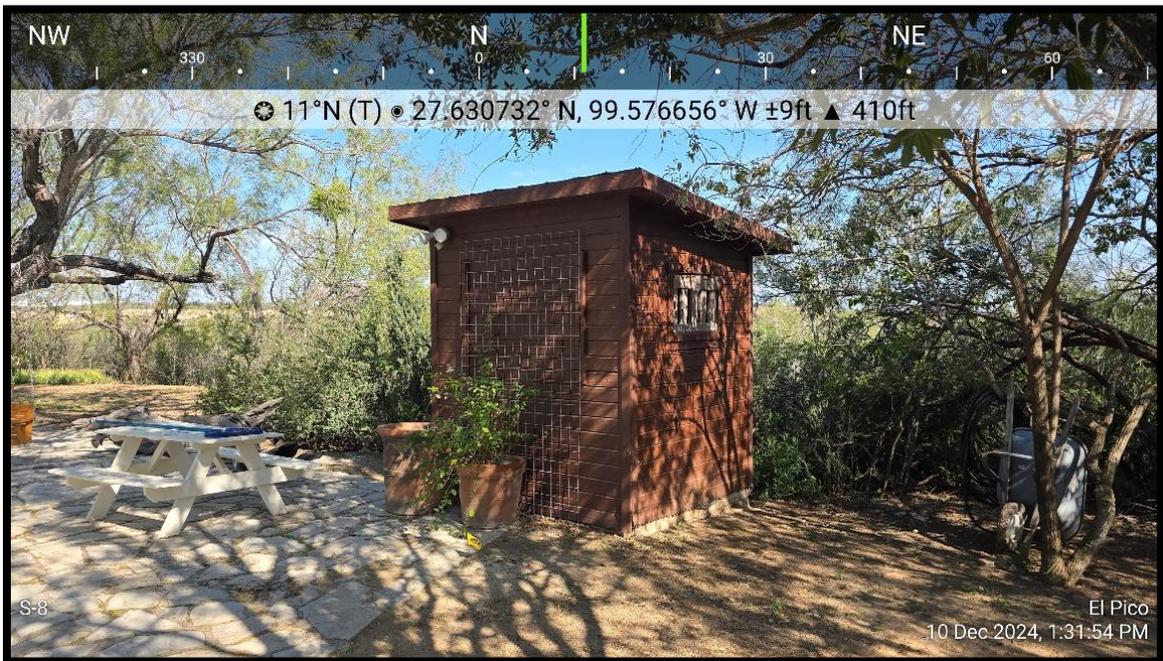


Photo 8. Pool house located at point S-8 in Figure 5

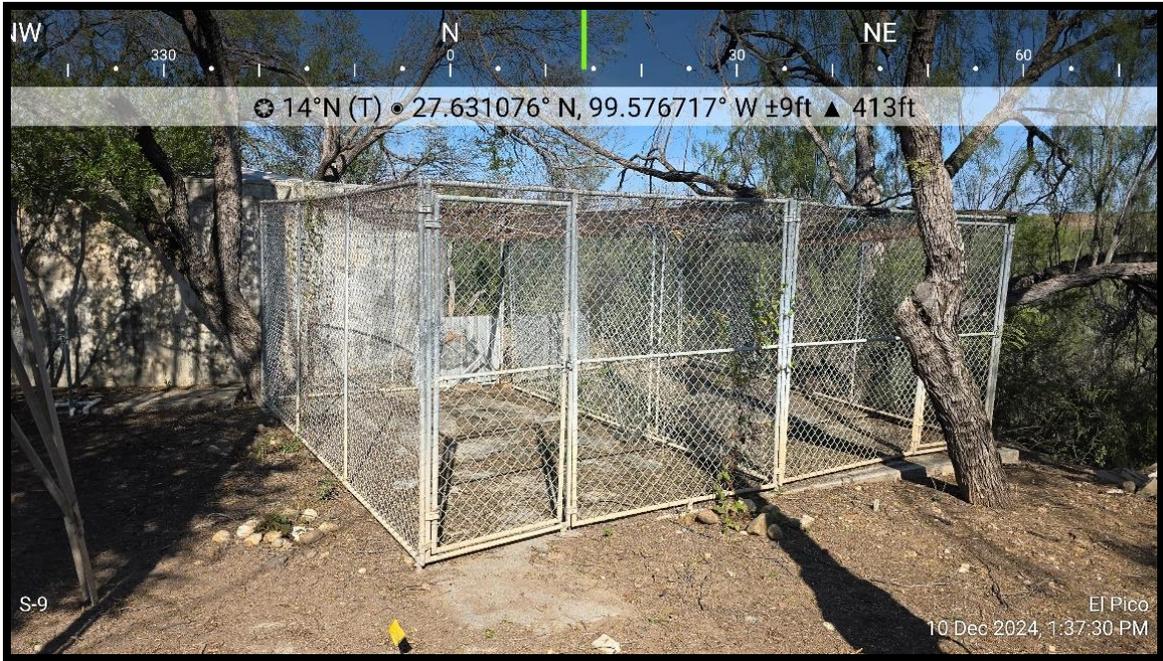


Photo 9. Dog kennel located at point S-9 in Figure 5

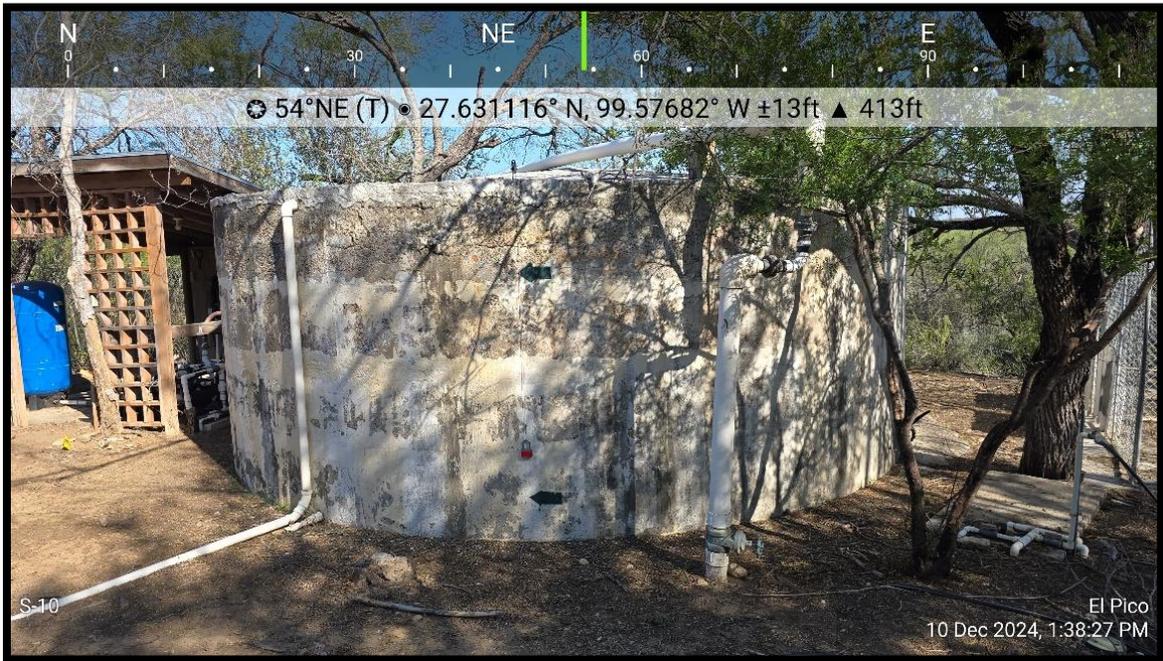


Photo 10. Water tank (cistern) located at point S-10 in Figure 5

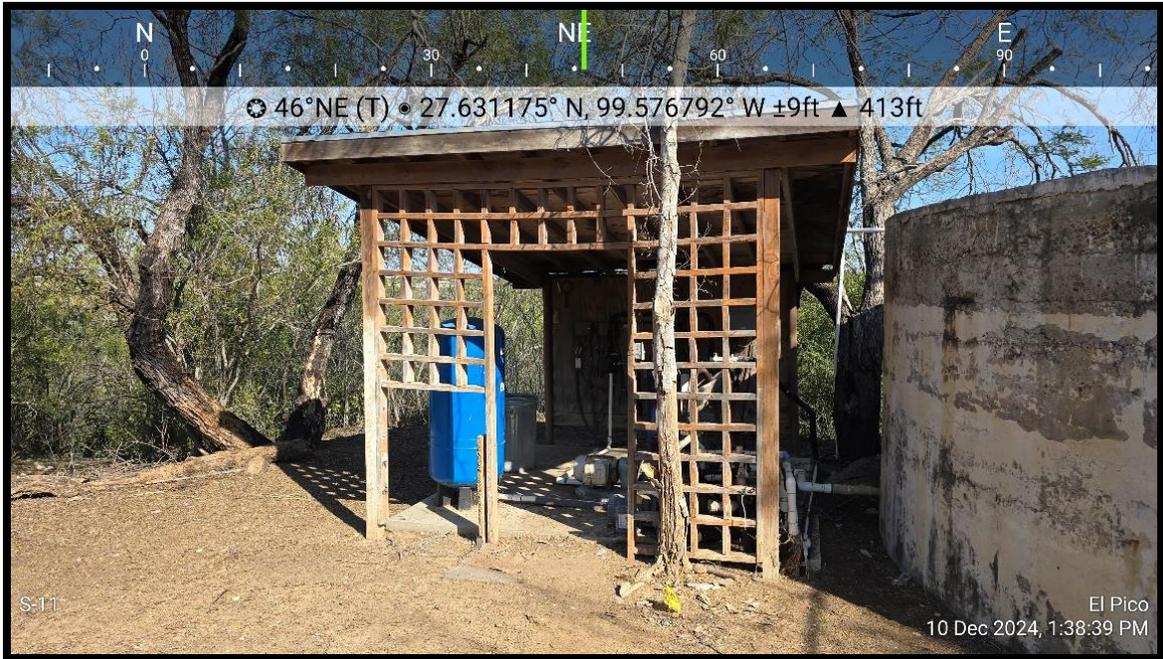


Photo 11. Cistern Pump Slab and Covering located at point S-11 in Figure 5

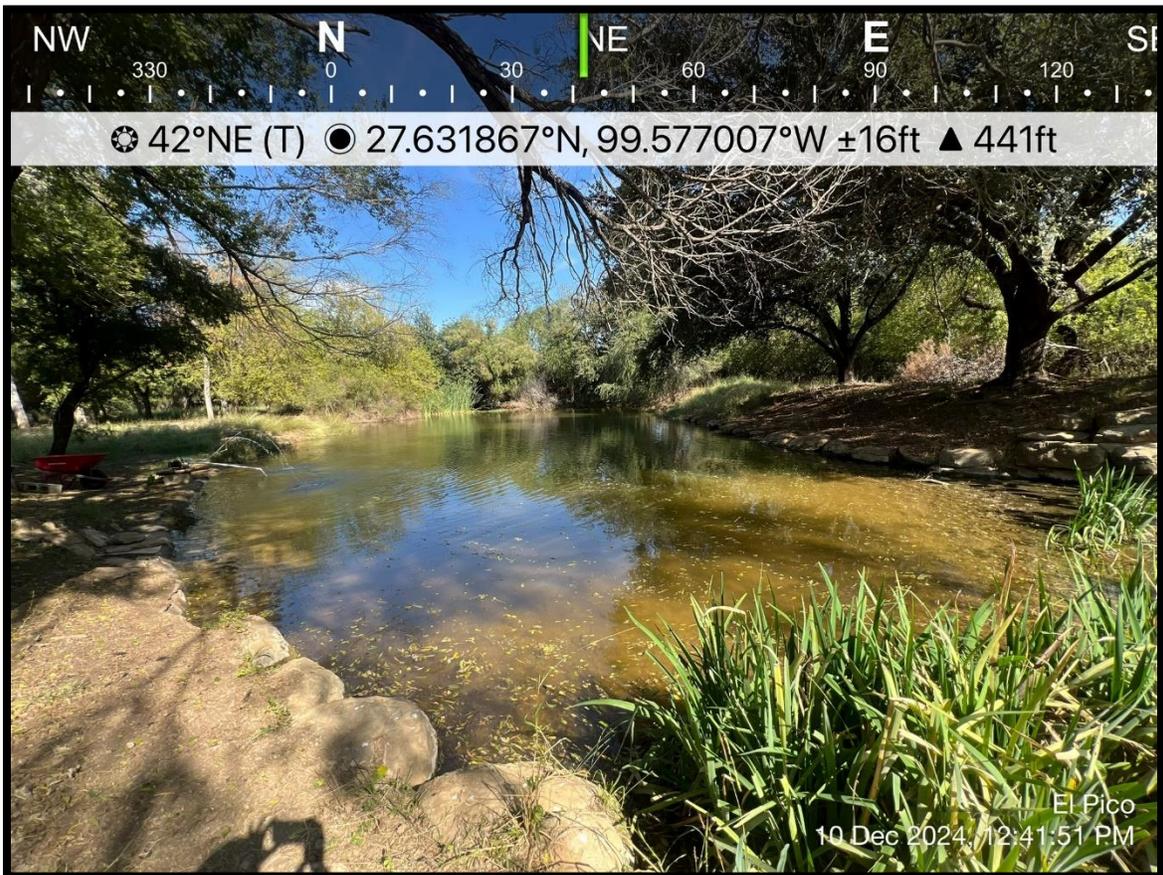


Photo 12. Lined pond located in the northwestern portion of the property

Significant or Sensitive Natural Resources to be Protected

Geologic Features

According to the USGS *Geologic Atlas of Texas*, the 41-acre El Pico property is underlain by the following geologic formations (**Figure 7**):

- **Quaternary Fluvial terrace deposits (Qt):** Gravel, sand, silt, and clay; composed of materials similar to those present in contiguous alluvium; contiguous terraces are separated by a solid line
- **El Pico Clay (Eep):** Clay, sandstone, and coal; mostly clay, in part gypsiferous, medium gray to brown; sandstone, mostly fine grained, some medium to coarse, argillaceous, silty, in part glauconitic, gray to brown, thin bedded to massive, friable to indurated; aphanatic septarian concretions common; thickness 900-1,150 feet

Floodplains

A review of FEMA Floodplain Data shows that none of the property falls in the areas expected to be inundated by the 100-year flood (**Figure 8**).

Surface Waters

Based on a review of the most recent Cuervo Creek, TX and Laredo West, TX, 7.5 Minute USGS Topographic Map, the Rio Grande River is depicted to the adjacent west of the property boundary.

The 41-acre El Pico property is located within the watershed of the Rio Grande River.

Vegetation and Ecological Sites

The 41-acre El Pico Property and the surrounding area support a variety of vegetation types and species. It is appropriate to discuss the various ecological sites located on the 41-acre El Pico property to assess range conditions during future monitoring events. Ecological site indices use plant composition to determine if the range is deteriorating or improving over time. These indices use the concept of plant succession to determine the progression of plant community development. Invasive species are undesirable native and non-native species which are adventitious colonizers of highly disturbed or grazed sites. Ecological site descriptions below are supplied by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey and are presented in **Figure 10**.

Gravelly Ridge Ecological Site

The Gravelly Ridge sites get their name from the gravels that reside in the soil profile. Sites can be shallow to very deep located on uplands and ridges.

The plant communities of this site are dynamic, varying in relation to grazing and drought. The reference plant community of this site was also influenced to some extent by fire and grazing by herds of buffalo and wild horses. Herds of buffalo and wild horses would come into an area, graze it down, and then leave for many months or even years. This long deferment period allowed recovery of the grasses and forbs. Periodic fires set by either Native Americans or lightning affected this site only when climatic factors were ideal for carrying fire. However, fire probably did occur often enough to keep brush from completely dominating the site. The reference plant community

consists of approximately 70 to 80 percent grasses, 20 to 30 percent woody plants and 5 percent forbs. Dominant grasses are feather bluestem (*Andropogon* spp.), sideoats grama (*Bouteloua curtipendula*), and bristlegrass (*Setaria* spp.). Guajillo (*Acacia berlandieri*) and blackbrush (*Acacia rigidula*) dominate the woody shrubs on the site.

JQD – Jimenez-Quemado complex, undulating

Component: Jimenez (48%)

Slopes are 1 to 8 percent. This component is on paleoterraces on inland, dissected coastal plains. The parent material consists of gravelly and/or loamy alluvium. Depth to a root restrictive layer, petrocalcic, is 7 to 18 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 60 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Quemado (40%)

Slopes are 1 to 5 percent. This component is on paleoterraces on inland, dissected coastal plains. The parent material consists of gravelly and/or loamy alluvium. Depth to a root restrictive layer, petrocalcic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Ramadero Ecological Site

The Ramadero site is very deep with loamy soils. The sites are on upland drains and are in a water receiving position. This typically allows better moisture availability than nearby uplands.

The plant communities of this site are dynamic varying in relation to fire, periodic drought, and wet cycles. Periodic fires were set by either Native Americans or started naturally by lightning. Fire did not play as important a role on this site as in deeper more productive sites due to lower production of grasses to burn. Because of large amounts of gravel in the soil, available water holding capacity is greatly reduced. This causes highly variable forage production and minimal grass production during dry years. The historic community of this site was influenced to some extent by periodic grazing by herds of buffalo and wild horses. Herds of buffalo and wild horses would come into an area, graze it down, and then not come back for many months or even years depending upon the availability of water. This long deferment period allowed recovery of the grasses and forbs which served as fuel load. More than likely, fire occurred following years of good rainfall followed by a dry season. The fire frequency for this area is interpreted to be four to six years.

Te –Tela sandy clay loam, 0 to 1 percent slopes, frequently flooded

Component: Tela (80%)

Slopes are 0 to 1 percent. This component is on drainageways on inland, dissected coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the

most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Shallow Sandy Loam Ecological Site

The Shallow Sandy Loam has soils that are shallow to very shallow, gently sloping, with neutral to moderate alkalinity. The reference plant community is a grassland with some woody species.

The plant communities of this site are dynamic varying in relation to fire, periodic drought, and wet cycles. Periodic fires were set by either Native Americans or started naturally by lightning. Fire did not play as important a role on this site as in deeper more productive sites due to lower production of grasses to burn. Because of large amounts of gravel in the soil, available water holding capacity is greatly reduced. This causes highly variable forage production and minimal grass production during dry years. The historic community of this site was influenced to some extent by periodic grazing by herds of buffalo and wild horses. Herds of buffalo and wild horses would come into an area, graze it down, and then not come back for many months or even years depending upon the availability of water. This long deferment period allowed recovery of the grasses and forbs which served as fuel load. More than likely, fire occurred following years of good rainfall followed by a dry season. The fire frequency for this area is interpreted to be four to six years.

VkC – Verick fine sandy loam, 1 to 5 percent slopes

Component: Verick (80%)

Slopes are 1 to 5 percent. This component is on ridges on inland, dissected coastal plains. The parent material consists of calcareous loamy residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, paralithic, is 6 to 16 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent. There are no saline horizons within 30 inches of the soil surface.

Gray Sandy Loam Ecological Site

The Gray Sandy Loam refers to the gray-colored, sandy loam surfaces found on the ecological site. High amounts of calcium carbonates in the upper soil profile are responsible for the gray colors and alkalinity.

The plant communities of this site are dynamic varying in relation to fire, periodic drought, and wet cycles. Periodic fires were set by either Native Americans or started naturally by lightning. Fire did not play as important a role on this site as in deeper more productive sites due to lower production of grasses to burn. Because of large amounts of gravel in the soil, available water holding capacity is greatly reduced. This causes highly variable forage production and minimal grass production during dry years. The historic community of this site was influenced to some extent by periodic

grazing by herds of buffalo and wild horses. Herds of buffalo and wild horses would come into an area, graze it down, and then not come back for many months or even years depending upon the availability of water. This long deferment period allowed recovery of the grasses and forbs which served as fuel load. More than likely, fire occurred following years of good rainfall followed by a dry season. The fire frequency for this area is interpreted to be four to six years.

Presently, the Gray Sandy Loam is a community of woody shrubs exceeding 50 percent canopy, with the interspaces dominated by shortgrasses such as common curly mesquite (*Hilaria berlangeri*), fall witchgrass (*Digitaria cognata*), Hall's panicum (*Panicum hallii*), perennial threeawn (*Aristida purpurea*), and tumblegrass (*Schedonnardus paniculatus*). If drought and/or grazing denude the site, soils will cap over and infiltration of rainfall will be reduced significantly making the site much more droughty. When in this condition, this site recovers very slowly, and mechanical manipulation will be required to reduce shrub canopy and break the soil crust.

CpB – Copita fine sandy loam, 0 to 3 percent slopes

Component: Copita (90%)

Slopes are 0 to 3 percent. This component is on low hills on inland, dissected coastal plains. The parent material consists of calcareous loamy residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent. The soil has a slightly saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 6 within 30 inches of the soil surface.

Wildlife

The 41-acre El Pico Property and the surrounding area support a variety of wildlife, and placement of this property in a conservation easement will result in protection of the quality of habitat available for wildlife, resulting in more diversity and attraction of migratory species moving through the area. Overall, the property supports a healthy and diverse wildlife population that will be sustained and protected by the implementation of a conservation easement.

Cultural Resources Reconnaissance

AEI archaeologists carried out archaeological reconnaissance of the overall 168-acre property (127-acre parcel and a 41-acre parcel) located at 961 El Pico Road. While inspection of the property was not designed for compliance with the National Historic Preservation Act, the Antiquities Code of Texas, or other federal/state regulations, reconnaissance of the property was sufficient to determine the presence of cultural material scattered across the landscape. In the uplands of the first and second terraces above the floodplain of the Rio Grande, chipped stone artifacts are frequently scattered across the surface, especially approaching the Rio Grande-side of the landforms. Considering the abundance of artifacts in these settings above the floodplain, there would be relatively increased potential for buried cultural resources within the floodplain setting. These findings are consistent with the nature and properties of archaeological sites found in the vicinity of this property. Within a one-kilometer search area, there are 10 known sites, and there are many more just beyond that search radius. In the uplands these sites are primarily found on the

surface, but the Rio Grande has the potential to deeply bury archaeological resources within its floodplains. A more detailed document is attached in **Appendix C** of this report.

Current Land Use

Current uses of the property include the following:

- Residential
- Recreational

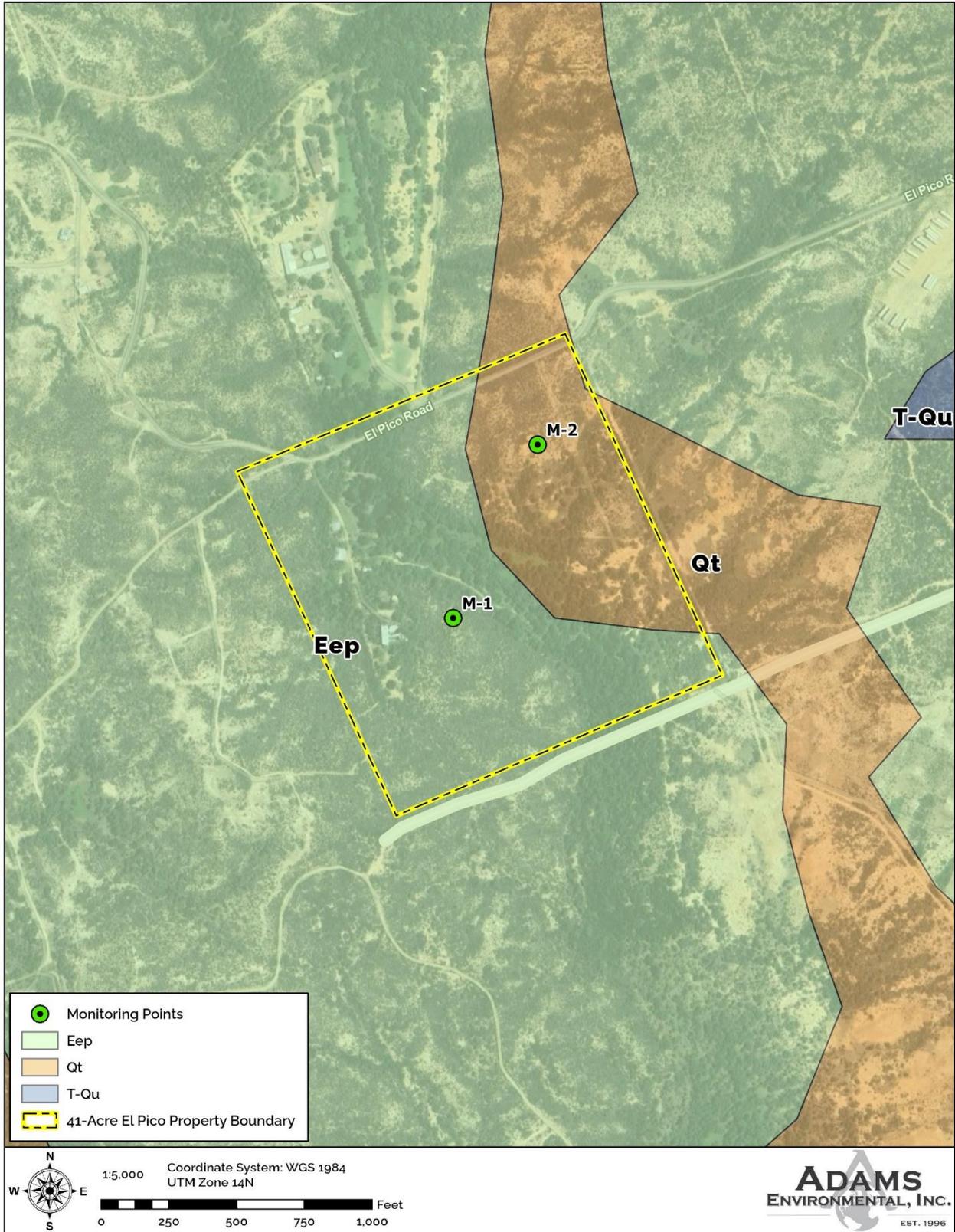


Figure 7. Geologic formations underlying the 41-Acre El Pico Property as depicted by USGS Geologic Atlas of Texas (2024)

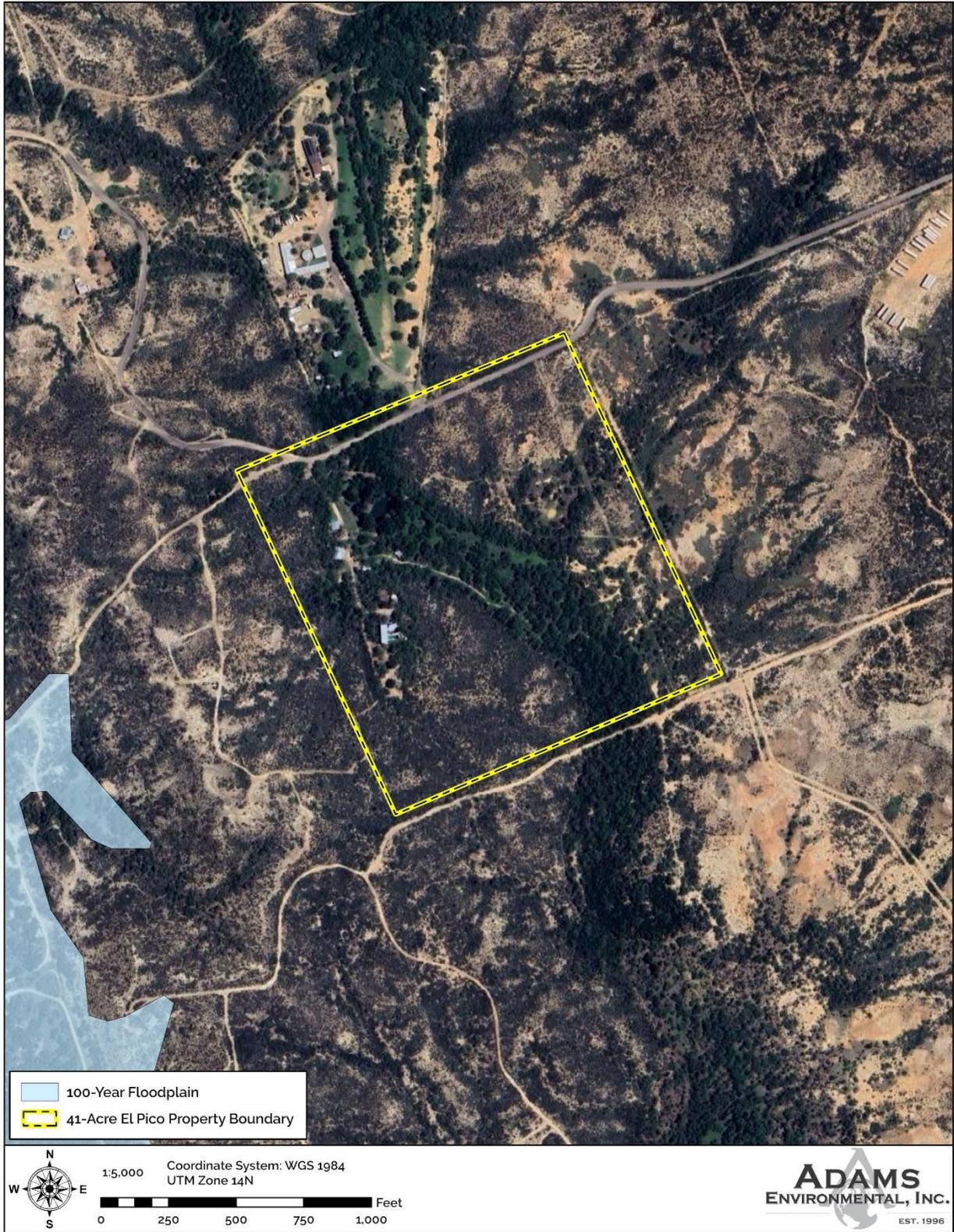


Figure 8. The 41-acre El Pico Property in relation to the 100-year floodplain
 (Source: FEMA, 2020)

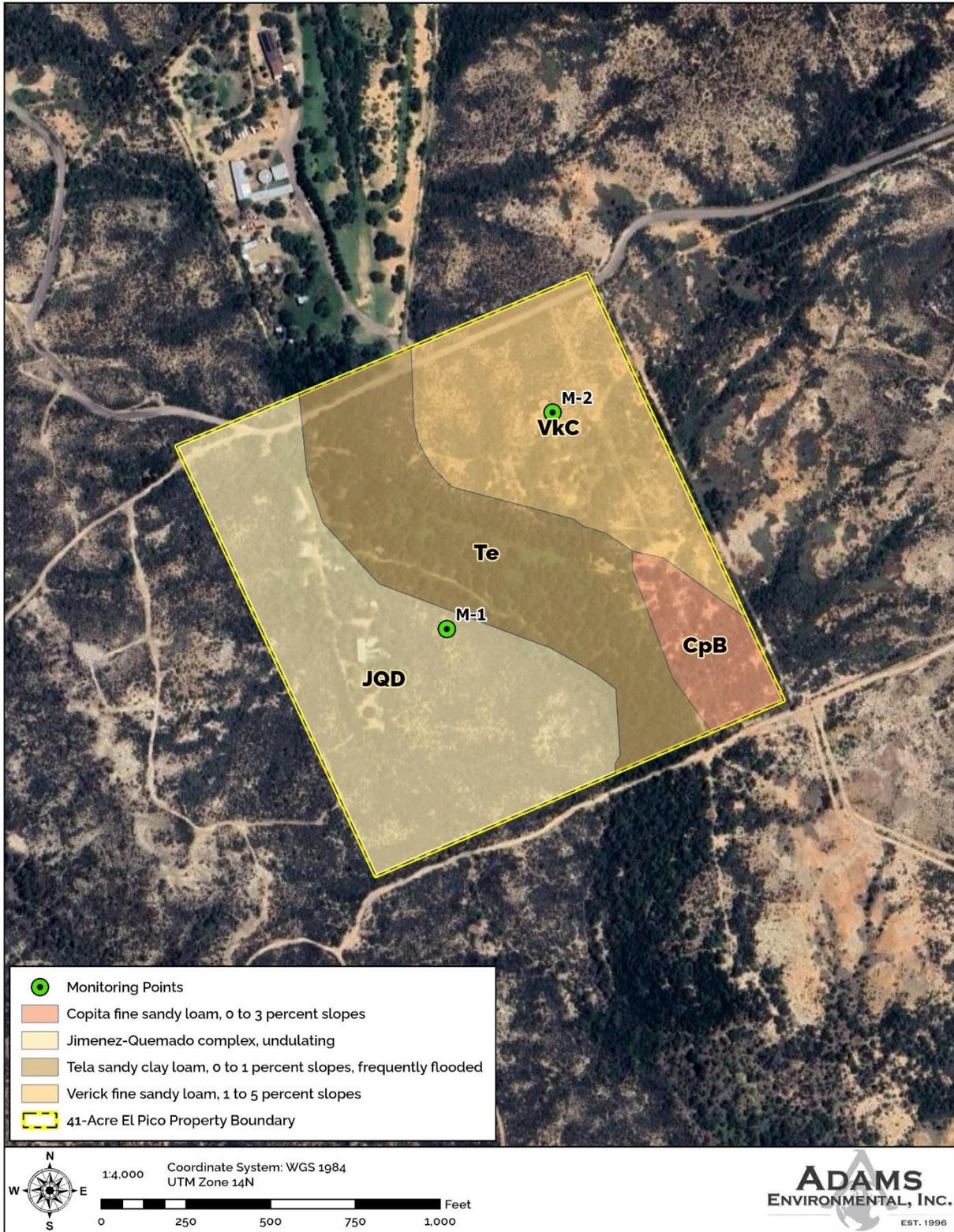


Figure 9. Soils found on the 41-Acre El Pico Property
 (Source: Natural Resources Conservation [NRCS] Web Soil Survey, 2024)

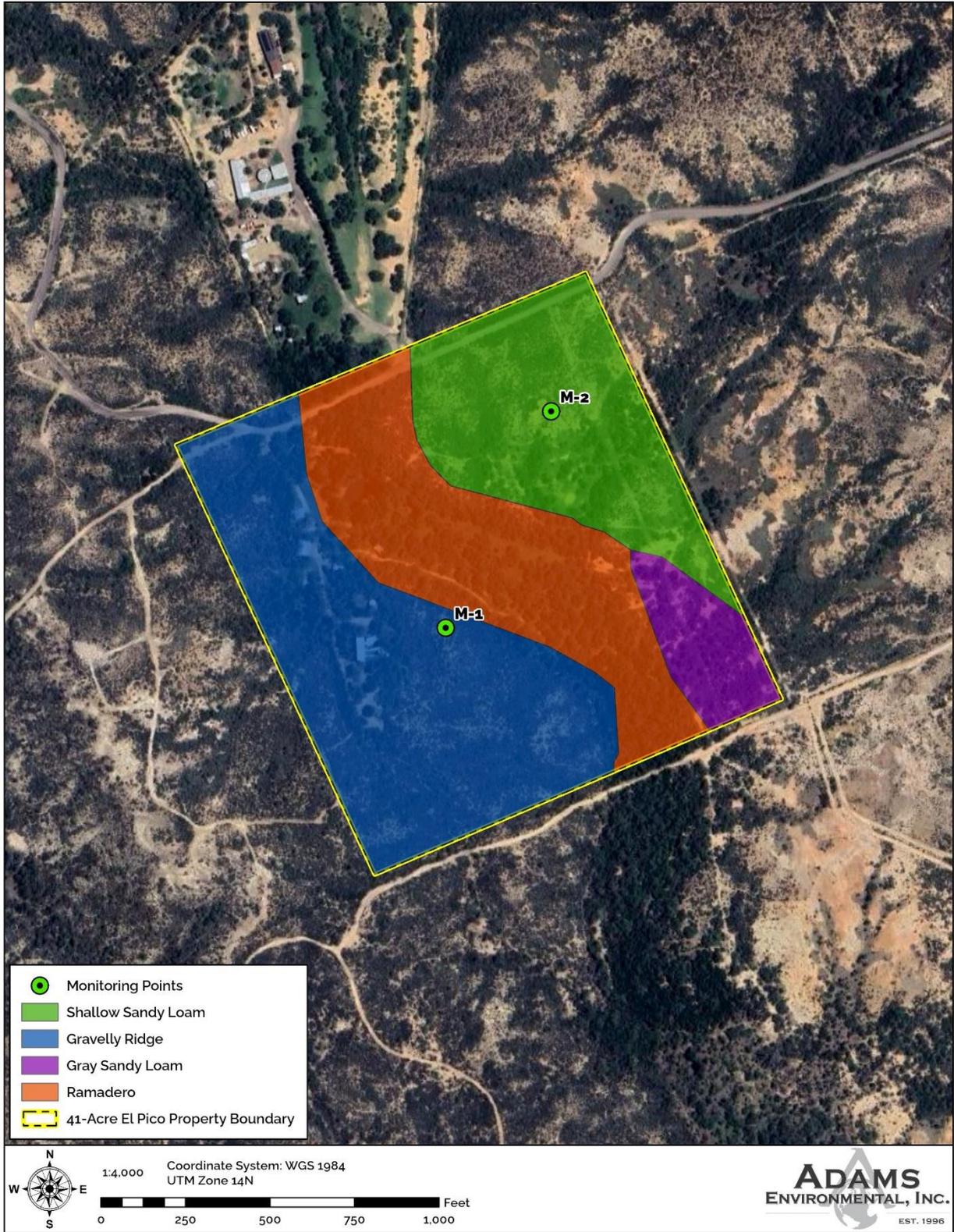


Figure 10. Ecological sites underlying the 41-Acre El Pico Property
 (Source: Natural Resources Conservation Service [NRCS] Web Soil Survey, 2024)

MONITORING POINT SELECTION AND METHODOLOGY

Monitoring points are used to document the initial baseline conditions of the property. These areas represent permanent observation stations that will be visited on a yearly basis, and are selected based on the following general hierarchy:

- Tier 1 Features - Seeps, springs, deep karst features (i.e. caves, fracture planes, vertical shaft sinkholes), and known recharge features
- Tier 2 Features - High value viewsheds that offer sweeping views of large segments of the property (i.e. hilltops overlooking valleys, areas of human development, etc.)
- Tier 3 Features - Points placed along roads or other access routes that provide for monitoring of portions of the property without Tier 1 or 2 features (i.e. meadows, lowland areas, etc.). These points are used to ensure monitoring of portions of the property where unique or high value features are absent.

Once a monitoring point has been selected, GPS coordinates are recorded to confirm location.

Vegetation data are collected at each monitoring point by identifying the species by strata within an approximate 40-foot radius around the monument. This radius is a general guideline and may be either expanded or retracted at the discretion of the baseline crew. Species are identified and classified in accordance with the following strata:

- Trees - woody species greater than 3" in diameter at breast height
- Shrubs - woody species less than 3" in diameter at breast height (also includes all cacti and woody vines)
- Grasses
- Herbaceous (non-grasses)

Once vegetative species have been classified by strata, a simple, categorical measurement is assigned to each species to denote its dominance in the plant community. The categories are "Trace," "Present," and "Dominant." Trace foliar cover is defined as sporadic and sparse cover within the assessment range; Present is defined as moderate habitation within the assessment range; Dominant is defined as highly established and widespread throughout the assessment range.

In assessing the condition of the range at each monitoring station, the relative foliar cover of Dominants in the overall community is compared to the list of dominant species anticipated for the climax community, or the community that would be expected at the location absent of any disturbances (i.e. grazing pressure, development, etc.). Communities containing "Trace" amounts of climax communities are considered to be in poor condition. Communities containing "Present" amounts of climax cover are considered to be in fair condition. Communities containing "Dominant" amounts of climax cover are considered to be in good condition. Climax species for each range site can be found in the USDA Web Soil Survey.

Photos are then taken facing north, south, east, and west from the monument. In some cases, it may be necessary to take photos at alternative bearings in order to document specific features of note (i.e. springs, seeps, etc.).

Monitoring Point Information

Monitoring Point 1

Location (Northing/Easting UTM WGS84 Zone 14N): 27.630981 N; 99.576039 W

Geologic Formation: Eep

Soils: JQD - Jimenez-Quemado complex, undulating

Ecological Site: Gravelly Ridge

Vegetative Cover: 30%

Site Description: M-1 is located along an ephemeral drainage central to the property.

Grasses Observed:

Common Name	Scientific Name	Foliar Cover
Curly Mesquite Grass	<i>Hilaria belangeri</i>	Trace

Herbaceous Broadleaf Vegetation Observed:

Common Name	Scientific Name	Foliar Cover
None Observed		

Woody Vegetation Observed:

Common Name	Scientific Name	Foliar Cover
Shrubs		
Coyotillo	<i>Karwinskia humboldtiana</i>	Present
Blackbrush	<i>Acacia rigidula</i>	Dominant
Tasajillo	<i>Opuntia leptocaulis</i>	Present
Trees		
None Observed		



Figure 11. Location of Monitoring Point 1 on 2024 satellite imagery

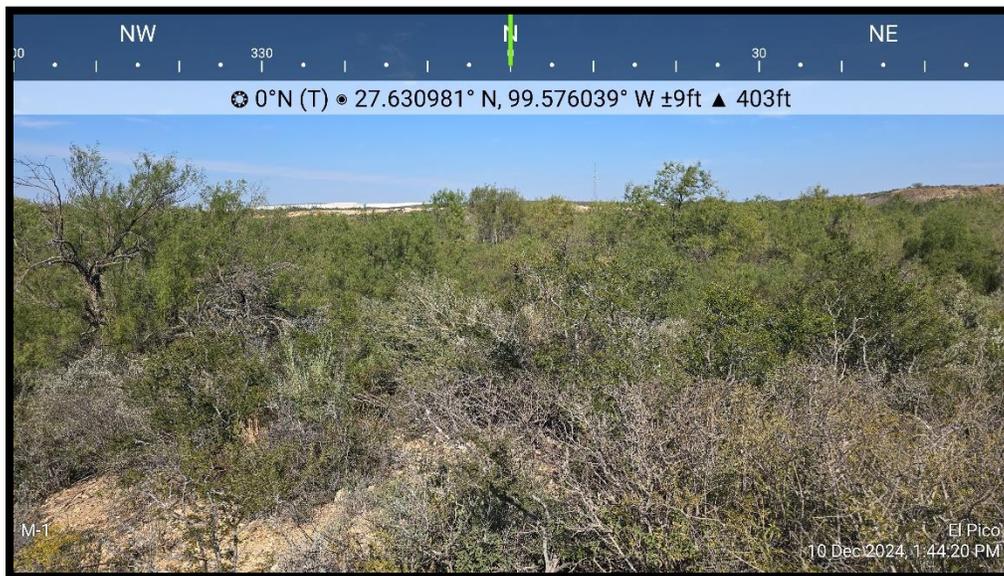


Photo 13. View north from Monitoring Point 1

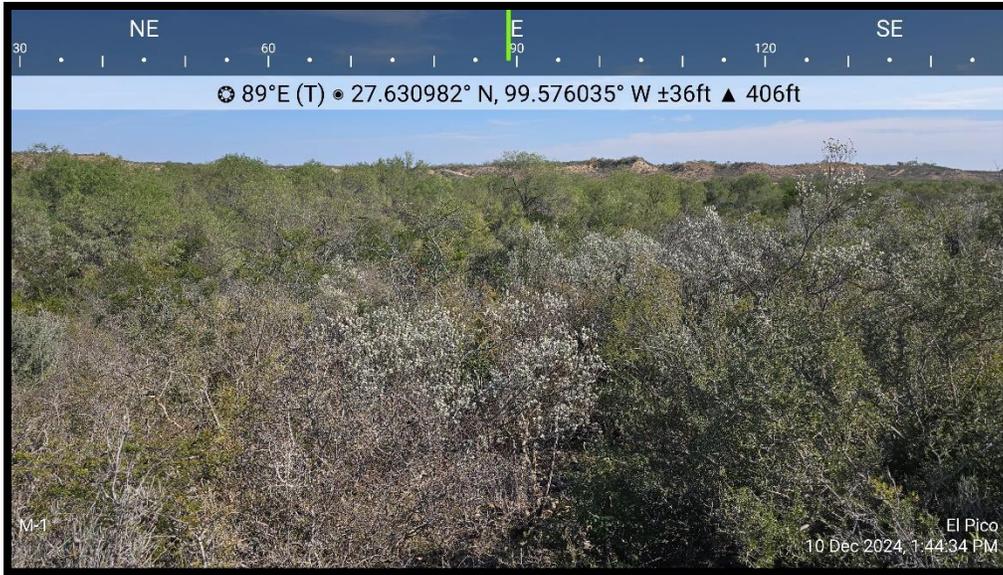


Photo 14. View east from Monitoring Point 1

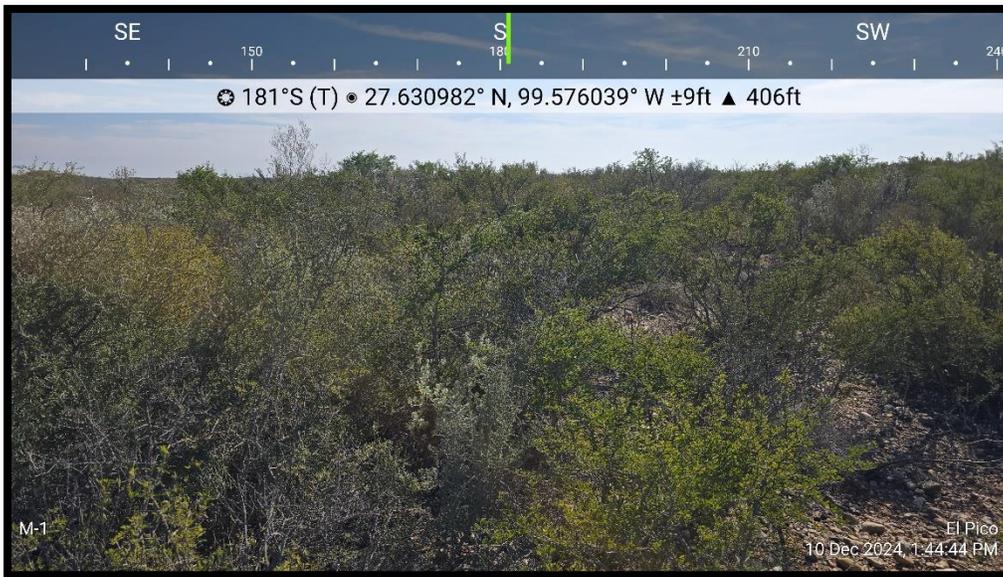


Photo 15. View south from Monitoring Point 1

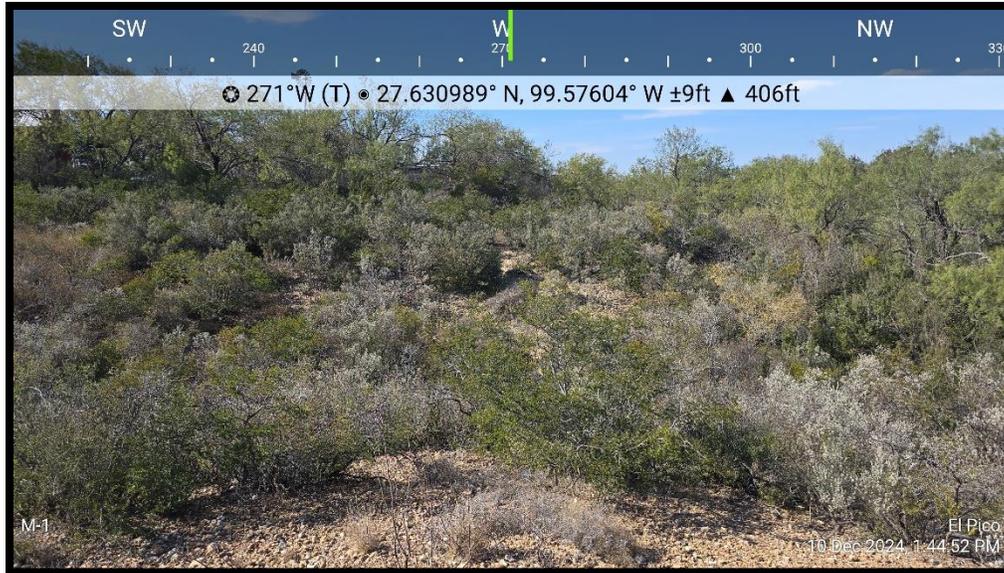


Photo 16. View west from Monitoring Point 1

Monitoring Point 2

Location (Northing/Easting UTM WGS84 Zone 14N): 27.632716 N; 99.575064 W

Geologic Formation: Qt

Soils: VkC - Verick fine sandy loam, 1 to 5 percent slopes

Ecological Site: Shallow Sandy Loam

Vegetative Cover: 30%

Site Description: M-2 is located on a knoll overlooking the eastern portion of the property.

Grasses Observed:

Common Name	Scientific Name	Foliar Cover
Curly Mesquite Grass	<i>Hilaria belangeri</i>	Trace

Herbaceous Broadleaf Vegetation Observed:

Common Name	Scientific Name	Foliar Cover
None Observed		

Woody Vegetation Observed:

Common Name	Scientific Name	Foliar Cover
Shrubs		
Soapbush	<i>Miconia crenata</i>	Present
Desert Peach	<i>Prunus andersonii</i>	Present
Fairy Duster	<i>Calliandra eriophylla</i>	Dominant
Trees		
None Observed		



Figure 12. Location of Monitoring Point 2 on 2024 satellite imagery

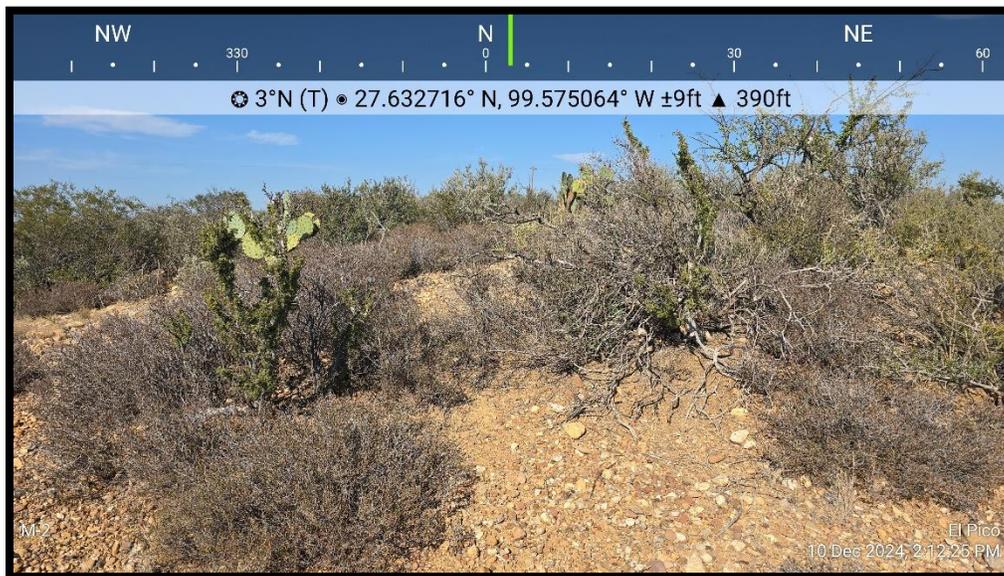


Photo 17. View north from Monitoring Point 2

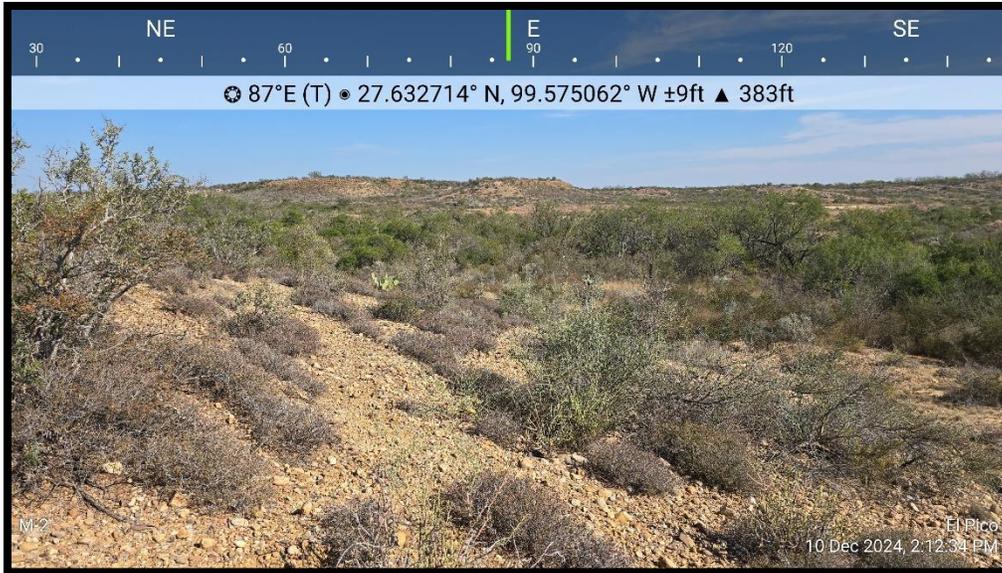


Photo 18. View east from Monitoring Point 2

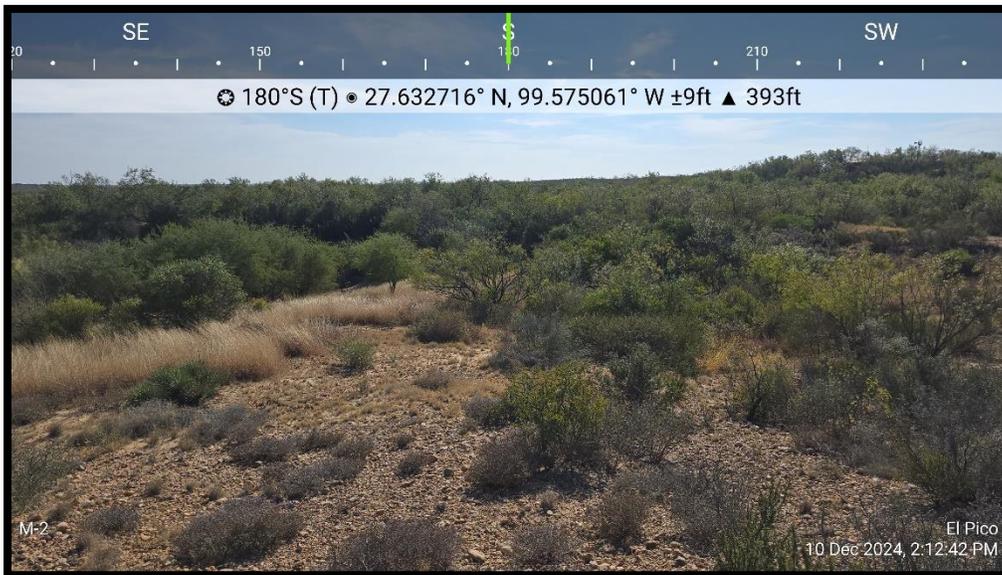


Photo 19. View south from Monitoring Point 2



Photo 20. View west from Monitoring Point 2

Recommended Monitoring Methodology

An important procedure for the conservation easement is annual monitoring. This baseline report provides information regarding the condition of the 41-acre El Pico Property when the easement was initiated. The next step in the process is to conduct annual monitoring visits to ensure that the property is being properly managed as a conservation easement and no major impacts or disturbances have occurred. It is important to carefully monitor vegetation composition to determine if range conditions are degrading or improving. This can most easily be accomplished by identifying the foliar cover of dominant plant species observed at each monitoring point and determining if the abundance of climax species is trending in a positive direction. If climax species appear to be increasing over time, this indicates that the site is improving in quality. If invasive or increaser species become dominant, the site may be impacted by changes in climatic conditions (drought/wet seasons), soil disturbance, fire, human activities, livestock, wild hogs or deer. Modification of wildlife or livestock management techniques and/or restoration/replanting of impacted vegetation may be warranted. In the case of climatic changes, fire and other large scale natural impacts, the area will likely be allowed to naturally recover without intervention. In most cases, human impacts are remedied by removal of the source of the impact and allowing for natural recovery of the area. If necessary, the area may be replanted with endemic plant species.

Annual monitoring will include visiting each monitoring point and making observations during the drive between points, and it is highly recommended that monitoring be conducted in the timeframe from mid-April to mid-June. Future monitoring events should be used to create a comprehensive list of plant species at the 41-acre El Pico Property. Information collected at each monitoring point each year should include the following at a minimum:

- An overall impression of the current condition of the monitoring point. Any obvious disturbances to plant communities.
- Using a compass, photographs should be taken at the same bearings as the original photographs for the monitoring point. The photographs can then be compared and changes in photographs should be noted as improvements or degradation of habitat.
- Plant composition at the monitoring point should be measured in terms of relative foliar cover of each species. For more detailed monitoring and to see smaller changes throughout the years, percent foliar cover of each species can be documented. Over time, this information can be used to note changes in the vegetative composition which may indicate impacts to the habitat.
- Any wildlife, or sign of wildlife, observed at each monitoring point during the monitoring event.

The final annual monitoring report should be formatted similar to the baseline study summarizing observations at each point and along the driving routes. Photographs should also be included with the report. If changes are observed, comparison photographs between years should be provided.

Appendix A:
Landowner Questionnaire

ADAMS ENVIORNMENTAL, INC.
ENVIORNMENTAL DOCUMENTATION
REPORT QUESTIONNAIRE

Property Name: Pico Homestead (41 Acres)

1. Number of wells on property: None
Are wells properly permitted? N/A
Number of abandoned (inactive wells): None
If any wells are abandoned (inactive), are they properly plugged/sealed? N/A

2. Number of septic systems on property: 3
Age of septic systems: 25 years
Are septic systems permitted? Yes
Any crude septic systems on property? No

3. Any historic dipping vats on property? No
Was arsenic historically used in vat? N/A

4. Archaeological sites or dig sites on property? No

5. Food plots or agricultural fields on property? Yes
Approximate size (acreage) of food plots or ag fields: 1/2 Acre

6. Number of pastures on property: 1
Approximate size (acreage) of pastures: 25 Acres

7. Number of stock tanks on property: 2
Are any stock tanks lined with impervious cover? Yes

8. Dump sites or garbage/burn pits on property? None

Are these used on a regular basis or abandoned? N/A

Any material storage areas on property? N/A

Any materials used on an on-going basis? N/A

9. Water detention features (i.e. dams)? Yes

How many permanent dams? One

How many temporary dams (i.e. check or earthen dams)? N/A

10. Number of quarry or extraction sites on property? None

How many of the quarry or extraction sites are abandoned? N/A

Landowner Name: Ricardo De Anda

Landowner Signature: 

Date: 11/20/2024

Appendix B:
List of Preparers

Matthew Kitchen, MNR, GISP
Senior G.I.S. Analyst/Project Manager/Senior Environmental Scientist
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Emmerson Avila
Archaeological and Environmental Technician
Adams Environmental, Inc.
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San Antonio, Texas 78217

Sable Kitchen
President and QA/QC Manager
Adams Environmental, Inc.
13032 Nacogdoches Road, Suite 214
San Antonio, Texas 78217

Appendix C:
Cultural Resources Background Review



Sable Kitchen
President & Owner

Lynn Kitchen, Ph.D.
Vice President

Matthew Kitchen, GISP
Senior Environmental
Project Manager

David Yelacic, RPA
Cultural Resources
Program Manager

Julia Coyle
Environmental Scientist

McKenna Douglass, RPA
Project Archaeologist

Emmerson Avila
Field Technician –
Environmental &
Archaeology

Thais Peacher
Operations Assistant

December 30, 2024

Ricardo de Anda
961 El Pico Road
Laredo, Texas 78045

**RE: Cultural Resources Background Review for the 168-acre Property at
961 El Pico Road in Laredo, Webb County, Texas**

To Whom It May Concern:

Adams Environmental, Inc. (AEI) appreciates the opportunity to provide Mr. Ricardo de Anda and the Valley Land Fund (VLF) with the Cultural Resources Review of the above referenced property located in Webb County, Texas.

Please let us know if you have questions or comments about the attached background review of cultural resources and our recommendations.

Sincerely,

McKenna Douglass, RPA
Project Archaeologist

David Yelacic, RPA
Cultural Resources Program Manager

Sable Kitchen
President

168-ACRE PROPERTY AT 961 EL PICO ROAD CULTURAL RESOURCES BACKGROUND REVIEW

Introduction

Adams Environmental, Inc. (AEI) was retained by the owner of the 168-acre property at 961 El Pico Road and the Valley Land Fund (VLF) to conduct archaeological reconnaissance of the property in association with a Conservation Easement and Environmental Baseline Documentation. The property is privately owned and located on the northern outskirts of Laredo in northwestern Webb County, Texas. For the purposes of the Conservation Easement, the 168 acres is divided into two parcels, one of 127 acres and the other 41 acres. The archaeological background research and preliminary fieldwork was not designed to comply with state or federal rule or regulations; AEI does not understand there to be a trigger for compliance with the Antiquities Code of Texas or the National Historic Preservation Act (NHPA) at this time.

The following sections will provide descriptions of the natural environment, cultural context, and previous archaeological sites and investigations within one kilometer, which will be followed by field methods, results, conclusions and recommendations. Figures are presented at the end of the document.

Environmental Setting

The project is situated on an undeveloped floodplain of the Rio Grande (**Figure 2**). Geomorphology of the area is dominated by the Rio Grande floodplain and alluvial processes. In this stretch of the river, the Rio Grande meanders considerably within its floodplain; numerous meander scars and oxbow lakes, resacas, become increasingly common towards the Gulf of Mexico and are readily apparent on aerial imagery and topographic maps. Vegetation and wildlife of the area are typical of the Rio Grande Floodplain and Terraces Level 4 Ecoregion, which is characterized by croplands with marginal upland brushy species with some grasses and floodplain forests (Griffith et al. 2004). Vegetation of the subject property included thorny scrub brush, Mesquite and cacti, as well as bunch grasses.

The climate of the region is generally subtropical with hot summers (Swanson 1995). Precipitation of the region is generally bimodal with peaks in the spring and late summer/early fall. Paleoclimatic reconstructions based on fossil pollens (Bousman 1998), phytoliths (Joines 2005), and cave deposits (Musgrove et al. 2001; Toomey 1993) of the region indicate that temperature generally increased since the Pleistocene. Peak warmth and aridity occurred during the mid-Holocene Altithermal.

Figure 3 shows underlying geology of the project area as Pleistocene-age Fluvial Terrace Deposits (Qt) and Eocene-age El Pico Clay (Eep; USGS 2024). Soils of the project area are mapped as Copita fine sandy loam (CpB), Jimenez-Quemado complex (JQD), Rio Grande very fine sandy loam (Rg), Tela sandy clay loam (Te), and Verick fine sandy loam (VkC) (NRCS 2024). The soils present in the project area, coupled with the topography and land use, would suggest high potential for intact buried archaeological resources.

Cultural Background and Extant Archaeological Resources

The cultural chronology for the region is not fully understood nor unanimously agreed upon; however, archaeological deposits indicate rich cultural development spanning the Holocene and into the late Pleistocene. Here we are dividing the history of human presence in the region into two broad categories, Pre-contact and Post-contact, referring to cultures before and after European Colonization of the region. The following brief description of the history of people in Central and South Texas is a broad generalization

based on nearly a century of archaeological research and interpretation (cf. Collins 1995, 2004; Hester 1995).

Pre-contact

Pre-Contact people of the region were primarily hunter-gatherers. Through nearly a century of archaeological research in the region, identifiable and repeated patterns in artifact assemblages have indicated trends and shifts in subsistence strategies. Accordingly, lifeways of the region are subdivided into three prior to European contact: *Paleoindian*, *Archaic*, and *Late Prehistoric* periods.

Collins (1995, 2004) and Hester (1995) date the Paleoindian period in the region to roughly 11,500-8,800 years before present (BP), and there may be distinct Early and Late phases. Early Paleoindian artifacts are associated with the Clovis and Folsom cultures and diagnostic items included fluted lanceolate projectile points and prismatic blade technology, and the period is generally characterized by nomadic cultures reliant on mobile big game and local fauna. Folsom cultures are considered to be specialized bison hunters, as inferred from the geographic location and artifactual composition of sites. Late Paleoindian phase archaeological assemblages contain an increasingly diverse array of diagnostic projectile points and tools, including Wilson, Golondrina-Barber, and St. Mary's Hall points, on the cusp of the proliferation of burned rock cooking technology.

The Archaic period is the longest unit of archaeological history, lasting approximately 7,500 years from 8800 BP to 1300 BP (Collins 1995, 2004). The period of time is commonly subdivided Early, Middle, and Late, but the common thread is the reliance on hot rock cooking and increased use of plants as food. Additionally, the period includes shifts and variability in stone tool making, as well as population dynamics and burial of the dead. The Early Archaic marks a distinct transition from the Paleoindian period with the introduction of burned rock, which coupled with ground and chipped stone tool technology, suggests a change in subsistence strategy likely related to concurrent changes in climate and natural resource availability. In the region, this period is the least understood (Hester 1995). The Middle Archaic period coincides with the Altithermal. During a middle Holocene period of relative mesic and cooler conditions, grassy plains expanded southwards through central Texas, and along with the plains migrated bison and pronghorn. As the climate shifted towards peak aridity and temperatures, plains and big game receded northwards. Shifts in chipped stone technology and knapping skill appear to coincide with increasingly mesic conditions and population growth during the Late Archaic.

From approximately 1300 BP to contact with Europeans, the Late Prehistoric period is marked by a shift to bow and arrow technology and the incorporation of ceramic technology. When Spanish and French explorers initially set foot on the shores of Texas, there were numerous tribes scattered across the land (Foster 2008).

Post-contact

Colonization of the region by Spanish missionaries and military began in present-day Mexico and spread across the coastal plains and Balcones Escarpment to present-day Louisiana. Laredo was established in 1755 by Tomás Sánchez de la Barrera y Garza as a settlement upriver from Nuestra Señora de los Dolores Hacienda (Cuéllar 2019). This settlement was under the authority of Spanish colonizer José de Escandón who sought to enforce Christian religion upon indigenous tribes of the region and simultaneously prevent French infiltration into Spanish territory. The site chosen to establish Laredo was chosen because it was the typical crossing point over the river for those traveling from Nuevo Leon and Coahuila to Texas. Early

settlers in Laredo relied primarily on raising livestock because the topography of the river made irrigation difficult for farming.

In 1768, Laredo held its first election for local officials and by 1783 the first public school was established (Cuéllar 2019). During the Texas Revolution, Laredo served as a centroid for Antonio López de Santa Anna's military forces. Even after the war, those living in Laredo associated themselves with Mexico rather than the Republic of Texas due to neglect from the central government. In 1840, a short-lived federalist rebellion proclaimed Laredo as the capital of the Republic of the Rio Grande under Antonio Zapata and Antonio Canales Rosillo.

It was not until 1846 that Laredo fully came under the authority of the Republic of Texas when Texas Ranger Robert Addison Gillespie stationed a garrison within the city (Cuéllar 2019). In 1848, Laredo was selected as county seat for the newly established Webb County and the Rio Grande was designated as the international boundary between the United States and Mexico. Laredo began to modernize when connections to the Texas Mexican Railroad, the International and Great Northern Railroad, and the Rio Grande and Pecos Railway were secured for service and made the city instrumental as a gateway to Mexico.

Laredo's population steadily rose from 3,521 in 1880 to over 13,000 in 1900. The local economy was boosted throughout the early 1900s by coal mining, onion farming, as well as abundant oil and gas sources (Cuéllar 2019).

Archaeological Sites and Previous Investigations

The Texas Archeological Sites Atlas (Atlas) shows that the project area does not contain previously recorded archaeological sites, but the project area has not been previously investigated (**Figure 4**). Within a one-kilometer search radius, there are nine recorded sites and six investigations noted on the Atlas. The sites range from Pre-contact lithic procurement/quarry sites to historical structures and homesteads. Relevant and analogous to the findings of the current investigation, site 41WB796 is an extensive scatter of chipped stone materials among Uvalde Gravel deposits exposed at the surface of the upland landforms north of the current 168-acre property. **Table 1** provides brief descriptions of these ten nearby archaeological sites—it should be noted that this information, including Figure 4 and Table 1, is protected by state laws and is not for public disclosure. The users of this document should keep this information confidential.

Previous archaeological investigations in the vicinity of the project area were conducted on behalf of various federal and state agencies in compliance with the National Historic Preservation Act and the Antiquities Code of Texas.

Table 1. Archaeological sites within one kilometer of the 168-acre El Pico Road property.

Trinomial	Description	NRHP/SAL Eligibility
41WB293	Open campsite and 19 th c. homestead	Unknown (has potential)
41WB599	Isolated find—one chipped stone artifact at surface	Unknown (low potential)
41WB707	Chipped stone, burned rock, historical debris	Unknown (low potential)

41WB708	Ruins of handcut sandstone structure/homestead	Unknown (has potential)
41WB715	Two burned rock features, chipped stone artifacts	Recommended not eligible
41WB713	Seven burned rock features, formal tools, and chipped stone artifacts	Eligible
41WB714	Three burned rock features, formal tools, and chipped stone artifacts	Recommended not eligible
41WB600	Lithic quarry site	Not eligible
41WB796	Extensive lithic quarry site, over 100 acres	Recommended not eligible
41WB601	Open campsite and historical debris	Unknown (low potential)

Historic Aerials and Maps

Review of historic aerials show that the project area has remained relatively undeveloped with several scattered historical structures near El Pico Road within the project area since the earliest readily accessible aerial imagery, circa 1959 (NETR 2024). Topographic maps of the same era, circa 1956 and 1965, also show scattered historical structures mapped within the project area.

Field Methods and Results

To explore the project area for intact archaeological deposits, AEI archaeologists conducted opportunistic pedestrian survey and reconnaissance. The broad floodplain portion of the project area was visually inspected at locations near the Rio Grande, approximately halfway across the terrace, and at the base of the transition to upland. This scarp at the distal end of the floodplain was examined nearly across the width of the property, and then a transect was walked across the center of the property to the homestead. A number of prominent landforms, or peaks, were examined off the transect, and after a brief conversation with the landowner, archaeologists made a reconnaissance of another prominent landform. Finally, a brief inspection of the property east of the homestead and along the eastern fence line was made on foot. No shovel tests or other excavations were conducted. Observations were limited to the surface or erosional facies.

Reconnaissance of the Rio Grande riverbank and floodplain did not reveal archaeological deposits at the surface—this portion of the landscape, however, was not exhaustively or systematically surveyed, and the deep sandy deposits of the Rio Grande floodplain are known to deeply bury archaeological resources in similar settings nearby. The lack of archaeological observations in this area does not indicate a true lack of resources, and the abundance of artifacts present at the surface on the adjoining landforms may indicate an increased potential for buried artifacts in the floodplain setting of the property.

Reconnaissance of the erosional slope between the floodplain and the adjoining terrace/uplands yielded numerous observations of freshwater mussel shell (**Figure 5**) and chipped stone artifacts (**Figure 6**) apparently washing down the slope. Exploration of the surface above the slope resulted in the discovery of abundant similar materials: mussel shells, chipped stone artifacts, cores, and scattered burned rock. Aside from a portion of this first terrace above the floodplain that was obviously pushed into a berm to capture stormwater, there were artifacts scattered across the landform (**Figure 7**). No temporally

diagnostic artifacts were identified, though the landowner reported numerous projectile point discoveries in the past. Intact features or discrete clusters of materials were not observed either, but only a small fraction of the landform was inspected.

The low-lying area between the first terrace and the second terrace or peaks lacked the frequency of artifacts, but this portion of the landscape was also clearly disturbed and/or actively eroding. Moving up the slope to the east, the sandy surface gave way to a gravel pavement with plentiful chipped stone artifacts, including a scraper tool (**Figure 8**). On the portion of this landform closest to the Rio Grande, with a clear view out over the floodplain, abundant cherty gravels were obviously the source material for chipped stone artifacts in the area (**Figure 9 and 10**). Notably missing from this portion of the landscape were the scatter of burned rocks and mussel shells. Moving eastward across this upland, past the extant homestead, chipped stone artifacts were observed at the numerous opportunistic observation points.

Conclusions and Recommendations

The 168-acre property at 961 El Pico Road was subject to archaeological reconnaissance under the supervision of a Secretary of the Interior-qualified archaeologist on staff with AEI. While inspection of the property was not designed for compliance with the National Historic Preservation Act or Antiquities Code of Texas or other federal/state regulations, reconnaissance of the property was sufficient to determine the presence of cultural material scattered across the landscape. In the uplands of the first and second terraces above the floodplain of the Rio Grande, chipped stone artifacts are frequently scattered across the surface, especially approaching the Rio Grande-side of the landforms. Considering the abundance of artifacts in these settings above the floodplain, there would be relatively increased potential for buried cultural resources within the floodplain setting.

While archaeological materials were observed, the extent of the archaeological site was not sufficiently determined through reconnaissance. More intensive archaeological investigations could be used to map the horizontal and vertical extent of the materials, if they were confined within the 168-acre property—and it a possibility that these materials could extend along the terraces north and south of the property, because it is certainly picturesque and with much food, water, and material resources.

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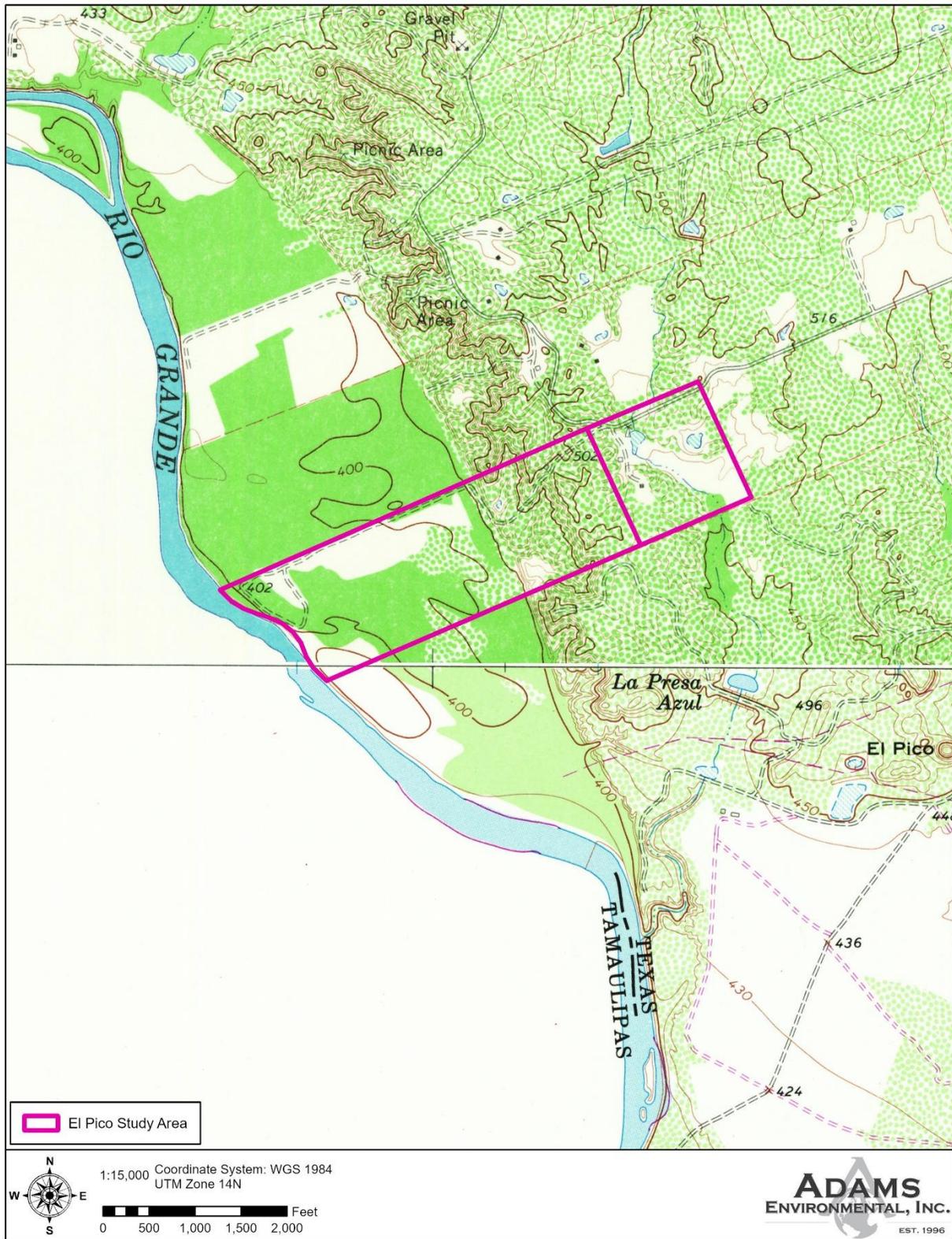


Figure 1. The project area shown on a topographic map.



Figure 2. The project area shown on aerial imagery.

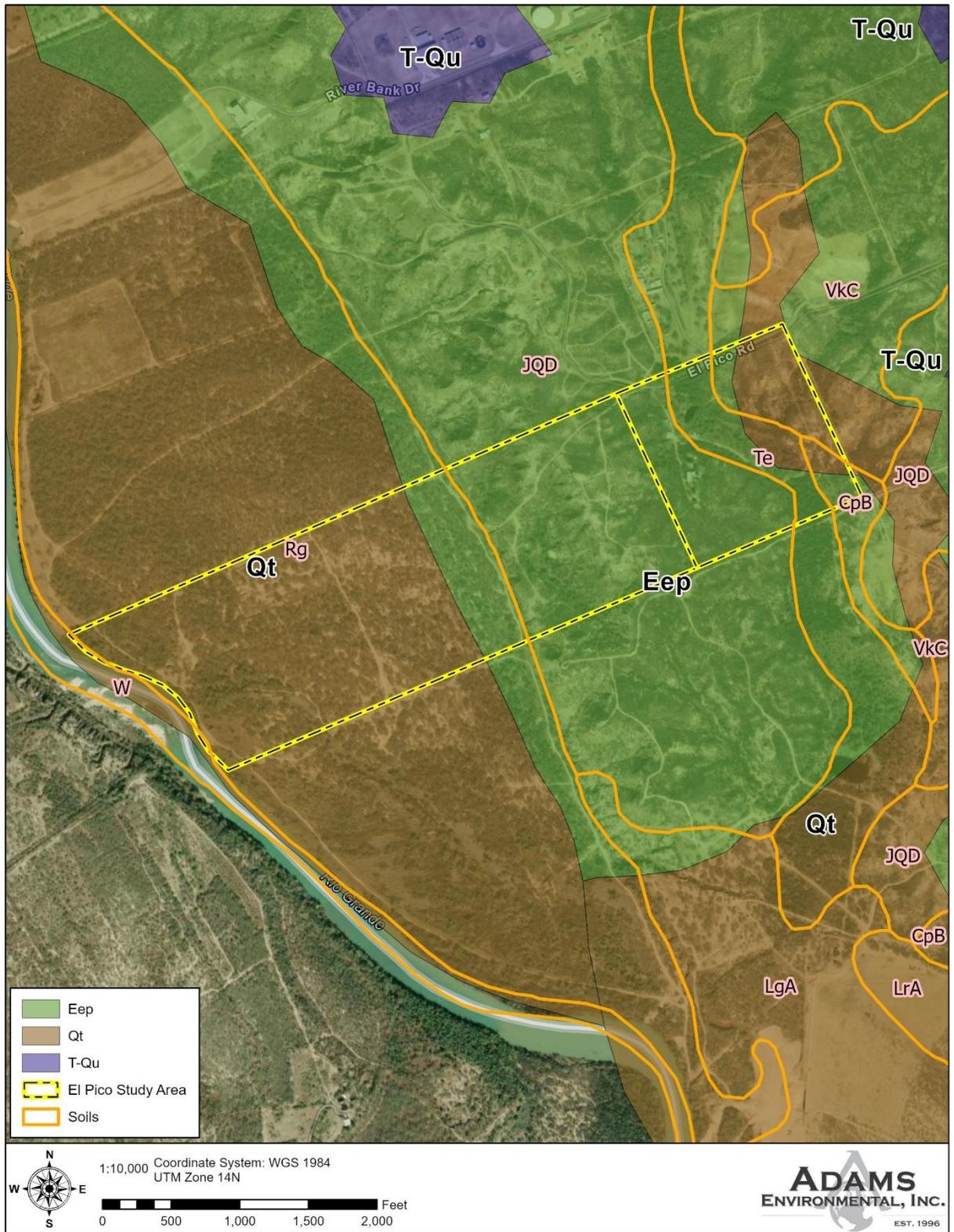


Figure 3. Geology and soils of the project area.

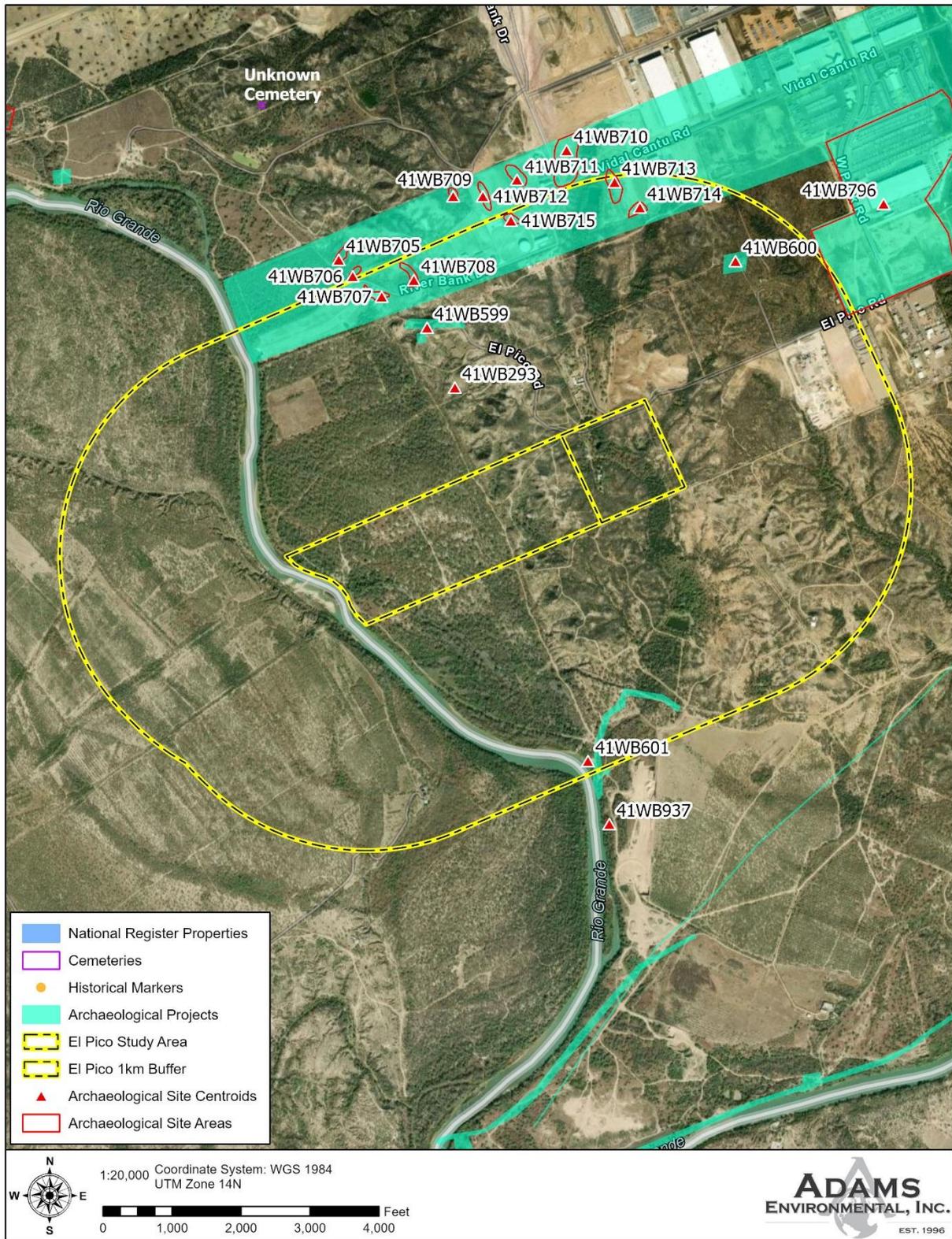


Figure 4. Project area and one-kilometer search radius shown with known cultural resources and survey data from the Texas Archeological Sites Atlas.



Figure 5. Mussel shell observed near transition from floodplain to upland terrace.



Figure 6. Chipped stone, mussel shell, and glass artifacts observed at the surface from floodplain to upland terrace.



Figure 7. Berm with stormwater catchment to photo right. Note the lack of gravels in roadway.



Figure 8. Scraper, unifacially worked chipped stone tool.



Figure 9. Uvalde gravels deposit with chipped stone intermixed in upland setting.



Figure 10. View across upland and floodplains from prominent high-elevation feature on the landscape.