CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO
NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738 (SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME IV OF VI
SITING AND LAND USE

Prepared for

Camino Real Environmental Center, Inc.

September 2022

Prepared by

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505-301-2026

WCG Project No. 0601-667-11-06

CONTENTS

Section

1 SITING CRITERIA

2 LAND USE

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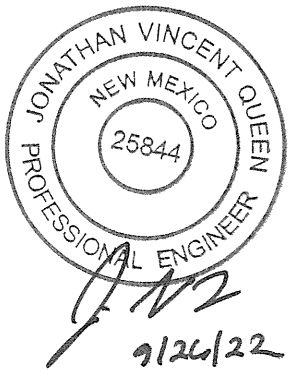

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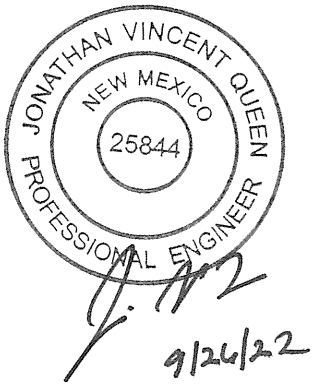
CONTENTS

1	**INTRODUCTION**	**IV.1-1**
	1.1 Site Location	IV.1-1
	1.2 Existing Permitted Landfill Unit Overview	IV.1-1
	1.3 Purpose	IV.1-2
	1.4 Siting Compliance	IV.1-2
2	**MAXIMUM SIZE**	**IV.1-3**
3	**FLOODPLAINS, WETLANDS AND WATERCOURSES**	**IV.1-4**
	3.1 Floodplains	IV.1-4
	3.2 Wetlands	IV.1-4
	3.3 Watercourses	IV.1-5
4	**DEPTH TO WATER TABLE**	**IV.1-6**
5	**SUBSURFACE MINES**	**IV.1-7**
6	**HOLOCENE FAULTS**	**IV.1-8**
7	**ARCHAEOLOGICAL SURVEYS**	**IV.1-9**
8	**DISTANCE TO WATER WELLS**	**IV.1-10**
9	**DISTANCE TO AIRPORTS**	**IV.1-11**
10	**DISTANCE TO STRUCTURES**	**IV.1-12**
11	**ACTIVE ALLUVIAL FANS**	**IV.1-13**
12	**THREATENED AND ENDANGERED SPECIES**	**IV.1-14**
13	**SEISMIC IMPACT ZONES**	**IV.1-15**
14	**UNSTABLE AREAS**	**IV.1-16**
	14.1 Poor Foundation Conditions	IV.1-16
	14.2 Areas Susceptible to Mass Movements	IV.1-17
	14.3 Karst Terrain Areas	IV.1-17



CONTENTS (Continued)

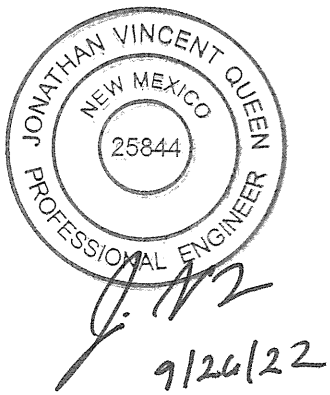
FIGURES

Figure

IV.1.1 Site Location Map
IV.1.2 Mines, Mills and Quarries Map
IV.1.3 Quaternary Faults and Folds Map
IV.1.4 Water Well Location Map
IV.1.5 Airport Location Map
IV.1.6 Land Use Setbacks
IV.1.7 Seismic Impact Zones Map
IV.1.8 Karst Terrains Map

ATTACHMENTS

IV.1-A Goshawk Environmental Consulting, Inc. – Waters of the U.S. Determination
IV.1-B Goshawk Environmental Consulting, Inc. – Threatened or Endangered Species Habitat Assessment
IV.1-C FAA Coordination
IV.1-D Archaeological Survey



1 INTRODUCTION

The Camino Real Landfill (CRLF) is an existing solid waste facility operating in compliance with its current Permits, SWM-030738 and SWM-030738(SP), and the New Mexico Environment Department (NMED) Solid Waste Rules (the Rules; 20.9.2-20.9.10 NMAC). The owner and operator of the Camino Real Landfill is Camino Real Environmental Center, Inc. (CREC).

CREC is seeking a Permit Modification (20.9.3.22 NMAC) and Permit Renewal (20.9.3.25 NMAC) for the CRLF to modify the existing permitted landfill configuration and to renew the current permit. Each of these items is discussed in more detail below.

1.1 Site Location

The CRLF is an existing solid waste disposal facility that encompasses approximately 480 acres of land located at 1000 Camino Real Blvd. on the New Mexico (NM)/Mexico (MX) border in Sunland Park. The approximate geographic coordinates for the center of the CRLF site are: Latitude 31° 47' 24.7272" N and Longitude 106° 35' 32.6508" W. A topographic map showing the CRLF site location is provided as Figure I.1.1.

The legal description of the site is summarized as follows:

> *A certain parcel of land situated within Section 12 and 13, Township 29 South, Range 3 East, New Mexico Principal Meridian, City of Sunland Park, Doña Ana County, New Mexico.*

CRLF is constructed, operated, monitored, and inspected in compliance with the Solid Waste Facility Permits granted by the NMED Solid Waste Bureau (SWB) pursuant to the Rules (20.9.2-20.9.10 NMAC).

1.2 Existing Permitted Landfill Unit Overview

As shown on Figure I.1.2, MSW disposal and development at CRLF is defined by four "area fill" Units, i.e., 1 through 4, which are further divided into cells. Unit 1 (50 acres) is designated as closed. Unit 2 (124.2 acres) is an active landfill area. Unit 3 (60.5 acres) is permitted for waste disposal, and recently (2019) the first cell in this

unit was developed. Portions of Unit 3 have been excavated to provide soils for ongoing operations. Unit 4 (73.0 acres) is located east of the current operations and is permitted but undeveloped. Soils from the Unit 4 area have also been excavated to support the ongoing operation, and the area has also been used to stockpile construction soils. Cell phasing within each unit is determined by operational conditions. This Application for Permit Modification and renewal addresses subgrade configurations in Units 3 and 4 and final contour design over all units.

1.3 Purpose

The Purpose of Volume IV, Section 1 – Siting Criteria, is to provide updated compliance demonstrations for each of the siting criteria listed in the current Solid Waste Rules, 20.9.4.9 NMAC (2007). Siting compliance was demonstrated in the March 2006 NMED-approved Application for Permit (updated May 2007 and approved in July 2008) prepared by Gordon Environmental/PSC. Data previously provided and approved for the previous CRLF Permits are summarized and affirmed in this Application. In addition, this Permit Application provides updates which address changes in site conditions and regulatory requirements since the previous siting compliance demonstrations. Responses to each of the Siting Criteria are briefly summarized in Volume I, Section 4. Additional site characterization documentation is provided in Volume IV, Section 2 – Land Use, which includes the new "Vulnerable Area Assessment" conducted in compliance with 20.9.3.8.D NMAC (Attachment IV.2-B).

1.4 Siting Compliance

The most recent public notice for the CRLF facility was issued in association with the Permit Application prepared by Gordon Environmental, Inc. in 2008. On the date of the first public notice in 1991, per 20.9.4.9.A NMAC, no portion of the proposed CRLF disposal area was in conflict with the siting criteria, as approved by NMED in the 2008 Permit.

For the current Permit Application, CRLF is not proposing a lateral expansion. Therefore, new field studies (e.g., biology, cultural resources, geology, etc.) are not required as part of this Application. However, since a final configuration for the previously permitted Unit 4 area was not provided under SW96-05(P), a Waters of the U.S. Determination, Threatened and Endangered Species Habitat Assessment, and Cultural Resource study have been completed and included in Volume IV. A detailed design for the previously permitted Unit 4 is provided in this application. General siting updates including current siting maps, and review of current literature for water wells, seismic zones, flood zones, etc., are included as part of this Application for Permit Modification.

2 MAXIMUM SIZE

20.9.4.8 NMAC states that:

> ***"The Secretary shall not issue a permit for any solid waste facility larger than five hundred acres."***

The CRLF facility boundaries are shown on Figure IV.1.1. The site encompasses approximately 480 acres in Sections 12 and 13, Township 29 South, Range 3 East of the New Mexico Principal Meridian (United States Geological Survey (USGS), Smeltertown, TX-NM 7.5-minute Quadrangle Topographic Map). The facility boundary remains consistent with the facility boundary included in the current permit. The southern boundary of the site runs parallel to and 60 feet north of the international boundary zone between the United States and Mexico. Detailed information regarding the property survey is provided in Volume I, Attachment 1.3-A.

3 FLOODPLAINS, WETLANDS AND WATERCOURSES

20.9.4.9.A(1) NMAC states that:

> ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is in a floodplain, within 500 feet of a wetlands, or within 200 feet of a watercourse."***

3.1 Floodplains

A floodplain is defined in 20.9.2.7.F(2) NMAC as:

> ***"the lowland and relatively flat areas adjoining inland and coastal water that are inundated by the 100 year flood. The 100 year flood has a one percent chance of recurring in any given year or a flood or a flood of magnitude equaled or exceeded once in 100 years on the average over a significantly long period."***

As shown on Figure 4.5 in Volume III, Section 8, the landfill boundary is located over 200 feet from the 100-year floodplain as defined by the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) for Doña Ana County, New Mexico and incorporated areas (Map Number 35013C1925G).

In addition, Goshawk Environmental Consulting, Inc. (Goshawk) performed a waters of the U.S. (WATERS) determination in January 2020 (included as Attachment IV.1-A) to demonstrate compliance with the floodplain location restriction. The WATERS determination indicates the entire CRLF site lies within areas outside the special flood hazard area. The nearest mapped floodplain is Zone A (1% annual chance of flood hazards) and is located 0.75 miles northeast of the site.

3.2 Wetlands

Wetlands are defined in 20.9.2.7.W(5) NMAC as:

> ***"those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal***

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

A review of the United States Fish & Wildlife Service's current National Wetlands Inventory (NWI) Map for the CRLF vicinity performed by Goshawk as part of their WATERS determination indicates that there are not any potential WATERS on the CRLF facility property. The closest mapped potential WATERS is the Rio Grande which is riverine, intermittent, streambed, seasonally flooded, and excavated ($R45BC_x$). As shown on Figure 6 in Attachment IV.1-A, the Rio Grande is located more than 500 feet from the site. Therefore, no portion of the CRLF disposal area is located within 500 feet of a wetland.

3.3 Watercourses

Watercourse is defined by 20.9.2.7.W(2) NMAC as:

"any river, creek, arroyo, canyon, draw, or wash, or any other channel having definite banks and beds, with visible evidence of continuous or intermittent flow of water."

Based on inspection of aerial orthoimagery and field investigation, Goshawk determined no potential WATERS are indicated within the site boundaries. In addition, based on USGS topographic map (Figure 2 in Attachment IV.1-A) and aerial orthoimagery (Figure 3 in Attachment IV.1-A), CRLF is not located within 200 feet of any watercourses.

4 DEPTH TO WATER TABLE

20.9.4.9.A(2) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is where the top of the uppermost aquifer will be closer than 100 feet to the bottom of the fill, or for construction and demolition landfills that do not accept more than 25 tons per day annual average, where the top of the uppermost aquifer will be closer than 50 feet to the bottom of the fill."***

20.9.2.7.W(3) NMAC defines "water table" as:

> ***"that surface in unconfined ground water at which the pressure is atmospheric; defined by the levels at which water stands in wells that penetrate the water just far enough to hold standing water."***

Waste disposal units at the CRLF are designed with a minimum depth to groundwater separation of 160 feet. The CRLF has a groundwater monitoring network consisting of seven wells (MW-A, MW-B, MW-D2, MW-E, MW-F, MW-G, and MW-H) that have been used to establish groundwater elevation on a semi-annual basis since 1989. Groundwater monitoring wells MW-A, MW-B, and MW-D were installed by Eldredge Engineering Associates, Inc., in 1988 and 1991. Groundwater monitoring wells MW-E, MW-F, and MW-G were completed by Daniel B. Stephens & Associates (DBS&A) in 1995. Wells MW-D2 and MW-H located in the Unit 3 area were completed by Gordon Environmental in 2006. MW-D was decommissioned due to waste filling progression into Unit 3. Upgradient monitoring data is being collected from replacement MW-D2. Figure V.2.2 in Volume V, Section 2 (Groundwater Contour Map) shows groundwater contours from the measurements taken on May 21-22, 2019. Volume V, Section 1, Hydrogeology provides detailed descriptions of the regional and site-specific subsurface soil and groundwater conditions.

5 SUBSURFACE MINES

20.6.4.9.A(3) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is where new, abandoned, or exploration subsurface mines registered with the New Mexico department of energy, minerals and natural resources may pose a risk of subsidence or instability."***

Subsurface mines are not present at the CRLF site. The Mines, Mills & Quarries in New Mexico map (Figure IV.1.2) provided by the NM Bureau of Mines and Mineral Resources Department (NMBMWR) indicates that the closest surface mining site is Eagle Mine/Mill, a clay/shale/brick/crushed rock operation located approximately 3 miles east of the CRLF.

6 HOLOCENE FAULTS

20.9.4.9.A(4) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within 200 feet of a fault that has had a displacement within Holocene time (i.e., the past 11,000 years), unless the owner or operator demonstrates the secretary that an alternative setback of less than 200 feet will prevent damage to the structural integrity of the facility and will be protective of public health, welfare and the environment."***

Based on the Quaternary Folds and Faults Map (Figure IV.1.3) obtained from USGS open file report 98-521, the CRLF is not located within 200 feet of a fault that has experienced displacement within Holocene time (i.e., the last 11,000 years). Additional discussion regarding faulting in the region is provided in Volume V, Section 1.

7 ARCHAEOLOGICAL SURVEYS

20.9.4.9.A(5) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Sections 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 18-8-1 to 188-8."***

CRLF has a robust history of archaeological surveys being conducted for the site, including a 1988 survey by the University of New Mexico's Office of Contract Archaeology (OCA), a 1995 survey by the OCA, and a 2005 survey by Quivira Research Center (QRC). In addition, CRLF routinely coordinates with the State Historic Preservation Division (HPD) to ensure clearance of any potential archaeological sites identified in the survey.

As part of this Application for Permit Modification and Renewal, Goshawk Environmental, Inc. performed an archaeological survey for the entire CRLF site on December 27 and 28, 2019. The archaeological report (NMCRIS Activity #145264), included as Attachment IV.1-D, provides the results of the survey conducted for the 19.52 hectares (48.24 acres) site. As part of the 100 percent pedestrian survey, two previously recorded prehistoric archaeological sites (LA 67691 and LA 67692) were revisited. The site boundaries for both sites were expanded from those presented in the original recorder's report. No new archaeological sites were identified during the current survey; however, new features were discovered. This survey was submitted to the State of New Mexico Department of Cultural Affairs Historic Preservation Division (NMHPD) on August 17, 2020.

Attachment IV.1-D also includes an August 27, 2020 response from the NMHPD recommending that a testing/data recovery plan be written and submitted for review regarding the two sites identified by the Survey and located in Unit 4. Prior to development of Unit 4, CREC will submit the required testing/data recovery plan to the NMHPD for review and approval. NMHPD approval will be obtained prior to development of areas containing archaeological sites identified by the Survey. In the interim, the referenced archeological sites will be protected with fencing as requested by NMHPD.

8 DISTANCE TO WATER WELLS

20.9.4.9.A(6) NMAC and 20.9.4.9.A(7) NMAC state that *"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within 1000 feet of a public water supply well or a private drinking water supply well with a sustainable yield of 100 gallons per minute of more, or within 350 feet of a public water supply or private well with a maximum sustainable yield of less than 100 gallons per minute."*

The CRLF disposal area is not located within 1,000 feet of any known public or private water supply well. The New Mexico Water Rights Reporting System (NMWRRS) database, maintained by the NM Office of the State Engineer (NMOSE), was reviewed to identify water supply wells near CRLF. As shown on Figure IV.1.4, there are a number of wells in proximity to the CRLF. Well LRG-07366 is approximately 1,820 feet from the property boundary; however, all water rights associated with this well were transferred in 1993 to another water well. Therefore, there are no water rights associated with this well. Well L2G-06307 is approximately 2,530 feet from the property boundary, but there is no current water right tied to this well. Well LRG-06638 was permitted (permit expired in 1987) but never drilled due to poor water quality in the area. Well LRG-15728-P0D1 is located approximately 300 feet from the property boundary but well over 1,000 feet from the disposal area. This well was plugged in March of 2014. Well LRG-06726 serves as the site's water well supply and is primarily used in operations and for dust control. Well LRG-06726-S is owned by the CRLF but does not have any recent meter records. Based on this information gathered from the NMOSE, the CRLF solid waste disposal boundary is not located within 1,000 feet of a public or private drinking water supply well with a sustainable yield of 100 gallons per minute (gpm) or more; and is not located within 350 feet of a public or private drinking water well with a sustainable yield of less than 100 gpm.

9 DISTANCE TO AIRPORTS

20.9.4.9.A(8) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within the distance to airports set by the federal aviation administration unless the landfill owner or operator demonstrates that the federal aviation administration does not object to construction and operation of the landfill at the proposed site."***

The applicable NMAC, EPA, and FAA regulations were reviewed to determine compliance with airport location restrictions as documented in the FAA notice letter included in Attachment IV.1-C. There are no airports located within the distance to airports set by the FAA of the CRLF, as indicated on the Airport Location Map (Figure IV.1.5) reproduced from the FAA El Paso Sectional Aeronautical Chart 103rd Edition dated July 18, 2019. The nearest public use airport is the Doña Ana County Airport at Santa Teresa, NM, located approximately 7.5 miles northwest of the CRLF facility.

CRLF is required to file notice with the FAA in accordance with CFR Title 14 Part 77.9(a) which requires any construction or alteration that is more than 200 feet above ground level to file notice with the FAA. Demonstration of compliance with the requirements of CFR Title 14 Part 77.9 is included in Attachment IV.1-C. In addition, because of the topography of the site, a potential for wildlife hazard determination was requested as documented in Attachment IV.1-C.

Notice was filed on March 5 and March 12, 2020 via the FAA online obstruction evaluation portal, and the FAA made a "no hazard to air navigation" determination on June 8, 2020. A request for wildlife hazard determination was submitted on March 12, 2020, and the FAA issued a letter of no objection on June 8, 2020.

10 DISTANCE TO STRUCTURES

20.9.4.9.A(9) NMAC states that *"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within 50 feet of the facility property boundaries nor within 500 feet of a permanent residence, school, hospital, institution or church."*

The Land Use Setbacks aerial photo provided as Figure IV.1.6 identifies the CRLF site boundary, solid waste disposal limits, and the required setbacks. In comparison to the setback distances approved in the 2008 permit application, setbacks on the west, south, and north sides of the site have remained consistent. Setbacks to the southeast, northeast, and northwest have actually been increased, providing a greater physical buffer between the landfill and the communities located north of the facility and minimizing noise potential while also maintaining more than the minimum required setback distance (i.e., 50 feet). The setback to the east has been slightly modified but maintains more than the required setback distance (i.e., 50 feet). The undeveloped disposal areas, including Unit 3 and Unit 4, are not within 50 feet of the facility property boundary as shown on Figure IV.1.6. In addition, the CRLF disposal areas are not located within 500 feet of a permanent residence, school, hospital, institution or church. Currently, the closest permanent residence (Desert View Elementary School) is approximately 800 feet northeast of the CRLF facility boundary.

11 ACTIVE ALLUVIAL FANS

20.9.4.9.A(10) NMAC states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is in an active alluvial fan (i.e., areas being currently aggraded by either permanent or intermittent streams."***

20.9.2.7.A(6) NMAC defines alluvial fan as:

> ***"a low, outspread, relatively flat to gentle sloping mass of loose sediment, shaped like an open fan or a segment of a cone, deposited by a stream at a place where it issues from a narrow mountain valley upon a plain or broad valley."***

The CRLF facility is not located in an area of active alluvial fans. Site inspections and examination of the USGS Quadrangle Map of Smeltertown, New Mexico (Volume I, Attachment I.2-C) indicate that the site does not possess any requisite characteristics. In addition, Section 3 discusses the absence of watercourses at and within 200 feet of the site. Areas distant from the site containing alluvial fan sediments are identified in Volume V, Section 1.

12 THREATENED AND ENDANGERED SPECIES

20.9.4.9.A(11) NMAC states that *"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within areas that will result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in either 50 CFR Part 17 or by the New Mexico department of game and fish in its most recent biennial review."*

The CRLF is not located where any portion of the disposal area is within areas that will result in the destruction or adverse modification of the critical habitat of threatened and endangered species. Weaver Boos Consultants, LLC–Southwest conducted a threatened and endangered species field survey for the CRLF site in November 1995 as reported in the 1998 CRLF Permit Application. Results of the survey indicated that the CRLF facility was not considered a critical habitat for any listed threatened and endangered species of plants or animals.

Metric Corporation conducted a T&E survey on the CRLF site in October 2005 that focused on 115 acres including the entire Unit 3 area. This survey found no T&E species present in or around the surveyed property.

As part of this Application for Permit Modification, Goshawk Environmental Consulting, Inc. performed a Threatened and Endangered Species Habitat Assessment included as Attachment IV.1-B. Based on their assessment, Goshawk concluded the CRLF does not provide habitat for, and would not likely be occupied by, any federally or state listed threatened or endangered species. In addition, as part of this assessment, an IPaC Trust Resource Report was requested from the U.S. Fish and Wildlife Service (USFWS) to provide a list of threatened and endangered species that may occur in the project area. The USFWS determined that there are no critical habitats within the project area.

13 SEISMIC IMPACT ZONES

20.9.4.9.A(12) states that ***"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within seismic impact zones, unless the owner or operator demonstrates that all containment structures, including liners, leachate collection systems, and surface water control systems, designed to resist the maximum horizontal acceleration in lithified earth material for the site."***

20.9.2.7.S(4) NMAC defines seismic impact zones as:

> ***"an area with 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years".***

CRLF is located in a potential seismic impact zone as defined by 20.9.2.7.S(4) NMAC based on USGS mapping. The Seismic Impact Zones Map, included as Figure IV.1.7, indicates the potential maximum horizontal acceleration exceeds 0.1 g in 250 years within the vicinity of the site.

Siting within the defined seismic impact zones requires that environmental control systems are "designed to resist the maximum horizontal acceleration in lithified earth material for the site." Slope stability analysis calculations provided in Volume III, Section 3 demonstrate that each of the environmental containment structures is designed accordingly.

14 UNSTABLE AREAS

20.9.4.9.A(13) NMAC states that *"no municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is within an unstable area, unless the owner or operator demonstrates that engineering measures have been incorporated into the landfill design to ensure that the integrity of the structural components of the landfill will not be disrupted."*

20.9.2.7.U NMAC defines "unstable area" as:

> ***"a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Examples of unstable areas are poor foundation conditions, areas susceptible to mass movements, and Karst terrain areas where Karst topography, with its characteristic surface and subterranean features, is developed as a result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in Karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys."***

Unstable areas include poor foundation conditions, areas susceptible to mass movements, and Karst terrain areas (20.9.2.7.U NMAC), and each is addressed below.

14.1 Poor Foundation Conditions

20.9.2.7.P(4) NMAC defines "poor foundation conditions" as:

> ***"those areas where features exist which indicate that a natural or man-made event may result in inadequate foundation support for the structural components of the landfill."***

The CRLF is not located within an unstable area as defined by 20.9.2.7.V NMAC. Results of subsurface investigations of the site performed in 1989, 1990, 1995, 2005, and 2006 indicate that the foundation of the landfill is constructed in Santa Fe Group deposits. Based on borings advanced on-site and the regional geological

database, these deposits are in excess of 4,000 feet thick and are considered to be neither compressible nor low in shear strength. In addition, settlement calculations and a slope stability analysis have been performed for the site and can be found in Volume III, Section 2 and Section 3, respectively.

14.2 Areas Susceptible to Mass Movements

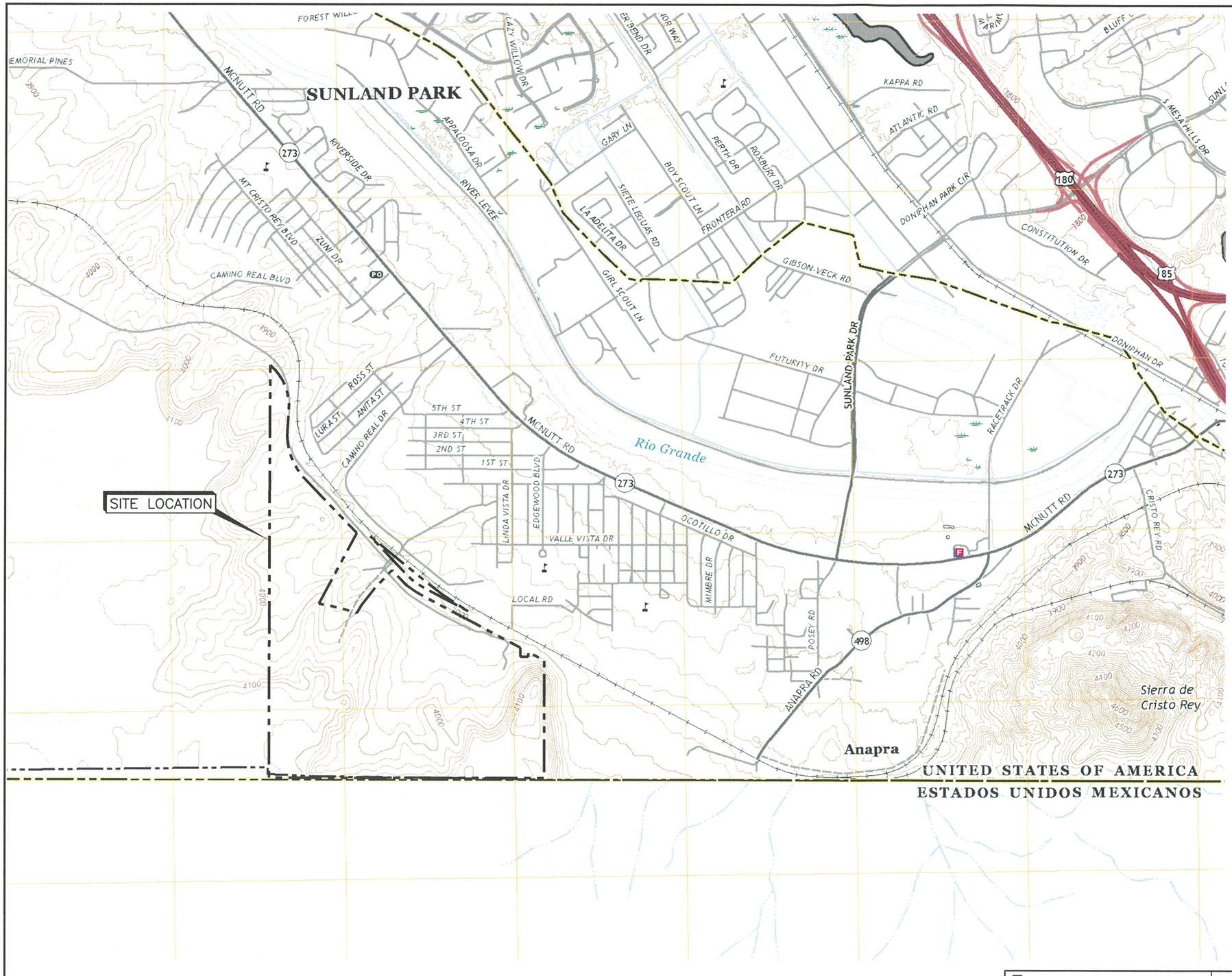
20.9.2.7.A(9) NMAC defines "areas susceptible to mass movement" as:

> ***"those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides or flows, solifluction, block sliding, and rock fall."***

Visual inspections by qualified professionals of the landfill site during surface and subsurface investigations, as well as review of applicable published maps and literature, indicate no landslide deposits and no evidence of circular, planar, or wedge-type mass movements of earth material. Therefore, CRLF is not located in an area susceptible to mass movements.

14.3 Karst Terrain Areas

There is no evidence for karst terrain in the vicinity of the CRLF based on regional data (as demonstrated on Figure IV.1.8) acquired from USGS Open File Report 2004-1352 and focused site inspections and investigations. Karst is the term used to describe the surface expression of soluble limestone, dolomite, or gypsum areas where the roofs of caves collapse to create sinkholes. Paleozoic deposits are not found in the site vicinity, and karst terrain is not evident in the area.



NOTES:

1. BASED ON SMELTERTOWN, 2019 USGS QUADRANGLE 7.5' MAP.
2. GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE: 31° 47' 22.67" N. 106° 35' 34.41" W.

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CAD: IV.1.1-SITE LOCATION.DWG

DRAWN BY: JDW
DESIGN BY: KRB
REVIEWED BY: JVQ

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SITE LOCATION MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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FIGURE IV.1.1

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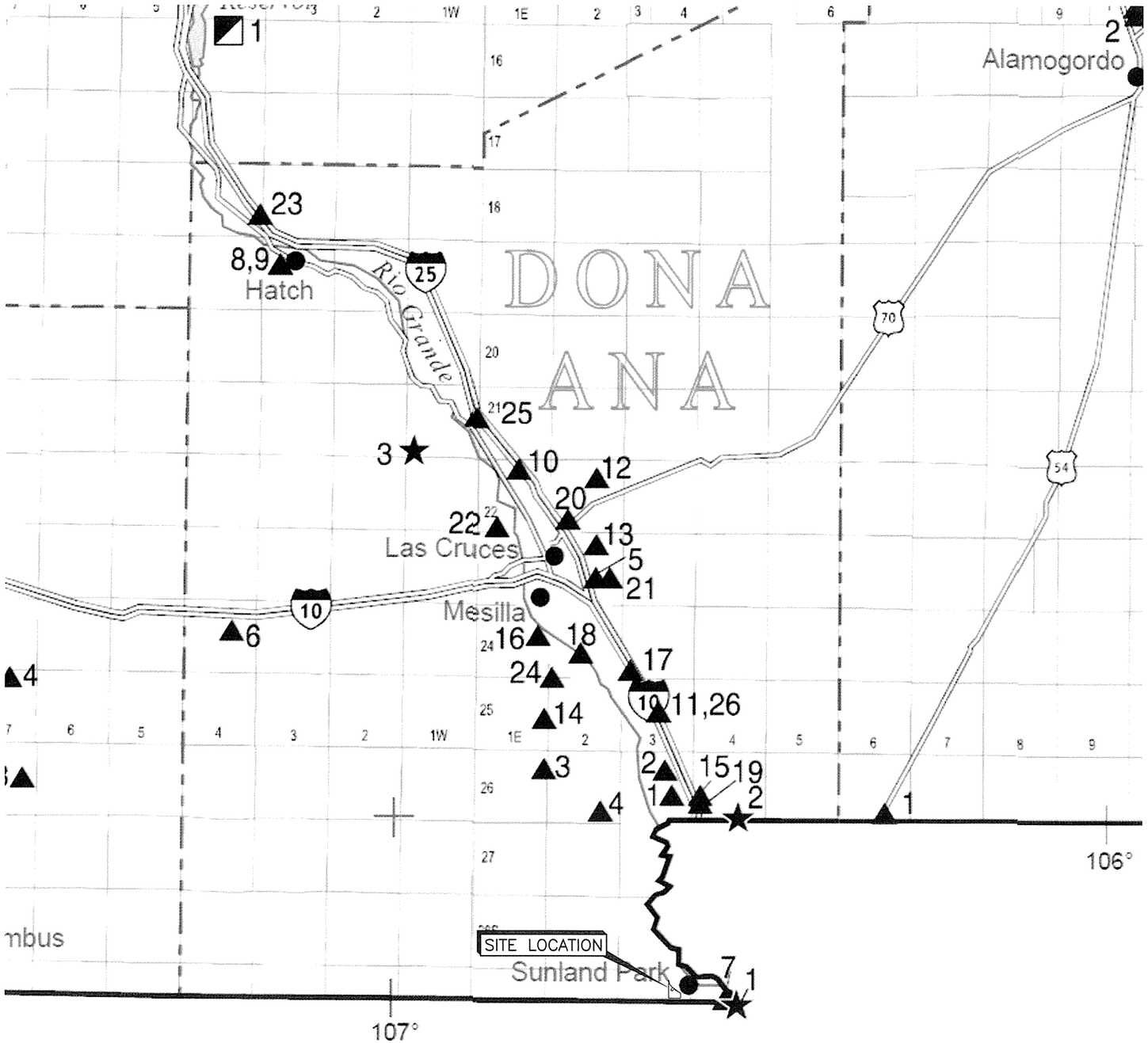
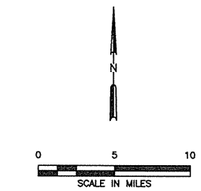
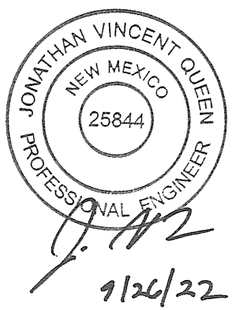
O:\0601\667\EXPANSION 2019\VOLUME 4\PART IV\IV-1-1-SITE LOCATION.dwg, sfor4, 1:2





LEGEND

- ▲ Aggregate and stone mining
- ◊ Coal mining
- ★ Industrial minerals, mining, and milling
- ◪ Metals
- ■ Potash mining and milling
- □ Smelters, converters, and refineries
- ♦ Uranium mining and milling



NOTES:

1. REPRODUCED "MINES, MILLS, AND QUARRIES IN NEW MEXICO" NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES (2001).

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DATE: 07/2022
FILE: 0601-667-11
CAD: IV.1.2 MINES MILLS.DWG

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DESIGN BY: KRB
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REVISIONS

NO.	DATE	DESCRIPTION

MINES, MILLS, AND QUARRIES

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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FIGURE IV.1.2

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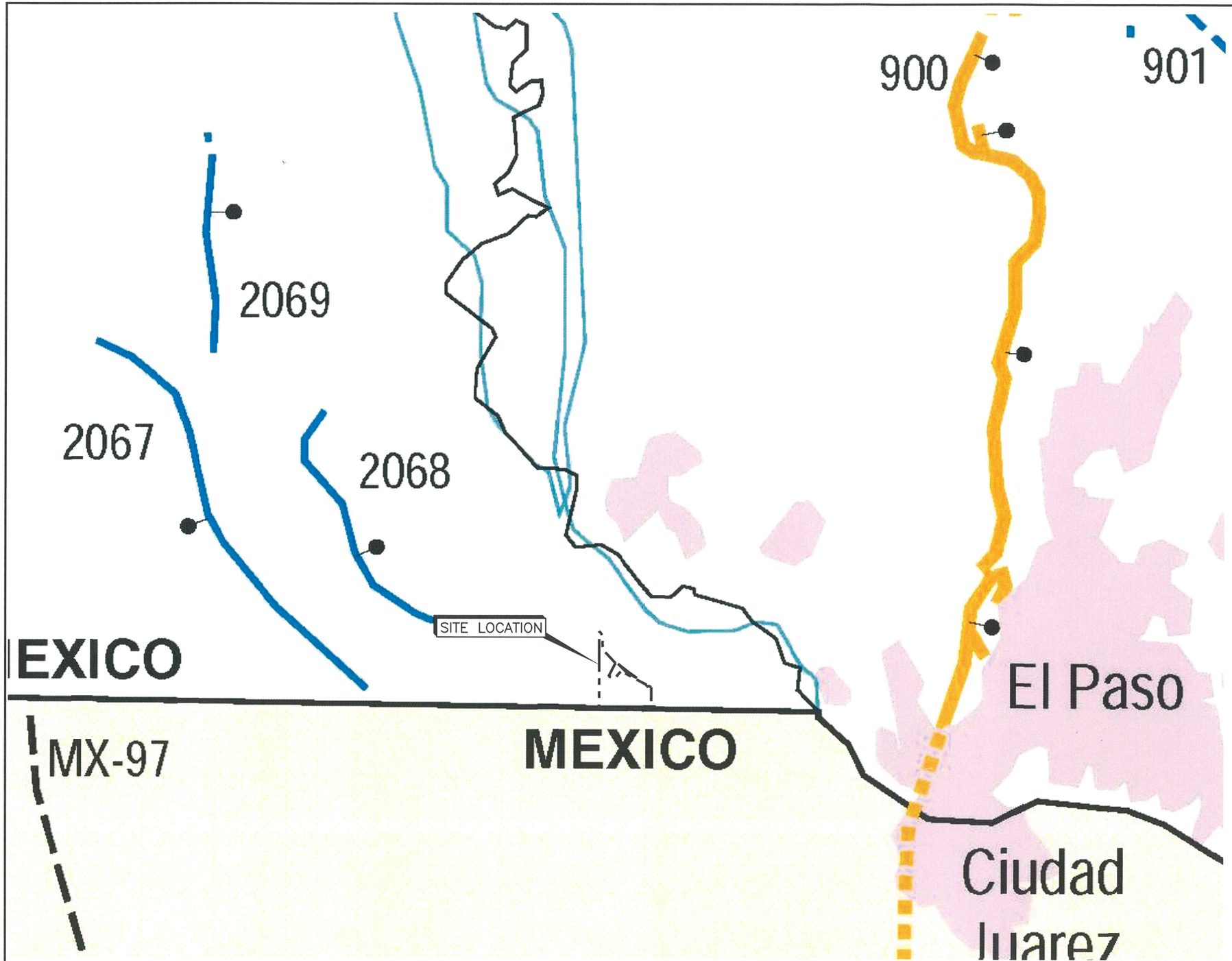
O:\0601\667\EXPANSION 2019\VOLUME 4\PART IV\IV-1-2 MINES MILLS.dwg, sford, 1:2



N

0 1 2
SCALE IN MILES

LEGEND

PROPERTY BOUNDARY

Holocene (<10,000 years) or post last glaciation (<15,000 years)

Late Quaternary (<130,000; post penultimate glaciation)

Late and middle Quaternary (<750,000 years)

Area of no Quaternary faults or area unmapped

METROPOLITAN AREA

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PROFESSIONAL ENGINEER
9/26/22

NOTES:

1. FAULT DATA OBTAINED FROM USGS OPEN FILE REPORT OFR 98–521 (DIGITAL VERSION) MAP OF QUATERNARY FAULTS AND FOLDS IN NEW MEXICO, 1998.

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QUATERNARY FAULTS AND FOLDS MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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FIGURE IV.1.3

O:\0601\667\EXPANSION 2019\VOLUME 4\PART I\IV-1-3 FAULTS AND FOLDS.dwg, sford, 1:2

N

0 500 1000
SCALE IN FEET

LEGEND

PROPERTY BOUNDARY

WATER WELL LOCATION (SEE NOTE 2)

NOTES:

1. AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH IN JANUARY 2020.
2. WATER WELL INFORMATION REPRODUCED FROM NM OSE WATER WELL ESRI SHAPE FILE.

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DATE: 07/2022
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CAD: IV-1-4 WATER WELL.DWG

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WATER WELL LOCATION MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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FIGURE IV.1.4

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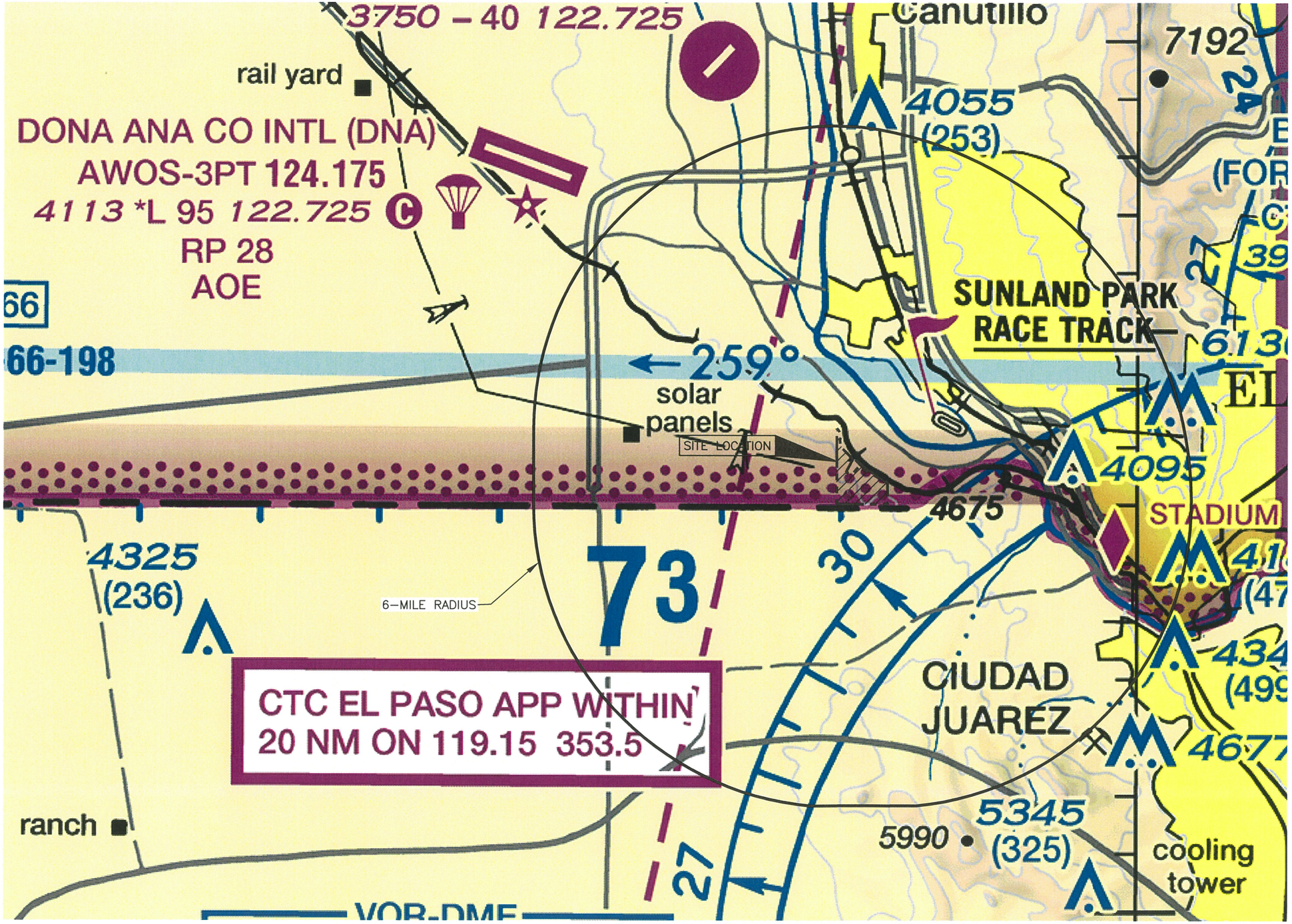
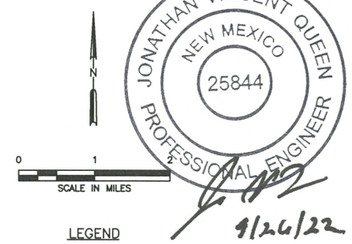
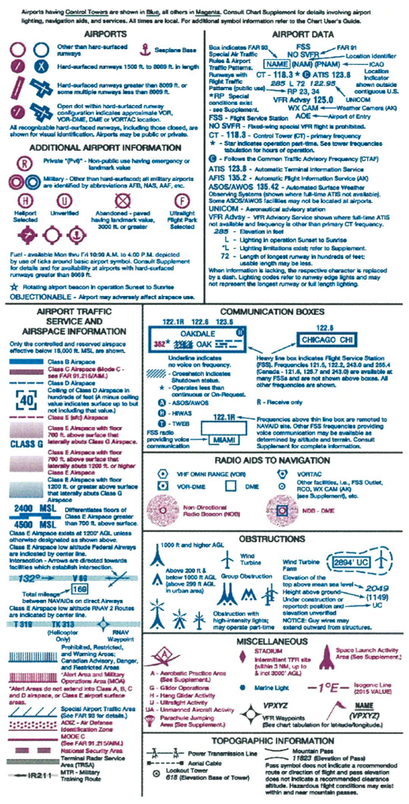
O:\0601\667\EXPANSION 2019\VOLUME 4\PART IV\IV-1-4 WATER WELL.dwg, sford, 1:2





LEGEND

PROPERTY BOUNDARY



NOTE:

1. THIS MAP REPRODUCED FROM THE FAA EL PASO SECTIONAL AERONAUTICAL CHART 103rd EDITION DATED JULY 18, 2019.

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DATE: 07/2022
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CAD: IV-1-5-AIRPORT LOCATION MAP.DWG

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AIRPORT LOCATION MAP

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FIGURE IV.1.5

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N

0 500 1000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE FOR UNIT 2
- PERMITTED LIMITS OF WASTE FOR UNIT 1 (CLOSED)
- ADJUSTED LIMITS OF WASTE FOR UNITS 3 AND 4

NOTES:

1. GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE: 31° 47' 22.67" N. 106° 35' 34.41" W.
2. AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH IN JANUARY 2020.

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CAD: IV-1-6 LAND USE SETBACKS.DWG

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LAND USE SETBACKS

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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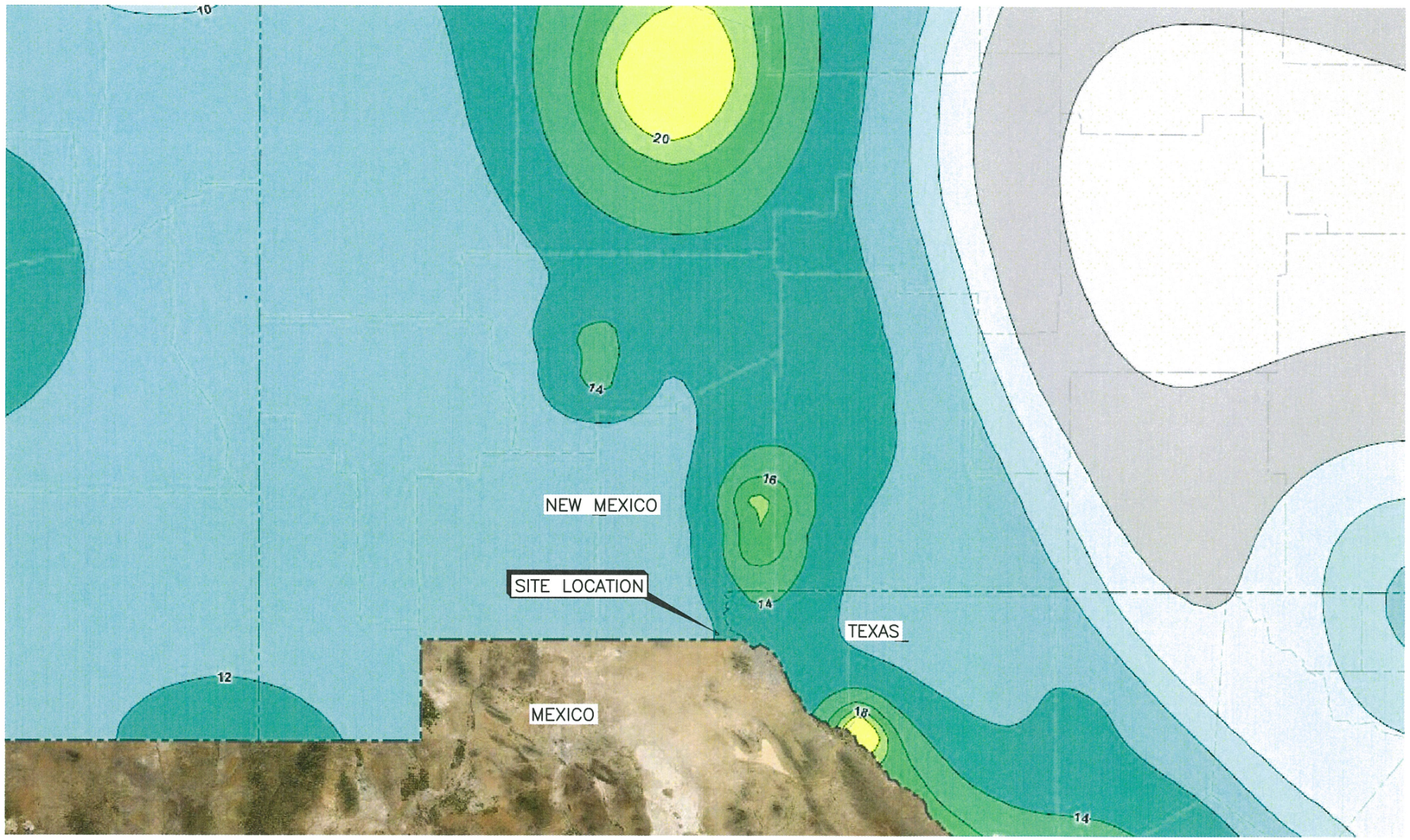
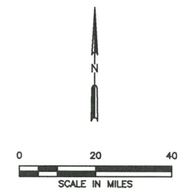
FIGURE IV.1.6

0:\0601\667\EXPANSION 2019\VOLUME 4\PART IV\IV-1-6 LAND USE SET BACKS.dwg, sford, 1:2





PGA (SEE NOTE 1)

- 160 - 200
- 120 - 160
- 80 - 120
- 60 - 80
- 50 - 60
- 40 - 50
- 30 - 40
- 20 - 30
- 18 - 20
- 16 - 18
- 14 - 16
- 12 - 14
- 10 - 12
- 8 - 10
- 6 - 8
- 4 - 6
- 2 - 4
- 0 - 2

NOTES:

1. PEAK GROUND ACCELERATION (PGA) WITH 10% PROBABILITY OF EXCEEDANCE IN 250 YEARS IS EXPRESSED AS A PERCENT OF GRAVITY.
2. SEISMIC DATA REPRODUCED FROM 2014 USGS NATIONAL SEISMIC HAZARD MAPPING PROJECT.

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DATE: 07/2022
FILE: 0601-667-11
CAD: IV.1.7 SEISMIC IMPACT.DWG

DRAWN BY: JDW
DESIGN BY: KRB
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SEISMIC IMPACT ZONES MAP

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FIGURE IV.1.7

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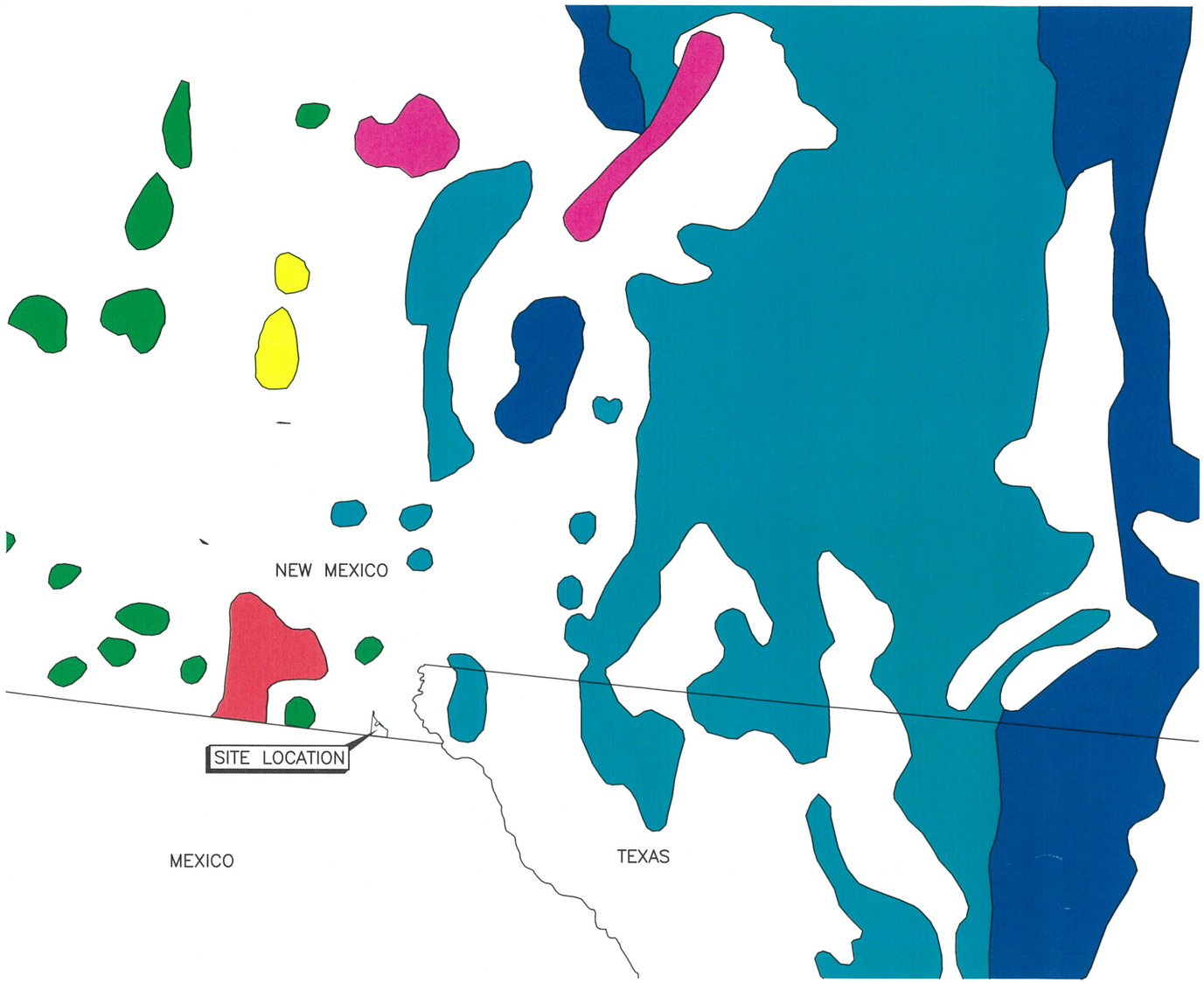

N

0 4 8
SCALE IN MILES

LEGEND

- IN GENTLY DIPPING TO FLAT–LYING BEDS OF CARBONATE ROCK
- FISSURES, TUBES AND TUNNELS PRESENT TO A DEPTH OF 250 FT (75M) OR MORE IN LAVA
- IN GENTLY DIPPING TO FLAT–LYING BEDS OF CARBONATE ROCK
- IN GENTLY DIPPING TO FLAT–LYING BEDS OF GYPSUM
- FISSURES, TUBES AND TUNNELS PRESENT TO A DEPTH OF 50 FT (15M) OR MORE IN LAVA
- IN GENTLY DIPPING TO FLAT–LYING CARBONATE ROCK

NOTES:

1. MAP REPRODUCED FROM USGS OPEN FILE REPORT 2004–1352, ENGINEERING ASPECTS OF KARST, NATIONAL ATLAS GIS DATA.

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CAD: IV–1–8 KARST GIS.DWG

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KARST TERRAINS MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

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FIGURE IV.1.8

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O:\0601\667\EXPANSION 2019\VOLUME 4\PART IV\IV-1-8 Karst GIS.DWG, sford, 1:2

ATTACHMENT IV.1-A

GOSHAWK ENVIRONMENTAL CONSULTING, INC. – WATERS OF THE U.S. DETERMINATION

GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

9 March 2020

Mr. Jonathan Queen
Weaver Consultants Group, LLC
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109

RE: Waters of the US Determination
Camino Real Landfill Site
Doña Ana County, New Mexico

Dear Mr. Queen:

Goshawk Environmental Consulting, Inc. (Goshawk) performed a Waters of the US (WATERS) determination of the Camino Real Landfill Site in Doña Ana County, New Mexico. The purpose of this investigation was to evaluate whether the site contained WATERS, the approximate size and location of any WATERS, and associated development constraints, if applicable. Figures and photographs are provided in Appendix A and B.

1.0 INTRODUCTION

The Camino Real Landfill Site encompasses approximately 480 acres in Sunland Park, Doña Ana County, New Mexico (Figure 1). More specifically, the site is located at the southern terminus of Camino Real Drive, approximately 1 mile south of its intersection with State Road 273. The irregular-shaped site is situated within portions of Sections 12 and 13 of Township 29S, Range 3E. The site is bordered by open rangeland to the east and west, Mexico to the south, and a railroad to the north. Generally, the site consists of undeveloped rangeland and municipal solid waste disposal areas.

2.0 WATERS DETERMINATION

2.1 REGULATORY BACKGROUND

WATERS are regulated by the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA). This WATERS determination includes a resource review and field investigation to determine if the site contains any features subject to USACE jurisdiction. The jurisdictional status of identified features is determined based on 33 CFR 328.3(a), along with the USACE–Environmental Protection Agency (EPA) joint guidance on CWA jurisdiction following the US Supreme Court's decision in *Rapanos v. United States* and *Carabell v. United States*.

Current guidance states that the USACE and EPA and will assert jurisdiction over (1) traditionally navigable waters (TNWs) and all wetlands adjacent to TNWs; (2) relatively permanent waters (RPWs), which include non-navigable tributaries of TNWs that typically flow year-round or have continuous flow at least seasonally, and all wetlands that are directly abutting RPWs; and (3) other water bodies such as non-RPWs, wetlands adjacent to non-RPWs, and wetlands adjacent to but not directly abutting an RPW that are analyzed and determined to have a significant nexus with a TNW. A significant nexus exists if the tributary, in combination with its adjacent wetlands,

has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW.

2.2 METHODOLOGY

The WATERS Determination consisted of a resource review, field investigation, and report of findings. The resource review was performed to gather site-specific information and evaluate the potential presence of WATERS within the site. The field investigation was then performed to further evaluate potential WATERS identified by the resource review and provide documentation to support the jurisdictional status of the WATERS. The field investigation was performed in accordance with USACE guidelines utilizing the *Corps of Engineers Wetlands Delineation Manual – Technical Report Y-87-1* (January 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) – ERDC/EL TR-08-28* (September 2008). Goshawk utilized a handheld GPS and aerial orthoimagery to determine the approximate boundary, size, and location of each feature.

2.3 RESOURCE REVIEW

The resource review included inspection of the Smeltertown, New Mexico, 7.5-minute US Geological Survey (USGS) topographic quadrangle; National Agriculture Imagery Program (NAIP) digital aerial orthoimagery (2018); Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM) Community Panel Number 35013C1925G (dated 6 July 2016); the Natural Resource Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO); and National Wetland Inventory (NWI) data.

2.3.1 USGS Topographic Maps

The USGS topographic quadrangle (Figure 2) indicates the site is entirely within grasslands (white background). Elevations range from approximately 3,900 feet above mean sea level (AMSL) along the railroad to approximately 4,132 feet AMSL at the southeast corner of the site. Elevations slope upward toward mesas in the southeast and southwest portions of the site.

Overland sheet flow generally flows northeast toward the Rio Grande, which is approximately 0.8 miles northeast of the site. The site is within the Rio Grande watershed. The only potential WATERS indicated on the topographic quadrangle are numerous small water features mapped at the base of the mesas. No other water features or structures are indicated on the topographic map.

2.3.2 Aerial Imagery

The 2018 natural color aerial orthoimagery indicates the central portion of the site is barren hills, while the northwestern and southeastern portions are open rangeland (Figure 3). A network of roads is visible through the barren hills and on the mesas to the southeast. The barren hills have been used for disposal of municipal solid waste and have little to no vegetative cover. The rangeland areas can be generally described as sparsely vegetated desert shrubland. Several structures are noted in the northeast corner of the site. None of the water features indicated on the topographic map are visible on the aerial orthoimagery. No potential WATERS are indicated within the site boundaries on the aerial orthoimagery.

2.3.3 Floodplains

The FEMA DFIRM indicates the entire site lies within Zone X; areas outside special flood hazard area (Figure 4). The nearest mapped floodplain is Zone A (1% annual chance of flood hazard), located approximately 0.75 miles northeast of the site along the Rio Grande.

2.3.4 Soils

According to the NRCS SSURGO spatial data (Figure 5) soils present on the site by prevalence are Bluepoint loamy sand, 5-15% slopes (Bn); Bluepoint loamy sand, 0-5% slopes (Bm); Pajarito-Pintura complex (Pb); and Bluepoint-Caliza-Yturbide complex (BP). The Bluepoint loamy sands are located on the slopes and lower elevations within the northern portion of the site. Pajarito-Pintura complex occupies the mesas in the southeastern and southwestern portions of the site. The Bluepoint-Caliza-Yturbide complex is found on the steeper slopes just below the mesa tops. These soils are well drained with low runoff potential. None of the soils mapped within the site contain hydric components.

2.3.5 National Wetland Inventory (NWI)

The NWI map does not indicate any potential WATERS within the site (Figure 6). The closest mapped potential WATERS is the Rio Grande, which is riverine, intermittent, streambed, seasonally flooded, and excavated (R4SBCx).

FIELD INVESTIGATION

A field investigation was conducted on 28 December 2019 to determine the presence of potential WATERS within the Camino Real Landfill Site. The rangeland portions of the site were traversed on foot to adequately observe representative vegetative communities and any potential aquatic features.

Observed site conditions and structures were generally consistent with those depicted on the aerial orthoimagery. The barren hills in the central portion of the site contained very little to no vegetative cover (Photo 1). Vegetation within the rangeland portions of the site consisted of creosote, honey mesquite, ocotillo, yucca, Mormon tea, broom snakeweed, and desert sumac (Photo 2). The northeastern portion of the site consisted of rolling terrain. The southeastern portion of the site was a relatively flat mesa with steep side slopes (Photo 3).

POTENTIAL WATERS

No potential WATERS were identified within the rolling rangeland in the northwestern portion of the site. Most of the water features indicated on the topographic map at the base of the mesas were within the waste disposal areas and no longer existed as mapped. However, two water features still existed (Figure 7) and could be described as detention basins with relatively large berms (Photo 4 and 5). The existing features were dry and devoid of vegetation but contained significant amounts of loose sand (Photo 6). The observed lack of hydric vegetation suggested these features were dry during most growing seasons. Due to the lack of hydric vegetation and hydric soils, these features do not meet the criteria to be considered wetlands and would not be considered WATERS.

SUMMARY

Based on the information evaluated in the resource review and field observations at the Camino Real Landfill Site, it is Goshawk's opinion that no areas meet the criteria necessary to be considered regulated WATERS. Development of the site would not likely require notification to, or permitting from, the USACE.

It is important to note that only the USACE has the authority to make a formal determination, defining its jurisdictional limits under the CWA. Therefore, Goshawk's opinion should not be considered authoritative, and cannot wholly eliminate uncertainty regarding the USACE's jurisdictional limits. If there are any questions or additional information is required, please contact our office.

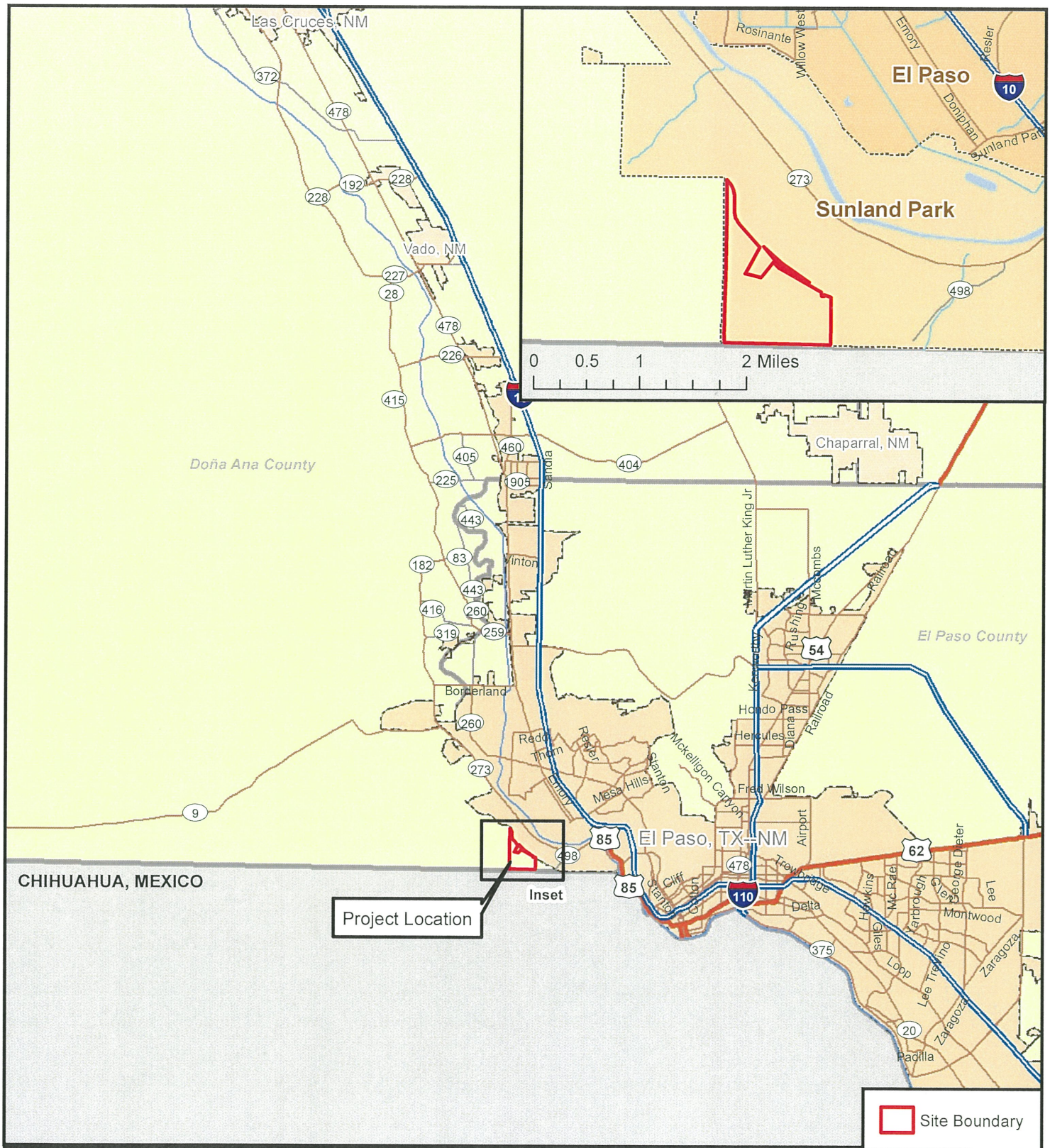
Sincerely,

Hannah Kuhl

Hannah Kuhl
Environmental Specialist

APPENDIX A

FIGURES



Map Source: ESRI, Maps and Data, USA Base Map, 2017, 10.6

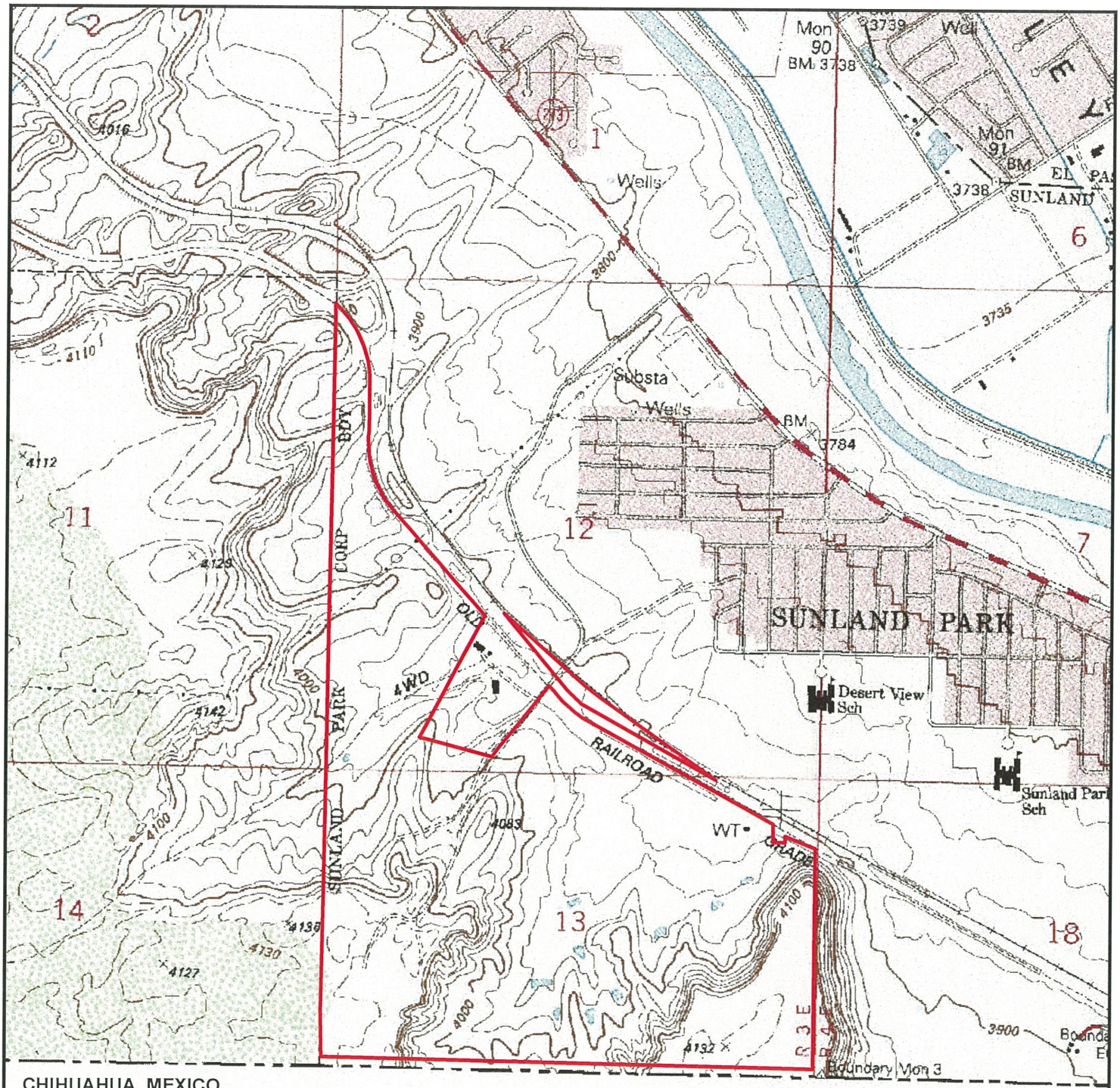
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 1
Vicinity

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020

Doña Ana County, New Mexico



Map Source: USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

N

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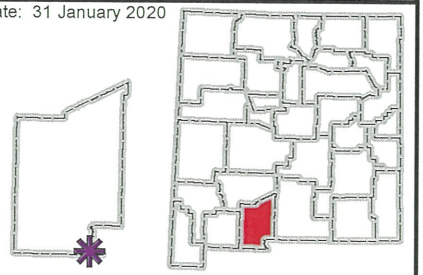
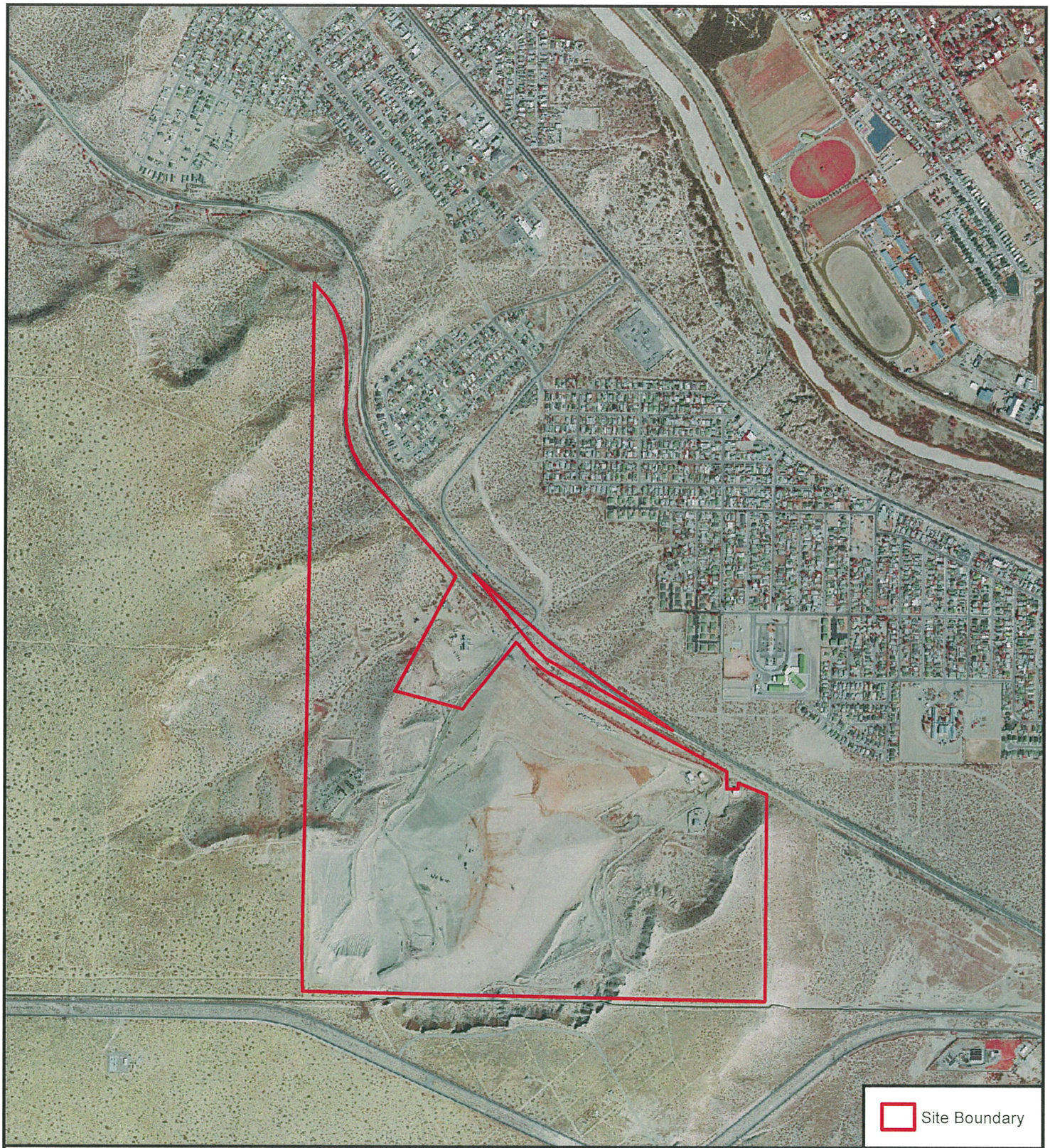
Figure 2
USGS Topographic

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018.

0 750 1,500 Feet

N

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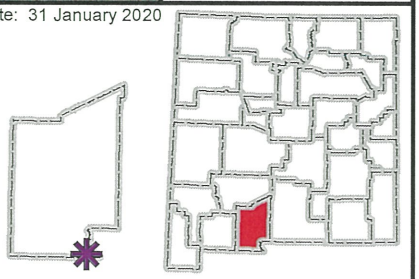
Figure 3
Aerial Orthoimagery

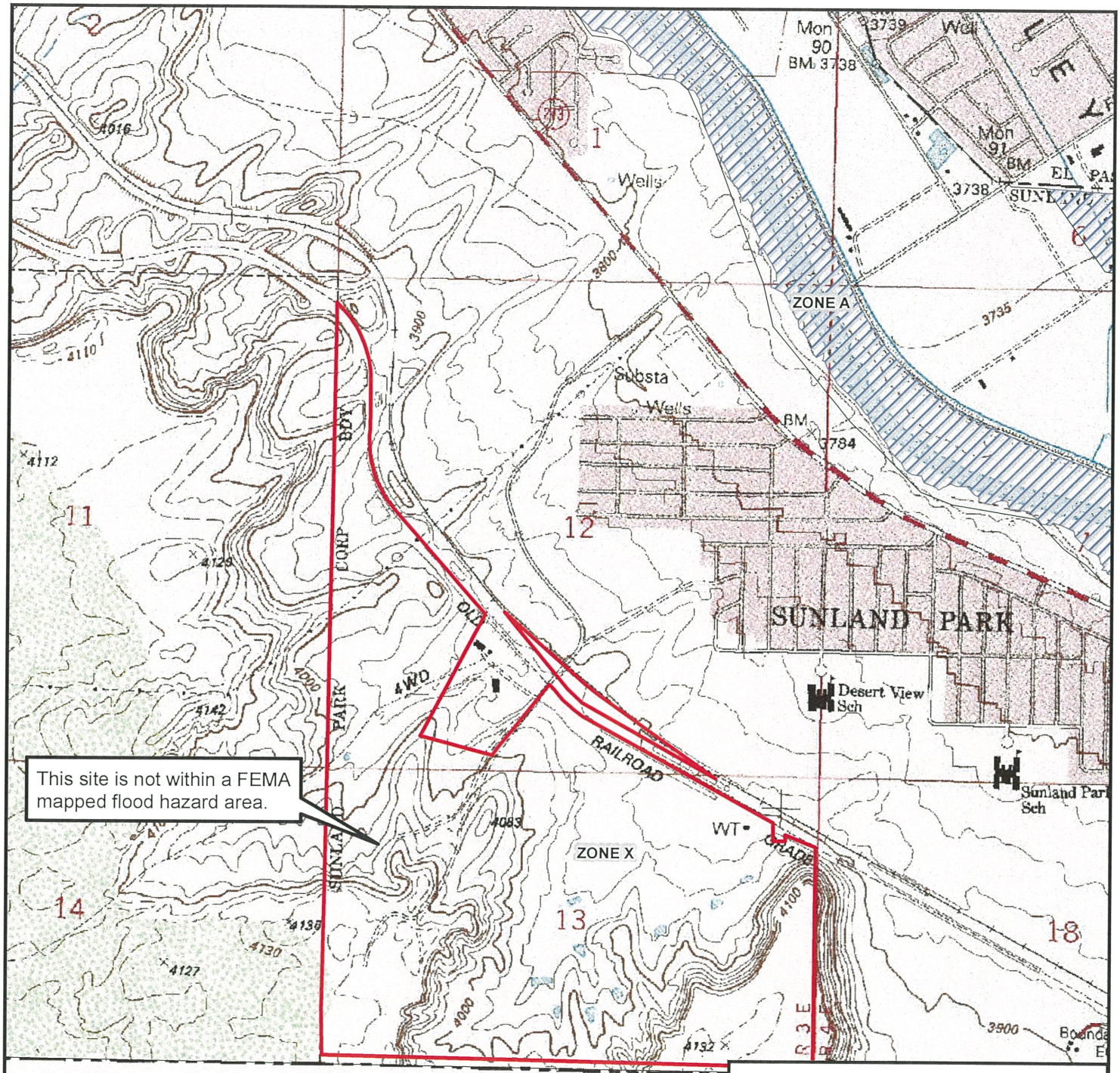
Camino Real Landfill Site

Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: FEMA, DFIRM Database, Doña Ana County, New Mexico; Panel #35013C1925G; Effective Date: July 06, 2016. USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

N

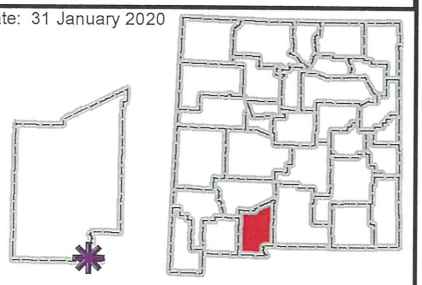
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 4
FEMA Floodplain

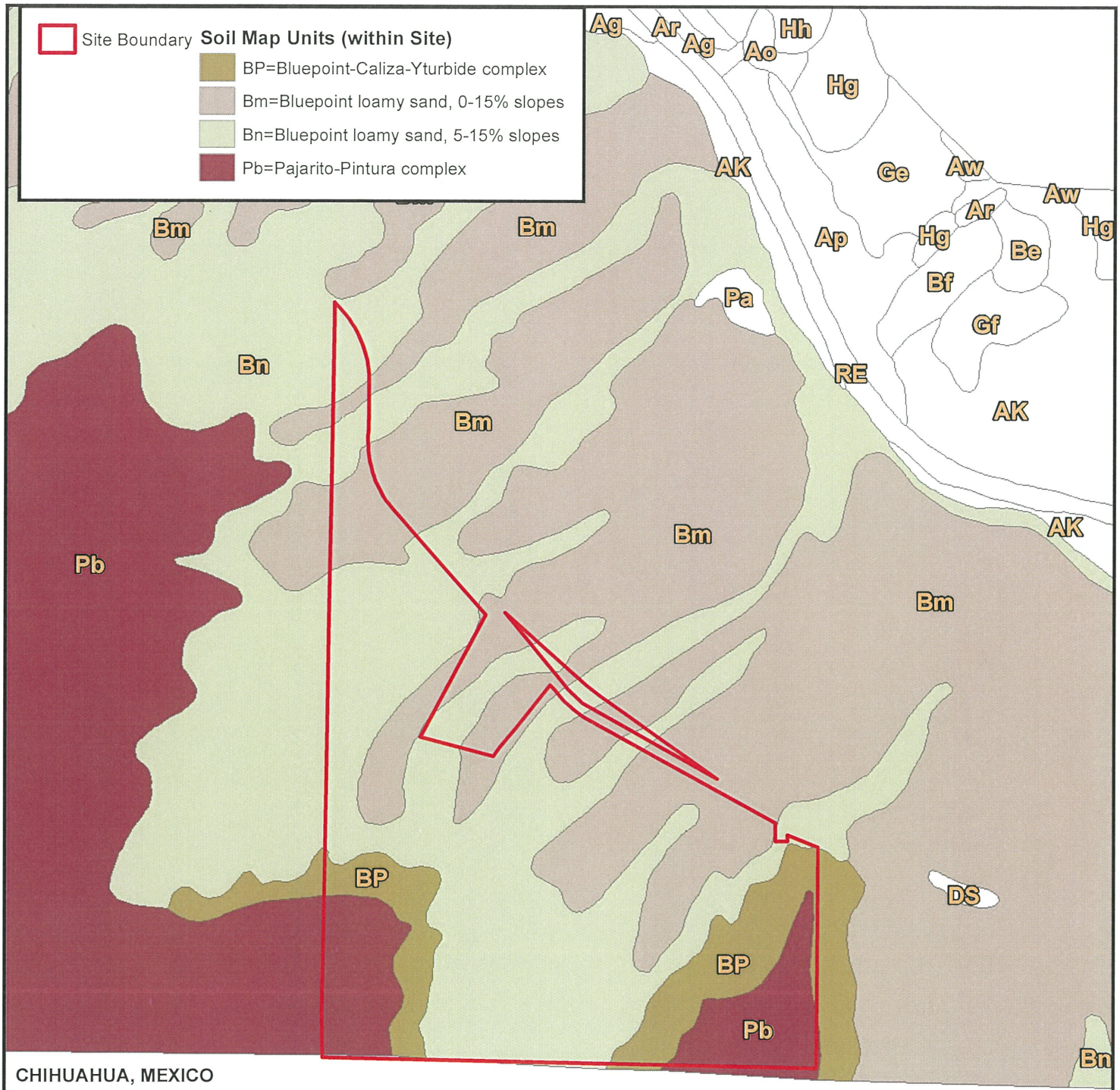
Camino Real Landfill Site

Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: USDA/NRCS - National Geospatial Center of Excellence. Soil Survey Geographic (SSURGO) Doña Ana County, New Mexico.

0 750 1,500 Feet

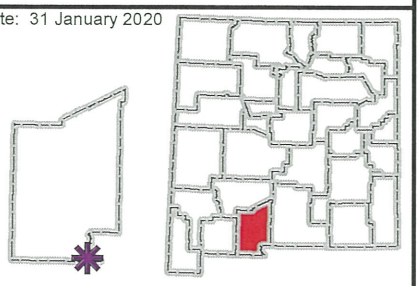
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

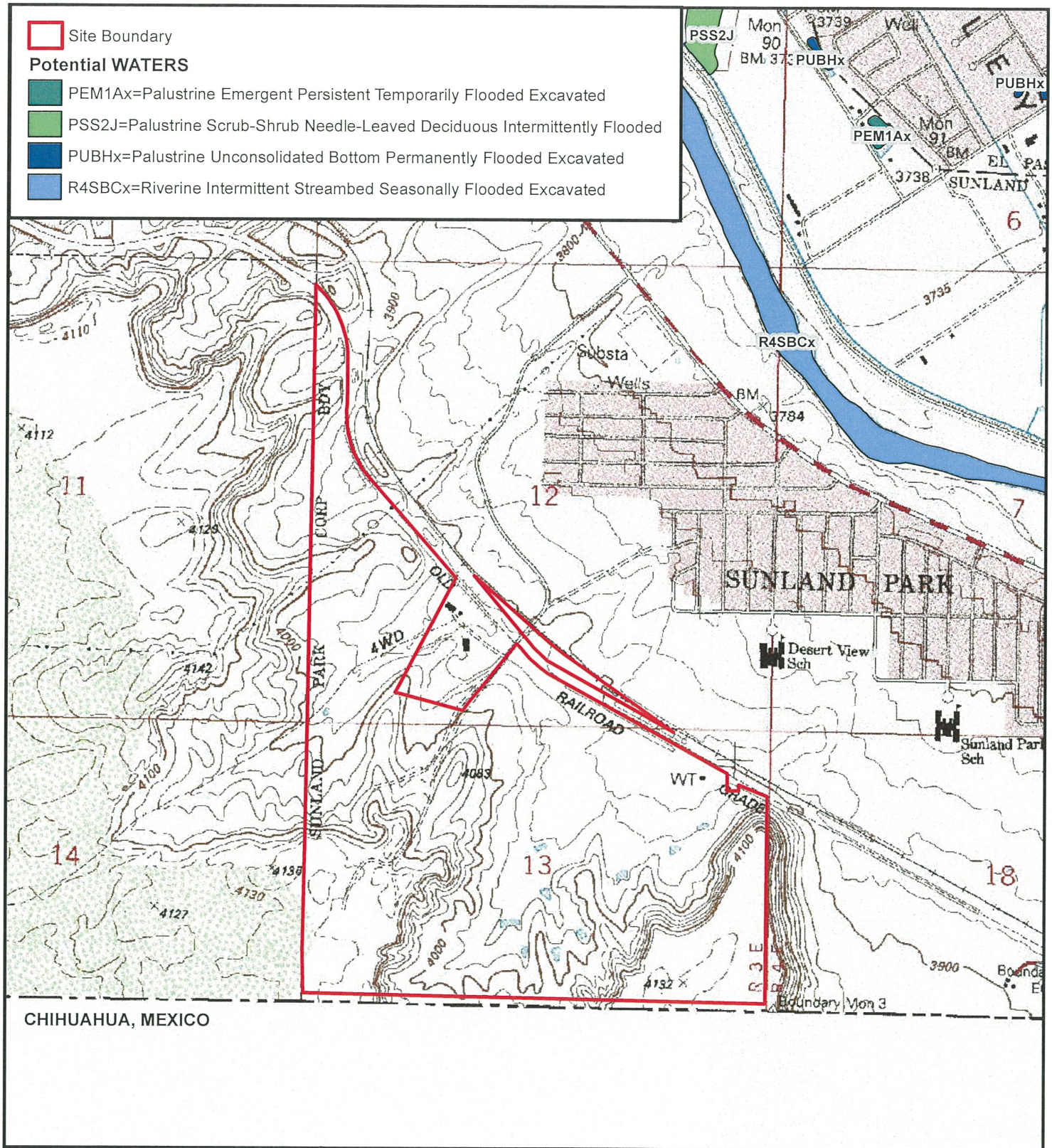
Figure 5
NRCS SSURGO

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: National Wetland Inventory Digital Data, US Department of Interior, Fish & Wildlife Service, USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

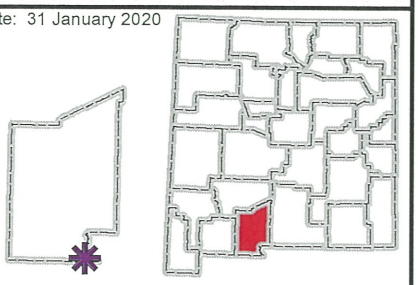
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

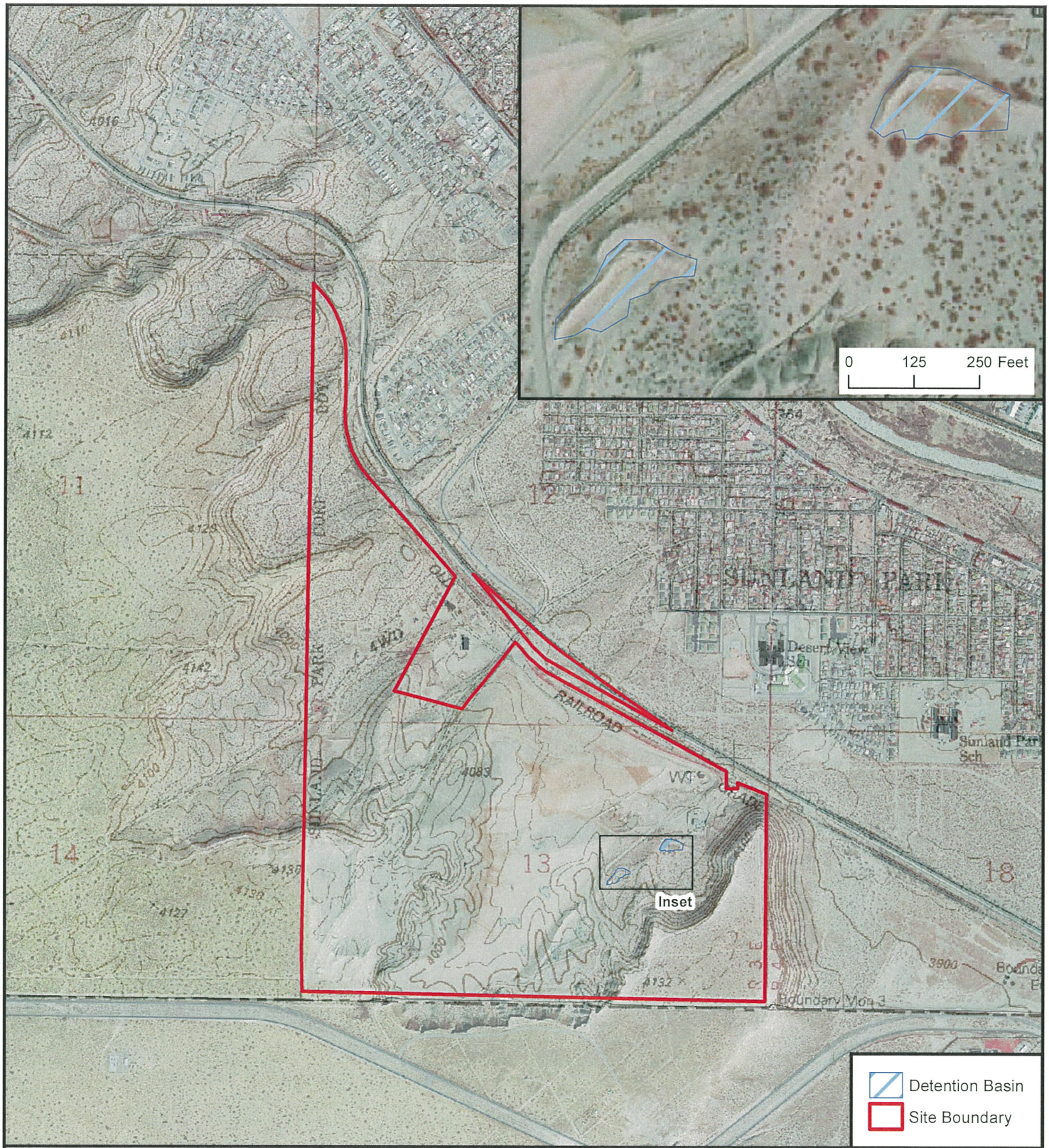
Figure 6
National Wetlands Inventory

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018;
USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

N

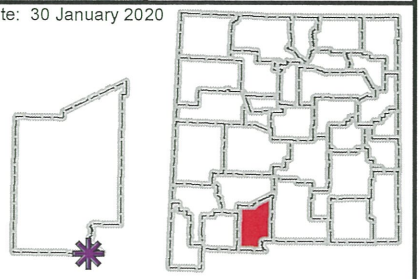
GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

Figure 7
Findings

Camino Real Landfill Site

Township 29S; Range 3E; Sections 12, 13

Date: 30 January 2020



Doña Ana County, New Mexico

APPENDIX B

PHOTOGRAPHS

Photo #:	Date:
1	28 December 2019

Barren Hills Used for Waste Disposal, Facing South

Photo #:	Date:
2	28 December 2019

Typical Vegetation within the Rangeland Portions of the Site, Facing Northeast

Photo #:	Date:
3	28 December 2019

Steep Side Slope of Mesa in Southeastern Portion of the Site, Facing North

Photo #:	Date:
4	28 December 2019

Detention Basin with Large Earthen Berm, Facing North

Photo #:	Date:
5	28 December 2019

Drainage from Topographic Cut into Detention Basin, Facing Southeast

Photo #:	Date:
6	28 December 2019

Dry Detention Basin, Mostly Devoid of Vegetation, Facing Northeast

ATTACHMENT IV.1-B

GOSHAWK ENVIRONMENTAL CONSULTING, INC. – THREATENED OR ENDANGERED SPECIES HABITAT ASSESSMENT

GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

9 March 2020

Jonathan Queen
Weaver Consultants Group, LLC
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109

Re: Threatened or Endangered Species Habitat Assessment
Camino Real Landfill Site
Sunland Park, Doña Ana County, New Mexico

Dear Mr. Queen:

Goshawk Environmental Consulting, Inc. (Goshawk) conducted a Threatened or Endangered (T/E) species habitat assessment of the Camino Real Landfill Site in Doña Ana County, New Mexico. The assessment included a literature review and field investigation to evaluate the site for T/E species habitat and determine the likelihood of use by species.

1.0 INTRODUCTION

The Camino Real Landfill Site encompasses approximately 480 acres at the terminus of Camino Real Drive in Sunland Park, Doña Ana County, New Mexico (Appendix A, Figure 1). The irregular-shaped site is situated within portions of Sections 12 and 13 of Township 29S, Range 3E. The site is bordered by open rangeland to the east and west, Mexico to the south, and a railroad to the north. Generally, the site consists of undeveloped rangeland and areas used for municipal solid waste disposal.

2.0 REGULATORY BACKGROUND

The Endangered Species Act prohibits any action that causes a "take" of any listed T/E species. A "take" is defined as harm or harassment, including hunting, wounding, killing, trapping, and the capture or collection of individuals of listed species. The law also protects against the degradation or loss of vital habitat for listed species. The United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service are the regulatory authorities for federally listed T/E species.

State-listed T/E species are protected under New Mexico Wildlife Conservation Act (17-2-41). The New Mexico Department of Game and Fish (NMDGF) has the authority to establish a list of fish and wildlife species that are endangered or threatened. Unlike the federal act, the state's regulation makes no provision for the protection of wildlife species from indirect take (e.g., destruction of habitat or unfavorable management practices); rather, it protects from the unlawful killing, trade, or transportation of state-listed species. Therefore, the state-listed species are only a potential development constraint if state-listed species currently occupy the site.

3.0 LITERATURE REVIEW

Literature and agency file searches were conducted to identify the potential occurrence of any federally and/or state-listed T/E species or their potential habitat on the site. Reviewed map sources include the US Geological Survey (USGS) 7.5-minute topographic quadrangle (Smeltertown, New

Mexico) and National Agriculture Imagery Program (NAIP) digital aerial orthoimagery (2018). Internet searches were conducted within the NMDGF Biota Information System of New Mexico (BISON-M) and the US Fish and Wildlife Service (USFWS) *Information, Planning and Conservation System* (IPaC).

3.1 Topographic Map

The USGS topographic quadrangle (Appendix A, Figure 2) indicates the site is entirely within grasslands (white background). Elevations range from approximately 3,900 feet above mean sea level (AMSL) along the railroad to 4,132 feet AMSL at the southeast corner of the site. Elevations slope upward toward mesas or flat hilltops in the southeast and southwest portions of the site.

Overland sheet flow generally flows northeast toward the Rio Grande, which is approximately 0.8 miles northeast of the site. The site is within the Rio Grande watershed. The only potential WATERS indicated on the topographic quadrangle are numerous small water features mapped at the base of the mesas. No other water features or structures are indicated on the topographic map.

3.2 Aerial Orthoimagery

The 2018 natural color aerial orthoimagery indicates the central portion of the site is barren hills, while the northwestern and southeastern portions are open rangeland (Appendix A, Figure 3). A network of roads is visible in the barren hills and on the mesas to the southeast. The barren hills have been used for municipal solid waste disposal and have little to no vegetative cover. The rangeland areas can be generally described as sparsely vegetated desert shrubland. Several structures are noted in the northeast corner of the site. None of the water features indicated on the topographic map are visible on the aerial orthoimagery. No potential WATERS are indicated on the aerial orthoimagery.

3.3 NMDGF BISON-M

The NMDGF BISON-M database, developed by the New Mexico Department of Game and Fish and other contributing agencies, contains species accounts of all vertebrate and many invertebrate species of wildlife that occur in New Mexico. BISON-M was used to identify the federal and state endangered, threatened, and candidate species with potential to occur in Doña Ana County, New Mexico (Appendix B). State-listed species include the western yellow bat (*Dasypterus xanthinus*), spotted bat (*Euderma maculatum*), Peñasco least chipmunk (*Neotamias minimus atristriatus*), Organ Mountains Colorado chipmunk (*Neotamias quadrivittatus australis*), common ground-dove (*Columbina passerina),* Costa's hummingbird (*Calypte costae*), broad-billed hummingbird (*Cynanthus latirostris*), violet-crowned hummingbird (*Amazilia violiceps*), least tern (*Sternula antillarum*), Neotropic cormorant (*Phalacrocorax brasilianus*), bald eagle (*Haliaeetus leucocephalus*), common black hawk (*Buteogallus anthracinus*), aplomado falcon (*Falco femoralis*), peregrine falcon (*Falco peregrinus*), southwestern willow flycatcher (*Empidonax traillii extimus*), Bell's vireo (*Vireo bellii*), gray vireo (*Vireo vicinior*), Baird's sparrow (*Centronyx bairdii*), varied bunting (*Passerina versicolor*), reticulate Gila monster (*Heloderma suspectum suspectum*), and Doña Ana talussnail (*Sonorella todseni).*

3.4 USFWS IPaC

An official species list was requested through an informal consultation with the USFWS IPaC to identify federally listed T/E species "that should be considered as part of an effects analysis" for the site. The T/E species listed in the IPaC Trust Resource Report for the site (Appendix C) are the least tern (*Sterna antillarum*), northern aplomado falcon (*Falco femoralis septentrionalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), yellow-billed cuckoo (*Coccyzus americanus*), and the Sneed pincushion cactus (*Coryphantha sneedii var. sneedii*). The IPaC Trust Report indicates there are not any critical habitats within the site.

4.0 FIELD INVESTIGATION

Goshawk conducted a field investigation on 28 December 2019 to assess the site for potential T/E species or their habitats. The undeveloped rangeland portions of the site were traversed on foot to identify any T/E species or habitat. None of the state or federally listed T/E species were observed during the field investigation. The site conditions were generally consistent with those depicted on the aerial orthoimagery.

The barren hills contained very little to no vegetative cover. Vegetation within the rangeland portions of the site consisted of creosote bush (*Larrea tridentata*), honey mesquite (*Prosopis glandulosa*), ocotillo (*Fouquieria splendens*), yucca (*Yucca sp.*), Mormon tea (*Ephedra sp.*), broom snakeweed (*Gutierrezia sarothrae*), and desert sumac (*Rhus microphylla*). Wildlife observed included desert cottontail (*Sylvilagus audubonii*) and black-tailed jackrabbit (*Lepus californicus*). Additionally, none of the on-site vegetation types exhibit the necessary characteristics to be occupied by any of the listed species.

5.0 HABITAT SUITABILITY FINDINGS

State regulations prohibit the taking, possession, transportation, or sale of any state-listed T/E species. Because Doña Ana County has the potential to support state-listed T/E species, care should be taken to avoid direct impacts (including harassment, harm, killing, and/or collection) to any species that may inhabit the site. The state-listed mammals and birds would have the ability to leave the site during active construction to avoid impacts. However, ground-dwelling and slow-moving species (reticulate Gila monster and Doña Ana talussnail) are more likely to be impacted by construction activities than other state-listed species. The site does not contain habitat for either of these species.

5.1 Least Tern

The least tern primarily feeds on fish within shallow water areas of rivers, streams, and lakes. This species nests on bare or sparsely vegetated beaches, sandbars, and islands composed of sand, shell, and/or gravel, usually within major rivers and reservoirs. Although the Rio Grande may provide nesting and feeding habitat, the least tern is not likely to utilize the site. Site development would not impact potential habitat along the Rio Grande; therefore, no impacts to the least tern are anticipated.

5.2 Northern Aplomado Falcon

The northern aplomado falcon historically utilized open desert grasslands and/or savannas in the Southwest. Scattered shrubs and trees on the landscape provided roosting and nesting locations.

Although the site is within rangeland scattered with shrubs, the land uses of this area (landfill and urbanization) likely precludes the northern aplomado falcon from utilizing the site and surrounding areas.

5.3 SOUTHWESTERN WILLOW FLYCATCHER

Southwestern willow flycatchers breed only in dense riparian vegetation near saturated soil or surface water, and commonly use patches of riparian habitat during migration. Although the Rio Grande may provide nesting and feeding habitat, the flycatcher is not likely to utilize the site. Site development would not impact potential habitat along the Rio Grande; therefore, no impacts to the southwestern willow flycatcher are anticipated.

5.4 YELLOW-BILLED CUCKOO

Yellow-billed cuckoos utilize wooded habitat with dense cover and water nearby, including dense thickets and woodlands along streams and marshes. Although the Rio Grande may provide nesting and feeding habitat, the cuckoo is not likely to utilize the site. Site development would not impact potential habitat along the Rio Grande; therefore, no impacts to the yellow-billed cuckoo are anticipated.

5.5 SNEED PINCUSHION CACTUS

Sneed's pincushion cactus utilizes exposed areas of steep, sloping limestone. The soils and lack of limestone outcrops at the site likely preclude the Sneed's pincushion cactus from utilizing the site. No impacts to the Sneed's pincushion cactus are anticipated.

6.0 SUMMARY

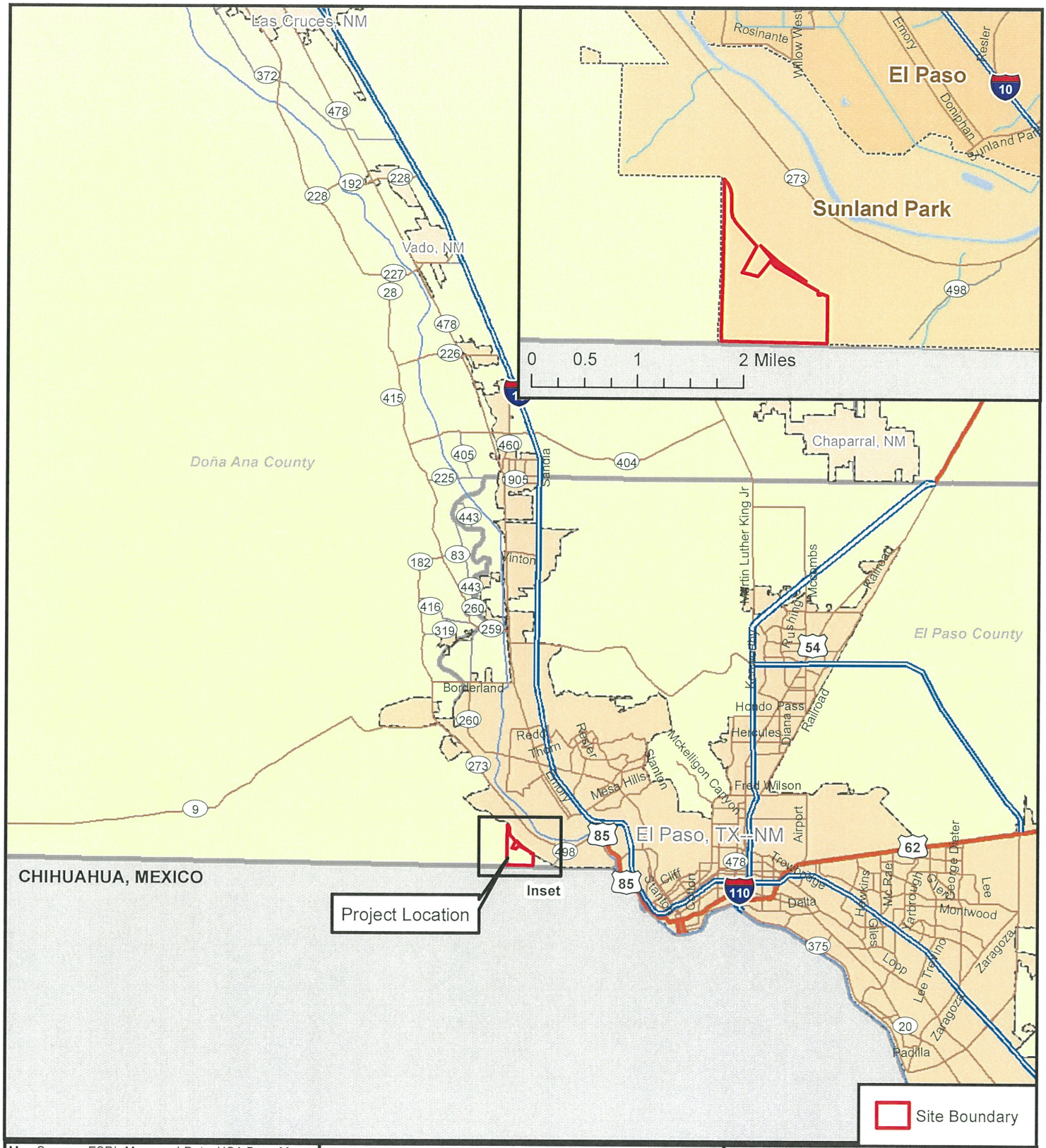
Based on this assessment, it is Goshawk's opinion this site does not provide habitat for, and would not likely be occupied by, any federally listed threatened or endangered species. Similarly, no state-listed species are known to occur on the site, and none were identified during the field investigation. If you have any questions or require additional information, please contact our office.

Sincerely,

Hannah Kuhl

Hannah Kuhl
Environmental Specialist

APPENDIX A
FIGURES



Map Source: ESRI, Maps and Data, USA Base Map, 2017, 10.6

0 2.5 5 Miles

N

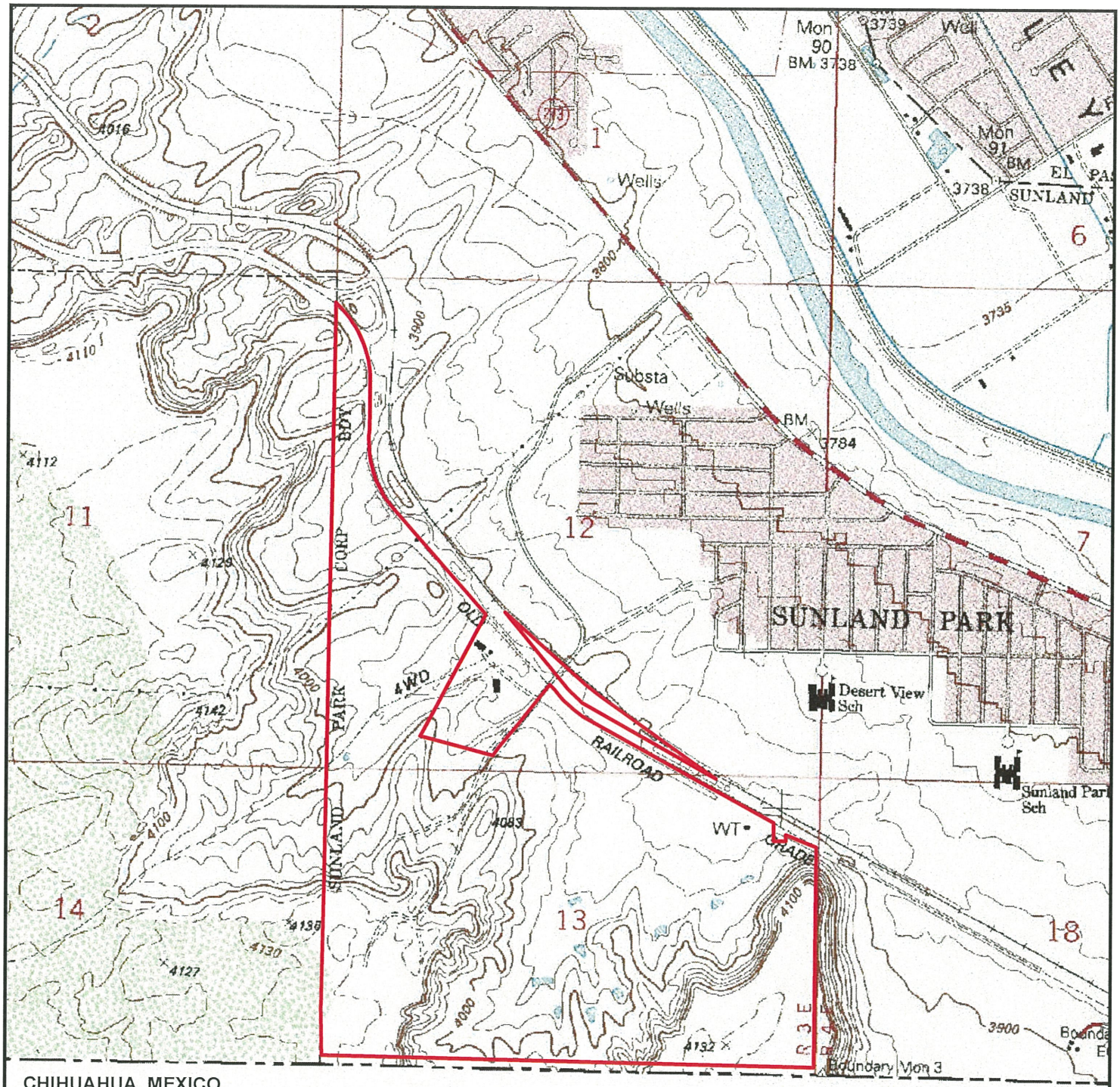
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 1
Vicinity

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020

Doña Ana County, New Mexico



Map Source: USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

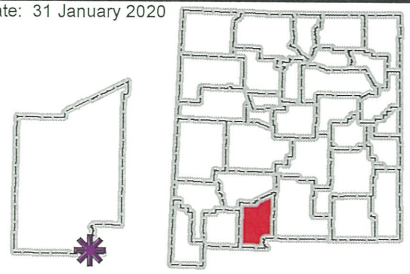
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

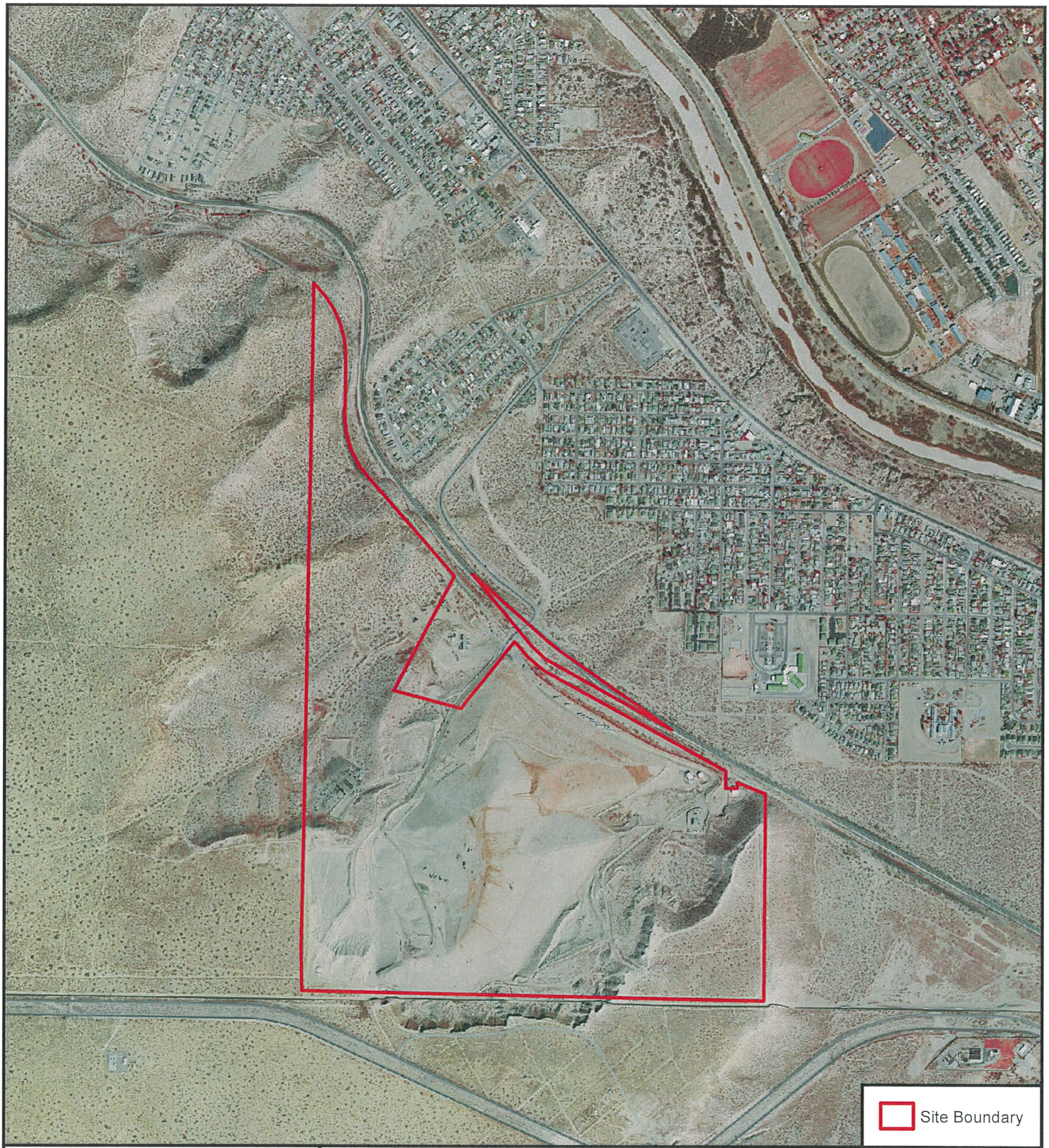
Figure 2
USGS Topographic

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018.

0 750 1,500 Feet

N

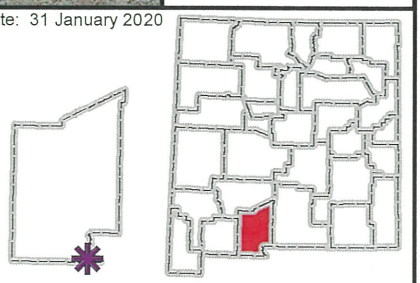
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 3
Aerial Orthoimagery

Camino Real Landfill Site

Township 29S; Range 3E; Sections 12, 13

Date: 31 January 2020



Doña Ana County, New Mexico

APPENDIX B
BISON DATABASE RESULTS

Species of Greatest Conservation Need and Federal or State Threatened/Endangered

Dona Ana

Taxonomic Group	# Species	Taxonomic Group	# Species
Birds	17	Mammals	4
Molluscs	1	Reptiles	1

TOTAL SPECIES: 23

Common Name	Scientific Name	NMGF	US FWS	Critical Habitat	SGCN	Photo
Western Yellow Bat	Dasypterus xanthinus	T			Y	View
Spotted Bat	Euderma maculatum	T			Y	View
Penasco Least Chipmunk	Neotamias minimus atristriatus	E	C		Y	View
Organ Mountains Colorado Chipmunk	Neotamias quadrivittatus australis	T			Y	View
Common Ground-dove	Columbina passerina	E			Y	View
Yellow-billed Cuckoo (western pop)	Coccyzus americanus occidentalis		T		Y	View
Costa's Hummingbird	Calypte costae	T			Y	View
Broad-billed Hummingbird	Cynanthus latirostris	T			Y	View
Violet-crowned Hummingbird	Amazilia violiceps	T			Y	View
Least Tern	Sternula antillarum	E	E		Y	View
Neotropic Cormorant	Phalacrocorax brasilianus	T			Y	View
Bald Eagle	Haliaeetus leucocephalus	T			Y	View
Common Black Hawk	Buteogallus anthracinus	T			Y	View
Mexican Spotted Owl	Strix occidentalis lucida		T	Y	Y	View
Aplomado Falcon	Falco femoralis	E	E		Y	View
Peregrine Falcon	Falco peregrinus	T			Y	View
Southwestern Willow Flycatcher	Empidonax traillii extimus	E	E	Y	Y	View
Bell's Vireo	Vireo bellii	T			Y	View
Gray Vireo	Vireo vicinior	T			Y	View
Baird's Sparrow	Centronyx bairdii	T			Y	View
Varied Bunting	Passerina versicolor	T			Y	View
Reticulate Gila Monster	Heloderma suspectum suspectum	E			Y	View
Dona Ana Talussnail	Sonorella todseni	T			Y	No Photo

APPENDIX C
USFWS IPaC Trust Resource Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
Phone: (505) 346-2525 Fax: (505) 346-2542
http://www.fws.gov/southwest/es/NewMexico/
http://www.fws.gov/southwest/es/ES_Lists_Main2.html

In Reply Refer To:
Consultation Code: 02ENNM00-2020-SLI-0454
Event Code: 02ENNM00-2020-E-00970
Project Name: Camino Real

February 03, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act (BGEPA) as amended (16 USC 668-668c). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area and to recommend some conservation measures that can be included in your project design.

FEDERALLY-LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Attached is a list of endangered, threatened, and proposed species that may occur in your project area. Your project area may not necessarily include all or any of these species. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

If you determine that your proposed action may affect federally-listed species, consultation with the Service will be necessary. Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

The scope of federally listed species compliance not only includes direct effects, but also any interrelated or interdependent project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations) and any indirect or cumulative effects that may occur in the action area. The action area includes all areas to be affected, not merely the immediate area involved in the action. Large projects may have effects outside the immediate area to species not listed here that should be addressed. If your action area has suitable habitat for any of the attached species, we recommend that species-specific surveys be conducted during the flowering season for plants and at the appropriate time for wildlife to evaluate any possible project-related impacts.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico state agencies. These lists, along with species information, can be found at the following websites:

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program: www.emnrd.state.nm.us/SFD/ForestMgt/Endangered.html

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, www.fws.gov/wetlands/Data/Mapper.html integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Bird Office. To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged.

We recommend review of Birds of Conservation Concern at website www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html to fully evaluate the effects to the birds at your site. This list identifies birds that are potentially threatened by disturbance and construction.

BALD AND GOLDEN EAGLES

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the ESA on August 9, 2007. Both the bald eagle and golden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For information on bald and golden eagle management guidelines, we recommend you review information provided at www.fws.gov/midwest/eagle/guidelines/bgepa.html.

On our web site www.fws.gov/southwest/es/NewMexico/SBC_intro.cfm, we have included conservation measures that can minimize impacts to federally listed and other sensitive species. These include measures for communication towers, power line safety for raptors, road and highway improvements, spring developments and livestock watering facilities, wastewater facilities, and trenching operations.

We also suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State fish, wildlife, and plants.

Thank you for your concern for endangered and threatened species and New Mexico's wildlife habitats. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please call 505-346-2525 or email nmesfo@fws.gov and reference your Service Consultation Tracking Number.

Attachment(s):

- Official Species List
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
(505) 346-2525

Project Summary

Consultation Code: 02ENNM00-2020-SLI-0454

Event Code: 02ENNM00-2020-E-00970

Project Name: Camino Real

Project Type: Landfill

Project Description: Landfill

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/31.795239987400947N106.59751531637457W

Counties: Doña Ana, NM

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Least Tern *Sterna antillarum* Population: interior pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505	Endangered
Northern Aplomado Falcon *Falco femoralis septentrionalis* Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923	Experimental Population, Non-Essential
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Flowering Plants

NAME	STATUS
Sneed Pincushion Cactus *Coryphantha sneedii var. sneedii*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4706

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31
Black Throated Sparrow *Amphispiza bilineata* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 15 to Sep 5

NAME	BREEDING SEASON
Black-chinned Sparrow *Spizella atrogularis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Burrowing Owl *Athene cunicularia* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
Golden Eagle *Aquila chrysaetos* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Lark Bunting *Calamospiza melanocorys* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Long-billed Curlew *Numenius americanus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Lucifer Hummingbird *Calothorax lucifer* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Aug 31
Virginia's Warbler *Vermivora virginiae* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see

below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

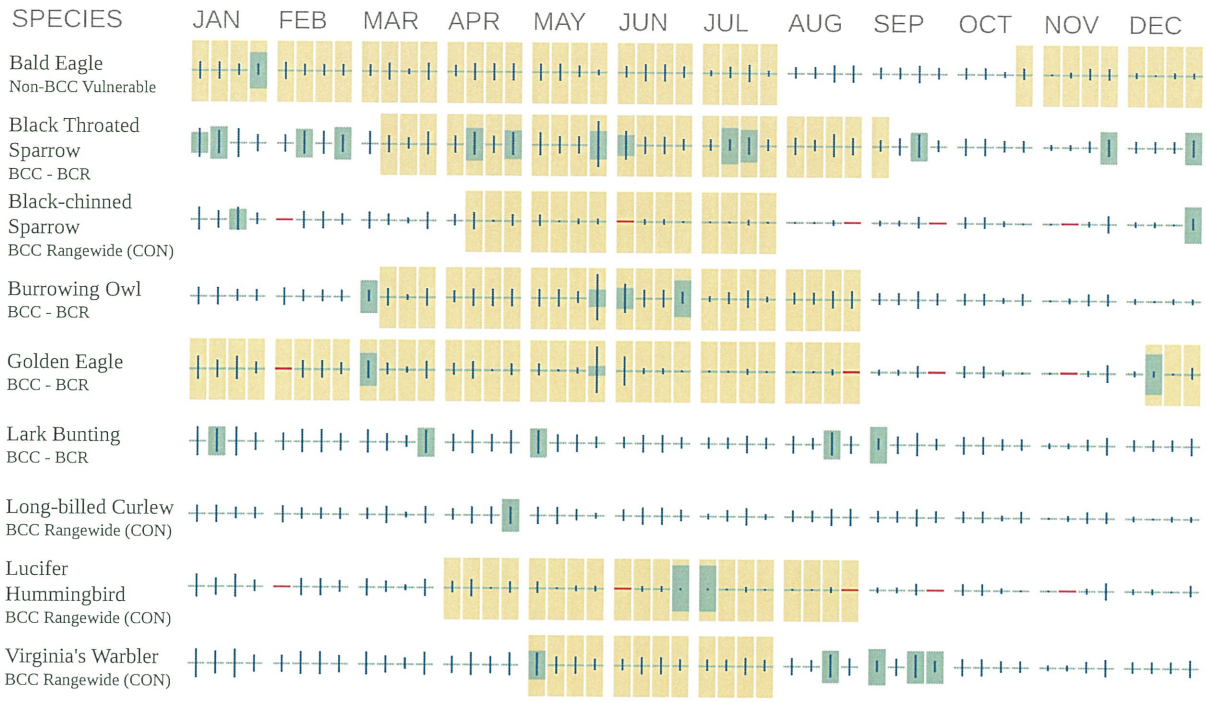
Breeding Season (▒)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

▒ probability of presence ▒ breeding season | survey effort – no data



Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell

me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

ATTACHMENT IV.1-C

FAA COORDINATION

- March 5, 2020 WCG FAA Notice Letter.
- June 8, 2020 FAA Determination of No Hazard to Air Navigation Letters.
- March 12, 2020 Request for Wildlife Hazard Determination Letter.
- June 8, 2020 FAA Wildlife Hazard Letter of No Objection.

MARCH 5, 2020 WCG FAA NOTICE LETTER

Weaver Consultants Group

Project No. 0601-667-11-06
March 5, 2020

Mr. Andrew B. Hollie
FAA Specialist for Arkansas, Georgia, Louisiana, New Mexico,
North Carolina, Oklahoma, and South Carolina
Obstruction Evaluation Group, AJV-15
10101 Hillwood Pkwy.
Fort Worth, Texas 76177

Re: Compliance with Airport Location Restriction
Camino Real Landfill Permit Application
Sunland Park, New Mexico

The purpose of this letter is to demonstrate communication with the Federal Aviation Administration (FAA), consistent with New Mexico Administrative Code (NMAC) 20.9.3.9(B)(13) and 20.9.4.9(A)(8).

NMAC 20.9.3.9(B)(13) requires any person seeking a permit for a municipal or special waste landfill to provide proof of notification to the FAA and any affected airports if the facility is to be located within 6 miles of an airport used by the public and that the FAA does not object to the site being operated as a solid waste facility.

NMAC 20.9.4.9(A)(8) requires that no municipal, construction and demolition, or special waste landfill be located where, on the date of the first public notice, any portion of the proposed disposal area is within the distance to airports set by the FAA unless the landfill owner or operator demonstrates that the FAA does not object to construction and operation of the landfill at the proposed site.

The distance to airports set by the FAA is outlined in CFR Title 14, Aeronautics and Space, Chapter I Federal Aviation Administration, Department of Transportation, Subchapter E Airspace, Part 77 – Safe, Efficient Use, and Preservation of the Navigation Airspace, Subpart B – Notice Requirements §77.9. Section 77.9(b) requires any construction or alteration that exceeds an imaginary surface extending outward at a slope of 100 to 1 for a horizontal distance of 20,000 feet, 50 to 1 for a horizontal distance of 10,000 feet, or 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest runway of an airport to file notice with the FAA.

Weaver Consultants Group, LLC (WCG) is preparing an Application for Permit Modification and Permit Renewal under contract with Camino Real Environmental Center, Inc., to reconfigure their existing landfill, Camino Real Landfill (CRLF), located in the southern portion of the City of Sunland Park, New Mexico. The site is located at 1000 Camino Real Blvd., Sunland, NM 88063. The closest airport, Doña Ana County Airport at Santa Teresa, NM, is located approximately 7.5 miles northwest of the site.

As shown in Attachment 1, the Camino Real Landfill is located over 6 miles from an airport used by the public. Therefore, NMAC 20.9.3.9(B)(13) is not applicable. Also, the facility is

located over 20,000 feet from the nearest runway end of the Dona Ana County Airport. Therefore, §77.9(b) (and consequently NMAC 20.9.4.9(A)(8)) is not applicable.

Additionally, WCG utilized the FAA's web-based Circle Search for Airports feature to search for airports in the vicinity of CRLF. A 10 nautical mile circle search of the site was completed and yielded one airport, Dona Ana County Airport, approximately 7.5 miles from the site. Therefore, as noted above, NMAC 20.9.3.9(B)(13) and NMAC 20.9.4.9(A)(8) are not applicable.

WCG also reviewed other airport safety related regulations including EPA and FAA related regulations including Code of Federal Regulations (CFR), Title 40: Protection of Environment, Chapter I Environmental Protection Agency, Subchapter I Solid Wastes, Part 258 Criteria for Municipal Solid Waste Landfills, Subpart B Location Restrictions, §258.10 Airport Safety. Applicable sections of 40 CFR §258.10 are addressed below.

40 CFR §258.10(a) requires a permit applicant of any waste management or disposal area of a new land disposal facility, or expansion of waste management or disposal areas of an existing land disposal facility, to provide a demonstration that the facility will not pose a bird hazard to aircraft, if that facility or expansion to the existing facility is to be located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft.

Additionally, 40 CFR §258.10(b) requires a permit applicant of waste management or disposal areas of a new land disposal facility, or expansion of waste management or disposal areas of an active land disposal facility, located within a 5-mile radius of any airport runway end used by a turbojet or piston-type aircraft to notify the FAA and the affected airport.

The nearest airport to the CRLF is the Doña Ana County Airport at Santa Teresa, NM. The CRLF is located over 10,000 feet and more than 5 miles from the nearest runway end of the Doña Ana County Airport at Santa Teresa, NM, as shown in Attachment 1. Therefore, 40 CFR §258.10(a) and 40 CFR §258.10(b) are not applicable.

CFR Title 40 §258.10 also makes note of FAA Advisory Circular (AC) 150/5200-34, dated August 26, 2000. A review of FAA 150/5200-34 indicates this AC has been cancelled and replaced with FAA AC 150/5200-34A, dated January 26, 2006. AC 150/5200-34A contains guidance on complying with federal statutory requirements regarding the construction or establishment of new municipal solid waste landfills (MSWLFs) near public airports. The guidance is provided to comply with new MSWLF site limitations contained in United States Code (U.S.C.), Title 49 Transportation, Subtitle VII Aviation Programs, Part A Air Commerce and Safety, Subpart iii Safety, Chapter 447 Safety Regulations, Section 44718 – Structures interfering with air commerce. In general, U.S.C. Title 49 §44718(d) and AC 150/5200-34A relate to the establishment of a MSWLF within 6 miles of a public airport. However, this limitation only applies to new MSWLFs (constructed and established after April 5, 2000) and is not applicable to an existing MSWLFs or MSWLFs that are expanded or modified after April 5, 2000. As noted above, the closest public airport to the site is approximately 7.5 miles northwest of the site. Additionally, landfill operations have occurred at this site since 1987. Therefore, U.S.C. Title 49 §44718(d) and AC 150/5200-34A are not applicable.

AC 150/5200-34A makes reference to related reading materials including AC 150/5200-33, Hazardous Wildlife Attractions on or Near Airports, dated July 27, 2004. A review of AC 150/5200-33A indicates that this AC has been cancelled and replaced with AC 150/5200-33B, dated August 28, 2007. AC 150/5200-33B contains guidance on certain land uses that have potential to attract hazardous wildlife on or near public use airports. In general, when addressing MSWLFs, AC 150/5200-33B discusses the same, 6 mile, 5 mile, 10,000 foot and 5,000 foot radius regulations as discussed previously. Therefore, as discussed above, AC 150/5200-33B is not applicable.

Section 77.9 of CFR Title 14 also provides notice requirements based on height, location, and frequencies emitted from a structure. WCG utilized the FAA's web-based Notice Criteria Tool (Obstruction Evaluation Version 2018.2.0), in addition to the regulations addressed in this letter, to determine notification requirements. Based on the Notice Criteria Tool, the CRLF is required to file notice with the FAA in accordance with CFR Title 14 Part 77.9(a), which requires filing notice with the FAA for any construction or alteration that is more than 200 feet above ground level at the site. To assist with this filing notice, a Proposed Landfill Completion Plan (Attachment 2) is enclosed. This plan shows Points A through F, which have been uploaded to the FAA online obstruction evaluation portal so that an aeronautical study can be performed. Note that the peak elevation of the landfill occurs at Point A. However, Points B through F are also set at the maximum landfill elevation to provide a conservative landfill configuration for the aeronautical study (the landfill elevations at these points are lower than the maximum landfill elevation for Point A).

In summary, CRLF is an existing active land disposal facility located over 6 miles from an airport. Per the NMAC, EPA, and FAA regulations, CRLF is required to file notice with the FAA in compliance with CFR Title 14 Part 77.7. WCG will also coordinate with an FAA specialist for New Mexico regarding the potential for wildlife hazards.

Your assistance with this matter is sincerely appreciated. Please call if you have any questions or need additional information.

Sincerely,
Weaver Consultants Group, LLC

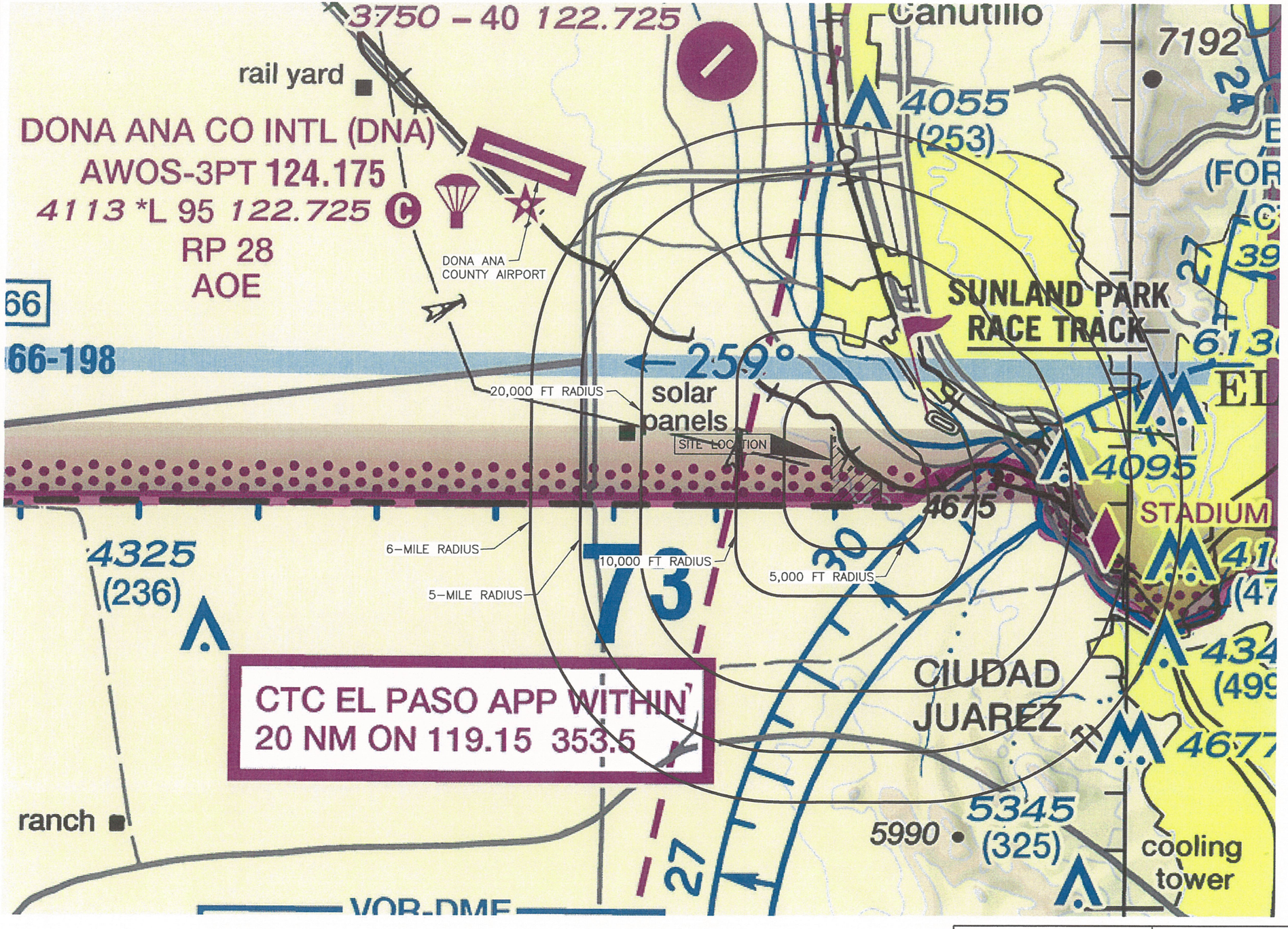
Jonathan V. Queen, P.E.
Project Director

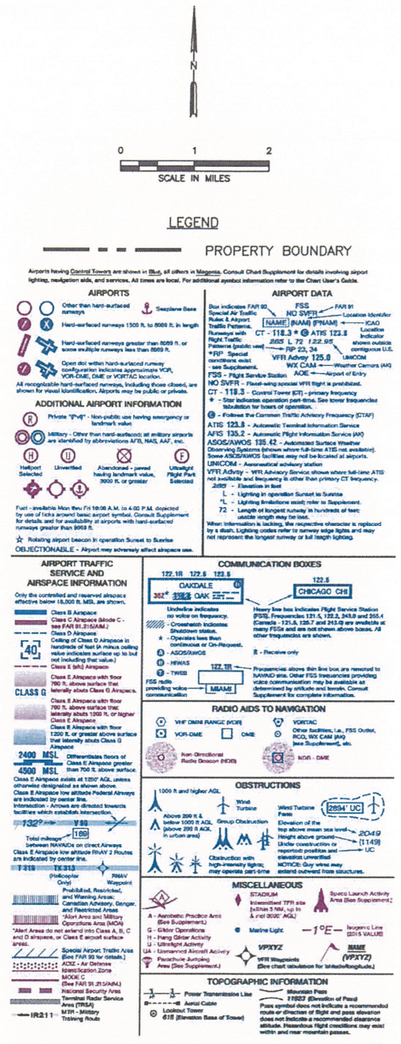
Attachments: Attachment 1 – FAA Airport Vicinity Map
Attachment 2 – Proposed Landfill Completion Plan

cc: Brady Stewart, Camino Real Environmental Center, Inc.
Juan Carlos Tomas, Camino Real Environmental Center, Inc.

ATTACHMENT 1

FAA AIRPORT VICINITY MAP





NOTE:

1. THIS MAP REPRODUCED FROM THE FAA EL PASO SECTIONAL AERONAUTICAL CHART 103rd EDITION DATED JULY 18, 2019.

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- [ ] DRAFT
- [x] FOR INFORMATION PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 03/2020
FILE: 0601-667-11
CAD: 1-AIRPORT LOCATION MAP.DWG
DRAWN BY: JCW
DESIGN BY: RMB
REVIEWED BY: JAE

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS

NO.	DATE	DESCRIPTION

AIRPORT LOCATION MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

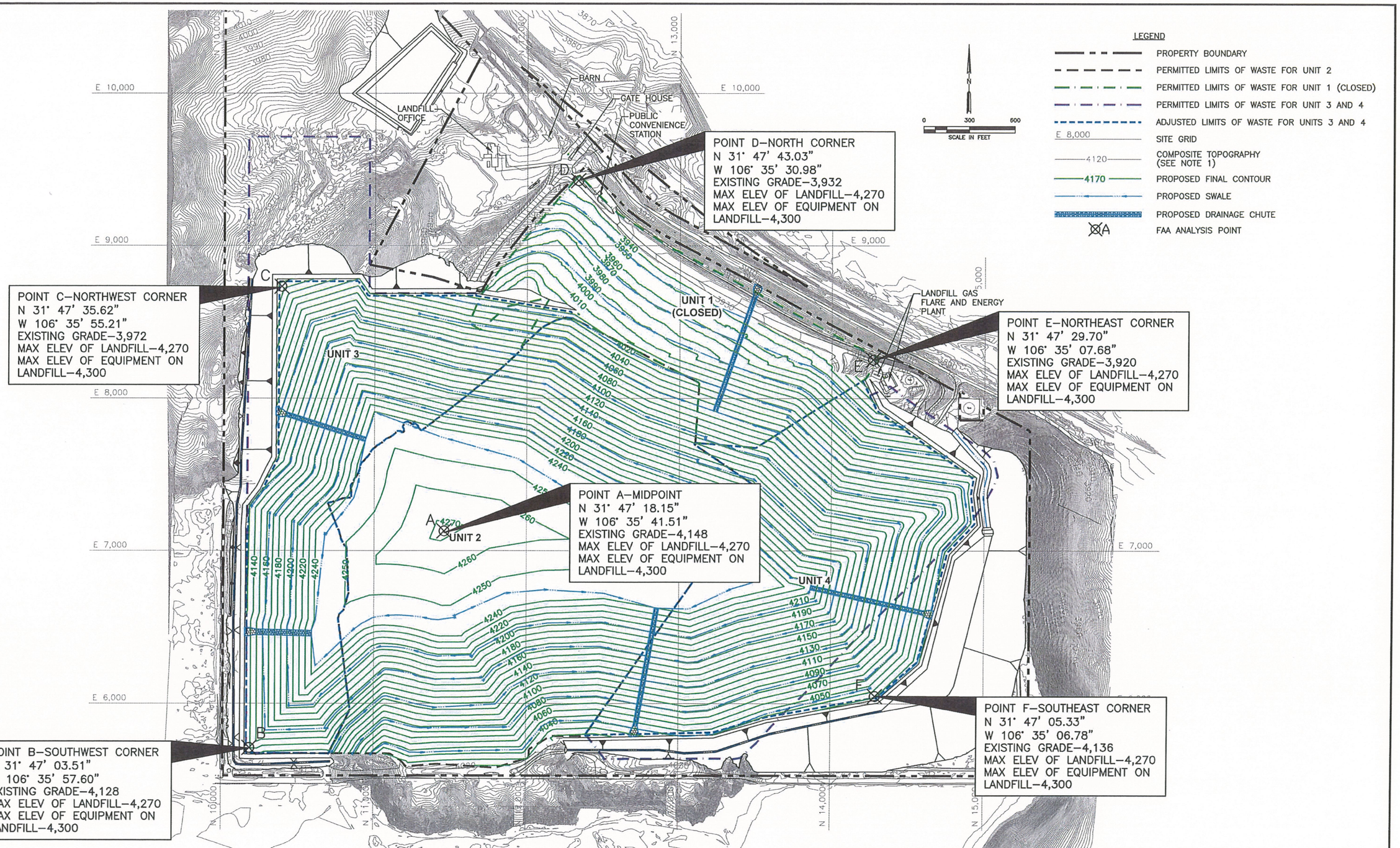
WWW.WCGRP.COM

DRAWING 1

O:\0601\667\EXPANSION 2019\LOCATION RESTRICTIONS\FAA\1-AIRPORT LOC MAP.dwg, jwilson, 1:2

ATTACHMENT 2

PROPOSED LANDFILL COMPLETION PLAN



NOTES:

1. COMPOSITE TOPOGRAPHY IS A COMPOSITE FROM THE 2005 AND 2018 AERIAL SURVEYS.

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☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 03/2020
FILE: 0601-667-11
CAD: 2-PROPOSED FINAL CONTOUR PLAN.DWG

DRAWN BY: JDW
DESIGN BY: JAE
REVIEWED BY: JVQ

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS

NO.	DATE	DESCRIPTION

PROPOSED COMPLETION PLAN

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

DRAWING 2

O:\0601\667\EXPANSION 2019\LOCATION RESTRICTIONS\FAA\2-PROP FINAL CONTOUR PLAN.dwg, sford, 1:2

JUNE 8, 2020 FAA DETERMINATION OF NO HAZARD TO AIR NAVIGATION LETTERS

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4096-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill - Point A Midpoint
Location:	Sunland Park, NM
Latitude:	31-47-18.15N NAD 83
Longitude:	106-35-41.51W
Heights:	4096 feet site elevation (SE)
	152 feet above ground level (AGL)
	4248 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

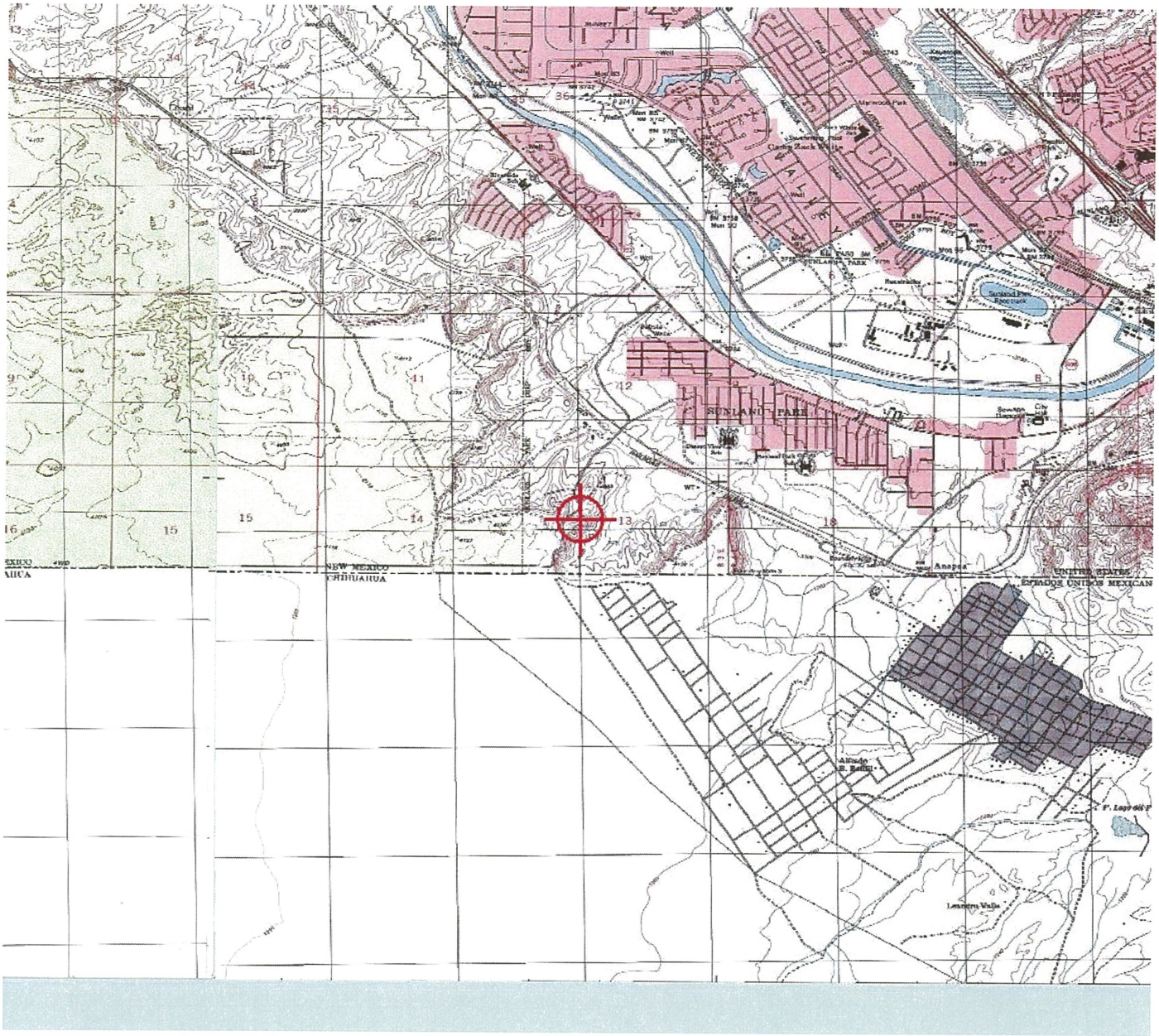
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

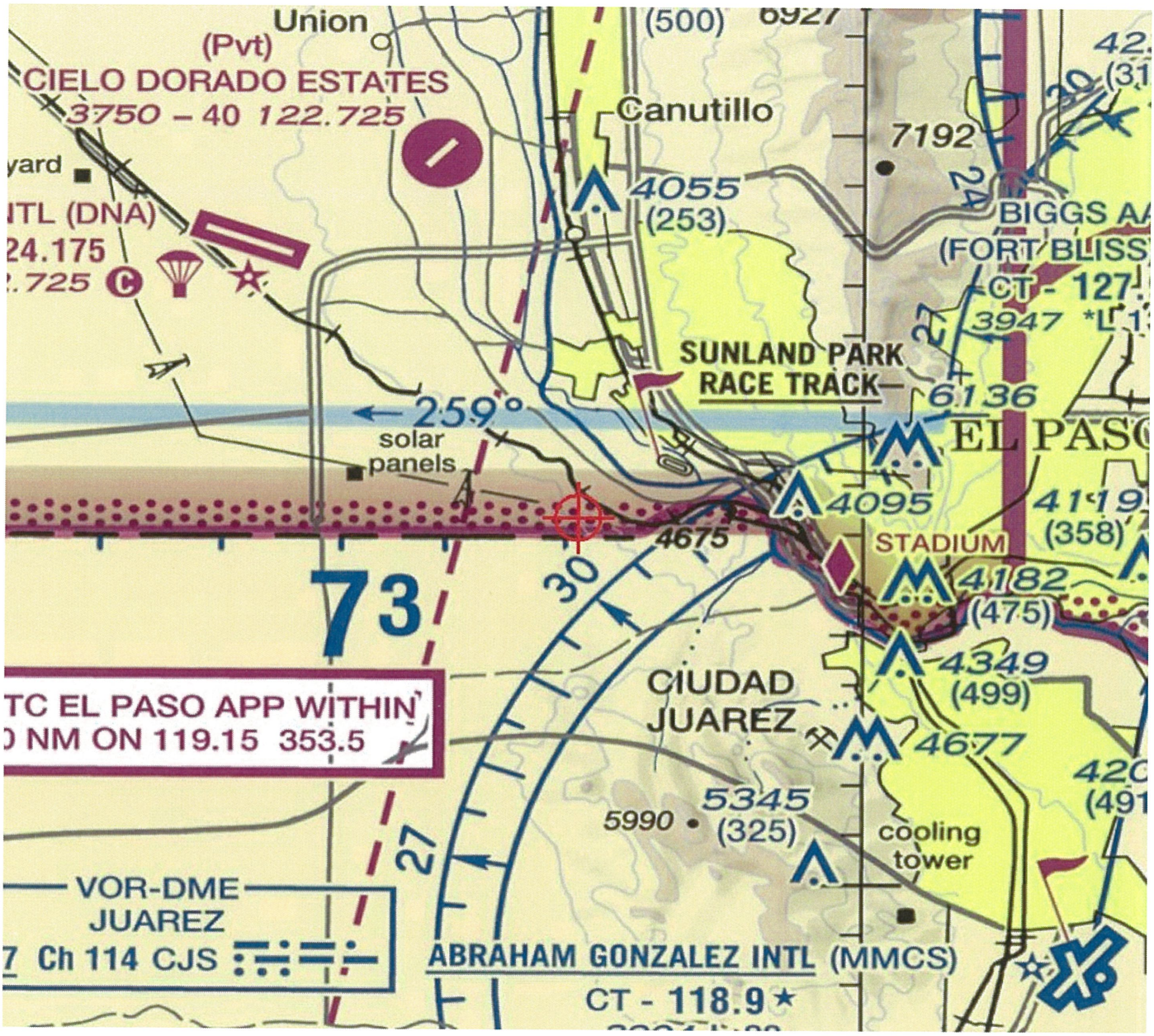
If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4096-OE.

Signature Control No: 433343685-442222931 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-4096-OE

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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4096-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill - Point A Midpoint
Location:	Sunland Park, NM
Latitude:	31-47-18.15N NAD 83
Longitude:	106-35-41.51W
Heights:	4096 feet site elevation (SE)
	152 feet above ground level (AGL)
	4248 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4096-OE.

Signature Control No: 433343685-508196480 (EXT)
Chris Smith
Specialist

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4095-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill-Point B Southwest Corner
Location:	Sunland Park, NM
Latitude:	31-47-03.51N NAD 83
Longitude:	106-35-57.60W
Heights:	4120 feet site elevation (SE)
	172 feet above ground level (AGL)
	4292 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

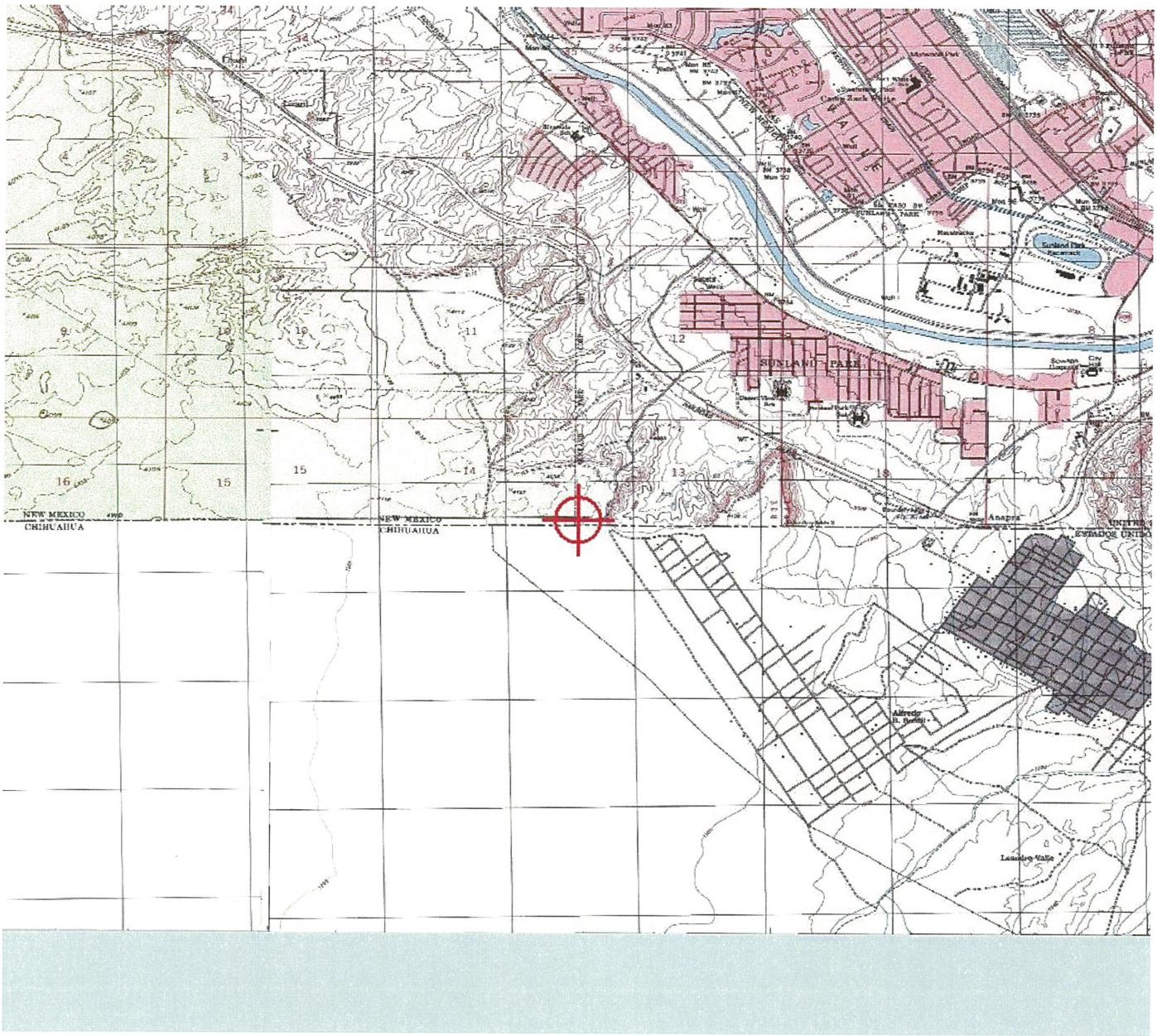
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

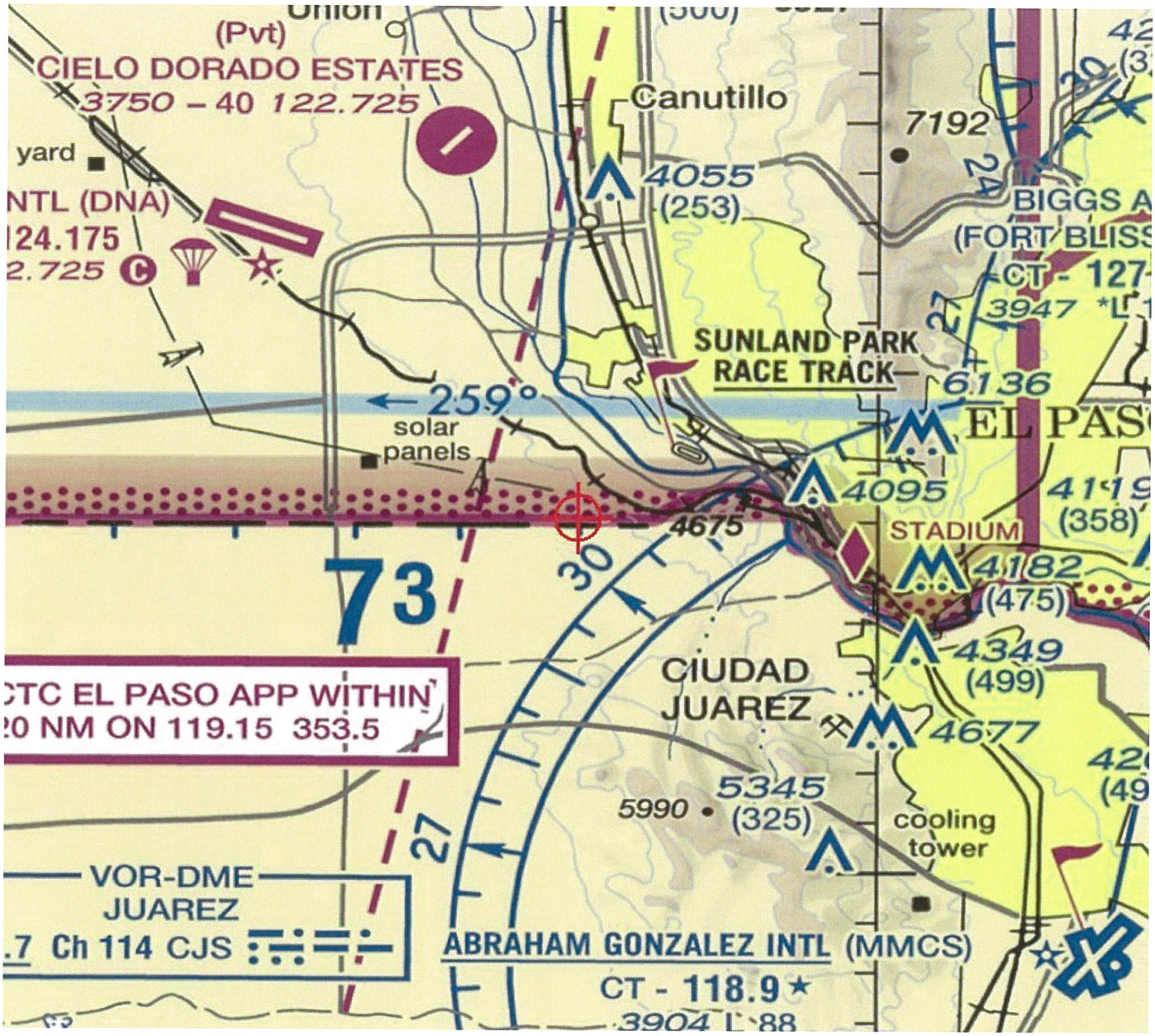
If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4095-OE.

Signature Control No: 433343679-442222930 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-4095-OE

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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4095-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill-Point B Southwest Corner
Location:	Sunland Park, NM
Latitude:	31-47-03.51N NAD 83
Longitude:	106-35-57.60W
Heights:	4120 feet site elevation (SE)
	172 feet above ground level (AGL)
	4292 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4095-OE.

Signature Control No: 433343679-508196478 (EXT)
Chris Smith
Specialist

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-3625-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill
Location:	Sunland Park, NM
Latitude:	31-47-35.18N NAD 83
Longitude:	106-35-55.23W
Heights:	3970 feet site elevation (SE)
	300 feet above ground level (AGL)
	4270 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

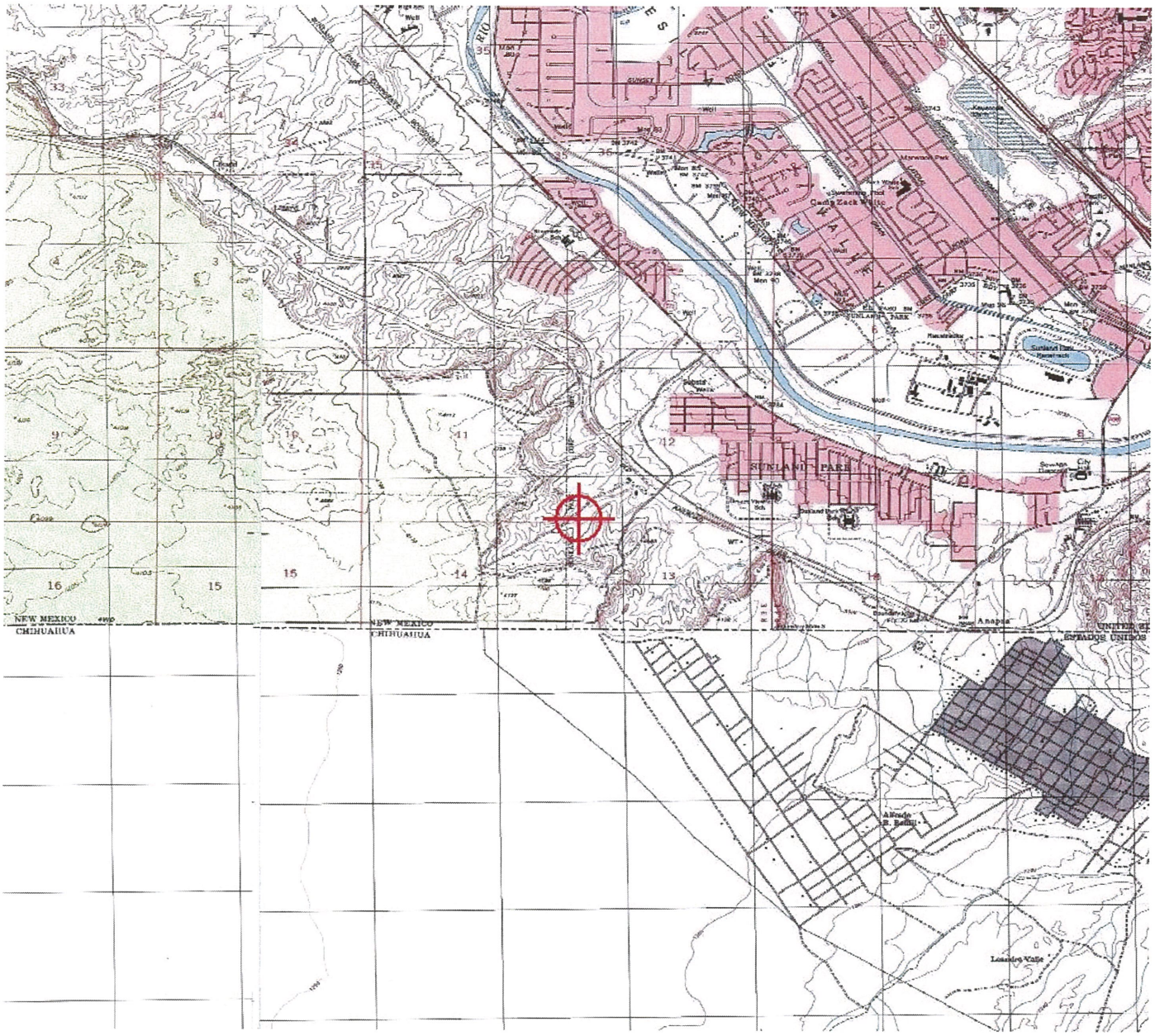
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

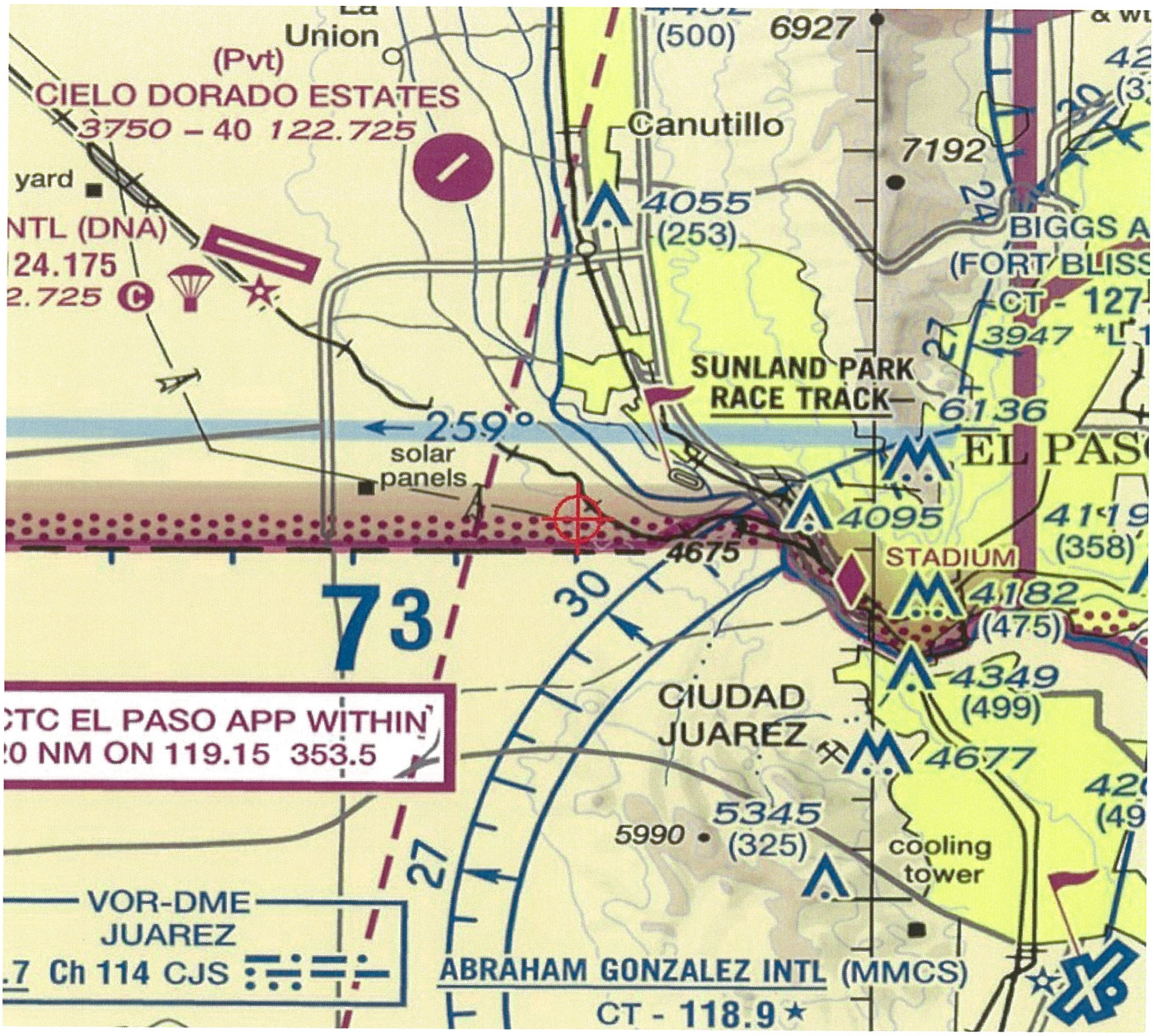
If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-3625-OE.

Signature Control No: 432728606-442223532 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-3625-OE

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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-3625-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill
Location:	Sunland Park, NM
Latitude:	31-47-35.18N NAD 83
Longitude:	106-35-55.23W
Heights:	3970 feet site elevation (SE)
	300 feet above ground level (AGL)
	4270 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-3625-OE.

Signature Control No: 432728606-508196479 (EXT)
Chris Smith
Specialist

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4094-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill-Point D North Corner
Location:	Sunland Park, NM
Latitude:	31-47-43.03N NAD 83
Longitude:	106-35-30.98W
Heights:	3918 feet site elevation (SE)
	380 feet above ground level (AGL)
	4298 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

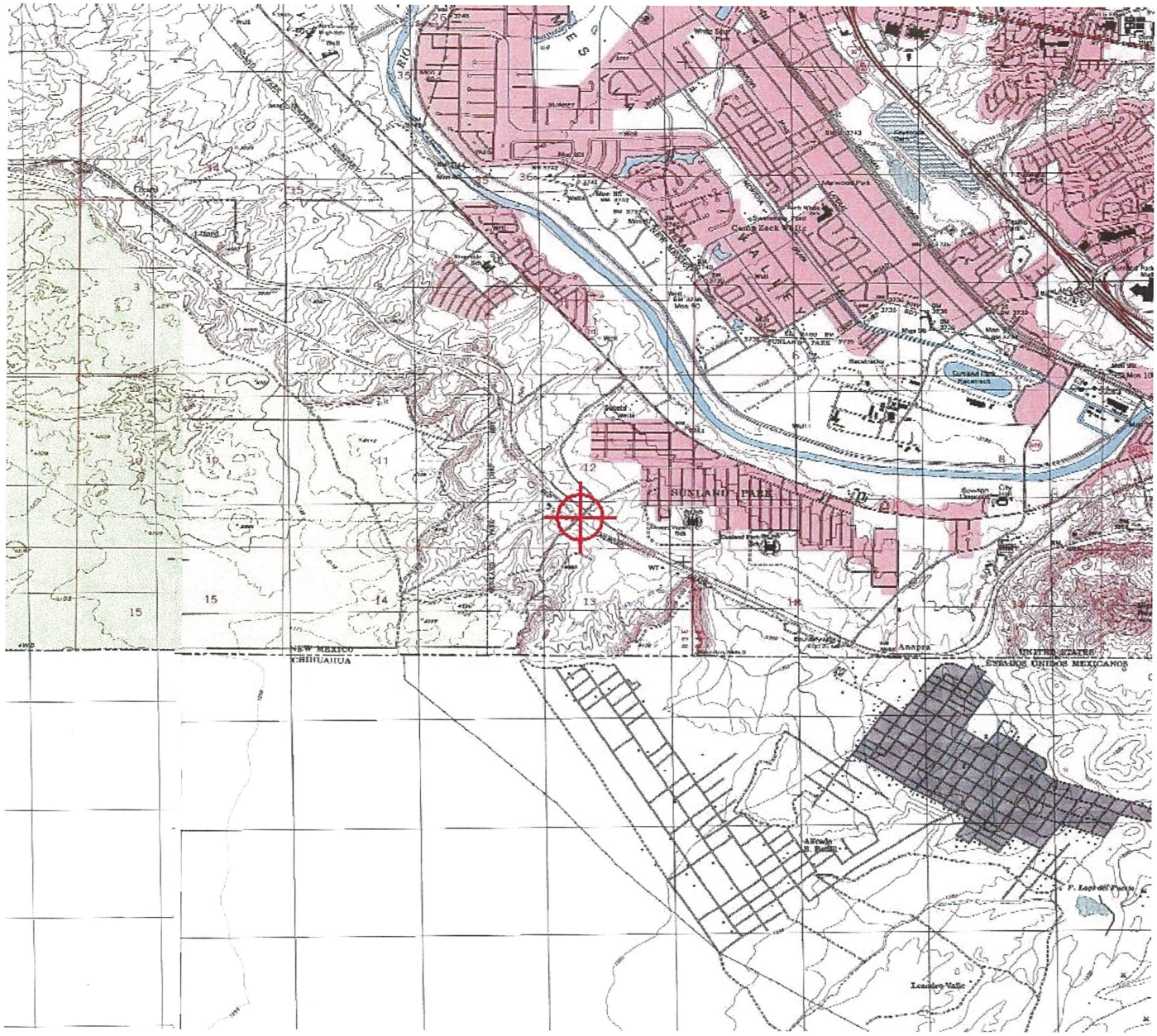
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4094-OE.

Signature Control No: 433343672-442223534 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-4094-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4094-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill-Point D North Corner
Location:	Sunland Park, NM
Latitude:	31-47-43.03N NAD 83
Longitude:	106-35-30.98W
Heights:	3918 feet site elevation (SE)
	380 feet above ground level (AGL)
	4298 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4094-OE.

Signature Control No: 433343672-508196476 (EXT)
Chris Smith
Specialist

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4093-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill-Point E Northeast Corner
Location:	Sunland Park, NM
Latitude:	31-47-29.70N NAD 83
Longitude:	106-35-07.68W
Heights:	3898 feet site elevation (SE)
	368 feet above ground level (AGL)
	4266 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

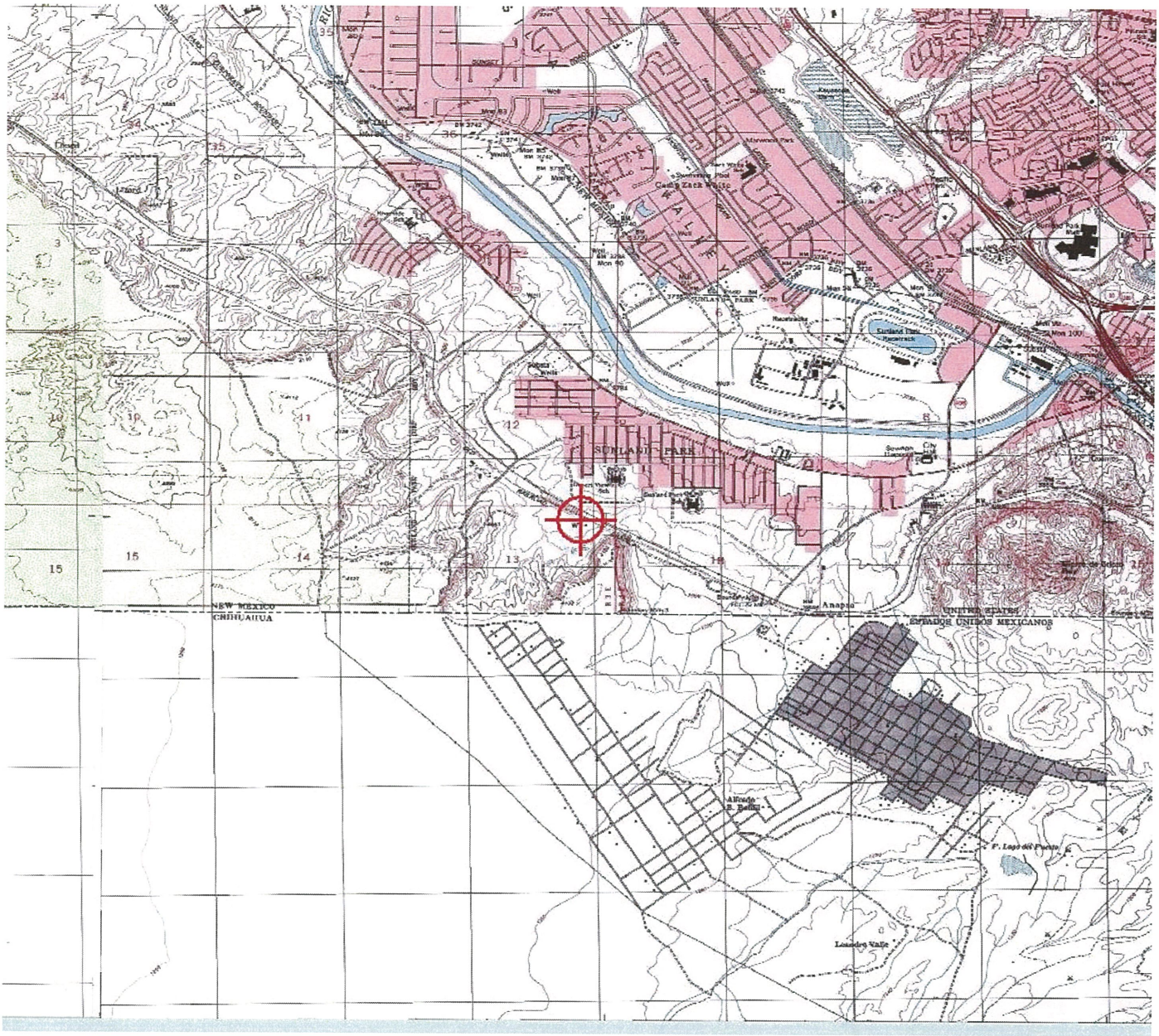
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

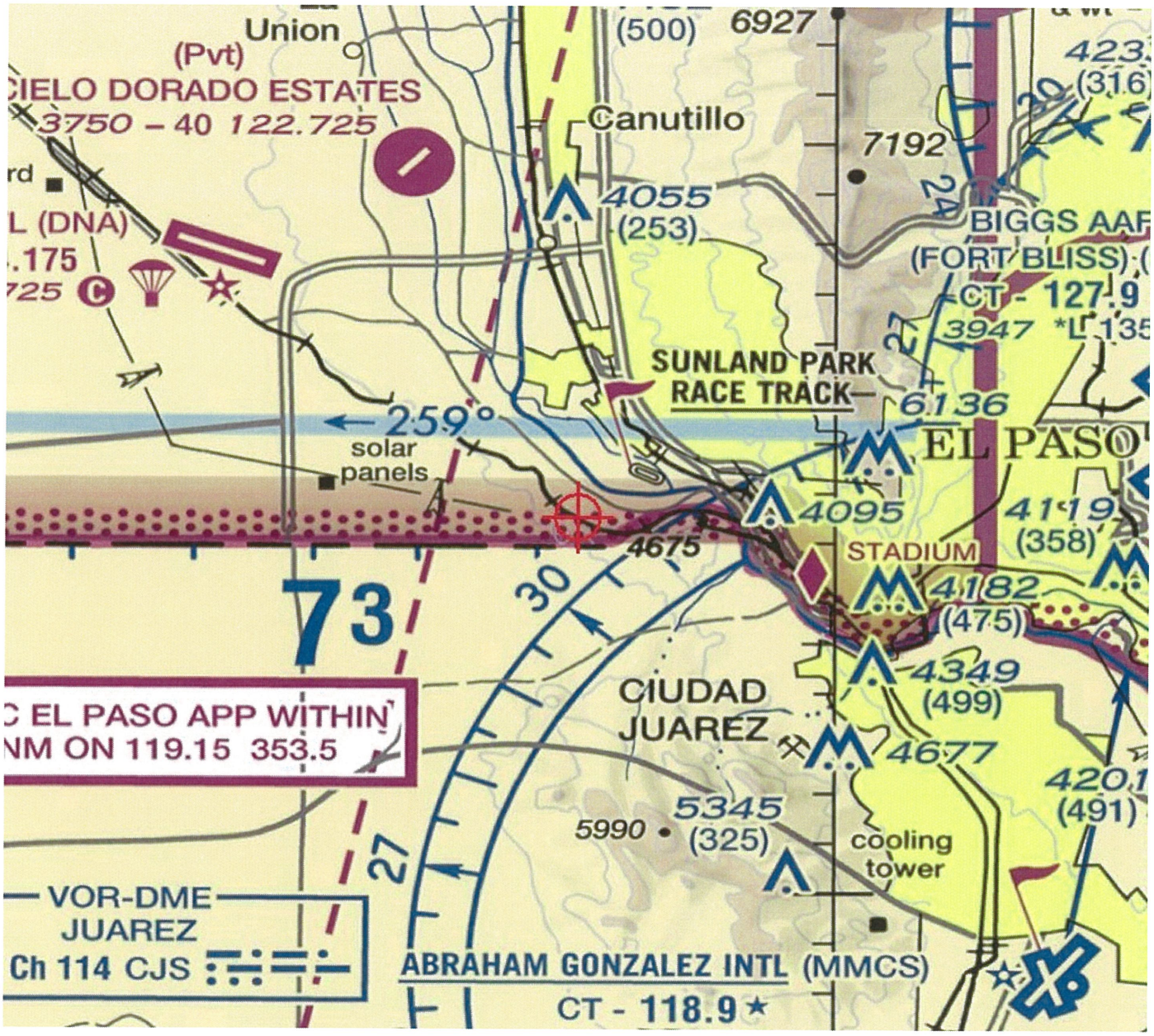
If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4093-OE.

Signature Control No: 433343668-442223533 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-4093-OE




Union
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3750 – 40 122.725
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C EL PASO APP WITHIN
NM ON 119.15 353.5
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Ch 114 CJS
ABRAHAM GONZALEZ INTL (MMCS)
CT - 118.9

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4093-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill-Point E Northeast Corner
Location:	Sunland Park, NM
Latitude:	31-47-29.70N NAD 83
Longitude:	106-35-07.68W
Heights:	3898 feet site elevation (SE) 368 feet above ground level (AGL) 4266 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4093-OE.

Signature Control No: 433343668-508196477 (EXT)
Chris Smith
Specialist

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4092-OE

Issued Date: 06/08/2020

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill Camino Real Landfill-Point F Southeast Corner
Location:	Sunland Park, NM
Latitude:	31-47-05.33N NAD 83
Longitude:	106-35-06.78W
Heights:	4082 feet site elevation (SE)
	164 feet above ground level (AGL)
	4246 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 12/08/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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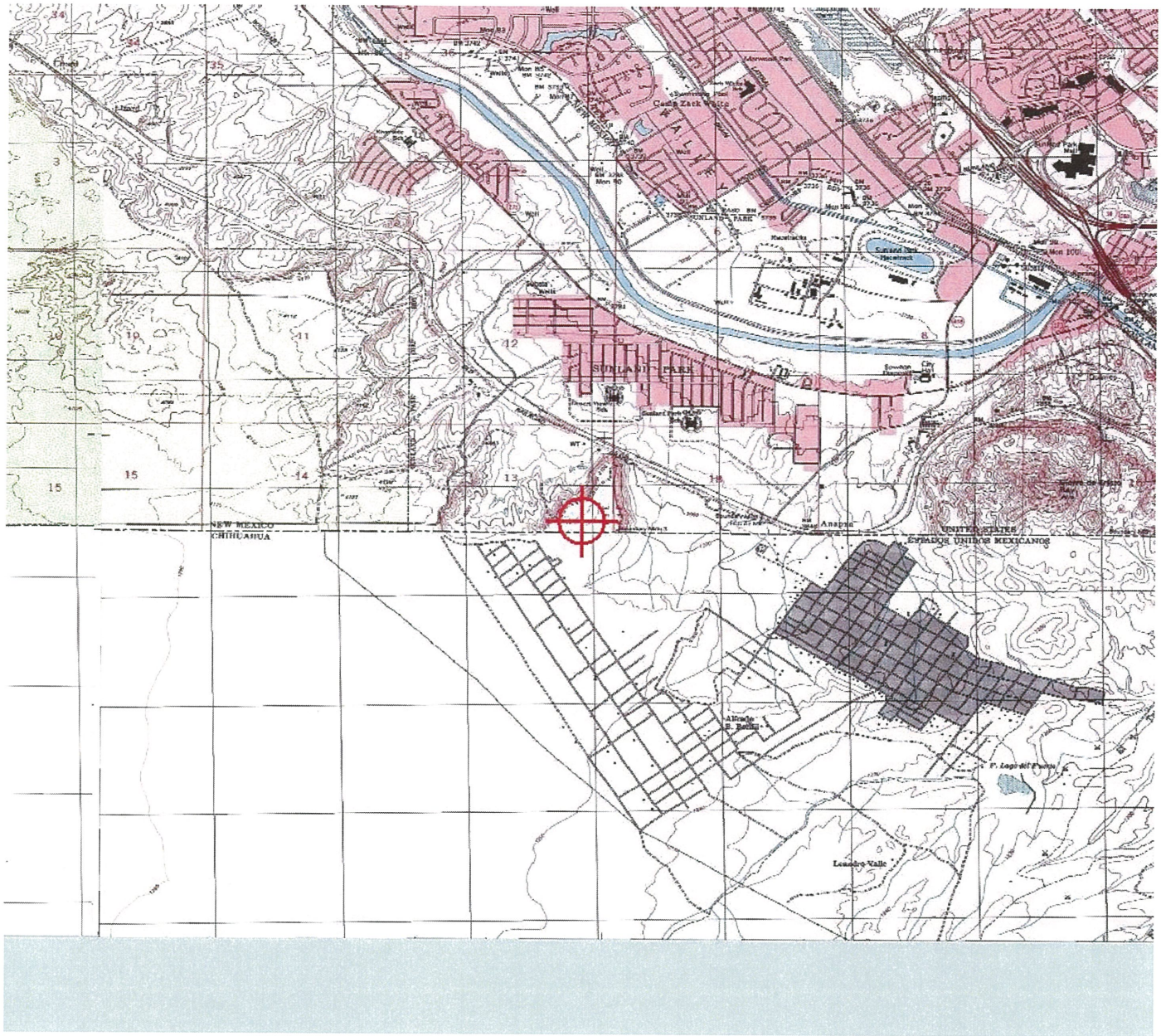
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4092-OE.

Signature Control No: 433343660-442222932 (DNE)
Chris Smith
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2020-ASW-4092-OE



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(FORT BLISS)
CT - 127.9
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RACE TRACK
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VOR-DME
JUAREZ
Ch 114 CJS
ABRAHAM GONZALEZ INTL (MMCS)
CT - 118.9

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASW-4092-OE

Issued Date: 01/18/2022

Brady Stewart
Camino Real Environmental Center, Inc.
1000 Camino Real Blvd
Sunland Park, NM 88063

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Landfill Camino Real Landfill-Point F Southeast Corner
Location:	Sunland Park, NM
Latitude:	31-47-05.33N NAD 83
Longitude:	106-35-06.78W
Heights:	4082 feet site elevation (SE)
	164 feet above ground level (AGL)
	4246 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 07/18/2023 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-4092-OE.

Signature Control No: 433343660-508196481 (EXT)
Chris Smith
Specialist

MARCH 12, 2020 REQUEST FOR WILDLIFE HAZARD DETERMINATION LETTER

Weaver Consultants Group

Project No. 0601-667-11-06
March 12, 2020

Mr. Gary Loftus
Airports Compliance Program Manager
Federal Aviation Administration
Southwest Region, Airports Division-Safety and Standards Branch
10101 Hillwood Pkwy
Fort Worth, Texas 76177

Re: Potential for Wildlife Hazard Determination
Camino Real Landfill Permit Modification and Renewal
Sunland Park, New Mexico

The purpose of this letter is to demonstrate communication with the Federal Aviation Administration (FAA), consistent with New Mexico Administrative Code (NMAC) 20.9.3.9(B)(13) and 20.9.4.9(A)(8).

NMAC 20.9.3.9(B)(13) requires any person seeking a permit for a municipal or special waste landfill to provide proof of notification to the FAA and any affected airports if the facility is to be located within 6 miles of an airport used by the public and that the FAA does not object to the site being operated as a solid waste facility.

NMAC 20.9.4.9(A)(8) requires that no municipal, construction and demolition, or special waste landfill be located where, on the date of the first public notice, any portion of the proposed disposal area is within the distance to airports set by the FAA unless the landfill owner or operator demonstrates that the FAA does not object to construction and operation of the landfill at the proposed site.

The distance to airports set by the FAA is outlined in CFR Title 14, Aeronautics and Space, Chapter I Federal Aviation Administration, Department of Transportation, Subchapter E Airspace, Part 77 – Safe, Efficient Use, and Preservation of the Navigation Airspace, Subpart B – Notice Requirements §77.9. Section 77.9(b) requires any construction or alteration that exceeds an imaginary surface extending outward at a slope of 100 to 1 for a horizontal distance of 20,000 feet, 50 to 1 for a horizontal distance of 10,000 feet, or 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest runway of an airport to file notice with the FAA.

Weaver Consultants Group, LLC (WCG) is preparing an Application for Permit Modification and Permit Renewal under contract with Camino Real Environmental Center, Inc., to reconfigure their existing landfill, Camino Real Landfill (CRLF), located in the southern portion of the City of Sunland Park, New Mexico. The site is located at 1000 Camino Real Blvd., Sunland, NM 88063. The closest airport, Doña Ana County Airport at Santa Teresa, NM, is located approximately 7.5 miles northwest of the site.

As shown in Attachment 1, the Camino Real Landfill is located over 6 miles from an airport used by the public. Therefore, NMAC 20.9.3.9(B)(13) is not applicable. Also, the facility is located over 20,000 feet from the nearest runway end of the Dona Ana County Airport. Therefore, §77.9(b) (and consequently NMAC 20.9.4.9(A)(8)) is not applicable.

Additionally, WCG utilized the FAA's web-based Circle Search for Airports feature to search for airports in the vicinity of CRLF. A 10 nautical mile circle search of the site was completed and yielded one airport, Dona Ana County Airport, approximately 7.5 miles from the site. Therefore, as noted above, NMAC 20.9.3.9(B)(13) and NMAC 20.9.4.9(A)(8) are not applicable.

WCG also reviewed other airport safety related regulations including EPA and FAA related regulations including Code of Federal Regulations (CFR), Title 40: Protection of Environment, Chapter I Environmental Protection Agency, Subchapter I Solid Wastes, Part 258 Criteria for Municipal Solid Waste Landfills, Subpart B Location Restrictions, §258.10 Airport Safety. Applicable sections of 40 CFR §258.10 are addressed below.

40 CFR §258.10(a) requires a permit applicant of any waste management or disposal area of a new land disposal facility, or expansion of waste management or disposal areas of an existing land disposal facility, to provide a demonstration that the facility will not pose a bird hazard to aircraft, if that facility or expansion to the existing facility is to be located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft.

Additionally, 40 CFR §258.10(b) requires a permit applicant of waste management or disposal areas of a new land disposal facility, or expansion of waste management or disposal areas of an active land disposal facility, located within a 5-mile radius of any airport runway end used by a turbojet or piston-type aircraft to notify the FAA and the affected airport.

The nearest airport to the CRLF is the Doña Ana County Airport at Santa Teresa, NM. The CRLF is located over 10,000 feet and more than 5 miles from the nearest runway end of the Doña Ana County Airport at Santa Teresa, NM, as shown in Attachment 1. Therefore, 40 CFR §258.10(a) and 40 CFR §258.10(b) are not applicable.

CFR Title 40 §258.10 also makes note of FAA Advisory Circular (AC) 150/5200-34, dated August 26, 2000. A review of FAA 150/5200-34 indicates this AC has been cancelled and replaced with FAA AC 150/5200-34A, dated January 26, 2006. AC 150/5200-34A contains guidance on complying with federal statutory requirements regarding the construction or establishment of new municipal solid waste landfills (MSWLFs) near public airports. The guidance is provided to comply with new MSWLF site limitations contained in United States Code (U.S.C.), Title 49 Transportation, Subtitle VII Aviation Programs, Part A Air Commerce and Safety, Subpart iii Safety, Chapter 447 Safety Regulations, Section 44718 – Structures interfering with air commerce. In general, U.S.C. Title 49 §44718(d) and AC 150/5200-34A relate to the establishment of a MSWLF within 6 miles of a public airport. However, this limitation only applies to new MSWLFs (constructed and established after April 5, 2000) and is not applicable to an existing MSWLFs or MSWLFs that are expanded or modified after April 5, 2000. As noted above, the closest public airport to the site is

approximately 7.5 miles northwest of the site. Additionally, landfill operations have occurred at this site since 1987. Therefore, U.S.C. Title 49 §44718(d) and AC 150/5200-34A are not applicable.

AC 150/5200-34A makes reference to related reading materials including AC 150/5200-33, Hazardous Wildlife Attractions on or Near Airports, dated July 27, 2004. A review of AC 150/5200-33A indicates that this AC has been cancelled and replaced with AC 150/5200-33B, dated August 28, 2007. AC 150/5200-33B contains guidance on certain land uses that have potential to attract hazardous wildlife on or near public use airports. In general, when addressing MSWLFs, AC 150/5200-33B discusses the same, 6 mile, 5 mile, 10,000 foot and 5,000 foot radius regulations as discussed previously. Therefore, as discussed above, AC 150/5200-33B is not applicable.

Section 77.9 of CFR Title 14 also provides notice requirements based on height, location, and frequencies emitted from a structure. WCG utilized the FAA's web-based Notice Criteria Tool (Obstruction Evaluation Version 2018.2.0), in addition to the regulations addressed in this letter, to determine notification requirements. Based on the Notice Criteria Tool, the CRLF is required to file notice with the FAA in accordance with CFR Title 14 Part 77.9(a), which requires filing notice with the FAA for any construction or alteration that is more than 200 feet above ground level at the site. Obstruction evaluation points have been uploaded to the FAA online obstruction evaluation portal so that an aeronautical study can be performed. Notification of a completed obstruction determination will be provided at a later date. In addition to filing noticing with the FAA, Camino Real Environmental, Inc. would like to request a potential for wildlife hazard determination.

Camino Real Environmental Center, Inc. is being proactive toward controlling vectors at the CRLF. CRLF utilizes the following methods to control vectors:

(1) Working Face Size – The working face is confined to as small an area as practical. The working face is also covered at the end of each day.

(2) Heavy Equipment – The constant movement of heavy equipment limits potential harborage or feeding areas.

(3) Pest Control Services – A pest control expert will be on-call to provide additional assistance if necessary.

These methods have been effective in deterring birds and other vectors from becoming a nuisance to the landfill and surrounding areas. The permit modification and renewal does not revise the landfill operations and therefore should not create any additional bird attracts. Drawing 2 comparing the permitted completion plan and the proposed completion plan is included in Attachment 2 for reference.

In summary, CRLF is an existing active land disposal facility that is not located within 6 miles of an airport. Per the NMAC and 40 CFR regulations, as well as the FAA Advisory Circular, this only requires notification to the FAA. However, Camino Real Environmental Center, Inc. would like to request a wildlife hazard determination. WCG

will also upload information regarding the height of the expansion to the FAA online obstruction evaluation portal so that an aeronautical study can be performed.

Your assistance with this matter is sincerely appreciated. Please call if you have any questions or need additional information.

Sincerely,
Weaver Consultants Group, LLC

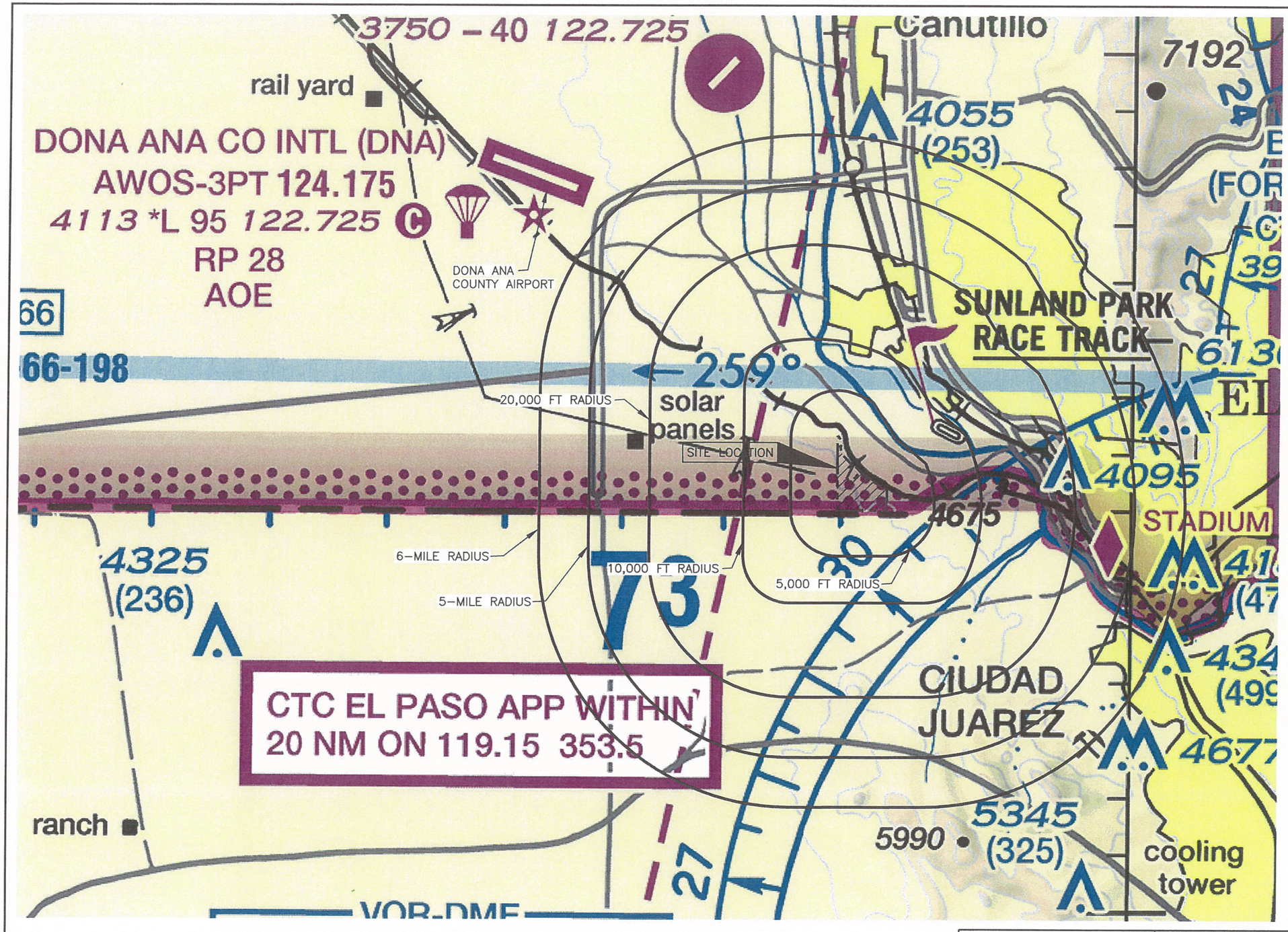
Jonathan V. Queen, P.E.
Project Director

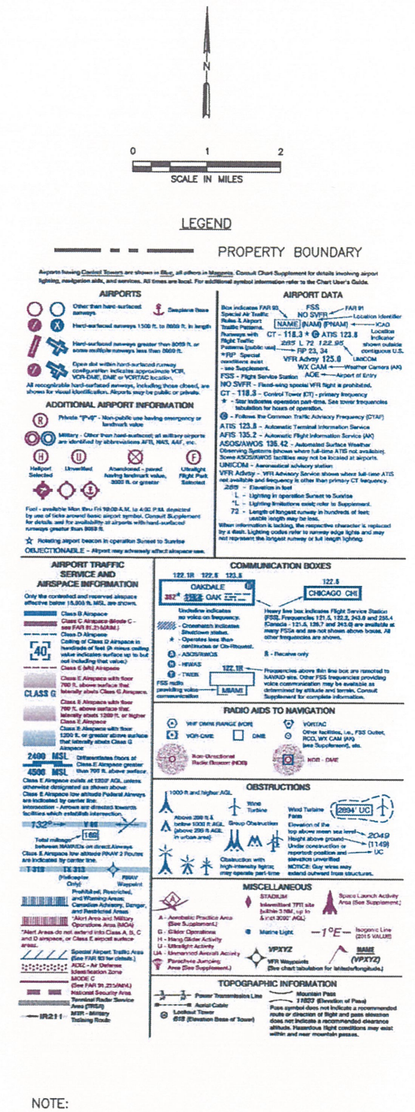
Attachments: Attachment 1 - FAA Airport Vicinity Map
Attachment 2 - Permitted Completion Plan and Proposed Completion Plan

cc: Brady Stewart, Camino Real Environmental Center, Inc.
Juan Carlos Tomas, Camino Real Environmental Center, Inc.

ATTACHMENT 1

FAA AIRPORT VICINITY MAP





NOTE:

1. THIS MAP REPRODUCED FROM THE FAA EL PASO SECTIONAL AERONAUTICAL CHART 103rd EDITION DATED JULY 18, 2019.

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☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 03/2020
FILE: 0601-667-11
CAD: 1-AIRPORT LOCATION MAP.DWG
DRAWN BY: JDW
DESIGN BY: RWB
REVIEWED BY: JAE

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group

AIRPORT LOCATION MAP

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

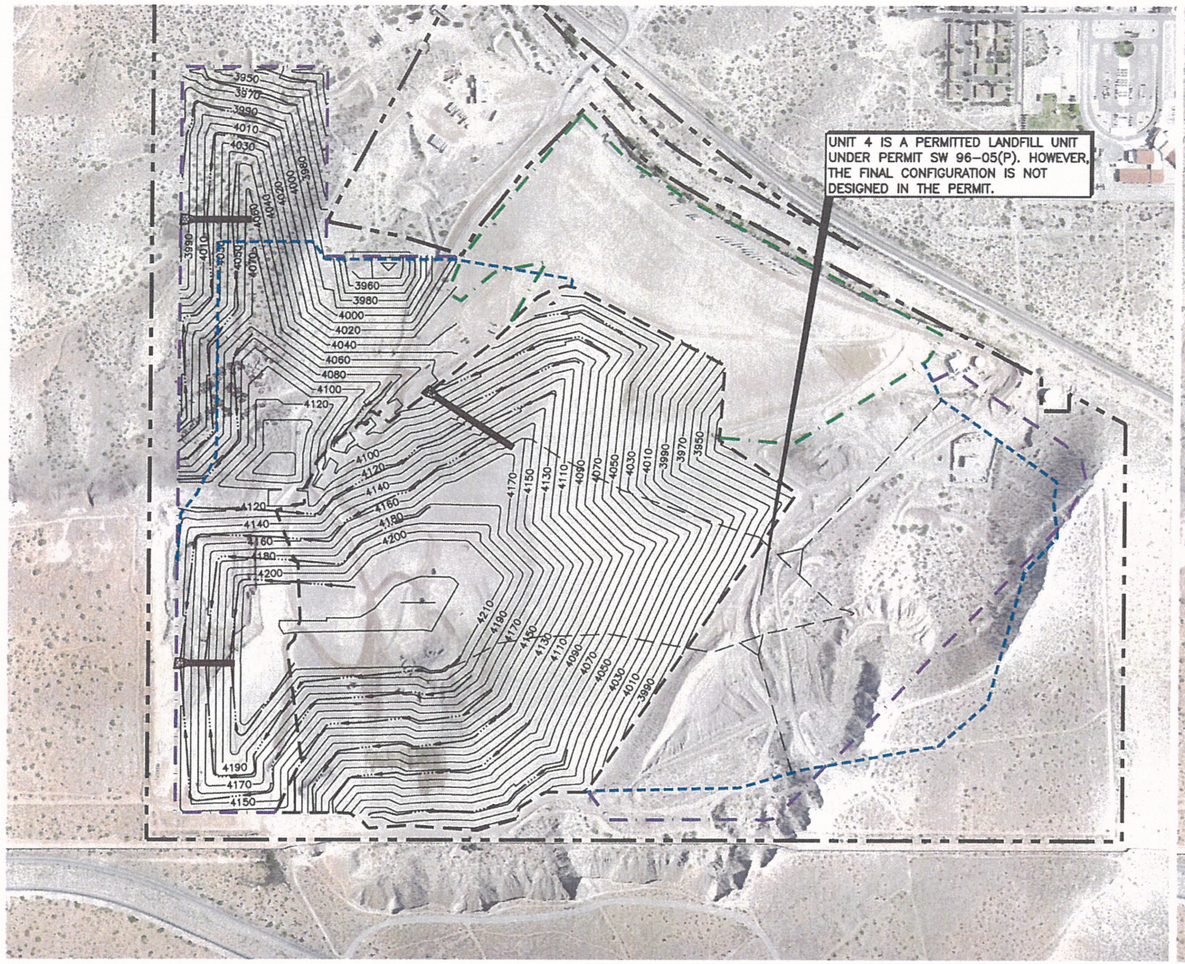
WWW.WCGRP.COM

DRAWING 1

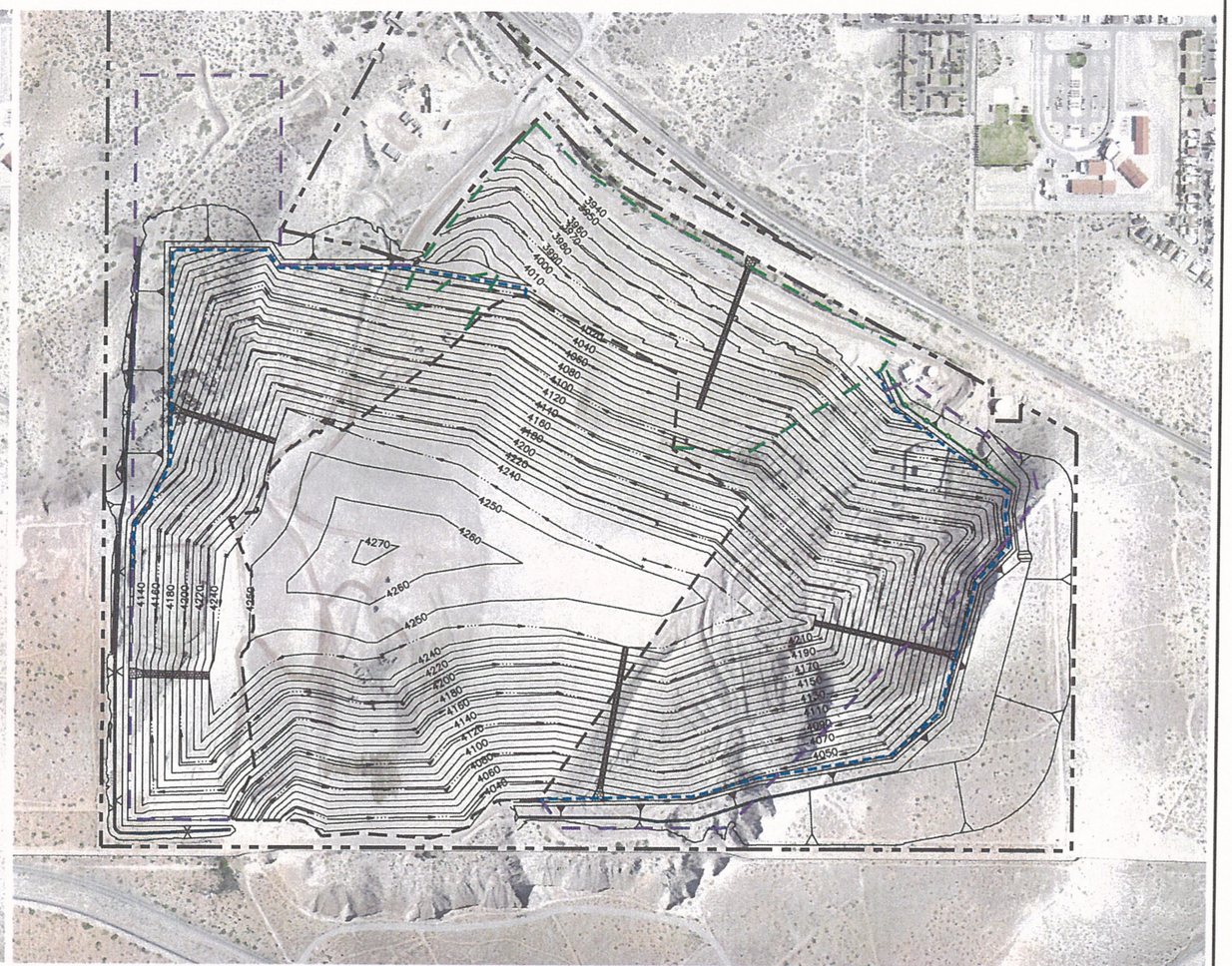
O:\0601\667\EXPANSION 2019\LOCATION RESTRICTIONS\FAA\1-AIRPORT LOC MAP.dwg, rbaker, 1:2

ATTACHMENT 2

PERMITTED COMPLETION PLAN AND PROPOSED COMPLETION PLAN



PERMITTED LANDFILL COMPLETION PLAN



PROPOSED LANDFILL COMPLETION PLAN

N

0 400 800

SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE FOR UNIT 2
- PERMITTED LIMITS OF WASTE FOR UNIT 1 (CLOSED)
- PERMITTED LIMITS OF WASTE FOR UNITS 3 AND 4
- ADJUSTED LIMITS OF WASTE FOR UNITS 3 AND 4
- 4190 FINAL COVER CONTOUR
- DRAINAGE SWALE
- DRAINAGE CHUTE

NOTES:

1. AERIAL PHOTOGRAPH PROVIDED BY MERRICK & COMPANY FROM AN AERIAL SURVEY FLOWN APRIL 30, 2019.

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☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 03/2020
FILE: 0601-667-11
CAD: 2 FINAL COVER COMPARISON.DWG

DRAWN BY: SRF
DESIGN BY: KRB
REVIEWED BY: JVQ

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group

LANDFILL COMPLETION PLAN COMPARISON

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

DRAWING 2

0:\0601\667\EXPANSION 2019\LOCATION RESTRICTIONS\FAA\2- FINAL COVER COMPARISON.dwg, jwilson, 1:2

JUNE 8, 2020 FAA WILDLIFE HAZARD LETTER OF NO OBJECTION

U.S. Department
of Transportation
**Federal Aviatic
Administration**

Federal Aviation Administration
Southwest Region, Airports Division
Safety and Standards Branch

10101 Hillwood Parkway
Fort Worth, Texas 76177

June 8, 2020

Ramsey Baker, E.I.T.
Staff Engineer
Weaver Consultants Group
6420 Southwest Blvd. Suite 206
Fort Worth, TX 761094

Subject: Camino Real Landfill
Permit Modification and Renewal
FAA File No. 2020-001-NM

Dear Ramsey:

This letter is in response to your March 12, 2020 letter advising us of the application submitted by Weaver Consultants Group on behalf of the Camino Real Landfill for site modification and renewal located at 1000 Camino Real Blvd, Sunland Park, NM.

Using coordinates of 31 47 05.33" N and 106 35' 06.78" W, we determined there are no public or public owned airports within 6 statute miles of the coordinate site.

On June 8, 2020, FAA issued your office a "Determination of No Hazard To Air Navigation."

We have no objection to the proposed modification of the Camino Real Landfill. Our position of no objection is based on the application of our guidance for hazardous wildlife attractants on or near airports FAA Advisory Circular 150/5200-33C.

This site has been assigned our file No. 2020-001-NM. Please refer to this number in any future correspondence regarding this site. Thank you for coordinating this project with us. If there are any questions, you can contact me at 817-222-5671 or gary.loftus@faa.gov.

Sincerely,
Gary Joseph Loftus
Digitally signed by Gary Joseph Loftus
Date: 2020.06.08 14:59:55 -05'00'
Gary J. Loftus, A.A.E.
Airports Compliance Program Manager
Airport Certification Safety Inspector
FAA Southwest Region Airports Division

ATTACHMENT IV.1-D

ARCHAEOLOGICAL SURVEY

- August 17, 2020 Goshawk Environmental Consultants, Inc. Archaeological Study
- August 27, 2020 New Mexico Historic Preservation Division (NM HPD) Concurrence Letter

Note: The complete archaeological study was provided to NMHPD and NMED. Sensitive information has been screened for inclusion in this permit application.

AUGUST 17, 2020 GOSHAWK ENVIRONMENTAL CONSULTANTS, INC. ARCHAEOLOGICAL STUDY

GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

17 August 2020

Jeff Pappas, PhD
State Historic Preservation Officer and Director
New Mexico Historic Preservation Division
Department of Cultural Affairs
Bataan Memorial Building, 407 Galisteo Street, Suite 236
Santa Fe, New Mexico 87501

Re: Archaeological Survey Submittal
Camino Real Landfill Permit Application
Sunland Park, Doña Ana County, New Mexico

Dear Dr. Pappas:

The purpose of this letter, submitted on behalf of Camino Real Environmental Center, Inc. (CREC), the owner and operator of the Camino Real Landfill, is to present the Class III Archaeological Survey of the Camino Real Landfill to the Historic Preservation Division (NMHPD) State Historic Preservation Officer (SHPO) for review and comment.

CREC is seeking a Permit Modification and Renewal for the Camino Real Landfill to modify the existing permitted landfill configuration, authorize the acceptance of additional special wastes, and renew the current permit. The New Mexico Solid Waste Rules (20.9.4.9.A(5) NMAC) require that no landfill shall be located where a portion of the proposed disposal area is (on the date of first public notice) "within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Section 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 18-8-1 to 18-8-8."

The enclosed archaeological report (NMCRIS Activity #145264) provides the results of the survey conducted for the 19.52-hectare (48.24-acre) site. As part of the 100% pedestrian survey, two previously recorded prehistoric archaeological sites (LA 67691 and LA 67692) were revisited. The site boundaries for both sites were expanded from those presented in the original recorder's report. No new archaeological sites were identified during the current survey; however, new features were discovered.

We appreciate your review of the enclosed report and look forward to any comments. Please do not hesitate to contact me at 512-203-0484 with any questions about the report or Jonathan V. Queen at 817-735-9770 with any questions about the permit modification.

Sincerely,

Zane N. Homesley
President

Cc: Jonathan V. Queen, P.E., Weaver Consultants Group, LLC. (with redacted report)
Brady Stewart, Camino Real Environmental Center, Inc. (with redacted report)
Juan Carlos Tomas, Camino Real Environmental Center, Inc. (with redacted report)

GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

NMCRIS ACTIVITY NUMBER: 145264

A CLASS III ARCHAEOLOGICAL SURVEY OF THE CAMINO REAL LANDFILL, DOÑA ANA COUNTY, NEW MEXICO

Author:
Reign Clark, Mark Willis, Tim Graves, Steve Evans, and Emily van Zanten

Principal Investigator:
Mark Willis

Field Supervisors:
Mark Willis and Tim Graves

Report Prepared by:
Goshawk Environmental Consulting, Inc.
P.O. Box 151525
Austin, Texas 78715

Lead Agency:
New Mexico Historic Preservation Division

New Mexico Archaeological Investigation Permit: 20-290

August 2020

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 145264	2a. Lead (Sponsoring) Agency: New Mexico Historic Preservation Division	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:

4. Title of Report: A Class III Archaeological Survey of the Camino Real Landfill, Doña Ana County, New Mexico
Author(s): Reign Clark, Mark Willis, Tim Graves, Steve Evans, and Emily van Zanten

5. Type of Report ☐ Negative ☒ Positive

6. Investigation Type
☐ Research Design ☒ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☐ Monitoring ☐ Ethnographic study ☒ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?):
Goshawk Environmental Consulting, Inc. (Goshawk) performed a cultural resources survey for Weaver Consultants Group for the proposed Camino Real Landfill (project area) in Sunland Park, Doña Ana County, New Mexico. Although the project area is owned by private concerns, the project area was once federally owned and transferred to private ownership in the early 1990s during the Cox Ranch Land Exchange. Archeological survey and subsequent review by the New Mexico Historic Preservation Division (NM/HPD) was conducted as part of the landfill permitting process. The cultural resources survey consisted of archival research, Class III Archaeological Survey, and preparation of a report suitable for review by the NM/HPD.

8. Dates of Investigation: 27 and 28 December 2019

9. Report Date: 31 March 2020

10. Performing Agency/Consultant: Goshawk Environmental Consultants, Inc.
Principal Investigator: Mark Willis
Field Supervisor: Mark Willis and Tim Graves
Field Personnel Names: Mark Willis and Tim Graves

11. Performing Agency/Consultant Report No.:04DA45264

12. Applicable Cultural Resource Permit No(s): 20-290

13. Client/Customer (project proponent): Weaver Consultants Group
Contact: Jonathan Queen
Address: 6420 Southwest Blvd., Suite 206, Fort Worth, TX 76109
Phone: 817-851-9464

14. Client/Customer Project No.:

15. Land Ownership Status ***(Must be indicated on project map):***

Land Owner	Acres Surveyed	Acres in APE
Private	48.24	493.63
TOTALS	48.24	493.63

16. Records Search(es):

Date(s) of ARMS File Review 20 December 2019	*Name of Reviewer(s):* Reign Clark	
Date(s) of NR/SR File Review	*Name of Reviewer(s)*	
Date(s) of Other Agency File Review	*Name of Reviewer(s)*	

17. Survey Data:
a. Source Graphics ☐ NAD 27 ☒ NAD 83
☒ USGS 7.5' (1:24,000) topo map ☐ Other topo map, Scale:
☒ GPS Unit Accuracy ☐<1.0m ☒ 1-10m ☐ 10-100m ☐>100m

b. USGS 7.5' Topographic Map Name / USGS Quad Code

Smeltertown	31106-G5

c. **County(ies):** Doña Ana

17. Survey Data (continued):
d. Nearest City or Town: Sunland Park, New Mexico
e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼
29S	3E	13	E2

Projected legal description? Yes [ ], No [X] Unplatted [ ]
f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.): See Description of Undertaking,

maps, and drawings in report.

18. Survey Field Methods:
Intensity: ☒ 100% coverage ☐ <100% coverage

Configuration: ☒ block survey units ☒ linear survey units (l x w): ☐ other survey units (specify):

Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 15 **Crew Size:** 2 **Fieldwork Dates:** 27 and 28 December 2019

Survey Person Hours: 12 **Recording Person Hours:** 8.00 **Total Hours:** 20.00

Additional Narrative: WCG contracted Goshawk to perform a cultural resources survey consisting of archival research, a pedestrian survey, and preparation of a report suitable for review by the NM/HPD, the regulatory agency responsible for oversight. The survey was conducted under State Archaeological Investigation Permit 20-290.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):
According to the NRCS data, the soils within the project area (listed by prevalence) are Bluepoint loamy sand, 5-15% slopes (Bn); Bluepoint loamy sand, 0-5% slopes (Bm); Pajarito-Pintura complex (Pb); and Bluepoint-Caliza-Yturbide complex (BP). The Bluepoint loamy sands are located on the slopes and lower elevations within the northern portion of the site. Pajarito-Pintura complex occupies the mesas in the southeastern and southwestern portions of the site. The Bluepoint-Caliza-Yturbide complex is found on the steeper slopes just below the mesa tops. These soils are well drained with low runoff potential. None of the soils mapped within the site contain hydric components.

Elevations range from approximately 1,189 meters (3,900 feet) above mean sea level (AMSL) along the railroad to 1,259 meters (4,132 feet) AMSL at the southeast corner of the site. Elevations slope upward toward mesas or flat hilltops in the southeast and southwest portions of the site. Overland sheet flow generally flows northeast toward the Rio Grande, which is approximately 1.3 kilometers (0.8 miles) northeast of the site. The site is within the Rio Grande watershed.

20.a. Percent Ground Visibility: 90% **b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):**
The dominant local land use is cow/calf ranching operation on native grasses and oil and gas production.

21. CULTURAL RESOURCE FINDINGS ☒ **Yes, See Page 3** ☐ **No, Discuss Why:**

22. Required Attachments (check all appropriate boxes):
- ☒ USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
- ☒ Copy of NMCRIS Mapserver Map Check
- ☐ LA Site Forms - new sites (*with sketch map & topographic map*)
- ☒ LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
- ☐ Historic Cultural Property Inventory Forms
- ☒ List and Description of isolates, if applicable
- ☐ List and Description of Collections, if applicable

23. Other Attachments:
- ☒ Photographs and Log
- ☐ Other Attachments

(Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Mark Willis

Signature: Mark Willis **Date:** 14 March 2020 **Title:** Principal Investigator

25. Reviewing Agency:
Reviewer's Name/Date:

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ Yes ☒ No

26. SHPO
Reviewer's Name/Date:

HPD Log #:
SHPO File Location:
Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 145264	2. Lead (Sponsoring) Agency: New Mexico Historic Preservation Division	3. Lead Agency Report No.:

SURVEY RESULTS:

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited (***site update form required***): 2
Previously recorded sites not relocated ***(site update form required):*** 0
TOTAL SITES VISITED: 2
Total isolates recorded: 4 **Non-selective isolate recording?** ☒
Total structures recorded (*new and previously recorded, including acequias*): 0

MANAGEMENT SUMMARY: Goshawk Environmental Consulting, Inc. (Goshawk) performed a cultural resources survey for Weaver Consultants Group for the proposed Camino Real Landfill (project area) in Sunland Park, Doña Ana County, New Mexico. Archeological survey and subsequent review by the NM/HPD was conducted as part of the landfill permitting process. The cultural resources survey consisted of archival research, Class III Archaeological Survey, and preparation of a report suitable for review by the NM/HPD, the regulatory agency responsible for oversight. The survey was conducted under State Archaeological Investigation Permit 20-290.

The 199.76-hectare (493.63-acre) project area consists of the active landfill and undeveloped land, some of which is permitted for additional landfill area (landfill permit area). Approximately 10.2 hectares (25.2 acres) of the project area have not been previously subjected to archaeological survey. No disturbance to this area is anticipated; therefore, it was not covered during the current survey effort. A total of 19.52 hectares (48.24 acres) at the southeast corner of the project area was subjected to 100-percent Class III Archaeological Survey (survey area). The project area is located on the Smeltertown, New Mexico, United States Geological Survey topographic quadrangle, within Section 13 of Township 29 South, Range 3 East.

The Class III Archaeological Survey was conducted on 27 and 28 December 2019 in Doña Ana County, New Mexico (NMCRIS Activity 145264). The survey resulted in the assessment of two previously recorded prehistoric archaeological sites. The site boundaries recorded during the revisit were expanded from those presented in the original recorder's report (Hogan 1993) but reduced from those shown on NMCRIS.

Sites LA 67691 and LA 67692 were both prehistoric occupations with burned caliche features, lithic debitage, limited lithic tools, and ground stone artifacts. Both sites yielded minimal temporally diagnostic artifacts during the initial recordings. No subsurface testing was conducted during the survey to prove or disprove the sites' potential for temporal stratification or eligibility for listing on the National Register of Historic Places (NRHP). However, the presence of larger, partially buried burned caliche features suggests areas of deposition greater than 10 centimeters (4 inches) below surface exist on the landform where both sites were found.

Significant portions of site LA 67691 and LA 67692 are within the boundaries of Permit Area 4. Additional subsurface testing would be necessary at both sites to determine temporal stratification and NRHP eligibility. Areas subjected to survey outside of the boundaries of the two sites do not require additional survey, and expansion in those areas should be allowed to proceed as planned. In the unlikely event that any human skeletal remains or funerary objects are discovered anywhere within the survey area during construction activities, the landfill operator should cease construction activities in the area of discovery and notify the archaeologist and the NM/HPD immediately.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)
LA 67691		Eligible, criteria D
LA 67692		Eligible, criteria D

NMCRIS INVESTIGATION ABSTRACT

Goshawk Environmental Consulting, Inc. (Goshawk) performed a cultural resources survey for Weaver Consultants Group for the proposed Camino Real Landfill (project area) in Sunland Park, Doña Ana County, New Mexico. Although the project area is owned by private concerns, it was once federally owned and transferred to private ownership in the early 1990s during the Cox Ranch Land Exchange. Archeological survey and subsequent review by the New Mexico Historic Preservation Division (NM/HPD) was conducted as part of the landfill permitting process. The cultural resources survey consisted of archival research, Class III Archaeological Survey, and preparation of a report suitable for review by the NM/HPD, the regulatory agency responsible for oversight. The survey was conducted under State Archaeological Investigation Permit 20-290.

The 199.76-hectare (493.63-acre) project area consists of the active landfill and undeveloped land, some of which is permitted for additional landfill area (landfill permit area). Approximately 10.2 hectares (25.2 acres) of the project area have not been previously subjected to archaeological survey. No disturbance to this area is anticipated; therefore, it was not covered during the current survey effort. A total of 19.52 hectares (48.24 acres) at the southeast corner of the project area was subjected to 100-percent Class III Archaeological Survey (survey area). The survey area is located on the Smeltertown, New Mexico, United States Geological Survey topographic quadrangle, within Section 13 of Township 29 South, Range 3 East.

The Class III Archaeological Survey was conducted on 27 and 28 December 2019 in Doña Ana County, New Mexico (NMCRIS Activity 145264). The survey resulted in the assessment of two previously recorded prehistoric archaeological sites (LA 67691 and LA 67692). The site boundaries recorded during the revisit were expanded from those presented in the original recorder's report (Hogan 1993) but reduced from those shown on NMCRIS.

Sites LA 67691 and LA 67692 were both prehistoric occupations with burned caliche features, lithic debitage, limited lithic tools, and a few ground stone artifacts. Both sites yielded few temporally diagnostic artifacts during the initial recordings. No subsurface testing was conducted during the survey to identify temporal stratification or eligibility for listing on the National Register of Historic Places (NRHP). However, the presence of larger, partially buried burned caliche features suggests areas of deposition greater than 10 centimeters (4 inches) below surface exist on the landform where both sites were found.

At the present time, portions of site LA 67691 and LA 67692 are within the boundaries of Permit Area 4. Additional subsurface testing would be necessary at both sites to determine temporal stratification and NRHP eligibility. Areas subjected to survey outside of the boundaries of the two sites do not require additional survey, and expansion in those areas should be allowed to proceed as planned. In the unlikely event that any human skeletal remains or funerary objects are discovered anywhere within the survey area during construction activities, the landfill operator should cease construction activities in the area of discovery and notify the archaeologist and the NM/HPD immediately.

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CONTENTS

1.0 PROJECT BACKGROUND 1
2.0 ENVIRONMENTAL SETTING 2
2.1 PHYSIOGRAPHIC AND GEOMORPHIC CONTEXT 2
2.2 SOILS 2
2.3 FLORAL AND FAUNAL COMMUNITIES 3
2.4 MODERN CLIMATE 3
2.5 PALEOENVIRONMENT 3
3.0 CULTURAL OVERVIEW OF THE EASTERN NEW MEXICO REGION 4
3.1 PREHISTORY 4
3.2 HISTORIC PERIOD (A.D. 1810 TO PRESENT) 6
4.0 CULTURAL RESOURCES SURVEY 7
4.1 PREVIOUS RESEARCH 7
4.2 CURRENT RESEARCH 8
5.0 NRHP ELIGIBILITY AND CONCLUSIONS 13
6.0 REFERENCES CITED 14

APPENDICES

A FIGURES
B PHOTOGRAPHS
C SITE FORMS

1.0 PROJECT BACKGROUND

Goshawk Environmental Consulting, Inc. (Goshawk) performed a cultural resources survey of Weaver Consultants Group for the proposed Camino Real Landfill (project area) in Sunland Park, Doña Ana County, New Mexico. Although the project area is owned by private concerns, the project area was once federally owned and transferred to private ownership in the early 1990s during the Cox Ranch Land Exchange. Archeological survey and subsequent review by the New Mexico Historic Preservation Division (NM/HPD) was conducted as part of the landfill permitting process. The cultural resources survey consisted of archival research, Class III Archaeological Survey, and preparation of a report suitable for review by the NM/HPD, the regulatory agency responsible for oversight. The survey was conducted under State Archaeological Investigation Permit 20-290.

The project area was located on the Smeltertown, New Mexico, United States Geological Survey topographic quadrangle, south of the small community of Sunland Park, New Mexico. Its southern boundary is located along the United States/Mexico border and its northeast boundary is defined by a railroad right-of-way (ROW). The project area is located 5.3 kilometers (3.3 miles) west of the Rio Grande and the Texas/New Mexico State Line (Figure 1). The 199.76-hectare (493.63-acre) project area consists of the active landfill and undeveloped land, some of which is permitted for additional landfill area (Figures 2 and 3). Four areas have already been permitted. Permit Area 1 has been closed to additional landfill use, Permit Areas 2 and 3 are an active landfill, and Permit Area 4 is subject to alteration from the approved permit area. The current survey area includes a portion of the Permit Area 4 alteration, where a previously documented archaeological site would be impacted (Figures 4a, 4b, and 4c). Approximately 10.2 hectares (25.2 acres) of the project area have not been previously subjected to archaeological survey (Figure 5). No disturbance to this area is anticipated; therefore, it was not covered during the current survey effort.

A total of 19.52 hectares (48.24 acres) of land at the southeast corner of the project area was subjected to 100-percent Class III Archaeological Survey (survey area). The survey area is located within Sections 12 and 13 of Township 29 South, Range 3 East. The survey was conducted on 27 and 28 December 2019 (NMCRIS Activity 145264). The survey area was eroded with expanses of caliche exposure at high elevations (Photo 1) and aeolian deposition of sand and silt on slopes and low elevations. As much as 50 percent of the survey area had been disturbed by vehicular traffic and erosion (Photo 2). Erosion of the shallow sandy soils across much of the survey area has been accelerated by devegetation.

The survey was performed in compliance with the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470 et seq., P.L. 89-665, 80 Stat. 915), and the implementing regulations under 36CFR800. They were also intended to comply with the National Environmental Policy Act (NEPA) of 1969; NEPA of 1974 (PL 81-190, 83 Stat. 915, 41 USC 4321, 1970); the Archaeological and Historic Preservation Act of 1974 (PL 93-291); the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 Fed. Reg. 44716-42, Sept. 29, 1983); the National Register Bulletin Series of the National Park Service; and the Archaeological Resources Protection Act of 1979 (US Department of the Interior 1977). The survey was also conducted under the standards developed by the Register of Professional Archeologists (RPA 2017).

2.0 ENVIRONMENTAL SETTING

The proposed Camino Real Landfill in Doña Ana County is located within the Basin and Range Physiographic Province. More specifically, it is within the Mexican Highlands, which is a large plateau that occupies north and central Mexico and is bounded on the east by the Sierra Madre Oriental (Fenneman 1938). The Sierra Madre Oriental traverses Mexico and enters Texas and New Mexico as the Davis and Guadalupe Mountain Ranges. Elevations range from approximately 1,189 meters (3,900 feet) above mean sea level (AMSL) along the railroad to 1,259 meters (4,132 feet) AMSL at the southeast corner of the site. Elevations slope upward toward mesas or flat hilltops in the southeast and southwest portions of the site. Overland sheet flow generally flows northeast toward the Rio Grande, which is approximately 1.3 kilometers (0.8 miles) northeast of the site. The site is within the Rio Grande watershed.

2.1 PHYSIOGRAPHIC AND GEOMORPHIC CONTEXT

The Geologic Map of New Mexico indicates the project area is underlain primarily by the Upper Santa Fe Group (Pleistocene to Upper Miocene) with Piedmont alluvial deposits (Upper and Middle Quaternary) along the north and east boundaries. Both of these geologic units parallel the Rio Grande. Older alluvial deposits formed on upland plains and piedmont areas of the High Plains. The Upper Santa Fe Group is comprised of multiple discreet formations derived from alluvial or volcanic sources. Piedmont alluvial deposits are associated with higher order tributaries bordering major stream valleys, alluvium from piedmont slopes, and alluvial fans.

2.2 SOILS

The NRCS Web Soil Survey (NRCS 2020) was consulted to determine the major soil types within the project area. According to the NRCS data, the soils within the project area (listed by prevalence) are Bluepoint loamy sand, 5-15% slopes (Bn); Bluepoint loamy sand, 0-5% slopes (Bm); Pajarito-Pintura complex (Pb); and Bluepoint-Caliza-Yturbide complex (BP). The Bluepoint loamy sands are located on the slopes and lower elevations within the northern portion of the site. Pajarito-Pintura complex occupies the mesas in the southeastern and southwestern portions of the site. The Bluepoint-Caliza-Yturbide complex is found on the steeper slopes just below the mesa tops. These soils are well drained with low runoff potential. None of the soils mapped within the site contain hydric components.

2.2.1 Bluepoint loamy sand

Bluepoint soils are comprised of sandy alluvium that accumulates upon the toe slopes of stream terraces. These deep loamy soils are fairly homogenous throughout the soil column down to the restrictive layer. These soils exhibit a moderate probability to contain temporally stratified deposits.

2.2.2 Pajarito-Pintura complex

Pajarito-Pintura complex soils are comprised of mixed coarse loamy alluvium deposited as alluvial fans. These well-drained soils are interbedded and highly variable with a restrictive layer below 203 centimeters (80 inches). These soils exhibit a moderate probability to contain temporally stratified deposits.

2.2.3 *Bluepoint-Caliza-Yturbide complex*

Bluepoint-Caliza-Yturbide complex soils are comprised of mixed sandy and gravelly alluvium deposited as alluvial fans or along drainageways. These very gravelly soils are well-drained with a restrictive layer below 203 centimeters (80 inches). These soils exhibit a moderate probability to contain temporally stratified deposits.

2.3 Floral and Faunal Communities

Southcentral New Mexico is located within the Chihuahuan Biotic Province (Blair 1950). The majority of the project area is steeply sloping desert scrubland with wind erosion, as evidenced by minimal vegetative cover (Photo 3). The vegetative community within the project area consists of honey mesquite, creosote, broom snakeweed, and Mormon tea (Photo 4).

Various mammal, bird, reptile, and invertebrate species inhabit southcentral New Mexico. Herbivorous mammals include mule deer, pronghorn, and numerous rodent species. Bison were common in the area 8,000 to 12,000 years ago (Dillehay 1974). Carnivores include coyote, bobcat, badger, striped skunk, and swift fox. Two upland game bird species, scaled quail and mourning dove, are prevalent throughout southeastern New Mexico. Many species of songbirds nest in the area; however, a greater diversity of birds utilize this habitat during migration or for non-nesting activities. Common avian predators include northern harrier, Swainson's hawk, red-tailed hawk, American kestrel, burrowing owl, and Chihuahuan raven. Numerous snake and lizard species also inhabit this area. Invertebrates are abundant including grasshoppers, beetles, wasps, spiders, and scorpions.

2.4 Modern Climate

Doña Ana County has a sub-humid to dry climate with hot summers and mild winters. Most rainfall in the area occurs in late spring to early fall, although evaporation rates are high. The combination of higher temperatures, winds, high evaporation rates, and low rainfall accelerates soil erosion. The yearly average is 62.4 degrees Fahrenheit with a summer high averaging 97 degrees Fahrenheit (F) and a winter low averaging 34 degrees. Average rainfall is approximately 25 centimeters (10 inches) per annum, including 8 centimeters (3 inches) of snow. The growing season averages 290 days (US Weather Service 2020). Rainfall is lowest in March and April and greatest in August and September.

2.5 Paleoenvironment

Thousands of years ago, during the Pleistocene, the climate was more mesic with fewer temperature extremes and relatively lush vegetation. Megafauna thrived in this setting but were dependent on streams and waterholes. Following the close of the Pleistocene, New Mexico experienced a trend toward a warmer and drier climate (Johnson and Holliday 1986). It has been postulated that this climate shift was partially responsible for the extinction of megafauna. Southern New Mexico is still experiencing relatively xeric conditions today.

3.0 CULTURAL OVERVIEW OF THE EASTERN NEW MEXICO REGION

Doña Ana County is within the Southern New Mexico Archaeological Region. Studies show that several cultures inhabited the area for the last 13,000 years (Abbott 2009; Jelinek 1967; Anthony, et al 1992; and Railey 2013 and 2016). The following cultural/temporal periods are used to categorize those habitations: Paleoindian (ca. 13,500 to 9,000 B.P.), Archaic (ca. 9,000 to 1,500 B.P.), Ceramic (ca. 1,500 to 600 B.P.), Post Formative Native American (ca. 600 B.P. to present), and Historic Euro-American (ca. C.E. 1810 to present).

3.1 PREHISTORY

3.1.1 Paleoindian Period (ca. 13,500 to 9,000 B.P.)

Recent archaeological evidence indicates prehistoric people may have occupied this area prior to the Paleoindian Period. However, the controversial sites that show evidence of an earlier period of habitation have not been widely accepted by the archaeological community (Dillehay and Meltzer 1991). For this reason, the prehistoric period will begin with the Paleoindians. Holliday (1987) divides the Paleoindian Period into three distinct temporal divisions: Clovis, Folsom, and Plano Paleoindian cultures in New Mexico. One radiocarbon date from the Lubbock Lake Landmark site firmly established Clovis occupation to 11,500 years ago in North Texas (Holliday 1987:22). Earlier dates have been secured from a Clovis site in northeastern New Mexico, where the lowest level was dated 13,300 to 13,000 years ago (Hanes and Warnica 2012).

Coinciding with the decline of the Wisconsin glaciation, the Paleoindian Period is characterized by a relatively cool, moist climate that encouraged the development of now-extinct species of Pleistocene megafauna (Johnson and Holliday 2004). This period is sometimes called the Big Game Hunting Tradition (Willey 1966), due to a presumed reliance by Paleoindian peoples on megafauna as a food source. These conclusions are based on well-documented exploitation of megafauna in the western United States and evidence of the presence of similar species in New Mexico and North Texas between 11,000 and 9,000 years ago.

Excavations at the Aubrey site (41DN479) in north-central Texas indicated subsistence efforts did not focus on big game animals alone (Ferring 1989, 2001). The entire range of available fauna was utilized by the occupants of the site. Meat sources included bison, deer, rabbit, squirrel, fish, and turtle (Ferring 1989, 2001; Ferring and Yates 1997). Whether this pattern of a more generalized foraging subsistence system is characteristic of Clovis adaptations to this region remains to be documented. Ferring and Yates (1997) suggest that the Clovis people probably employed "very flexible adaptive strategies."

Temporally diagnostic Paleoindian tool types include a variety of finely chipped, sometimes fluted, lanceolate projectile point styles, such as Clovis, Folsom, Plainview, and Scottsbluff (Prikryl 1990; Willey 1966). The Paleoindian projectile points transitioned from the early Paleoindian Period to Early Archaic Period. By the Late Paleoindian Period and Early Archaic Period, unfluted lanceolate projectile points, such as Plainview, Golondrina, Meserve, Scottsbluff, and Angostura were more common (Story 1990; Hester 1980). Today, these projectile points are most often found on the ground surface as isolated occurrences.

Overall population density was probably rather low during Paleoindian times. Early sites in New Mexico include Hermit's Cave, Burnet Cave, and Blackwater Draw locality 1 (Hanes and Warnica, 2012, Stuart and Gauthier 1980 Sebastian and Larralde 1989:26; Tainter and Girrio 1980:28; Cordell 1979).

3.1.2 Archaic Period (9,000 to 1,500 B.P.)

Following the close of the Pleistocene, eastern New Mexico experienced a trend toward a warmer and drier climate (Johnson and Holliday 1986). The archaeological record of this period exhibits a gradual diversification in subsistence patterns (Collins 1971). Although not well-defined in the region, studies indicate a dependence on hunting and gathering. From approximately 4,500 to 1,500 B.P., bison herds returned to the high plains and must have held great appeal to Archaic hunters (Dillehay 1974). Agricultural pursuits, which were established in part in northwestern New Mexico by 3,000 B.P., were non-existent in the south until much later (Stuart and Gauthier 1980). By the end of the Archaic Period, sea levels stabilized at current levels and the modern climatic regime was established (Aten 1983:157–159).

3.1.3 Ceramic Period (1,500 to 600 B.P.)

The project area is within the Greater Mogollon culture area. A trend toward sedentary group structure and population aggregation began during this time. Horticulture, beginning by approximately 1,500 B.P., started to support villages located within walking distance of reliable water sources (Haskell 1977). Ceramics first appeared in southern New Mexico approximately 1,600 B.P. which marks the beginning of the Mesilla Phase (Anthony, et al 1992). El Paso Brownware is a characteristic ceramic type of this phase. Trade routes became more formalized as ceramics, such as Mimbres, were imported from the west, and later, other types from Mexico.

Small villages with small rectangular pit structures became common. By 1,100 B.P., larger pithouse villages came with increased sedentism and larger populations. Importation of ceramics increased dramatically. By 900 B.P., the semi-subterranean pithouse gave way to the fully above-ground pueblo form of architecture, and with it, the beginning of the El Paso Phase. With the El Paso Phase came a new diversity of locally produced ceramic types such as El Paso Bichrome and Polychrome.

By the end of the El Paso phase, there were only scattered remnants of a once congregated native population. Whether this was due to a return of drought conditions or the increased pressure of new migrations is unknown. Partial abandonment of pueblos in the Hueco Bolson region followed, perhaps due to decreased rainfall and changing seasonality. Dillehay (1974) suggests an increase in the bison population from 750 to 650 B.P. renewed reliance on megafauna as a food source.

3.1.4 Post Formative Native American Period (600 B.P. to present)

After abandonment of prehistoric villages in the southern high plains, nomadic bison hunters roamed the deserted plains of New Mexico. Apachean groups and Plains Native American groups raided the region as Spanish and later Anglo ranchers began to settle southeastern New Mexico. Sebastian and Larralde (1989) present a comprehensive study of this settlement pattern, as do other researchers including Railey (2016:134-136) and Miller et al. (2016:22).

3.2 HISTORIC PERIOD (A.D. 1810 TO PRESENT)

First, conquistadors under Coronado, then Comancheros, then early Anglo hunters crossed the wide plains searching for gold, trade, and fortune. The first documented European crossing of the Rio Grande at Paseo del Norte occurred in 1598 by Juan de Oñate, although permanent settlement of the region would not begin until after the 1680 Pueblo Revolt. After the Pueblo Revolt, Comanche horse soldiers began raiding through the region on their way to the richer haunts of northern Mexico. After the Mexican Revolution in 1810, the new constitution (1824) spelled out governance in the northern territory. By 1850, many Comanches were removed to rancherias and reservations in Oklahoma.

After the Mexican-American War (1846 to 1848), the Treaty of Guadalupe Hidalgo (1848) ceded the southeast portion of the northern territory to Texas. After the Compromise of 1850, the land was ceded to the federal government giving the United States governance over the New Mexico territory, along with California, Arizona, and Texas that once comprised 55 percent of Mexico's land mass. The American military began waging continuous warfare against native populations by establishing military posts and forts throughout Texas in an effort to support Anglo settlement of the region. The Comanche gained ground somewhat during the settlement hiatus caused by the American Civil War, but soon retreated as the military returned to the frontier. The Red River Wars, culminating in the battle at Palo Duro Canyon in 1878, opened the way for cattle ranchers like Goodnight and Chisolm to establish large ranches in southeastern New Mexico. Before governing forces could bring peace to the region, clashes to establish dominance led to fighting, such as the Lincoln County Wars.

The territory grew between 1880 and 1910 with railroads and ranching leading American and Mexican settlers into the area. The New Mexico Education Association of schoolteachers was organized in 1886. In 1889 small state colleges were established at Albuquerque, Las Cruces, and Socorro; and in 1891 the first effective public school law was passed. An 1889 irrigation project in the Pecos River Valley marked the first of many projects to irrigate farms in the dry state. The 1890 discovery of artesian waters at Roswell led to an increase in farming and mining. In 1906, the completion of the Elephant Butte Dam and associated irrigation projects brought consistent water to the entire south-central New Mexico and far West Texas region. Coal mining developed during the 1890s, primarily to supply railroads. In 1912, after 63 years as a United States Territory, New Mexico became the 47th state in the Union.

4.0 CULTURAL RESOURCES SURVEY

Doña Ana County contains numerous recorded archaeological sites, most of which are recordings from urban expansion and associated infrastructure. The Camino Real Landfill survey is located on the Smeltertown, New Mexico, United States Geological Survey topographic quadrangle map. According to the New Mexico Cultural Resources Information System (NMCRIS), the county contains 35 properties that are listed on the National Register of Historic Places (NRHP). Of the 35 NRHP-listed properties, five are houses, two are forts, 17 are structures, two are historic roads, one is a fairground, and eight are National Register Districts. The closest NRHP-listed property is Old Fort Bliss in El Paso, Texas, located 7.5 kilometers (4.6 miles) southwest of the project area.

4.1 PREVIOUS RESEARCH

Numerous NMCRIS-listed activities have been conducted within a 500-meter (1,640-foot) radius of the project area. These include surveys for landfills, roadways, and government infrastructure. A list of the most pertinent NMCRIS activities (n=11) is shown in Table 1. The largest of these surveys was conducted on federal lands as part of the Cox Land Exchange in 1988 (NMCRIS Activity 35779). The Cox Land Exchange covered approximately 119.79 hectares (296 acres) of the project area and approximately 3.24 hectares (8 acres) of the current survey area.

Table 1: NMCRIS List of Activities within 500 Meters (1,640 Feet) of the Project Area

Activity #	Organization	Lead Agency	Acres	Sites Visited	Start Date
18381	BLM, Las Cruces District	BLM, Las Cruces District	374.5	31	1 to 31 June 1981
21553	Batcho & Kauffman Associated	Municipal Government	53.65	0	1 Jan to 31 Dec 1988
35581	Batcho & Kauffman Associates	Private	9.02	0	1 Jan to 31 Dec 1991
35779	University of New Mexico, Office of Contract Archaeology	BLM, Roswell District	9,516.00	91	16 May 1988 to 1 Sep 1993
51991	University of New Mexico, Office of Contract Archaeology	Private	8.8	7	15 Oct 1995 to 19 Jun 1996
53221	Ecology and Environment, Inc.	Private	Not Entered	10	4 to 30 June 1996
66004	Geo-Marine, Inc.	USACE, Fort Worth District	18.00	0	27 to 31 Dec 1994
67167	Lone Mountain Archaeological Services	BLM, Las Cruces District, NMDOT	1567.98	37	12 Apr 2000 to 31 Dec 2002
80061	TRC, Inc	Public Service Company of New Mexico	10.00	0	21 Aug to 31 Dec 2002
95391	Quivira Research Center Associates	Private	140	1	10 Oct to 30 Nov 2005
133616	Northland Research, Inc.	US Customs and Border Patrol	14.40	0	27 May 2015

Two sites were mapped within the survey area, and three additional sites were mapped within 500 meters (1,640 feet) of the survey area. Table 2 provides further information on the mapped sites.

Table 2: Previously Recorded Sites within 500 Meters (1,640 Feet) of the Project Area

LA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

4.2 CURRENT RESEARCH

Goshawk archaeologists conducted a Class III Archaeological Survey of a portion of the proposed Camino Real Landfill on 27 and 28 December 2019. The survey was conducted by Mark Willis and Tim Graves under NMCRIS activity 145264. A total of 19.52 hectares (48.24 acres) of private land was subjected to survey. This effort provided 100-percent coverage of the survey area.

Two previously documented archaeological sites, LA 67691 and LA 67692, were revisited and expanded during the Camino Real Landfill survey (Figure 6). The sites were prehistoric occupations containing burned caliche and lithic debitage. A total of four isolated occurrences were documented within the survey area outside of the observed site boundaries (Figure 7). The isolated artifacts consisted of two burned caliche fragments, one limestone flake, and one slab metate fragment.

4.2.1 LA 67691

Site LA 67691 was revisited by Goshawk archaeologists on 27 December 2019. The entire site was subjected to pedestrian transect survey at 5-meter (16-foot) intervals. All artifacts were analyzed in the field and point-plotted with a 3-meter-accuracy (9.8-foot-accuracy) handheld global positioning system (GPS). Select artifacts and features were photographed.

The site was located on a cuesta overlooking the Rio Grande Valley, which was more than 60 meters (200 feet) below (Photo 5). Vegetation included mesquite, creosote, yucca, Mormon tea, grasses, shrubs, and forbs. Surface visibility within the site boundaries averaged 90 percent (Photo 6). The site area was partially exposed by erosion and disturbed by rutting from a two-track roadway cutting through the site. The site appeared to be less than 20 percent intact. Still, the presence of larger, partially buried, burned caliche suggested deposition greater than 10 centimeters (4 inches) below surface. The site was on a Q2 surface that predated human occupation of the area as defined by geomorphologists in the region (Monger 1993; Johnson 1997). There was no evidence of looting or intentional vandalism at the site.

Site LA 67691 was represented on NMCRIS as a large circular site measuring 303 meters (1,000 feet) across but was described by the original recorders as measuring 220 by 70 meters (772 by 230 feet) in size. During the revisit, the site measured 280 by 92 meters (918 by 302 feet) (Figure 8). The site was originally described as lacking discernable cultural features; however, during the revisit, two concentrations of burned caliche (hearths) were identified. Feature 1, the deflated remains of a thermal feature located in the northern part of the site, measured 1 meter (3.3 feet) in diameter and consisted of 23 burned caliche (Photo 7). Feature 2, a partially exposed hearth located in the southern part of the site, measured 1 meter (3.3 feet) in diameter and consisted of eight burned caliche with charcoal stained sediments and charcoal (Photo 8). The adjusted site boundaries were expanded to the north and south-southwest, comprising a total site area of approximately 1.73 hectares (4.28 acres).

The artifacts analyzed included one piece of angular debris, one utilized piece of angular debris (agave knife), 30 lithic flakes, four utilized flakes, four unifacially shaped tools (three end scrapers and one chopper), five unimarginally retouched end scrapers, one marginally retouched tool, one round hammerstone, one slab metate fragment, one basin metate fragment, and two indeterminate ground stone fragments. The lithic flakes represented predominately expedient core reduction (n=22) but included some small tertiary bifacial or tool production pieces (n=6).

The artifacts analyzed included a wide variety of materials from Rio Grande gravel deposits, with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. The artifacts analyzed included ten limestone artifacts, 11 chert artifacts, nine rhyolite

artifacts, seven chalcedony artifacts, five quartzite artifacts, three sandstone artifacts, two siltstone artifacts, two basalt artifacts, one shale artifact, one ignimbrite artifact, and one obsidian artifact (Rio Grande Type II). No temporally diagnostic artifacts were observed during the revisit.

While much of LA 67691 had been heavily eroded, the sheet sand deposits may contain intact soils that possess temporally stratified features. Aeolian deposition may have capped features and preserved organic materials within sheet sand deposits. While the site lacked stratigraphic integrity at the apex of the hill, multiple artifact classes and two features identified within sheet sand deposits of the high ridge suggested some potential for temporally stratified deposits and organic preservation at the site. The presence of intact charcoal stains within Feature 2 indicates datable remains are present at the site. In addition, remnants or subsistence materials may also be found within the buried component of this feature. Goshawk's survey results suggest LA 67691 has components (primarily Feature 2) that could make the site eligible for listing on the NRHP.

4.2.2 LA 67692

Site LA 67692 was revisited by Goshawk archaeologists on 27 December 2019. The site was subjected to pedestrian transect survey at 5-meter (16-foot) intervals. All artifacts were analyzed in the field and point-plotted with a 3-meter-accuracy (9.8-foot-accuracy) handheld GPS. Select artifacts and features were photographed.

The site was located on a flat on the west edge of the aforementioned cuesta (Photo 9). Vegetation included mesquite, creosote, yucca, Mormon tea, grasses, shrubs, and forbs. Surface visibility within the site boundaries averaged above 90 percent (Photo 10). The site area was partially exposed by erosion and disturbed by rutting from a two-track roadway cutting through the site. The majority of the site was on Q4 surfaces that represented historic to modern aeolian deposits as defined by geomorphologist in the region (Monger 1993; Johnson 1997); however, portions of the site were located on a partially exposed surface that had been eroded to strata that predated human occupation. There was no evidence of looting or intentional vandalism at the site.

Site LA 67692 was represented on NMCRIS as a large circular site measuring 303 meters (1,000 feet) in diameter and described by the original recorders as measuring 120 meters (394 feet) in diameter. During Goshawk's revisit, the site measured 136 by 62 meters (918 by 302 feet) (Figure 9). The adjusted site boundaries were expanded slightly to the southwest, comprising a total site area of approximately 0.52 hectares (1.28 acres).

The site was originally described as lacking discernable cultural features. During the current revisit, two concentrations of burned caliche were identified in the northern portion of the site. Feature 1, a partially exposed thermal feature, measured 3 by 4 meters (9.8 by 13.1 feet) in size (Photo 11). Feature 2, another partially exposed thermal feature, measured 7 meters (23 feet) in diameter (Photo 12).

The observed features contained intact deposits and buried prehistoric/historic surfaces. Cultural materials were eroding out of graded caliche roads up to 20 centimeters (7.87 inches) below the surface. The features may extend to 50 centimeters (19.69 inches) or more below the surface, if

similar to other excavated burned caliche middens excavated in basin settings. These features could contain absolute chronological materials and subsistence remains. The scattered pieces of burned caliche, present in other portions of the site, indicate additional thermal features were once present or may still be present below the modern ground surface.

The artifact assemblage included more than 81 lithic artifacts, seven pieces of amethyst bottle glass fragments, and one historic railroad spike. The lithic artifacts analyzed (26 artifacts) included 15 flakes, four unimarginally retouched lithic tools, one projectile point, one angular hammerstone fragment, one pestle fragment, and four slab metate fragments. The lithic flakes analyzed represented expedient core reduction pieces; however, an estimated 40 additional flakes and 15 small metate ground stone fragments were not analyzed, some of which may have represented bifacial reduction or tool-refurbishing pieces.

The lithic artifacts analyzed were composed of a wide variety of materials from Rio Grande gravel deposits, with the exception of a few local materials. The lithic artifacts analyzed included four sandstone artifacts, three ignimbrite artifacts, three limestone artifacts, three quartzite artifacts, three rhyolite artifacts, two basalt artifacts, two Franklin thunderbird rhyolite artifacts, two chert artifacts, two Rancheria chert artifacts, one chalcedony artifact, and one obsidian artifact.

The only temporally diagnostic lithic artifact observed during the revisit was the obsidian projectile point, which would best be described as a Bonham-like arrow point (Turner and Hester 1999). Based on this artifact and the historic glass shards observed, the site was most likely associated with the Late Pithouse Jornada Mogollon to early 20th century.

The site appeared to be more than 50 percent intact. The majority of site LA 67692 lacked stratigraphic integrity at the apex of the hill; however, the two features identified within sheet sand deposits of the hill are within aeolian deposition. Organic materials are commonly preserved in depositional areas such as these features. Extensive dune formations represent the southern site boundary and ascended 2 to 3 meters (6.56 to 9.84 feet) above the site. Dunal areas often contain temporally stratified deposits. Goshawk's survey results suggest LA 67692 has components that could make the site eligible for listing on the NRHP.

4.2.3 Isolated Manifestations

A total of four isolated manifestations were found, photographed, and recorded during the Class III Archaeological Survey of the Camino Real Landfill Site (Table 3). Of the isolates identified, two were small burned caliche fragments, one was a complete limestone flake (IM-3), and one was a slab metate fragment (IM-4). All other cultural material observed was confined to the boundaries of the revisited sites.

Table 3: Isolated Manifestations identified within the Camino Real Landfill Site

Isolated [redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted] N: 3517844	[redacted]	[redacted]

5.0 NRHP ELIGIBILITY AND CONCLUSIONS

The Class III Archaeological Survey was conducted on 27 and 28 December 2019 in Doña Ana County, New Mexico (NMCRIS Activity 145264). The survey resulted in the assessment of two previously recorded prehistoric archaeological sites. The site boundaries recorded during the revisit were expanded from those presented in the original recorder's report (Hogan 1993) but reduced from those shown on NMCRIS.

Sites LA 67691 and LA 67692 were prehistoric occupations with burned caliche features, lithic debitage, limited lithic tools, and a few ground stone artifacts. The sites yielded few temporally diagnostic artifacts during the initial recordings. No subsurface testing was conducted during the survey to identify temporal stratification or eligibility for listing on the NRHP. However, the presence of larger, partially buried burned caliche and associated partially exposed thermal features suggests deposition greater than 10 centimeters (4 inches) below surface exists on the landform where both sites were found.

Portions of site LA 67691 and LA 67692 are within the boundaries of Permit Area 4. Additional subsurface testing would be necessary at both sites to determine temporal stratification and NRHP eligibility. Areas subjected to survey outside of the boundaries of the two sites require no additional survey, and expansion in those areas should be allowed to proceed as planned. In the unlikely event that any human skeletal remains or funerary objects are discovered anywhere within the survey area during construction activities, the landfill operator should cease construction activities in the area of discovery and notify the archaeologist and the NM/HPD immediately.

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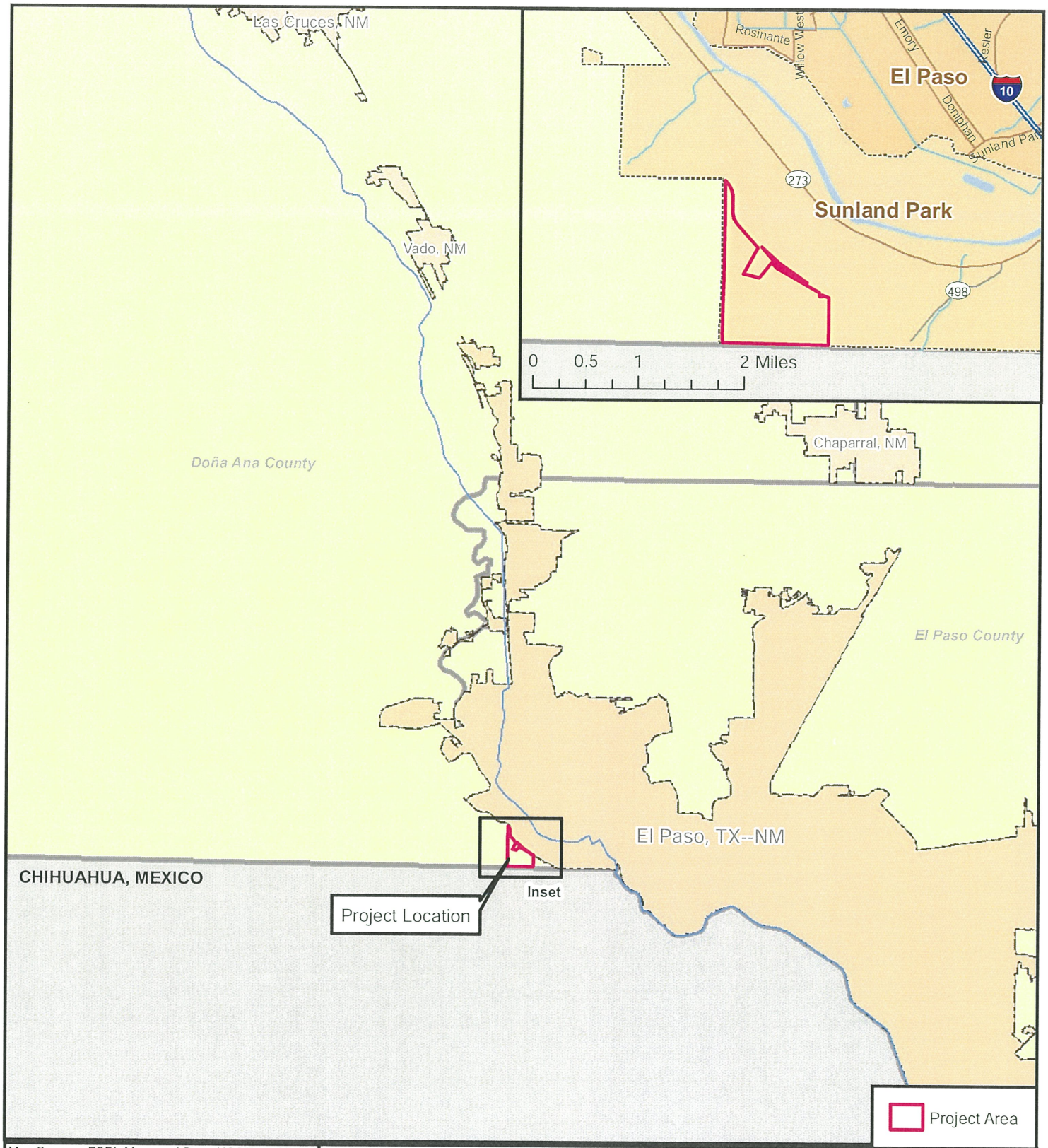
APPENDIX A
FIGURES



Map Source: ESRI, Maps and Data, USA Base Map, 2017, 10.6

0 2.5 5 Miles

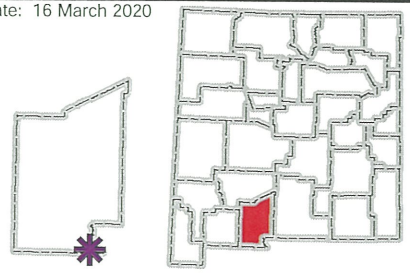
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

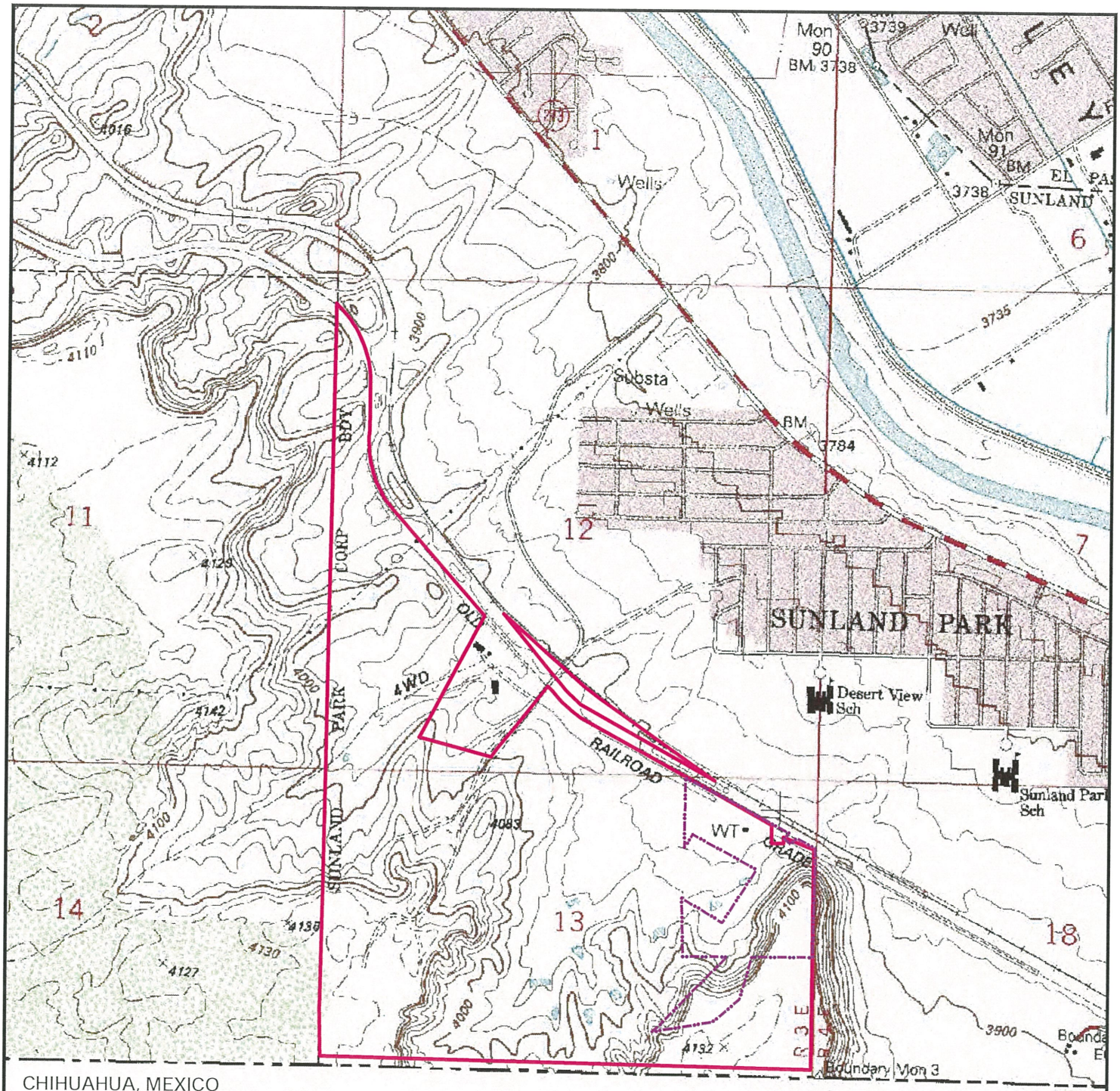
Figure 1
Vicinity

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

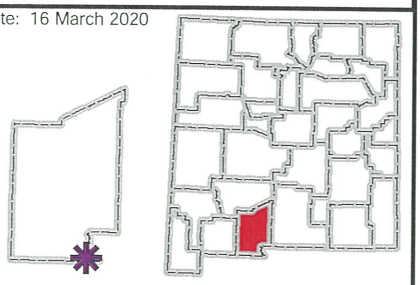
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

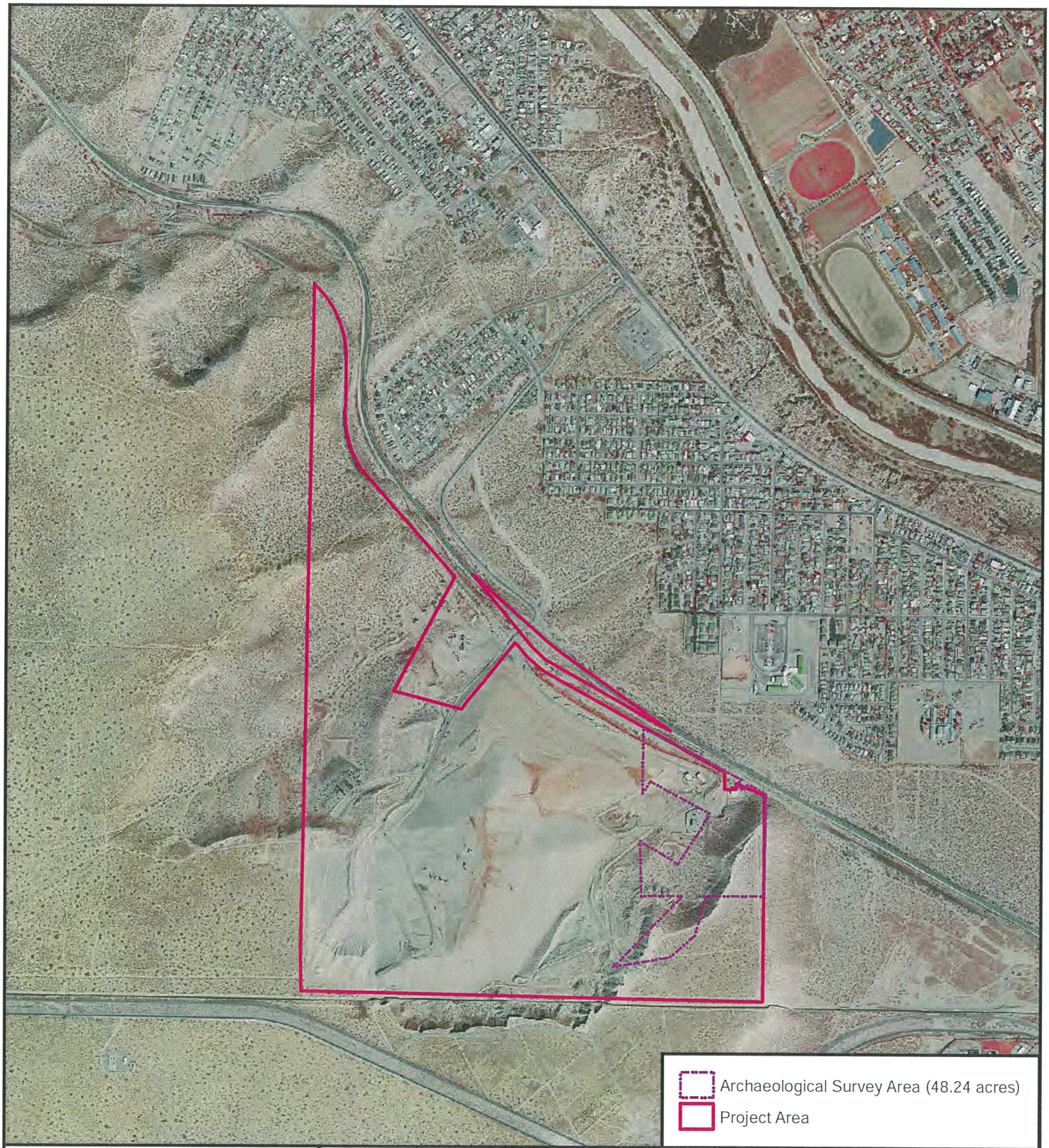
Figure 2
USGS Topographic

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018.

0 750 1,500 Feet

N

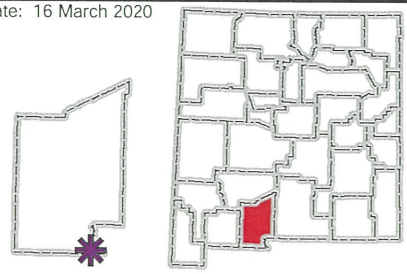
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 3
Aerial Orthoimagery

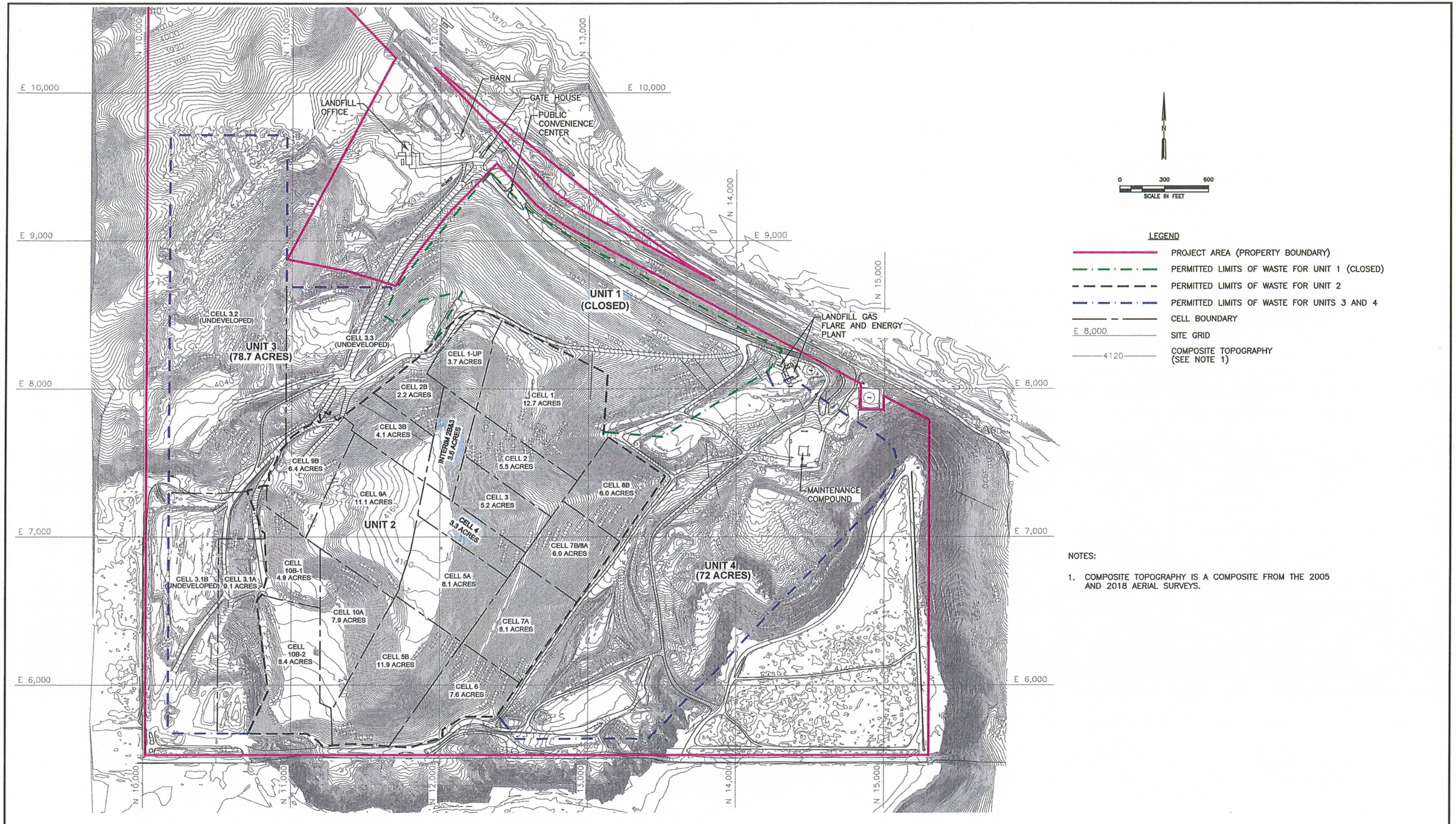
Camino Real Landfill Site

Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



NOTES:

1. COMPOSITE TOPOGRAPHY IS A COMPOSITE FROM THE 2005 AND 2018 AERIAL SURVEYS.

☐ DRAFT
☒ FOR INFORMATIONAL PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 04/2020
FILE: 0601-667-11
CAD: 4A-SITE DEVELOPMENT PLAN.DWG

DRAWN BY: JDW
DESIGN BY: JAE
REVIEWED BY: JVQ

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

LANDFILL PERMIT AREAS EXISTING SITE PLAN

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE 4A

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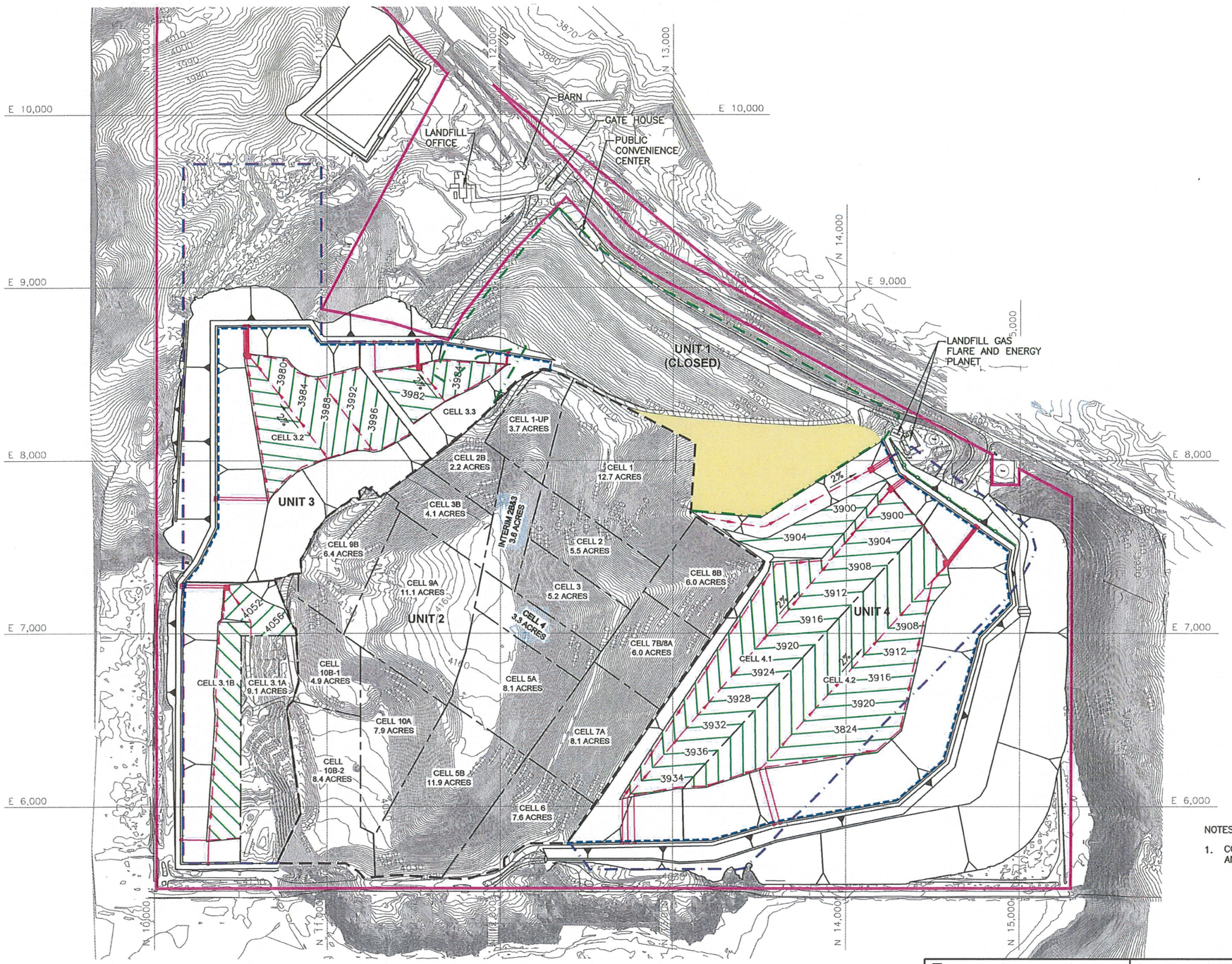
O:\0601\667\EXPANSION 2019\GOSHAWK FIGURES\4A-SITE DEVELOPMENT PLAN.dwg, rarrington, 1:2



NOTES:

1. COMPOSITE TOPOGRAPHY IS A COMPOSITE FROM THE 2005 AND 2018 AERIAL SURVEYS.

☐ DRAFT ☒ FOR INFORMATIONAL PURPOSES ONLY ☐ ISSUED FOR CONSTRUCTION	PREPARED FOR CAMINO REAL ENVIRONMENTAL CENTER, INC.	LANDFILL PERMIT AREAS EXCAVATION PLAN
DATE: 04/2020 FILE: 0601-667-11 CAD: 4B-PROPOSED EXCAVATION PLAN.DWG DRAWN BY: JDW DESIGN BY: JAE REVIEWED BY: JVQ	REVISIONS NO. / DATE / DESCRIPTION	CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO
Weaver Consultants Group	WWW.WCGRP.COM	FIGURE 4B

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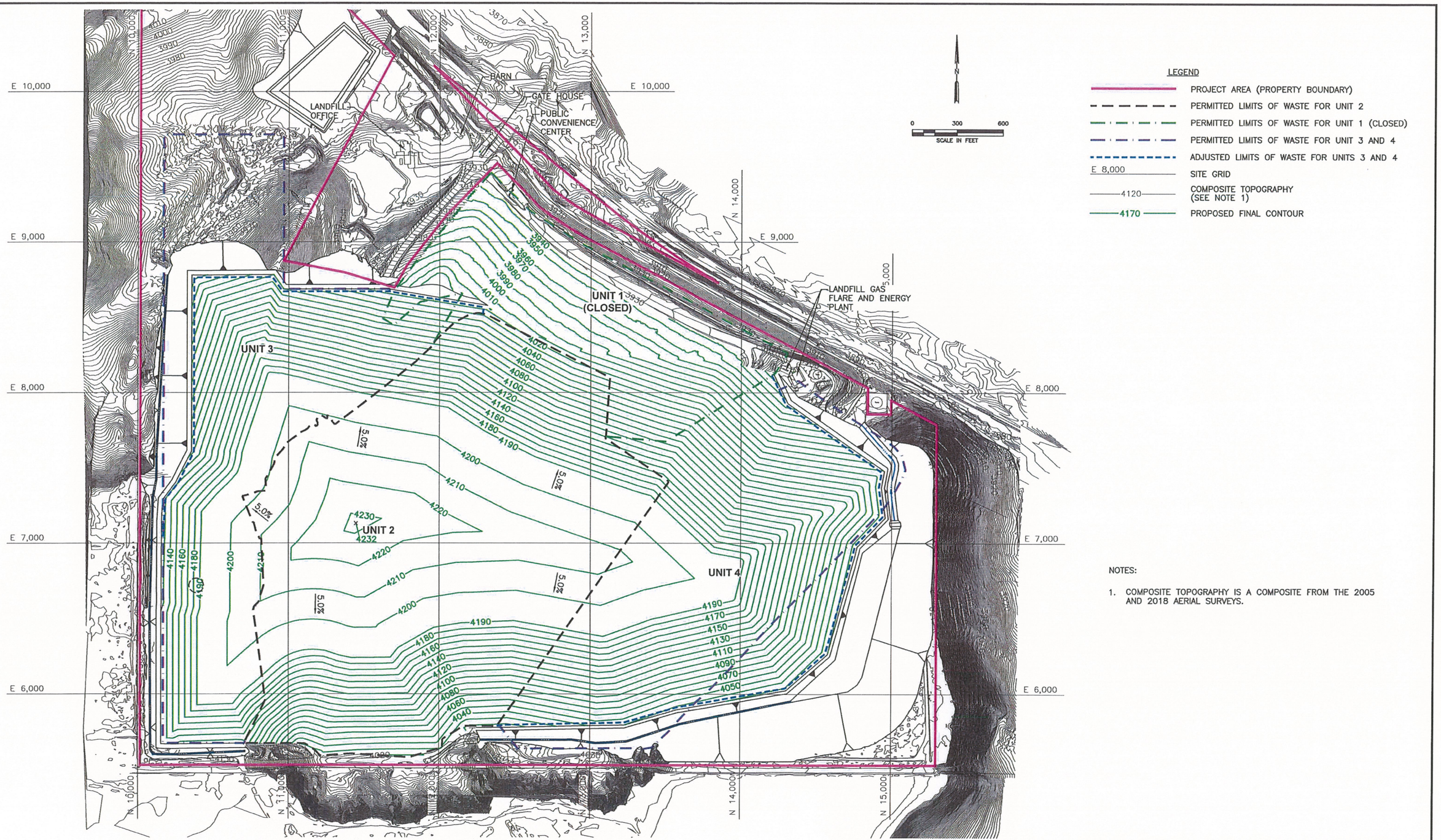
O:\0601\667\EXPANSION 2019\GOSHAWK FIGURES\4B-PROPOSED EXCAVATION.dwg, rarrington, 1:2



NOTES:

1. COMPOSITE TOPOGRAPHY IS A COMPOSITE FROM THE 2005 AND 2018 AERIAL SURVEYS.

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- [x] FOR INFORMATIONAL PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 04/2020
FILE: 0601-667-11
CAD: 4C-PROPOSED FINAL CONTOUR PLAN.DWG

DRAWN BY: JDW
DESIGN BY: JAE
REVIEWED BY: JVQ

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

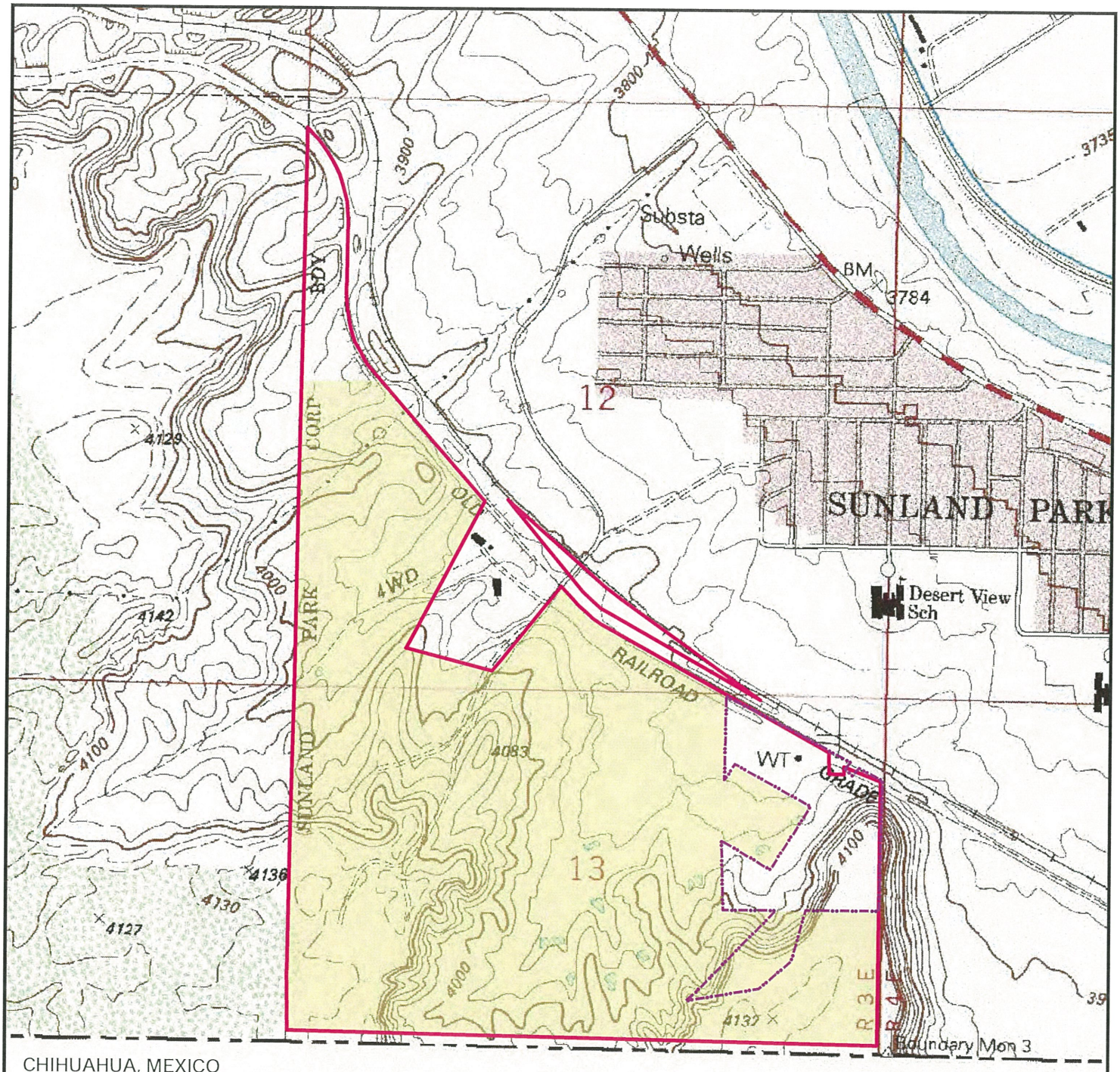
LANDFILL PERMIT AREAS PROPOSED COMPLETION PLAN

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE 4C

O:\0601\667\EXPANSION 2019\GOSHAWK FIGURES\4C-PROP FINAL CONTOUR PLAN.dwg, rarrington, 1:2



Map Source: USGS, Smeltertown, New Mexico Quadrangle.

0 750 1,500 Feet

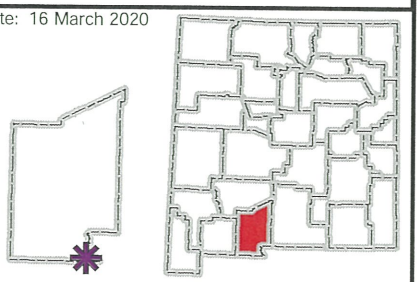
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

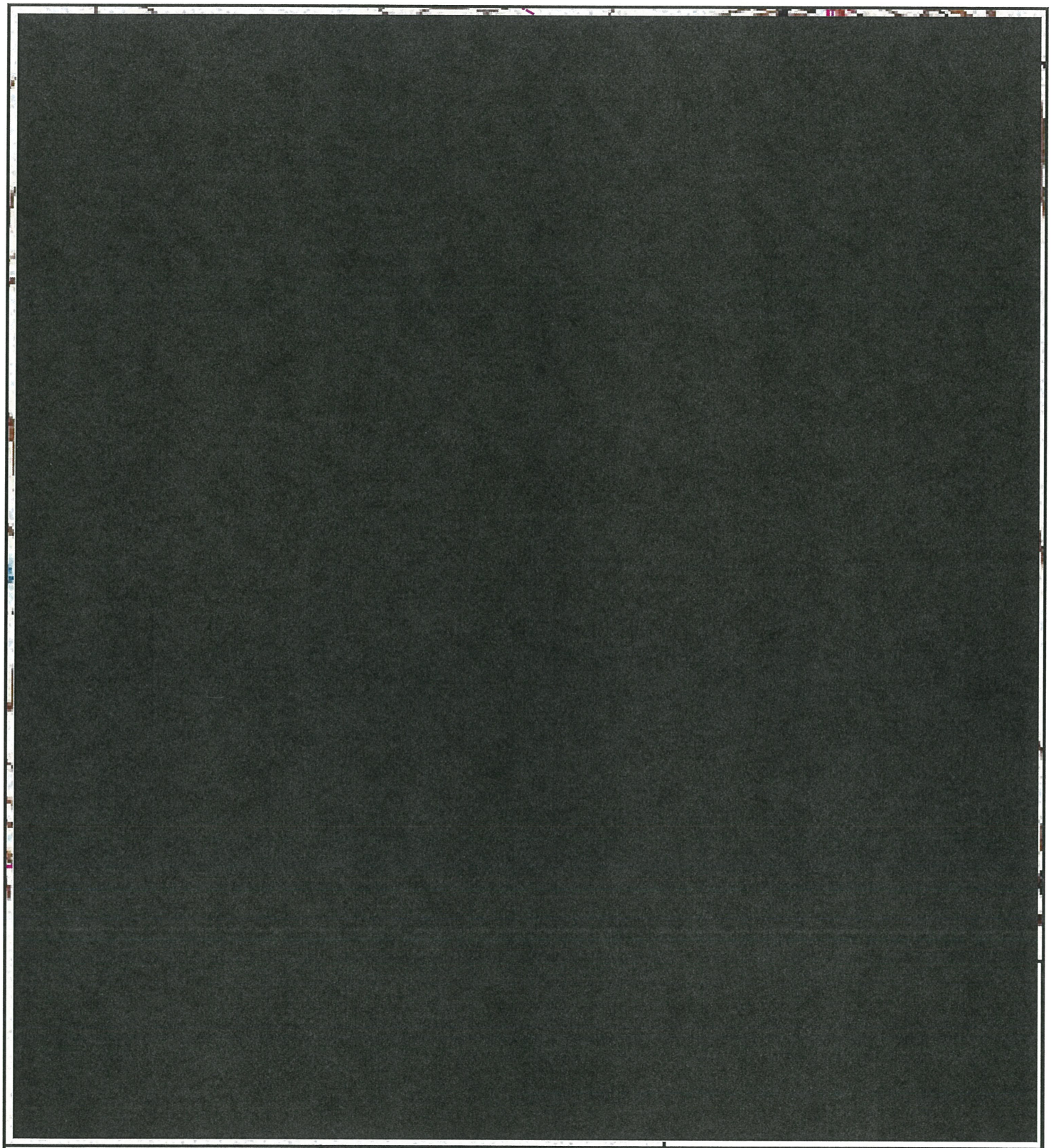
Figure 5
Archaeological Survey Areas

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: USGS, Smeltertown, New Mexico Quadrangle.

0 175 350 Feet

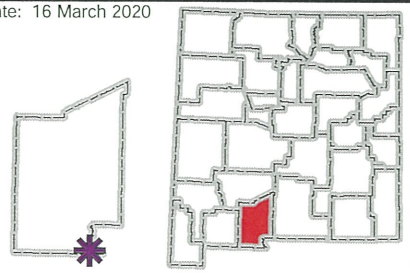
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

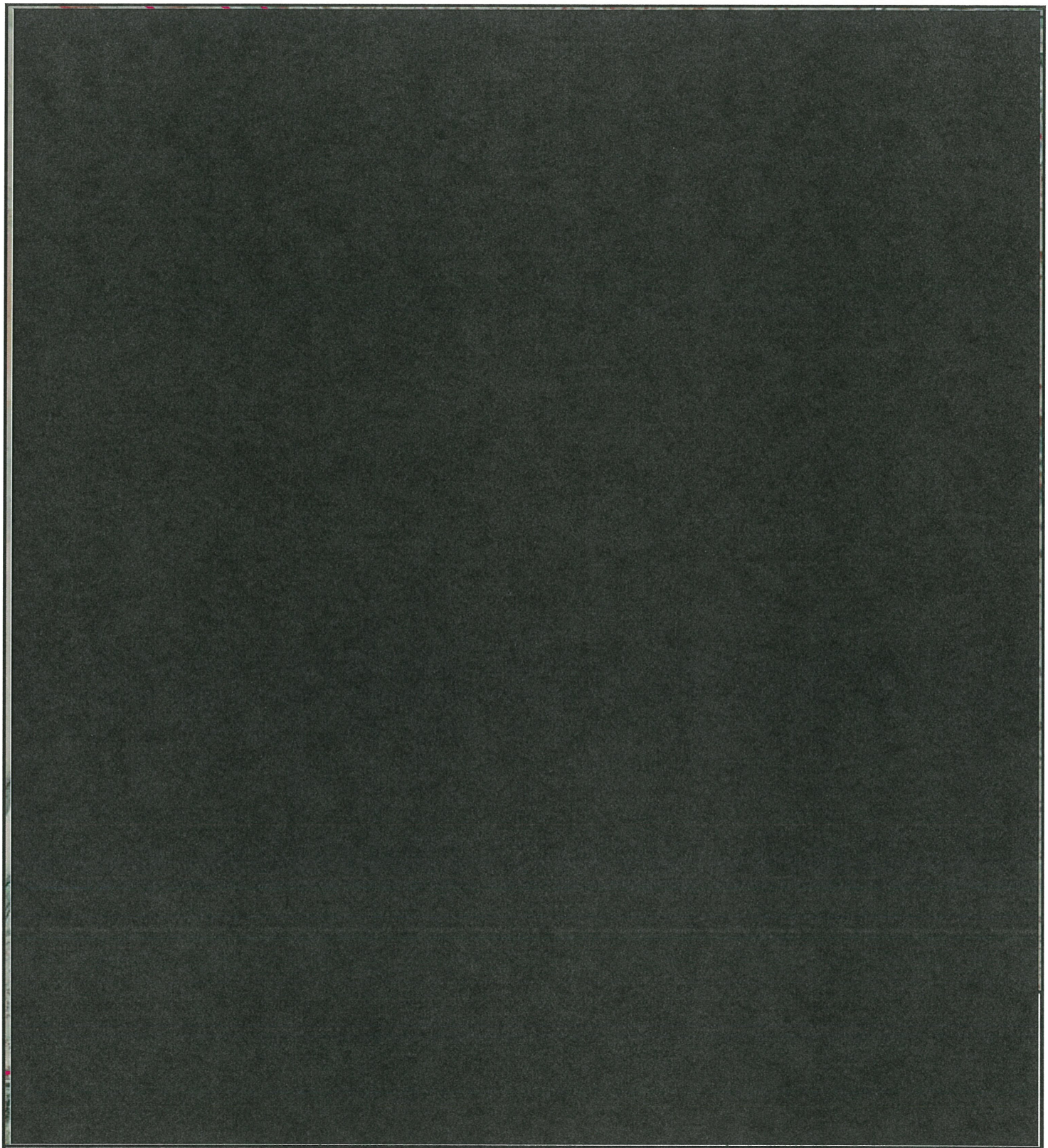
Figure 6
Archaeological Site Boundaries

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018.

0 250 500 Feet

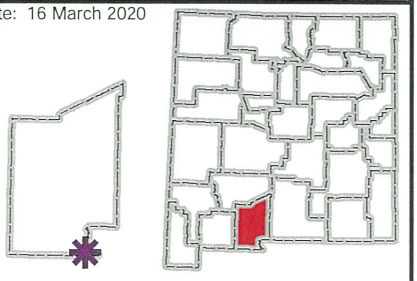
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

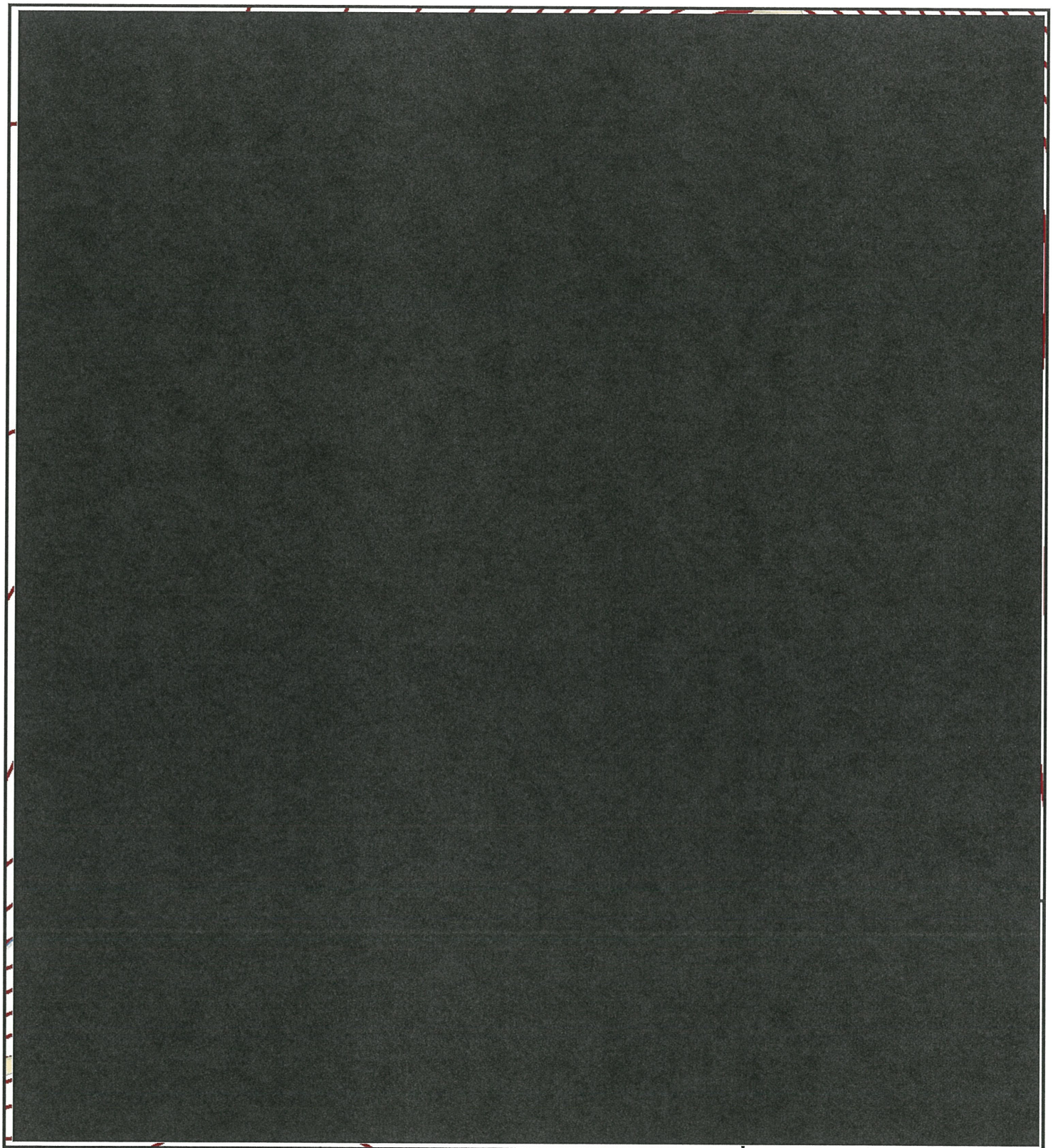
Figure 7
Isolated Manifestations

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: 3-Foot Contours derived from USGS NED 1/3 arc-second DEM for N32 W107, 2016.

0 75 150 Feet

0 25 50 Meters

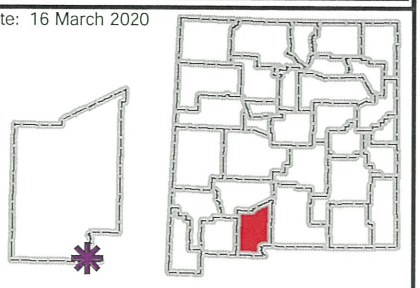
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

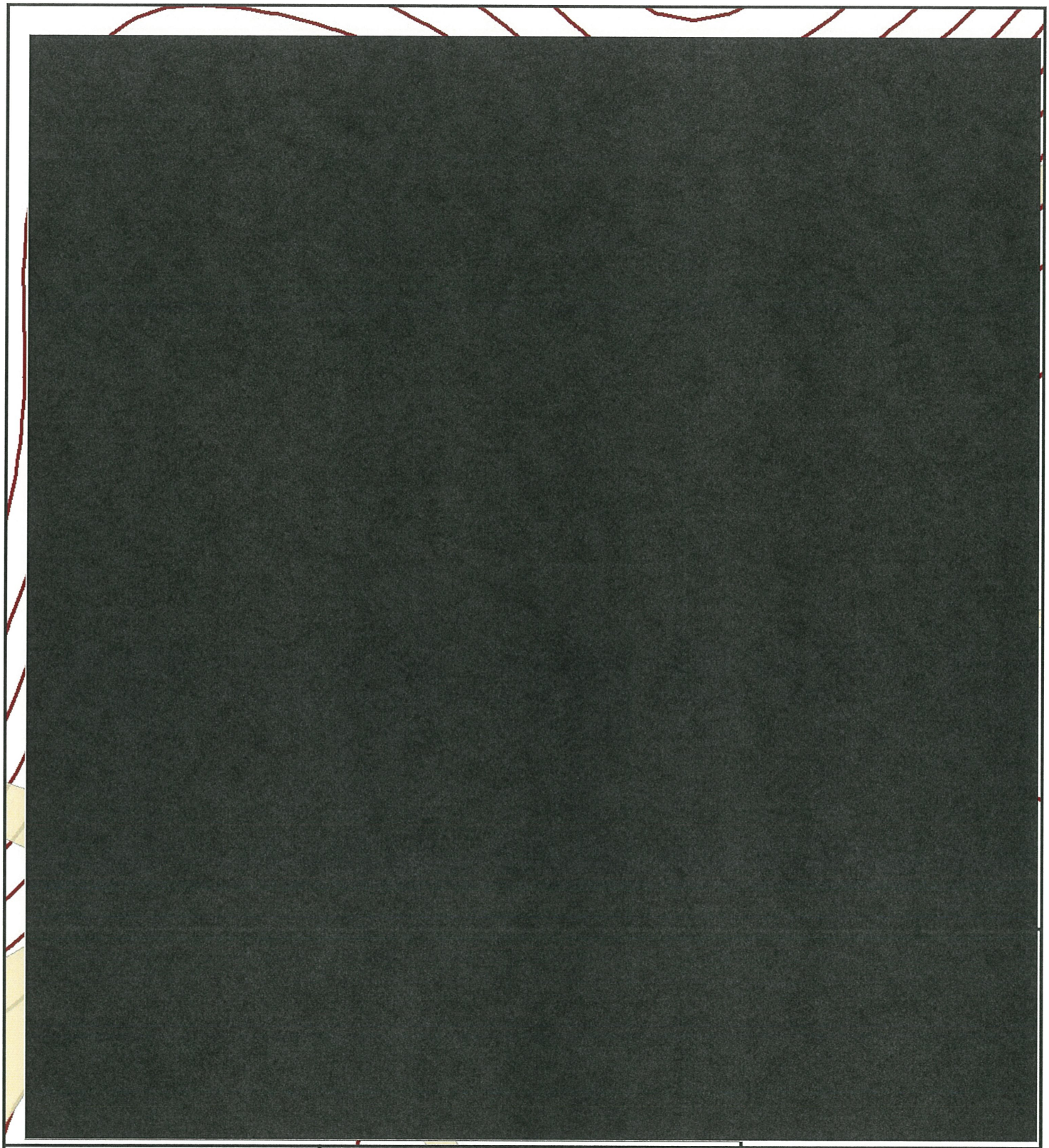
Figure 8
LA 67691 Sketch Map

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico



Map Source: 3-Foot Contours derived from USGS NED 1/3 arc-second DEM for N32 W107, 2016.

0 50 100 Feet

0 10 20 Meters

N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 9
LA 67692 Sketch Map

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020

Doña Ana County, New Mexico

APPENDIX B
PHOTOGRAPHS

Photo #:	Date:
1	27 December 2019

Eroded Survey Area with Expanses of Caliche Exposure at High Elevations, Facing South

Photo #:	Date:
2	27 December 2019

Survey Area Disturbance, Facing North

Photo #: 3	Date: 27 December 2019
Steeply Sloping Desert Scrubland with Significant Wind Erosion, Facing Northwest	

Photo #: 4	Date: 27 December 2019
Vegetative Community within the Project Area, Facing Southwest	

Photo #:	Date:
5	27 December 2019

Site LA 67691 on a Cuesta Overlooking the Rio Grande Valley, Facing North

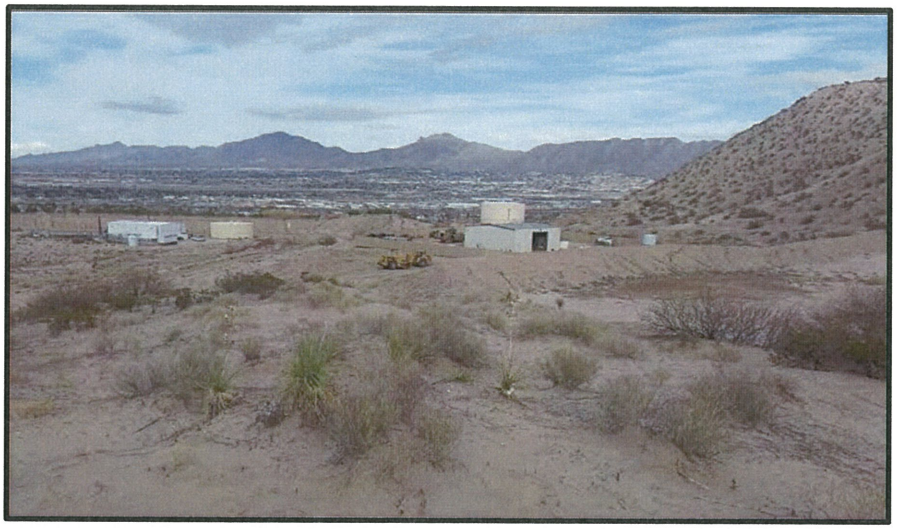


Photo #:	Date:
6	27 December 2019

Site LA 67691 Ground Surface Visibility

Photo #:	Date:
7	27 December 2019

Feature 1 at Site LA 67691, Facing West

Photo #:	Date:
8	27 December 2019

Feature 2 at Site LA 67691

Photo #: 9	Date: 27 December 2019
Overview of Site LA 67692, Facing North	

Photo #: 10	Date: 27 December 2019
Site LA 67692 Ground Surface Visibility, Facing West	

Photo #: 11	Date: 27 December 2019
Feature 1 at Site LA 67692	

Photo #: 12	Date: 27 December 2019
Feature 2 at Site LA 67692, Facing West	

APPENDIX C
SITE FORMS

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 6 7 6 9 1 (contact ARMS for site registration) ☒ Site Update? (complete at least pp. 1-2; see User's Guide)

Site Name(s): _____

Other Site Number(s): *Agency Assigning Number:

_____ _____

_____ _____

_____ _____

_____ _____

*Current Site Owner(s): Private - Camino Real Environmental Center

*Government entities: enter agency name & administrative unit; Private owners: enter owner name(s) & address (if known); Land grants: enter grant name

Site Type: ☐ Structural ☒ Non-Structural Occupation Type: ☒ Prehistoric ☐ Historic ☐ Prehistoric/Historic ☐ Unknown

2. RECORDING INFORMATION

NMCRIS Activity No.: 1 4 5 2 6 4

Field Site Number: 67691 Site Marker? ☒ no ☐ yes (specify ID#): _____

Recorder(s): Timothy Graves and Mark Willis

Agency: Goshawk Environmental Consulting, Inc Recording Date (eg., 12-APR-2000) day 2 7 month D E C year 2 0 1 9

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: Surface visibility was good, with flora including honey mesquite, creosote, broom snakeweed, and Mormon tea

Recording Activities:
- ☒ sketch mapping
- ☐ instrument mapping (e.g., total station mapping)
- ☐ surface collection (controlled or uncontrolled)
- ☒ in-field artifact analysis
- ☐ other activities (specify): _____
- ☒ photography
- ☐ shovel or trowel tests; probes
- ☐ test excavation
- ☐ excavation (data recovery)

Description of Analysis or Excavation Activities: Analysis included definition of site boundary, identification and GPS location recording of features and site boundary, and in-field artifact analysis.

Photographic Documentation: Digital 12/27/2019, photos 15 ranging from 100-0010 through 100-0024

Surface Collections (choose one):
- ☒ no surface collection
- ☐ uncontrolled surface collection
- ☐ collections of specific items only
- ☐ controlled (sample: <100%)
- ☐ controlled (complete: 100%)
- ☐ other method (describe): _____

Records Inventory:
- ☒ site location map
- ☒ sketch map(s)
- ☐ instrument map(s)
- ☒ excavation, collection, analysis records
- ☒ photos, slides, and associated records
- ☐ other records: _____
- ☒ field journals, notes
- ☐ NM Historic Building Inventory form

Repository for Original Records: Goshawk Environmental Consulting, Inc

Repository for Collected Artifacts: N/A

LA Number: 67691 Field Number: _____

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☒ construction/land development

☒ other source (specify): Two-track roads cut through site

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☒ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one): ☐ 0% ☒ 1-25% ☐ 26-50% ☐ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: Poor condition due to continual erosion and usage of road.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one): ☒ eligible ☐ not eligible ☐ not sure

***Applicable Criteria:** ☐ assoc. w/important events (a) ☐ distinctive architectural style, etc. (c)

☐ assoc. w/important persons (b) ☒ information potential (d)

Basis for Recommendation: While much of the LA 67691 site area has been heavily eroded, the sheet sand deposits may contain intact soils that possess temporally stratified features. Aeolian deposition may have capped features and preserved organic materials within sheet sand deposits. While the site lacked stratigraphic integrity at the apex of the hill, multiple artifact classes and two features identified within the sheet sand deposits of the high ridge suggested some potential for temporally stratified deposits and organic preservation at the site. Goshawk's survey results suggests LA 67691 has components that could make the site eligible for listing on the National Register of Historic Places under Criterion D of 36 CFR 60.4.

****Assessment of Project Impact:** Continued use, improvement, and maintenance of the road would disturb the features representing this site. Portions of the site are within the boundaries of the proposed development area.

**Treatment Recommendations: Additional subsurface testing should be conducted to determine temporal stratification and NRHP eligibility within areas proposed for development.

*Recorder's opinion ONLY—this is not an official determination of eligibility **Performing agency: consult with sponsoring agency before completing these data items

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date:** _____ day _____ month _____ year

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD staff: _____ **Date:** _____ day _____ month _____ year **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

LA Number: 67691 Field Number: _____

6. LOCATION

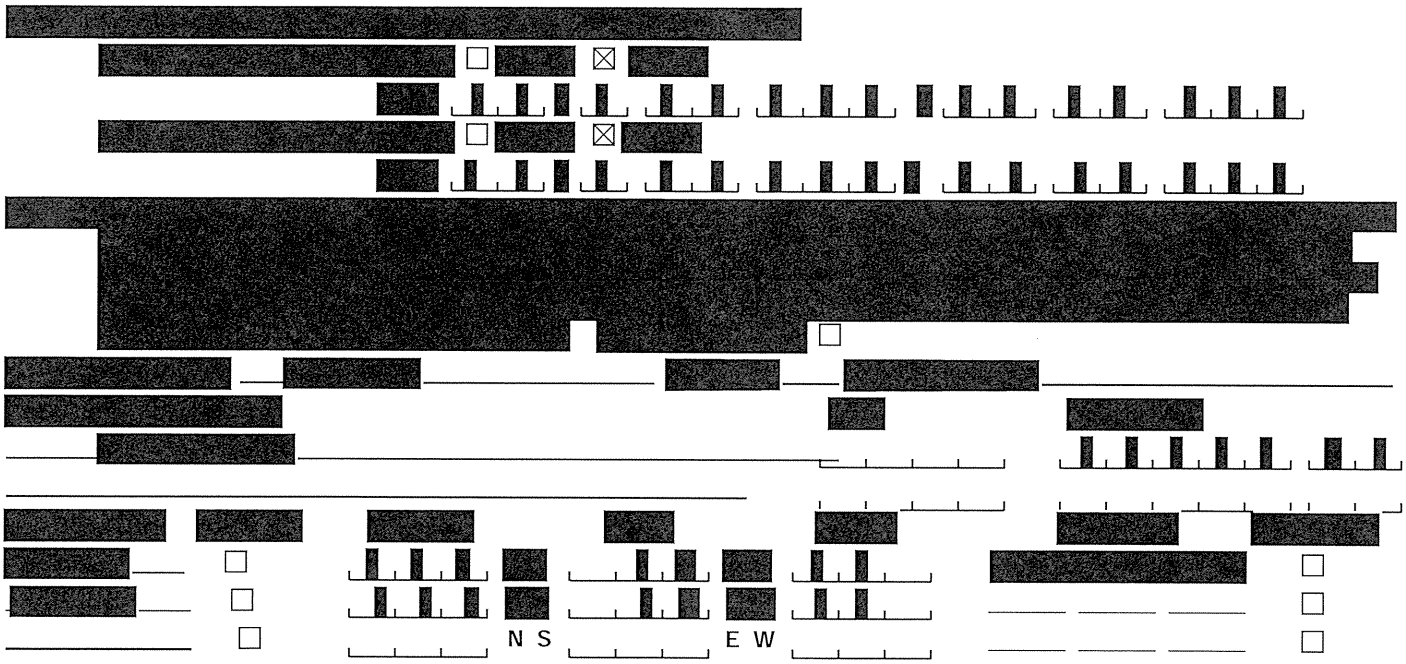
Source Graphics:

☒ USGS 7.5′ (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS Accuracy: ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____



7. PHYSICAL DESCRIPTION

Site Dimensions: 280 (max. length) x 92 (max. width) meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 17,321 sq m **Basis for Area** (choose one): ☐ estimated ☐ measured **Elevation:** 4120 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance ☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment ☐ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock) ☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined ☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: 10 cm or greater

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations ☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): The presence of larger, partially buried burned caliche suggested areas of deposition greater than 10 centimeters (4 inches) below surface.

LA Number: 67691 Field Number: _____

7. PHYSICAL DESCRIPTION (continued)

Observations on Subsurface Archeological Deposits: _____

The site was originally described as lacking discernable cultural features; however, during the current revisit, two concentrations of burned caliche were identified. Feature 1, the deflated remains of a hearth located in the northern part of the site, measured 1 meter in diameter and consisted of 23 burned caliche. Feature 2, a partially exposed hearth located in the southern part of the site, measured 1 meter in diameter and consisted of eight burned caliche with charcoal stained sediments and charcoal.

Local Vegetation (list observed species in decreasing order of dominance):

Overstory: none

Understory: honey mesquite, creosote, broom snakeweed, and Mormon tea

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ bench	☐ dune	☐ low rise	☒ ridge
☐ arroyo/wash	☐ blowout	☒ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ badlands	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ base of cliff	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of talus slope	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☒ other location (describe): Cuesta	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components):

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

LA Number: 67691 Field Number: _____

8. ASSEMBLAGE DATA (continued)

Assemblage Size (all components): ——— estimated frequency ———

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one):	☐	☐	☒	☐	☐	☐	
(include debitage)							52
prehistoric ceramics (choose one):	☒	☐	☐	☐	☐	☐	
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	
total assemblage size (choose one):	☒	☐	☐	☐	☐	☐	

*please provide rough counts (+/- 10 items) if estimated frequency is less than 100 items

Dating Potential: ☒ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration
☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The artifact assemblage included one piece of angular debris, one utilized piece of angular debris "agave knife", 30 lithic flakes, four utilized flakes, five unifacially shaped tools (three end scrapers and one chopper), five unimarginally retouched end scrapers, one marginal retouched tool, one round hammerstone, one slab metate fragment, one basin metate fragment, and two indeterminate ground stone fragments. The lithic materials included a wide variety of materials from Rio Grande gravel deposits, with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. These material types included 10 limestone, 11 chert, nine rhyolite, seven chalcedony, five quartzite, three sandstone, two siltstone, two basalt, one shale, one ignimbrite, and one obsidian (Rio Grande Type II). The lithic flakes represented predominately expedient core reduction (n=22) but included some small tertiary bifacial or tool production pieces (n=6). No temporally diagnostic artifacts were observed during the revisit.

9. CULTURAL/TEMPORAL AFFILIATIONS

Total Number of Defined Components: 1 (attach continuation sheets for Component #3 and greater)

Component #1 (Earliest)

Cultural Affiliation: ☐ Paleoindian ☐ Archaic ☐ Anasazi ☐ *Mixed* Anasazi/Mogollon ☐ Mogollon
☐ Casas Grandes ☐ Plains Village ☐ Plains Nomad ☐ Navajo ☐ Apache ☐ Ute ☐ Pueblo
☐ Hispanic ☐ Anglo/Euroamerican ☐ Unknown affiliation ☐ other affiliation (identify): _____

Basis for Temporal Affiliations (choose one): ☐ not applicable ☐ based on associated chronometric data or historic records
☐ associated diagnostic artifact or feature types ☒ based on analytically derived assemblage data or archeological experience

*Period of Occupation: (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)	*Begin Date	*End Date
Earliest Period: Paleoindian	9500 BC	1880 AD
Latest Period (if any): Late historic		

(leave blank to use default dates)

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration
☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: No diagnostic materials observed

Component Type (choose one): ☒ Simple Feature(s) ☐ Artifact Scatter ☐ Artifact Scatter w/Features
☐ Single Residence ☐ Multiple Residence ☐ Residential Complex/Community ☐ Industrial
☐ Military ☐ Ranching/Agricultural ☐ Transportation/Communication ☐ Commercial
☐ Governmental ☐ Ceremonial ☐ Other Type (specify type and explain in remarks): _____

Remarks: site may represent multiple occupations

*Associated Phase/Complex Name(s): n/a

LA Number: 67691 Field Number: _____

9. CULTURAL/TEMPORAL AFFILIATIONS (continued)

COMPONENT #2

Cultural Affiliation: ☐ Paleoindian ☐ Archaic ☐ Anasazi ☐ *Mixed* Anasazi/Mogollon ☐ Mogollon
☐ Casas Grandes ☐ Plains Village ☐ Plains Nomad ☐ Navajo ☐ Apache ☐ Ute ☐ Pueblo
☐ Hispanic ☐ Anglo/Euroamerican ☐ Unknown affiliation ☐ other affiliation (identify): _____

Basis for Temporal Affiliations (choose one): ☐ not applicable ☐ based on associated chronometric data or historic records
☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names) ***Begin Date** ***End Date**

Earliest Period: _____

Latest Period (if any): _____ _____ (leave blank to use default dates)

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration
☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type (choose one): ☒ Simple Feature(s) ☐ Artifact Scatter ☐ Artifact Scatter w/Features
☐ Single Residence ☐ Multiple Residence ☐ Residential Complex/Community ☐ Industrial
☐ Military ☐ Ranching/Agricultural ☐ Transportation/Communication ☐ Commercial
☐ Governmental ☐ Ceremonial ☐ Other Type (specify type and explain in remarks): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

*Feature Type	**Reliable ID ?	No. Observed	***Associated Component Nos.	Feature ID, Notes
Hearth	Y	2	1	Feature 1 is the deflated remains of a hearth at UTM NAD 1983 E350088 N3518092. Feature 2 is a partially exposed hearth with charcoal staining at UTM NAD 1983 E349936 N3517882

*see NMCRIS User's guide for a list of valid feature types

**enter "?" for uncertain identifications

***see Section 9 (Cultural-Temporal Affiliations) for Component Numbers; enter zero for unknown component associations

LA Number: 67691 Field Number:

10. FEATURE DATA (continued)

*Feature Type	**Reliable ID ?	No. Observed	***Associated Component Nos.	Feature ID, Notes

*see NMCRIS User's guide for a list of valid feature types

**enter "?" for uncertain identifications

***see Section 9 (Cultural-Temporal Affiliations) for Component Numbers; enter zero for unknown component associations

Feature Remarks: The site was originally described as lacking discernable cultural features; however, during the current revisit, two concentrations of burned caliche were identified. Feature 1, the deflated remains of a hearth located in the northern part of the site, measured 1 meter in diameter and consisted of 23 burned caliche. Feature 2, a partially exposed hearth located in the southern part of the site, measured 1 meter in diameter and consisted of eight burned caliche with some associated staining.

11. REFERENCES

*Written Sources of Information:

NRCS Soil Reference

*this item can be skipped if this form is submitted with an LA Investigation Record; please use American Antiquity style citations

Additional Sources of Information:

Hogan, Patrick

1993 *An Archeological Survey of the Cox Ranch Exchange Lands.* University of New Mexico, Office of Contract Archeology. Albuquerque.

LA Number: 67691 Field Number:

12. NARRATIVE DESCRIPTION

Site LA 67691 was originally recorded as an Archaic artifact scatter by UNM/OCA in July 1988 (NMCRIS Activity 35779). According to UNM/OCA, the artifact scatter consisted of hundreds of lithic artifacts and small quantities of fire-cracked rock. One diagnostic artifact was found, a San Jose dart point dating to the Middle Archaic Period. The recorder recommended the site as eligible for listing on the NRHP. It is unclear if the Bureau of Land Management/Las Cruces Field Office or the New Mexico SHPO provided an eligibility determination for this site.

Site LA 67691 was revisited by Goshawk archaeologists on 27 December 2019. The entire site was subjected to pedestrian transect survey at 5-meter (16-foot) intervals. All artifacts were analyzed in the field and point-plotted with a 3-meter-accuracy (9.8-foot-accuracy) handheld global positioning system (GPS). Select artifacts and features were photographed.

The site was located on a cuesta overlooking the Rio Grande Valley, which was more than 60 meters (200 feet) below. Vegetation included mesquite, creosote, yucca, Mormon tea, grasses, shrubs, and forbs. Surface visibility within the site boundaries averaged 90 percent. The site area was partially exposed by erosion and disturbed by rutting from a two-track roadway cutting through the site. The site appeared to be less than 20 percent intact. Still, the presence of larger, partially buried burned caliche suggested deposition greater than 10 centimeters (4 inches) below surface. The site was on a Q2 surface that predated human occupation of the area as defined by geomorphologists in the region. There was no evidence of looting or intentional vandalism at the site.

Site LA 67691 was represented on NMCRIS as a large circular site measuring 303 meters (1,000 feet) across but was described by the original recorders as measuring 220 by 70 meters (772 by 230 feet) in size. During the revisit, the site measured 280 by 92 meters (918 by 302 feet). The site was originally described as lacking discernable cultural features; however, during the revisit, two concentrations of burned caliche were identified. Feature 1, the deflated remains of a hearth located in the northern part of the site, measured 1 meter (3.3 feet) in diameter and consisted of 23 burned caliche. Feature 2, a partially exposed hearth located in the southern part of the site, measured 1 meter (3.3 feet) in diameter and consisted of eight burned caliche with some associated charcoal stained sediments and charcoal. The adjusted site boundaries were expanded to the north and south-southwest, comprising a total site area of approximately 1.73 hectares (4.28 acres).

The artifacts analyzed included one piece of angular debris, one utilized piece of angular debris (agave knife), 30 lithic flakes, four utilized flakes, four unifacially shaped tools (three end scrapers and one chopper), five unimarginally retouched end scrapers, one marginally retouched tool, one round hammerstone, one slab metate fragment, one basin metate fragment, and two indeterminate ground stone fragments. The lithic flakes represented predominately expedient core reduction (n=22) but included some small tertiary bifacial or tool production pieces (n=6).

The artifacts analyzed included a wide variety of materials from Rio Grande gravel deposits, with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. The artifacts analyzed included ten limestone artifacts, 11 chert artifacts, nine rhyolite artifacts, seven chalcedony artifacts, five quartzite artifacts, three sandstone artifacts, two siltstone artifacts, two basalt artifacts, one shale artifact, one ignimbrite artifact, and one obsidian artifact (Rio Grande Type II). No temporally diagnostic artifacts were observed during the revisit.

While much of LA 67691 had been heavily eroded, the shoulder slopes may contain intact soils that possess temporally stratified features. Aeolian deposition may have capped features and preserved organic materials on the shoulder slopes. While the site lacked stratigraphic integrity at the apex of the hill, multiple artifact classes and two features identified along the shoulder slopes of the high ridge suggested some potential for temporally stratified deposits and organic preservation at the site. The presence of intact charcoal stains within Feature 2 indicates datable remains are present at the site. In addition, remnants or subsistence materials may also be found within the buried component of this feature. Goshawk's survey results suggest LA 67691 has components that could make the site eligible for listing on the NRHP.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☒ other materials (itemize): Site Documentation Form, Tim Graves

Site Documentation

Archaeologist: Mark Willis and Tim Graves

LA# or Discorery #: LA 67691 **Date**:12/27/2019

Number of photos taken: see Mark Willis **Percentage of Site Intact**:<20%

Observations on Site Condition: The majority of LA 67691 is in poor condition; however Feature 2 contains intact subsurface charcoal stained sediments and charcoal. The cultural materials of this site are located on a partially exposed surface that has been eroded down to surfaces that predate the occupation of the site. Portions of the site have been impacted by modern mechanical impacts to the area including a graded caliche road bed in the northern portion that undercuts the terrain 20 to 30 cm. The surfaces of the site are resting on a Q2 surface that predates mans occupation of the area as defined by geomorphologist in the region (see Monger 1993, Johnson 1998). Scattered burned caliche on the site indicate thermal features were once present. Concentrations were not observed that could be identified as a feature. The site has been partially exposed down to surfaces predating the occupation and horizontal and vertical displacement of cultural materials have comprimised the integrity of the materials present.

Observations on Subsurface Archaeological Deposits (include estimated depth of deposits):

Materials are nearly all surficial with some partially buried large pieces of burned caliche though depth is limited and estimated at less than 10 cm below the present ground surface. The exception is Feature 2 which is a partially exposed burned caliche feature with charcoal stained sediments and charcoal estimated to extend more that 5 cm below the modern ground surface.

Observations on Site Setting: The site is located on top of a prominent ridge top above the Rio Grande Valley of the Mesilla bolson at 4,120 ft. amsl. The surface of the site is relatively level with a slight, less than one degree slope to the west. Surface sediments consist of a light brown sand/sandy loam with a moderate to high density of caliche nodule inclusions. Flora consist of creosote, soaptree yucca, a few Mormon/Indian tea, some broom snakeweed, and one mesquite. Surface visibility is greater than 95 percent.

Cultural Affiliation:_Unknown aboriginal Prehistoric/Historic

Earliest Period: Unspecific Paleoindian **Latest Period** (if any):Unspecific Historic

Date Range: 9,500 B.C. – A.D. 1880

Features: Two thermal features

Type: Burned caliche concentrations, one with staining

Description of features: Feature 1 is a concentration of 23 pieces of burned caliche in a 1 m diameter area and represents the deflated remains of a hearth. An additional scatter of more than 200 pieces of burned caliche 1 cm to 3 cm in diameter over a 15 m diameter area was noted in the vicinity of Feature 1 and represents the remains of additional thermal features that were once present in the area. Feature 2 is a concentration of eight pieces of burned caliche and charcoal stained sediments in a 0.75 m diameter area and represents a partially exposed hearth. A finger probe of the surface within the center of the feature revealed the charcoal stained sediments and that the remains extend more than 5 cm below the surface. Scattered burned caliche through the central site area (n=>500) indicate thermal features were once present within the site area.

Topography: The site is located on level terrain on top of a prominent ridge top extending out into the Rio Grande Valley from the south to the north in the south central portion of New Mexico. The site is on a slight less than one degrees slope south of a caliche graded road.

Field Analysis Table

Table 1 LA 67691 Lithic artifact analysis

Item	Artifact Type	Type	Whole/ Frag	Material	Cortex %	Length (cm)	Thick (cm)	Platform	Retouch	# of utilized edges	Comments
1	Flake	Core reduction	Whole	Basalt	0	2.2	0.4	Single facet	N/A	0	None
2	Utilized flake	Core reduction	Frag	Limestone	21-40	6	0.8	None	N/A	1	Snaps along margin
3	Flake	Core reduction	Frag	Basalt	61-80	5.3	1.2	None	N/A	0	None
4	Utilized flake	Core reduction	Whole	Limestone	1-20	5.1	0.9	Single facet	N/A	0	Snaps along margin
5	Flake	Bifacial reduction	Whole	Chalcedony	0	1.7	0.2	Multifacet	N/A	0	None
6	Angular debris	N/A	N/A	Limestone	41-60	4.1	0.9	N/A	N/A	0	None
7	Flake	Bifacial reduction	Whole	Chert	0	2.7	0.2	Multifacet	N/A	0	None
8	Slab metate	N/A	Frag	Limestone	61-80	11.2	4.2	N/A	N/A	1	None
9	Flake	Bifacial reduction	Frag	Chert	0	1.7	0.2	Multifacet	N/A	0	None
10	Unimarginal retouch tool	End scraper	Frag	Rhyolite	1-20	4.3	1.3	N/A	Marginal	2	None
11	Uniface	End scraper	Frag	Siltstone	21-40	8.1	1.7	N/A	Unifacial	2	None
12	Flake	Core reduction	Frag	Chalcedony	41-60	2.7	1.7	None	N/A	0	None
13	Flake	Core reduction	Whole	Obsidian	1-20	2.1	0.6	Cortical	N/A	0	None
14	Round hammerstone	N/A	Whole	Quartzite	100	3.8	1.7	N/A	N/A	2	None
15	Uniface	End scraper	Whole	Siltstone	81-99	6.1	2.14	N/A	Unifacial	2	Also groundstone
16	Utilized angular debris	N/A	Whole	Limestone	81-99	7.9	1.2	N/A	N/A	1	Agave knife
17	Flake	Core reduction	Frag	Chert	1-20	2.1	0.3	Single facet	N/A	0	Butterscotch
18	Flake	Core reduction	Whole	Limestone	21-40	5.1	0.9	Cortical	N/A	0	None
19	Unimarginal retouch tool	End scraper	Whole	Chalcedony	1-20	3.2	0.8	N/A	Marginal	2	None
20	Flake	Core reduction	Frag	Sandstone	1-20	2.3	0.3	Cortical	N/A	0	None
21	Indeterminate groundstone	N/A	Frag	Rhyolite	21-40	5.9	2.3	N/A	N/A	1	Also FCR
22	Flake	Bifacial reduction	Frag	Chert	0	1.3	0.2	Multifacet	N/A	0	Butterscotch
23	Flake	Core reduction	Whole	Rhyolite	0	4.3	0.5	Single facet	N/A	0	None

Table 1 LA 67691 Lithic artifact analysis

Item	Artifact Type	Type	Whole/ Frag	Material	Cortex %	Length (cm)	Thick (cm)	Platform	Retouch	# of utilized edges	Comments
24	Flake	Core reduction	Whole	Rhyolite	21-40	4.8	0.8	Cortical	N/A	0	None
25	Flake	Core reduction	Whole	Rhyolite	21-40	3.3	0.4	Cortical	N/A	0	None
26	Flake	Core reduction	Whole	Rhyolite	0	2.3	0.3	Multifacet	N/A	0	None
27	Flake	Bifacial reduction	Frag	Quartzite	0	3.8	0.6	None	N/A	0	None
28	Flake	Core reduction	Frag	Ignimbrite	0	2.1	0.5	Single facet	N/A	0	None
29	Flake	Core reduction	Whole	Quartzite	0	2.6	0.8	Single facet	N/A	0	None
30	Flake	Core reduction	Whole	Chalcedony	0	2.3	0.3	Single facet	N/A	0	None
31	Uniface	End scraper	Whole	Chalcedony	21-40	2.7	0.9	N/A	Unifacial	2	None
32	Flake	Core reduction	Whole	Quartzite	0	3.5	0.8	Single facet	N/A	0	None
33	Uniface	Chopper	Frag	Limestone	41-60	7.1	3.2	N/A	Unifacial	2	None
34	Unimarginal retouch tool	End scraper	Whole	Chalcedony	61-80	2.3	0.8	N/A	Marginal	2	None
35	Flake	Core reduction	Whole	Rhyolite	1-20	3.1	0.4	Cortical	N/A	0	None
36	Flake	Core reduction	Frag	Quartzite	0	3.7	0.5	None	N/A	0	None
37	Utilized flake	Core reduction	Whole	Limestone	0	4.8	0.5	Single facet	N/A	1	Snaps along margin
38	Unimarginal retouch tool	End scraper	Whole	Chert	1-20	3.2	0.4	N/A	Marginal	1	Petrified wood
39	Basin metate	N/A	Frag	Sandstone	61-80	8.5	1.2	N/A	N/A	1	None
40	Unimarginal retouch tool	End scraper	Whole	Rhyolite	1-20	4.1	0.5	N/A	Marginal	2	None
41	Flake	Core reduction	Whole	Chert	0	3.2	0.6	Single facet	N/A	0	None
42	Flake	Bifacial reduction	Whole	Chert	0	2.5	0.4	Multifacet	N/A	0	None
43	Flake	Core reduction	Whole	Limestone	21-40	4.3	1.4	Cortical	N/A	0	None
44	Indeterminate groundstone	N/A	Frag	Sandstone	41-60	6.8	3.3	N/A	N/A	1	Also FCR
45	Flake	Core reduction	Whole	Chalcedony	21-40	3.1	1	Cortical	N/A	0	None
46	Flake	Core reduction	Frag	Limestone	100	3.2	0.4	None	N/A	0	None
47	Flake	Core reduction	Frag	Chert	0	2.4	0.3	None	N/A	0	None
48	Flake	Bifacial reduction	Whole	Chert	0	1.2	0.2	Single facet	N/A	N/A	None
49	Utilized flake	N/A	Frag	Rhyolite	10	4.1	1.2	Single facet	None	1	None

Table 1 LA 67691 Lithic artifact analysis

Item	Artifact Type	Type	Whole/ Frag	Material	Cortex %	Length (cm)	Thick (cm)	Platform	Retouch	# of utilized edges	Comments
50	Marginal retouched tool	N/A	Whole	Shale	20	6.7	0.4	N/A	Marginal	2	Agave knife
51	Flake	Core reduction	Frag	Chert	0	1.2	0.3	Single facet	N/A	N/A	None
52	Uniface	N/A	Frag	Chert	0	1	0.6	N/A	Unifacial	1	None

LA Narrative:

Datum location – 350018E 3517930N

The adjusted boundaries of site LA 67691 were expanded to the north and to the south-southwest to accommodate two new features. During the current revisit, the site was found to measure 280 meters by 92 meters (918 feet by 302 feet) comprising a total site area of approximately 1.73 hectares (4.28 acres). In addition to the features, the site includes a broad scatter of more than 700 burned caliche and 52 lithic artifacts.

Much of the site lacks integrity and has been partially exposed below the original occupation surface in most places. The broad scatter of burned caliche present indicates the site once contained more thermal features. The lithic artifacts present included one piece of angular debris, one utilized piece of angular debris "agave knife", 28 lithic flakes, three utilized flakes, four unifacially shaped tools (three end scrapers and one chopper), five unimarginally retouched end scrapers, one round hammerstone, one slab metate fragment, one basin metate fragment, and two indeterminate groundstone fragments. The lithic materials included a wide variety of materials all from Rio Grande gravel deposits with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. These material types included 10 limestone, eight chert, eight rhyolite, seven chalcedony, five quartzite, three sandstone, two silstone, two basalt, one ignimbrite, and one obsidian (Rio Grande Type II). The lithic flakes represented predominatel expediant core reduction (n=22) but included some small tertiary bifacial or tool production pieces (n=6).

The two newly discovered features (hearths) suggest some potential for temporally stratified deposits and organic preservation at the site. In particular the presence of intact charcoal stains within Feature 2 indicates potential for datable remains. Remnants or subsistence materials may also be found within the buried component of this feature. LA 67691 has components (primarily Feature 2) that could make the site eligible for listing on the NRHP under Criterion D.

References

Monger, H. Curtis
1993 *Soil-Geomorphology and Paleoclimatic Characteristics of the Fort Bliss Maneuver Areas, Southern New Mexico and Western Texas.* Historic and Natural Resources Report No. 10, Cultural Resource Management Program, Directorate of the Environment, United States Army Air Defense Artillery Center Fort Bliss, Texas.

Johnson, Don L.
1997 *Geomorphological, Geoecological, Geoarcheological, and Surficial Mapping Study of McGregor Range, Fort Bliss New Mexico - Volume I and II.* Geo-Marine, Inc. Miscellaneous Report of Investigations Number 157 for U.S. Army Corps of Engineers Fort Worth District and Fort Bliss Military Reservation

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 6 7 6 9 2 (contact ARMS for site registration) ☒ Site Update? (complete at least pp. 1-2; see User's Guide)

Site Name(s):

Other Site Number(s): *Agency Assigning Number:

*Current Site Owner(s): Private - Camino Real Environmental Center

*Government entities: enter agency name & administrative unit; Private owners: enter owner name(s) & address (if known); Land grants: enter grant name

Site Type: ☐ Structural ☒ Non-Structural Occupation Type: ☒ Prehistoric ☐ Historic ☐ Prehistoric/Historic ☐ Unknown

2. RECORDING INFORMATION

NMCRIS Activity No.: 1 4 5 2 6 4

Field Site Number: 67692 Site Marker? ☒ no ☐ yes (specify ID#):

Recorder(s): Timothy Graves and Mark Willis

Agency: Goshawk Environmental Consulting, Inc Recording Date (eg., 12-APR-2000) day 2 7 month D E C year 2 0 1 9

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: Surface visibility was good, with flora including honey mesquite, creosote, broom snakeweed, and Mormon tea

Recording Activities:
- ☒ sketch mapping
- ☐ instrument mapping (e.g., total station mapping)
- ☐ surface collection (controlled or uncontrolled)
- ☒ in-field artifact analysis
- ☐ other activities (specify):
- ☒ photography
- ☐ shovel or trowel tests; probes
- ☐ test excavation
- ☐ excavation (data recovery)

Description of Analysis or Excavation Activities: Analysis included definition of site boundary, identification and GPS location recording of features and site boundary, and in-field artifact analysis.

Photographic Documentation: Digital 12/27/2019, photos 6 ranging from 100-0025 through 100-0030

Surface Collections (choose one):
- ☒ no surface collection
- ☐ uncontrolled surface collection
- ☐ collections of specific items only
- ☐ controlled (sample: <100%)
- ☐ controlled (complete: 100%)
- ☐ other method (describe):

Records Inventory:
- ☒ site location map
- ☒ sketch map(s)
- ☐ instrument map(s)
- ☒ excavation, collection, analysis records
- ☒ photos, slides, and associated records
- ☐ other records:
- ☒ field journals, notes
- ☐ NM Historic Building Inventory form

Repository for Original Records: Goshawk Environmental Consulting, Inc

Repository for Collected Artifacts: N/A

LA Number: 67692 Field Number: _____

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☒ construction/land development

☒ other source (specify): Two-track roads cut through site

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☒ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one): ☐ 0% ☐ 1-25% ☒ 26-50% ☐ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site appeared to be 50 percent intact. Some disturbance was due to continual erosion and usage of road.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one): ☒ eligible ☐ not eligible ☐ not sure

***Applicable Criteria:** ☐ assoc. w/important events (a) ☐ distinctive architectural style, etc. (c)

☐ assoc. w/important persons (b) ☒ information potential (d)

Basis for Recommendation: While much of the LA 67692 site area has been heavily eroded, extensive sheet sand deposits and coppice dune formations may contain intact soils that possess temporally stratified features. Eolian deposition may have capped features and preserved organic materials within sheet sand deposits and coppice dunes. While the site lacked stratigraphic integrity at the apex of the hill, multiple artifact classes and two features identified along the shoulder slopes of the high ridge suggested some potential for temporally stratified deposits and organic preservation at the site. Goshawk's survey results suggests LA 67692 has components that could make the site eligible for listing on the National Register of Historic Places under Criterion D of 36 CFR 60.4.

**Assessment of Project Impact: Continued use, improvement of the two-track road would disturb the features representing this site. The site is not currently within the adjusted permit limit of the landfill.

**Treatment Recommendations: Additional subsurface testing should be conducted to determine temporal stratification and NRHP eligibility within areas proposed for development.

*Recorder's opinion ONLY—this is not an official determination of eligibility **Performing agency: consult with sponsoring agency before completing these data items

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date:** _____ day _____ month _____ year

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD staff: _____ **Date:** _____ day _____ month _____ year **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

LA Number: 67692 Field Number: _____

6. LOCATION

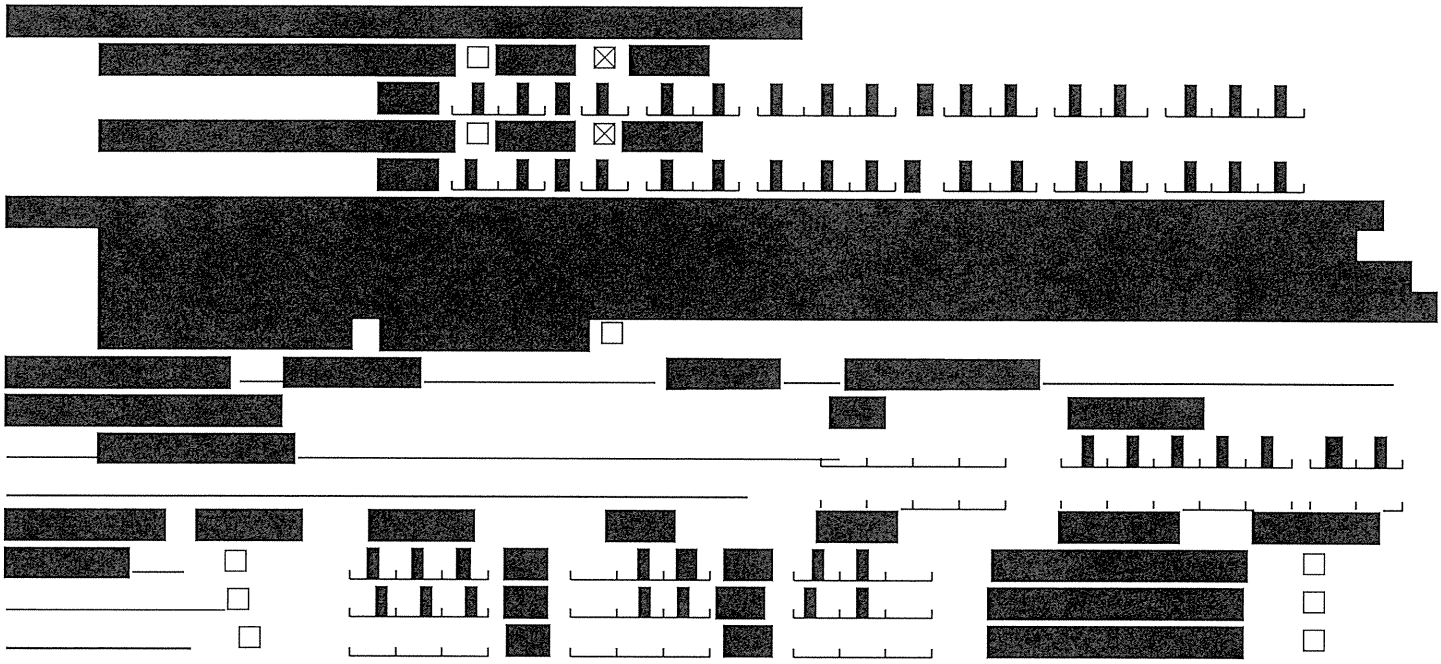
Source Graphics:

☒ USGS 7.5′ (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS Accuracy: ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____



7. PHYSICAL DESCRIPTION

Site Dimensions: 136 (max. length) x 62 (max. width) meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 5,180 sq m **Basis for Area** (choose one): ☐ estimated ☐ measured **Elevation:** 4120 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment ☐ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: 20 cm or greater

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): Many cultural materials were observed eroding 10 to 20 cm below the surface in road cut banks across the site. Portions of the site have been impacted by modern mechanical impacts to the area including a graded caliche roadbed in the northern portion of the site and another through the southwest portion of the site that undercut the terrain 20 to 30 cm.

LA Number: 67692 Field Number: _____

7. PHYSICAL DESCRIPTION (continued)

Observations on Subsurface Archeological Deposits:

The site does contain intact deposits and buried prehistoric/historic surfaces are present. These intact deposits are present in the two partially exposed thermal features (burned caliche middens or hearth), and materials are eroding out of graded caliche roads up to 20 cm below the surface. The features may extend to 50 cm or more below the surface if similar to other excavated burned caliche middens excavated in basin settings. These features could contain absolute chronological materials and subsistence remains. The scattered pieces of burned caliche present in other portions of the site indicate additional thermal features were once present or may still be present below the modern ground surface.

Local Vegetation (list observed species in decreasing order of dominance):

Overstory: none

Understory: honey mesquite, creosote, broom snakeweed, and Mormon tea

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ bench	☒ dune	☐ low rise	☒ ridge
☐ arroyo/wash	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ badlands	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ base of cliff	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of talus slope	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☒ other location (describe): Cuesta	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components):

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

LA Number: 67692 Field Number: _____

8. ASSEMBLAGE DATA (continued)

Assemblage Size (all components): estimated frequency

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☒	☐	☐	☐	81
prehistoric ceramics (choose one):	☒	☐	☐	☐	☐	☐	
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	
total assemblage size (choose one):	☒	☐	☐	☐	☐	☐	

*please provide rough counts (+/- 10 items) if estimated frequency is less than 100 items

Dating Potential: ☒ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration
☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The lithic materials included a wide variety of materials from Rio Grande gravel deposits with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. These material types included five sandstone, three ignimbrite, three limestone, three quartzite, three rhyolite, two basalt, two Franklin thunderbird rhyolite, two chert, two Rancheria chert, one chalcedony, and one obsidian. The projectile point was made of obsidian. The small arrow point with a straight stem does not fit particular types from the region. The point can be best described as a Bonham-like point (Turner and Hester 1993). The lithic flakes analyzed all represented expedient core reduction pieces although more than 40 additional flakes and 15 small metate ground stone fragments are estimated to be present and some of these may have represented bifacial reduction or tool refurbishing pieces. A single projectile point, interpreted in the field as a Bonham-like arrow point, was the only temporally diagnostic artifact observed during the revisit. Based on this artifact and a few historic glass shards, the site is thought to be attributed to Late Pithouse Jornada Mogollon to early 20th century.

9. CULTURAL/TEMPORAL AFFILIATIONS

Total Number of Defined Components: 2 (attach continuation sheets for Component #3 and greater)

Component #1 (Earliest)

Cultural Affiliation: ☐ Paleoindian ☐ Archaic ☐ Anasazi ☐ *Mixed* Anasazi/Mogollon ☒ Mogollon
☐ Casas Grandes ☐ Plains Village ☐ Plains Nomad ☐ Navajo ☐ Apache ☐ Ute ☐ Pueblo
☐ Hispanic ☐ Anglo/Euroamerican ☐ Unknown affiliation ☐ other affiliation (identify): _____

Basis for Temporal Affiliations (choose one): ☐ not applicable ☐ based on associated chronometric data or historic records
☐ associated diagnostic artifact or feature types ☒ based on analytically derived assemblage data or archeological experience

*Period of Occupation: (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)	*Begin Date	*End Date
Earliest Period: Late Pithouse	700 AD	1100 AD
Latest Period (if any): Late Pithouse		

(leave blank to use default dates)

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration
☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: One Bonham-like arrow point was found, the only temporally diagnostic artifact found

Component Type (choose one): ☒ Simple Feature(s) ☒ Artifact Scatter ☐ Artifact Scatter w/Features
☐ Single Residence ☐ Multiple Residence ☐ Residential Complex/Community ☐ Industrial
☐ Military ☐ Ranching/Agricultural ☐ Transportation/Communication ☐ Commercial
☐ Governmental ☐ Ceremonial ☐ Other Type (specify type and explain in remarks): _____

Remarks: site may represent multiple prehistoric occupations

*Associated Phase/Complex Name(s): n/a

LA Number: 67692 Field Number: _____

9. CULTURAL/TEMPORAL AFFILIATIONS (continued)

COMPONENT #2

Cultural Affiliation: ☐ Paleoindian ☐ Archaic ☐ Anasazi ☐ *Mixed* Anasazi/Mogollon ☐ Mogollon
☐ Casas Grandes ☐ Plains Village ☐ Plains Nomad ☐ Navajo ☐ Apache ☐ Ute ☐ Pueblo
☐ Hispanic ☒ Anglo/Euroamerican ☐ Unknown affiliation ☐ other affiliation (identify): _____

Basis for Temporal Affiliations (choose one): ☐ not applicable ☐ based on associated chronometric data or historic records
☒ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names) ***Begin Date** ***End Date**

Earliest Period: Statehood 1912 1945
Latest Period (if any): WWII _____ _____ (leave blank to use default dates)

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration
☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: Amethyst glass

Component Type (choose one): ☒ Simple Feature(s) ☐ Artifact Scatter ☐ Artifact Scatter w/Features
☐ Single Residence ☐ Multiple Residence ☐ Residential Complex/Community ☐ Industrial
☐ Military ☐ Ranching/Agricultural ☐ Transportation/Communication ☐ Commercial
☐ Governmental ☐ Ceremonial ☐ Other Type (specify type and explain in remarks): _____

Remarks: _____

***Associated Phase/Complex Name(s):** n/a

10. FEATURE DATA

*Feature Type	**Reliable ID ?	No. Observed	***Associated Component Nos.	Feature ID, Notes
Midden/Hearth	Y	2	1	Feature 1 was a partially exposed thermal feature located at UTM NAD 1983 E349818 N3517795. Feature 2 was a partially exposed thermal feature located at UTM NAD 1983 E349804 N3517792

*see NMCRIS User's guide for a list of valid feature types

**enter "?" for uncertain identifications

***see Section 9 (Cultural-Temporal Affiliations) for Component Numbers; enter zero for unknown component associations

LA Number: 67692 Field Number: _____

10. FEATURE DATA (continued)

*Feature Type	**Reliable ID ?	No. Observed	***Associated Component Nos.	Feature ID, Notes

*see NMCRIS User's guide for a list of valid feature types

**enter "?" for uncertain identifications

***see Section 9 (Cultural-Temporal Affiliations) for Component Numbers; enter zero for unknown component associations

Feature Remarks: The site was originally described as lacking discernable cultural features. During the current revisit, two concentrations of burned caliche were identified in the northern portion of the site. Feature 1, a partially exposed thermal feature, measured 3 meters by 4 meters in size. Feature 2, another partially exposed thermal feature, measured 2 meters by 7 meters in size.

11. REFERENCES

*Written Sources of Information:

Hogan, Patrick

1993 *An Archeological Survey of the Cox Ranch Exchange Lands.* University of New Mexico, Office of Contract Archeology. Albuquerque.

*this item can be skipped if this form is submitted with an LA Investigation Record; please use American Antiquity style citations

Additional Sources of Information:

LA Number: 67692 Field Number:

12. NARRATIVE DESCRIPTION

Site LA 67692 was originally recorded as an Archaic artifact scatter by UNM/OCA in July 1988 (NMCRIS Activity 35779). According to UNM/OCA, the assemblage consisted of lithic debitage, a few pieces of fire-cracked rock, one core, and two ceramic sherds. The diagnostic ceramic artifacts indicated the site was associated with the Late Pueblo Period Jornada Mogollon culture. The recorder recommended the site as eligible for listing on the NRHP. It is unclear if the BLM/Las Cruces Field Office provided an eligibility determination for the original site recording. A search of the NMCRIS indicates eligibility for this site has not been made by the New Mexico SHPO.

Site LA 67692 was revisited by Goshawk archaeologists on 27 December 2019. The site was subjected to pedestrian transect survey at 5-meter (16-foot) intervals. All artifacts were analyzed in the field and point-plotted with a 3-meter-accuracy (9.8-foot-accuracy) handheld GPS. Select artifacts and features were photographed.

The site was located on a flat on the west edge of the aforementioned cuesta. Vegetation included mesquite, creosote, yucca, Mormon tea, grasses, shrubs, and forbs. Surface visibility within the site boundaries averaged above 90 percent. The site area was partially exposed by erosion and disturbed by rutting from a two-track roadway cutting through the site. The majority of the site was on Q4 surfaces that represented historic to modern eolian deposits as defined by geomorphologist in the region; however, portions of the site were located on a partially exposed surface that had been eroded to strata that predated human occupation. There was no evidence of looting or intentional vandalism at the site.

Site LA 67692 was represented on NMCRIS as a large circular site measuring 303 meters (1,000 feet) in diameter and described by the original recorders as measuring 120 meters (394 feet) in diameter. During Goshawk's revisit, the site measured 136 by 62 meters (918 by 302 feet). The adjusted site boundaries were expanded slightly to the southwest, comprising a total site area of approximately 0.52 hectares (1.28 acres).

The site was originally described as lacking discernable cultural features. During the current revisit, two concentrations of burned caliche were identified in the northern portion of the site. Feature 1, a partially exposed thermal feature, measured 3 by 4 meters (9.8 by 13.1 feet) in size. Feature 2, another partially exposed thermal feature, measured 7 meters (23 feet) in diameter.

The observed features contained intact deposits and buried prehistoric/historic surfaces. Cultural materials were eroding out of graded caliche roads up to 20 centimeters (7.87 inches) below the surface. The features may extend to 50 centimeters (19.69 inches) or more below the surface, if similar to other excavated burned caliche middens excavated in basin settings. These features could contain absolute chronological materials and subsistence remains. The scattered pieces of burned caliche, present in other portions of the site, indicate additional thermal features were once present or may still be present below the modern ground surface.

The artifact assemblage included more than 81 lithic artifacts, seven pieces of amethyst bottle glass fragments, and one historic railroad spike. The lithic artifacts analyzed (26 artifacts) included 15 flakes, four unimarginally retouched lithic tools, one projectile point, one angular hammerstone fragment, one pestle fragment, and four slab metate fragments. The lithic flakes analyzed represented expedient core reduction pieces; however, an estimated 40 additional flakes and 15 small metate ground stone fragments were not analyzed, some of which may have represented bifacial reduction or tool-refurbishing pieces.

The lithic artifacts analyzed were composed of a wide variety of materials from Rio Grande gravel deposits, with the exception of a few local materials. The lithic artifacts analyzed included four sandstone artifacts, three ignimbrite artifacts, three limestone artifacts, three quartzite artifacts, three rhyolite artifacts, two basalt artifacts, two Franklin thunderbird rhyolite artifacts, two chert artifacts, two Rancheria chert artifacts, one chalcedony artifact, and one obsidian artifact.

The only temporally diagnostic lithic artifact observed during the revisit was the obsidian projectile point, which would best be described as a Bonham-like arrow point. Based on this artifact and the historic glass shards observed, the site was most likely associated with the Late Pithouse Jornada Mogollon to early 20th century.

The site was more than 50 percent intact. The majority of site LA 67692 lacked stratigraphic integrity at the apex of the hill; however, the two features identified within sheet sand deposits suggested potential for temporally stratified deposits. Aeolian deposition may have capped features and preserved organic materials on the shoulder slopes. Extensive dune formations represent the southern site boundary and ascended 2 to 3 meters (6.56 to 9.84 feet) above the site. Dunal areas often contain temporally stratified deposits. Goshawk's survey results suggest LA 67692 contains intact feature deposits that could make the site eligible for listing on the NRHP.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☒ other materials (itemize): Site Documentation Form, Tim Graves

Site Documentation

Archaeologist: Mark Willis and Tim Graves

LA# or Discorery #: LA 67692 **Date**:12/27/2019

Number of photos taken: see Mark Willis **Percentage of Site Intact**: 50%

Observations on Site Condition: LA 67692 is in fair to good condition. Some of the cultural materials of this site are located on a partially exposed surface that has been eroded down to surfaces that predate the occupation of the site though the majority are intact and a high potentital for buried intact remains is present in the two thermal features recorded and the fact many materials are eroding out 10 to 20 cm below the surface in road cut banks that extend through the site. Portions of the site have been impacted by modern mechanical impacts to the area including a graded caliche road bed in the northern and another through the southwest portions of the site that undercuts the terrain 20 to 30 cm. These impacts are less than 10 percent of the overall site area. The majority of the surfaces of the site are resting on a Q4 surfaces that represent historic to modern aeolian deposits of the area as defined by geomorphologist in the region (see Monger 1993, Johnson 1998). The site has been undercut in graded road beds through the site. Overall the site is considered to be more than 50 percent intact.

Observations on Subsurface Archaeological Deposits (include estimated depth of deposits):

The majority of the materials are exposed in partially eroded areas or along graded road beds indicating materials extend more than 20 to 30 cm below the modern ground surface. The cultural features are only partially exposed and likely retain intact subsurface remains that would provide absolute chronological and potentitally subsistence remains. These features likely extend 20 to 30 cm below the surface and potentitally deeper given both have been identified as burned caliche middens. Burned caliche middens in basin sediments have been identified as containing central pits up to and larger than 2 m in diameter and deeper than 50 cm excavated into caliche substrate (see Kenmotsu et al. 2009; Moore and Akins 2014:266-273; and Ward et al. 2008). In addition, recent 4 x 4 vehicle tracks through the south portion of the site indicate aeolian recent sands are deeper then 10 to 20 cm.

Observations on Site Setting: The site is located on top of a prominent ridge top above the Rio Grande Valley of the Mesilla bolson at 4,125 ft. amsl. The surface of the site is relatively level with a slight, less than one degree slope to the west. Surface sediments consist of a light brown sand/sandy loam with a low to moderate density of caliche nodule inclusions. A massive dune field forms the southern boundary ascending 2 to 3 m above the site area and the escarpment edge and caliche road bed form the northern boundary. Flora consist of creosote, Mormon/Indian tea, soaptree yucca, some broom snakeweed, dropseed grass, mesquite, and one large javalina bush. Surface visibility is greater than 95 percent.

Cultural Affiliation:_Jornada Mogollon and Late Historic

Earliest Period: Late Pithouse **Latest Period** (if any):Statehood/WWII

Date Range: A.D. 700 - 1945

Features: Yes

Type: Burned caliche middens

# of features - 2

Description of features: Feature 1 – 3 m by 4 m partially exposed burned caliche midden with more than 150 pieces of burned caliche; Feature 2 – 7 m diameter partially exposed burned caliche midden with more than 5,000 pieces of burned caliche. These burned caliche middens have been radiocarbon dated to the 19th century and have been associated with Apache occupations in the region (see Kenmotsu et al. 2009; Moore and Akins 2014:266-273; and Ward et al. 2008). The features are unique and generally contain deep central pits excavated into caliche substrate up to 50 cm below the modern ground surface.

An additional scattered 200 pieces of burned caliche on the site indicate additional thermal features were once present on the site or may still be buried below the modern ground surface.

Topography: The site is located on level terrain on top of a prominent ridge top extending out into the Rio Grande Valley from the south to the north in the south central portion of New Mexico. The site is on a slight less than one degrees slope south of a caliche graded road. The south edge of the site is bordered by an extensive massive dune that ascends 2 to 3 m above the site area forming the southern boundary.

Field Analysis Table

Item	Artifact Type	Type	Whole/ Frag	Material	Cortex %	Length (cm)	Thick (cm)	Platform	Retouch	# of utilized edges	Comments
1	Unimarginally retouched tool	End scraper	Whole	Basalt	0	3.1	0.6	N/A	Marginal	2	Associated with Feature 1
2	Hammerstone	Angular	Frag	Franklin rhyolite	21-40	10.5	3.5	N/A	N/A	0	Associated with Feature 1, T Bird rhyolite
3	Projectile point	Bonham like	Whole	Obsidian	0	1.5	0.5	N/A	Bifacial	2	Associated with Feature 1
4	Flake	Core reduction	Whole	Chalcedony	0	1.2	0.3	Single facet	N/A	0	Associated with Feature 1
5	Flake	Core reduction	Whole	Chert	0	2.3	0.6	Single facet	N/A	0	Associated with Feature 1, Brown chert
6	Flake	Core reduction	Frag	Chert	0	4	1.4	None	N/A	0	Associated with Feature 1, white chert
7	Flake	Core reduction	Whole	Rhyolite	21-40	3.5	1.2	Cortical	N/A	0	None
8	Unimarginally retouched tool	Tabular	Frag	Basalt	41-60	5	0.5	N/A	Marginal	1	None
9	Pestle	N/A	Frag	Quartzite	81-99	5	1.4	N/A	N/A	1	None
10	Flake	Core reduction	Frag	Limestone	1-20	3.1	0.5	Cortical	N/A	0	None
11	Flake	Core reduction	Frag	Rancheria chert	0	3.3	0.6	None	N/A	0	None
12	Slab metate	N/A	Frag	Sandstone	41-60	5.3	0.9	N/A	Unifacial	1	None
13	Flake	Core reduction	Frag	Ignimbrite	0	3.7	0.6	None	N/A	0	None
14	Flake	Core reduction	Frag	Ignimbrite	0	3.2	0.5	None	N/A	0	None

15	Flake	Core reduction	Frag	Quartzite	100	2.8	0.3	None	N/A	0	None
16	Flake	Core reduction	Whole	Limestone	100	3.2	0.3	Cortical	N/A	0	None
17	Slab metate	N/A	Frag	Sandstone	41-60	4.8	0.4	N/A	Unifacial	1	Also FCR
18	Slab metate	N/A	Frag	Sandstone	61-80	5	3	N/A	Unifacial	1	Also FCR
19	Unimarginally retouched tool	End scraper	Whole	Rhyolite	61-80	6.7	2.1	N/A	Marginal	2	Franklin T Bird rhyolite
20	Flake	Core reduction	Whole	Limestone	21-40	5.3	1.2	Single facet	N/A	0	None
21	Unimarginally retouched tool	Tabular	Frag	Sandstone	41-60	7.3	1.3	N/A	Marginal	3	Also slab metate frag
22	Flake	Core reduction	Whole	Franklin rhyolite	100	4.3	0.4	Cortical	N/A	0	Franklin T Bird rhyolite
23	Slab metate	N/A	Frag	Quartzite	61-80	10.2	0.5	N/A	Unifacial	1	Also FCR
24	Flake	Core reduction	Frag	Rancheria chert	21-40	3.7	1.2	None	N/A	0	None
25	Flake	Core reduction	Whole	Ignimbrite	0	2.1	0.3	Single facet	N/A	0	None
26	Flake	Core reduction	Whole	Rhyolite	21-40	3.4	0.5	Single facet	N/A	0	None

LA Narrative:

Datum location – Previous site datum located – Stamped on datum UNM 364-1-2 UTM corrdinates 349789E 3517766N

LA 67692 extends over a 136 m southwest to northeast by 62 m southeast to northwest (5,180 m^2 – 1.28 acre) area and includes two burned caliche midden features, a broad scatter of more than 200 burned caliche, more than 81 lithic artifacts, seven pieces of amethyst bottle glass fragments including one base fragment, and one historic railroad spike. The site does contain integrity and intact remains and buried prehistoric/historic surfaces are present. These intact remains are present in the two partially exposed burned caliche midden features and materials are noted to be eroding out of graded caliche roads up to 20 cm below the surface. The features may extend to 50 cm or more below the surface if similar to other excavated burned caliche middens excavted in basin settings. These remains would contain absolute chronological materials and likely subsistence remains. The scattered pieces of burned caliche present in other portions of the site indicate additional thermal features were once present or may still be present below the modern ground surface. Just over roughly 50 percent of the lithic artifacts present on the site surface were analyzed. This included the analysis of 26 items and these included 15 flakes, four unimarginally retouched lithic tools, one projectile point, one angular hammerstone fragment, one pestle fragment, and four slab metate fragments. The lithic materials included a wide variety of materials all from Rio Grande gravel deposits with the exception of a few local materials that included rhyolite, ignimbrite, basalt, sandstone, quartzite, and limestone. These material types included five sandstone, three ignimbrite, three limestone, three quartzite, three rhyolite, two basalt, two Franklin thunderbird rhyolite, two chert, two Rancheria chert, one chalcedony, and one obsidian. The projectile point was out of obsidian and although a small arrow point with a straight stem does not fit particular types from the region. The closest this point could be typed as is a Bonham like (Turner and Hester 1993). The lithic flakes analyzed all represented expediant core reduction pieces although more than 40 additional flakes and 15 small metate groundstone fragments are estimated to be present and some of these may have represented bifacial reduction or tool

refurbishing pieces. LA 67692 contains buried prehistoric/historic cultural surfaces as identified in graded road cut banks and the two thermal features identified on the site are partially exposed and likely contain intact subsurface remains. These potentital remains could contain absolute chronological remains (i.e. charcoal) and potentitally subsistence remains. These remains recorded on the site and based on the buried intact prehistoric/historic surfaces, LA 67692 would contribute data to the prehistory of the region. LA 67692 has components that could make the site eligible for listing on the NRHP under Criterion D.

References

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1993 *Soil-Geomorphology and Paleoclimatic Characteristics of the Fort Bliss Maneuver Areas, Southern New Mexico and Western Texas.* Historic and Natural Resources Report No. 10, Cultural Resource Management Program, Directorate of the Environment, United States Army Air Defense Artillery Center Fort Bliss, Texas.

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1993 *A Field Guide to Stone Artifacts of Texas Indians.* Second Edition. Texas Monthly Field Guide Series. Gulf Publishing Company, Houston, Texas.

Ward, C., R. Hall, S. Phillips, and M. Swanson
2008 *Mitigation and Evaluation of 10 Sites in Maneuver Areas 4B, 5B, and 6D on Fort Bliss, Otero County, New Mexico.* Directorate of Public Works Environmental Division Fort Bliss Garrison Command Historic and Natural Resources Report No. 04-11. GMI Report of Investigations No. 686EP. Geo-Marine, Inc. El Paso.

AUGUST 27, 2020 NEW MEXICO HISTORIC PRESERVATION DIVISION (NM HPD) CONCURRENCE LETTER

Michelle Lujan Grisham
Governor

August 27, 2020

Mr. Zane Homesley
President
Goshawk Environmental Consulting

Re: HPD Log 113599, Archaeological Survey Submittal Camino Real Landfill Permit Application
Sunland Park, Doña Ana County, NM

Dear Mr. Homesley:

Thank you for submitting the report "A Class III Archaeological Survey of the Camino Real Landfill, Doña Ana, County, New Mexico" to the New Mexico State Historic Preservation Officer (SHPO). We have reviewed the report and the accompanying site forms. The property is currently in private ownership, but was once owned by the Federal Government prior to being part of Cox Ranch Land Exchange. We understand that archaeological review and survey has been conducted as part of the permitting process. We understand that there are two archaeological sites located in the southeast corner of the project area and that these sites are partially located within the APE (Permit Area 4). The recent recording of both sites indicate that they potentially have significant buried components, although they have not been subjected to subsurface testing. We also understand that roads are alongside and/or bisect the archaeological sites.

The SHPO recommends that if possible, both sites be protected by establishing a 100 foot buffer off of the northwest limit of the sites and that protective fencing be installed along the roadway. This would exclude the southeast section of the property from future use, excluding road traffic. The location of the buffer is shown in yellow on the attached figure.

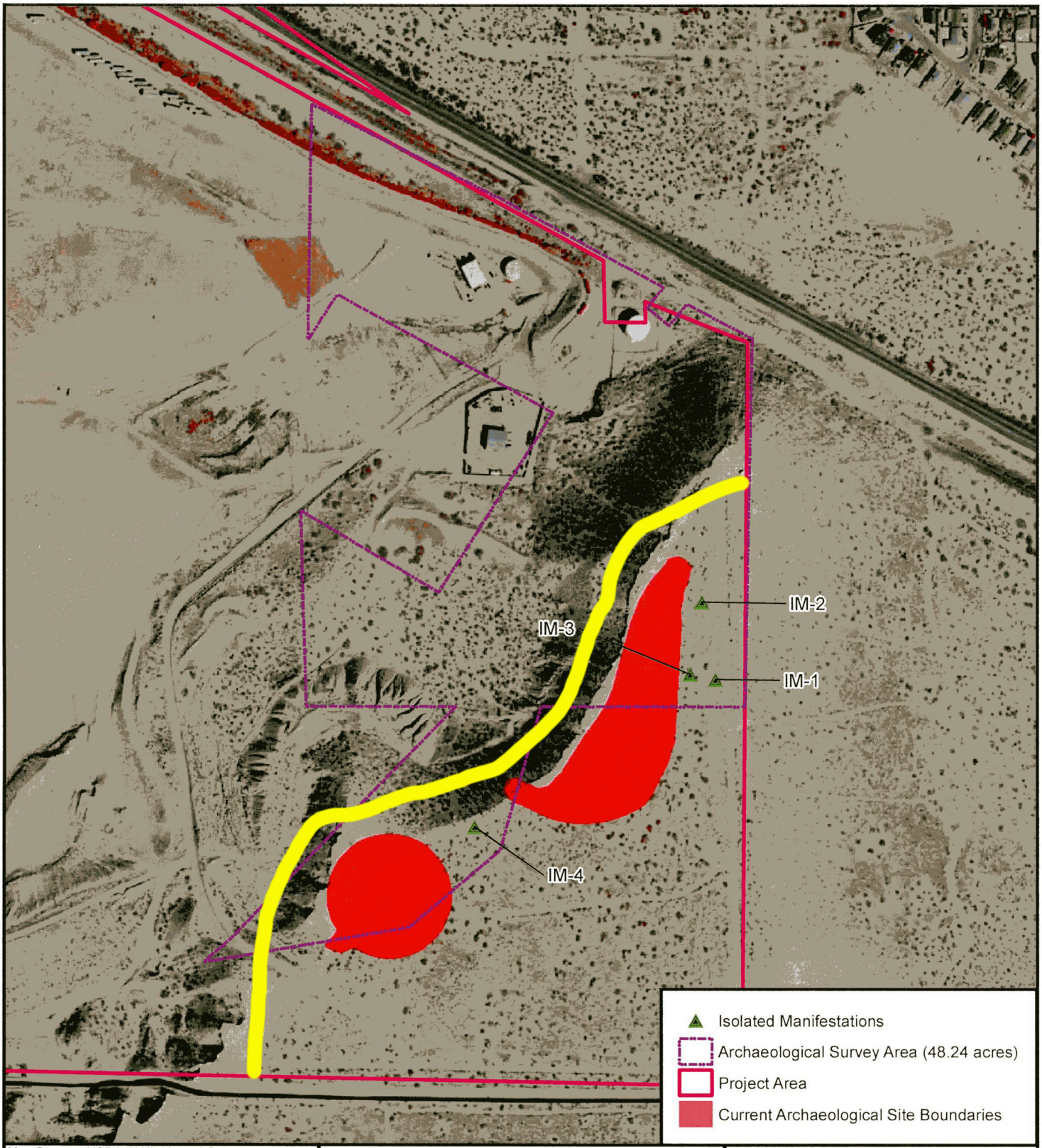
If such is not acceptable, then the SHPO recommends that a testing/data recovery plan be written and submitted for review for both of the sites so that eligibility to the National Register of Historic Places can be determined and if the sites are deemed eligible, then data recovery could occur.

If you have any questions pertaining to these comments, please do not hesitate to contact me. I can be reached by telephone at (505) 476-0530 or email at geoff.cunnar@state.nm.us.

Sincerely,

Geoff Cunnar, PhD RPA
Staff Archaeologist
State of New Mexico Department of Cultural Affairs
Historic Preservation Division
407 Galisteo Street, Suite 236
Santa Fe, New Mexico 87501
505-476-0530

CC:
Mr. Brady Stewart, Region Engineer, Camino Real Environmental Center, Inc.
brady.stewart@WasteConnections.com
Mr. George Schuman, Permit Section Manager, NMED Solid Waste Bureau
brady.stewart@WasteConnections.com



Map Source: USDA, NAIP Natural Color Imagery of New Mexico, 2018.

0 250 500 Feet

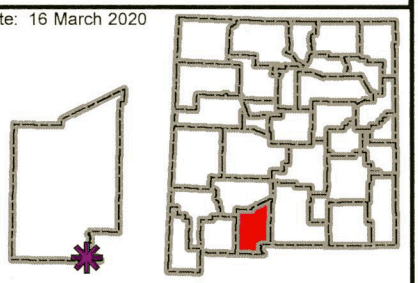
N

GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 7
Isolated Manifestations

Camino Real Landfill Site
Township 29S; Range 3E; Sections 12, 13

Date: 16 March 2020



Doña Ana County, New Mexico

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO
NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

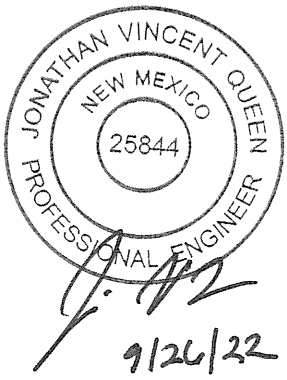
APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME IV – SITING AND LAND USE
SECTION 2 – LAND USE

Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC
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817-735-9770

IKG, LLC
24 Tejon Canon Rd.
Placitas, NM 87043
505-301-2026

WCG Project No. 0601-667-11-06

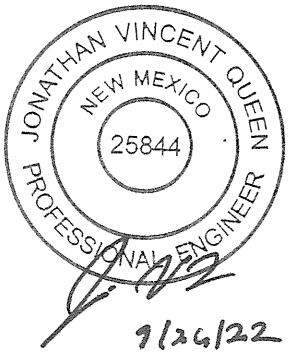
CONTENTS

1	**INTRODUCTION**	**IV.2-1**
	1.1 Site Location	IV.2-1
	1.2 Existing Permitted Landfill Unit Overview	IV.2-1
	1.3 Purpose	IV.2-2
2	**SITE DESCRIPTION**	**IV.2-3**
	2.1 Topography	IV.2-3
	2.2 Vegetation	IV.2-3
	2.3 Access	IV.2-3
	2.4 Water Source	IV.2-4
	2.5 Noise	IV.2-4
3	**CLIMATE**	**IV.2-5**
4	**CONTIGUOUS LAND USES**	**IV.2-6**
	4.1 Zoning	IV.2-6
	4.2 Local Land Uses	IV.2-7
	4.3 Facility Setbacks	IV.2-7
	4.4 Existing Infrastructure	IV.2-7
5	**VULNERABLE AREA ASSESSMENT SUMMARY**	**IV.2-8**
6	**DEMOGRAPHICS**	**IV.2-9**
	6.1 Doña Ana County	IV.2-9
	6.2 City of Sunland Park	IV.2-9

FIGURES

Figure

IV.2.1	Site Plan
IV.2.2	Site Location Map
IV.2.3	Wind Rose



CONTENTS (Continued)

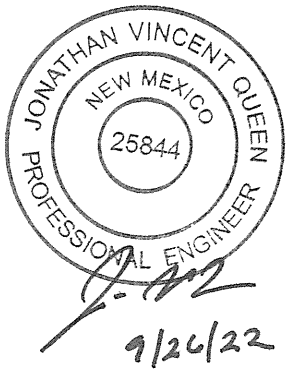
TABLES

Table		Page
IV.2-1	Climate Data – El Paso International, TX	IV.2-6
IV.2-2	Demographic/Socioeconomic Profile – City of Sunland Park and Doña Ana County	IV.2-11

ATTACHMENTS

Attachment

IV.2-A	CRLF Legal Description
IV.2-B	Vulnerable Area Assessment
IV.2-C	Community Noise Analysis



1 INTRODUCTION

The Camino Real Landfill (CRLF) is an existing solid waste facility operating in compliance with its current Permits, SWM-030738 and SWM-030738(SP), and the New Mexico Environment Department (NMED) Solid Waste Rules (the Rules; 20.9.2-20.9.10 NMAC). The owner and operator of the Camino Real Landfill is Camino Real Environmental Center, Inc. (CREC).

CREC is seeking a Permit Modification (20.9.3.22 NMAC) and Permit Renewal (20.9.3.25 NMAC) for the CRLF to modify the existing permitted landfill configuration and to renew the current permit. Each of these items is discussed in more detail below.

1.1 Site Location

The CRLF is an existing solid waste disposal facility that encompasses approximately 480 acres of land located at 1000 Camino Real Blvd. on the New Mexico (NM)/Mexico (MX) border in Sunland Park. The approximate geographic coordinates for the center of the CRLF site are: Latitude 31° 47' 24.7272" N and Longitude 106° 35' 32.6508" W. A topographic map showing the CRLF site location is provided as Figure I.1.1.

The legal description of the site is summarized as follows:

> *A certain parcel of land situated within Section 12 and 13, Township 29 South, Range 3 East, New Mexico Principal Meridian, City of Sunland Park, Doña Ana County, New Mexico.*

CRLF is constructed, operated, monitored, and inspected in compliance with the Solid Waste Facility Permits granted by the NMED Solid Waste Bureau (SWB) pursuant to the Rules (20.9.2-20.9.10 NMAC).

1.2 Existing Permitted Landfill Unit Overview

As shown on Figure I.1.2, MSW disposal and development at CRLF is defined by four "area fill" Units, i.e., 1 through 4, which are further divided into cells. Unit 1 (50 acres) is designated as closed. Unit 2 (124.2 acres) is an active landfill area. Unit 3 (60.5 acres) is permitted for waste disposal, and recently (2019) the first cell in this

unit was developed. Portions of Unit 3 have been excavated to provide soils for ongoing operations. Unit 4 (73.0 acres) is located east of the current operations and is permitted but undeveloped. Soils from the Unit 4 area have also been excavated to support the ongoing operation, and the area has also been used to stockpile construction soils. Cell phasing within each unit is determined by operational conditions. This Application for Permit Modification and renewal addresses subgrade configurations in Units 3 and 4 and final contour design over all units.

1.3 Purpose

The purpose of Volume IV, Section 2, Land Use, is to provide a description of general site characteristics, selected physical features, access, climate, land uses, zoning, socioeconomic and demographic characteristics of the area surrounding CRLF. More specifically, this section provides documentation on land use and zoning in response to 20.9.3.8.C(4)(b-d) NMAC. A "Vulnerable Area Assessment" was conducted for CRLF and submitted to NMED on July 17, 2020 in accordance with 20.9.3.8.D NMAC to determine whether the CRLF is located within a vulnerable area. A summary is provided herein.

2 SITE DESCRIPTION

2.1 Topography

The 480-acre CRLF site slopes generally from the southwest to the northeast. The highest elevation of the undeveloped portion of the site is approximately 4,130 feet above mean sea level (ft-msl) in the southwest corner of the property; and the lowest site elevation is approximately 3,900 ft-msl in the northeast corner of the site. No defined drainage features were identified on the undeveloped site during the site characterization and permitting process. The watersheds that contribute to run-off and run-on consist mainly of overland "sheet" flow in arroyos that intersect the site. Intermittent arroyo flow is discharged at two locations in the northern portion of the landfill.

2.2 Vegetation

The central portion of the site is barren hills, while the northwestern and southeastern portions are open rangeland. The barren hills have little to no vegetative cover. The rangeland areas can be generally described as sparsely vegetated desert shrubland. Vegetation within the rangeland portions of the site consists of creosote bush, honey mesquite, ocotillo, yucca, Mormon tea, broom snakeweed, and desert sumac. Onsite vegetation is further discussed in Attachments IV.1-A and IV.1-B.

2.3 Access

Access to the facility is along New Mexico Highway 273 (NM 273) connecting to a paved, private road, Camino Real Boulevard (Blvd.). The access roadway has two lanes of paving with extensive signage indicating a speed restriction of 20 miles per hour. The CRLF entrance is approximately 1 mile southwest of NM 273 on Camino Real Boulevard. The current traffic routes are comprised of paved roadways designed to accommodate heavy truck traffic. The highways are currently used by vehicles destined for the CRLF as well as other truck traffic and are not load-restricted. Improvements were made to the Camino Real Boulevard/NM 273 intersection to include one new lane in each direction and a continuous left-turn lane. Access to the CRLF facility is detailed in Volume II, Section 9 – Transportation

Plan. The Traffic Study is included in this section as Attachment II.9-A and provides traffic volume data, roadway capacity usage, and route information.

2.4 Water Source

CRLF has an existing water supply well as shown on Figure I.3.1. The well has been servicing the facility since its installation in 1998 and provides potable water for general, office/maintenance facility use, and dust control.

2.5 Noise

In December 2019, Ecosphere Environmental Services, Inc. conducted a Community Noise Analysis (Attachment IV.2-C) for the CRLF to evaluate potential noise effects on surrounding land uses from existing and future operations at the landfill. The analysis also evaluates noise from trucks and other traffic associated with the landfill within noise-sensitive areas (receivers). Both landfill operations and traffic-related noise fall within the applicable standards as outlined in the analysis. In addition, noise was calculated at points within the landfill nearest to the receivers, but over time most operations occur at greater distances. Therefore, noise levels would be even lower than those predicted. Noise impact at the CRLF is discussed in greater detail in the Community Noise Analysis (Attachment IV.2-C).

3 CLIMATE

Sunland Park, New Mexico lies in the Chihuahuan Desert, an area possessing a temperate, continental, semi-arid climate. Climate data for El Paso, TX, the closest area with consistent climate data is provided in Table IV.2-1. The maximum average temperature is 96.1 degrees (°) Fahrenheit (F) and occurs in June. The minimum average temperature occurs in January and is 31.6° F. The annual average precipitation is approximately 8.56 inches, and the majority of which occurs in the form of convection thunderstorms during the summer months (i.e., occurring in the form of "monsoon" storms).

A Wind Rose, based on the nearest available weather station (Station No. 23044, El Paso International AP, TX) is provided as Figure IV.2.3. Calms (i.e., winds less than 1.3 miles per hour) are predominant for the area approximately 1.00 percent of the time. While prevailing winds blow from the southeast, winds are also common from the west and southwest. Winds are commonly between 3 and 8 meters per second (or 7-18 miles per hour).

Table IV.2-1
Climate Data – El Paso, TX (412797)

Category	Unit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Average Max Temperature	F	57.9	63.2	70.3	79.0	87.7	96.1	95.2	93.2	87.9	78.8	66.2	58	77.8
Average Min Temperature	F	31.6	35.6	41.8	49.9	58.7	67.2	70.3	68.8	62.5	50.9	38.5	31.8	50.6
Average Total Precipitation	in	0.40	0.44	.27	.20	.34	.71	1.60	1.55	1.41	.65	.39	.59	8.56
Average Total Snowfall	in	1.1	.9	.3	.3	0	0	0	0	0	0	1.1	1.9	5.7
Average Snow Depth	in	0	0	0	0	0	0	0	0	0	0	0	0	0

Period of Record: 12/01/1942 to 6/10/2016
Data Source: Western Regional Climate Center (wrcc@dri.edu)

4 CONTIGUOUS LAND USES

4.1 Zoning

The CRLF site is located in the City of Sunland Park. On April 27, 1987, Sunland Park City Council approved Zoning Ordinance 1987-4 to designate the area occupied by the Nu-Mex Landfill as M-1 for heavy industrial land uses. Nu-Mex Landfill was re-named the Camino Real Landfill in 1995. The approval of the zoning ordinance was contingent on CRLF maintaining compliance with several conditions. These included using the area only for sanitary landfill purposes and incidental uses thereto, including salvage of discarded materials and ensures that the site was used in a manner that adequately protected the public health, safety, and general welfare of the citizens of the city. The zoning ordinance included the entire 480-acre parcel that is inclusive of the current boundary of CRLF. The 2004 edition of the Sunland Park Master Plan/Zoning Map indicates that the area in which CRLF is located is zoned M-1 "light industrial." In November of 2003, the City redefined heavy industrial land use as M-2. When this conversion was made, the City apparently overlooked what should have been a nominal reclassification of the same land use already established for property occupied by CRLF. It was initially designated M-1 for heavy industry; it is now designated M-1 for light industry. The inconsistency does not impose constraints that would preclude the operation of CRLF under the new definition, but it could have some bearing on future CRLF decisions to build facilities that would process solid waste. A legal description for the site is provided as Attachment IV.2-A.

Adjacent land outside the corporate limits of the City to the west of CRLF is zoned County Rural District (CRD) by the Doña Ana County Planning Department. The land south of the facility's southern boundary is under the jurisdiction of the Mexican Federal Government, the State of Chihuahua, and Ciudad Juarez. Although there are scattered structures constructed on land south of the international boundary, the area is not zoned. Land to the east of CRLF is zoned by the City for light industrial uses (M-1). Land adjacent to and north of CRLF is zoned for mixed land uses including residential, public purposes, and commercial activity. It is, therefore, not unreasonable to conclude that the current zoning status of CRLF continues to be consistent with adjacent existing land uses and existing zoning constraints. Based on historic zoning data and the Doña Ana County interactive zoning map (accessed March 2021), CRLF is zoned "M1 Industrial."

4.2 Local Land Uses

The site is comprised of approximately 480 acres located in Sections 12 and 13, Township 29 South, Range 3 East of the New Mexico Principal Meridian. In general, land adjacent to the CRLF remains vacant.

Land uses along NM 273 are dominated by commercial and community facilities (Figure IV.2.3). The north boundary of the site is immediately adjacent and generally parallel to the Union Pacific Railroad. Adjacent land to the west and south of the site is generally undeveloped; and the south boundary of the site coincides with the Mexico/New Mexico international boundary.

4.3 Facility Setbacks

The Land Use Setbacks aerial photo provided as Figure IV.1.6 identifies the CRLF site boundary, solid waste disposal limits, and the required setbacks. In comparison to the setback distances approved in the 2008 permit application, setbacks on the west, south, and north sides of the site have remained consistent. Setbacks to the southeast, northeast, and northwest have actually been increased, providing a greater physical buffer between the landfill and the communities located north of the facility and minimizing noise potential while also maintaining more than the minimum required setback distance (i.e., 50 feet). The setback to the east has been slightly modified but maintains more than the required setback distance (i.e., 50 feet). The undeveloped disposal areas, including Unit 3 and Unit 4, are not within 50 feet of the facility property boundary as shown on Figure IV.1.6.

4.4 Existing Infrastructure

Existing infrastructure is identified repetitively throughout this application.
Figure IV.2.1 (Site Plan) includes groundwater monitoring wells, landfill gas monitoring points, stockpile locations, fire protection equipment locations, water supply well, facility buildings, site access roads, fences, and the fiber optics line. Figure IV.2.2 (Site Location Map) uses the most recent USGS Quadrangle Map and includes railroads and public/private roads surrounding the facility. Drawing 6 of the Permit Plans (Proposed Completion Plan) includes surface drainage features and storage ponds. Drawing 4 of the permit plans (Excavation Plan) includes the engineered screening fence and Figure IV.1.6 (Land Use Setbacks) includes setback distances, both of which serve as barriers for concealing the site from public view and noise abatement.

5 VULNERABLE AREA ASSESSMENT SUMMARY

A Vulnerable Area Assessment (VAA) was conducted for the CRLF site to address each of the three "vulnerable area criteria" in relation to the proposed Permit Renewal and Modification of the CRLF, as required by the NM Solid Waste Rules. The rules (20.9.2.7.V(3) NMAC) define a vulnerable area as follows:

> **A vulnerable area is an area within a four mile radius from the geographic center of a facility or proposed facility that:**
>
> **(a) has a percentage of economically stressed households greater than the state percentage based on the most recent actual census bureau data within any square mile within the four mile radius surrounding the facility or proposed facility; and**
>
> **(b) where the New Mexico portion has a population of 50 people or more within any square mile within the four mile radius; and**
>
> **(c) has within it 3 or more regulated facilities not including the applicant's facility.**

A copy of the VAA, submitted to NMED on July 17, 2020 is provided as Attachment IV.2-B. The Secretary's letter of concurrence is also included in Attachment IV.2-B.

6 DEMOGRAPHICS

6.1 Doña Ana County

Demographic data for Doña Ana County in presented in Table IV.2-2. According to this data from the United States Census Bureau (USCB) and American Community Survey (ACS), Doña Ana County's population continues to rise. The total population of Doña Ana County has increased 19.77 percent, from 174,690 in 2000 to 209,233 in 2010. In addition, between 2010 and 2015 Doña Ana County also saw an increase in population of 2.92 percent from 209,233 to 215,338. Total households also increased 26.83 percent between 2000 and 2010, although they show a decline of 2.54 percent between 2010 and 2015. The median household income has also increased between 2000 and 2010 by 22.98 percent, and by 2.54 percent between 2010 and 2015. Table IV.2-2 also illustrates changes in the male and female populations and the median age of the Doña Ana County population.

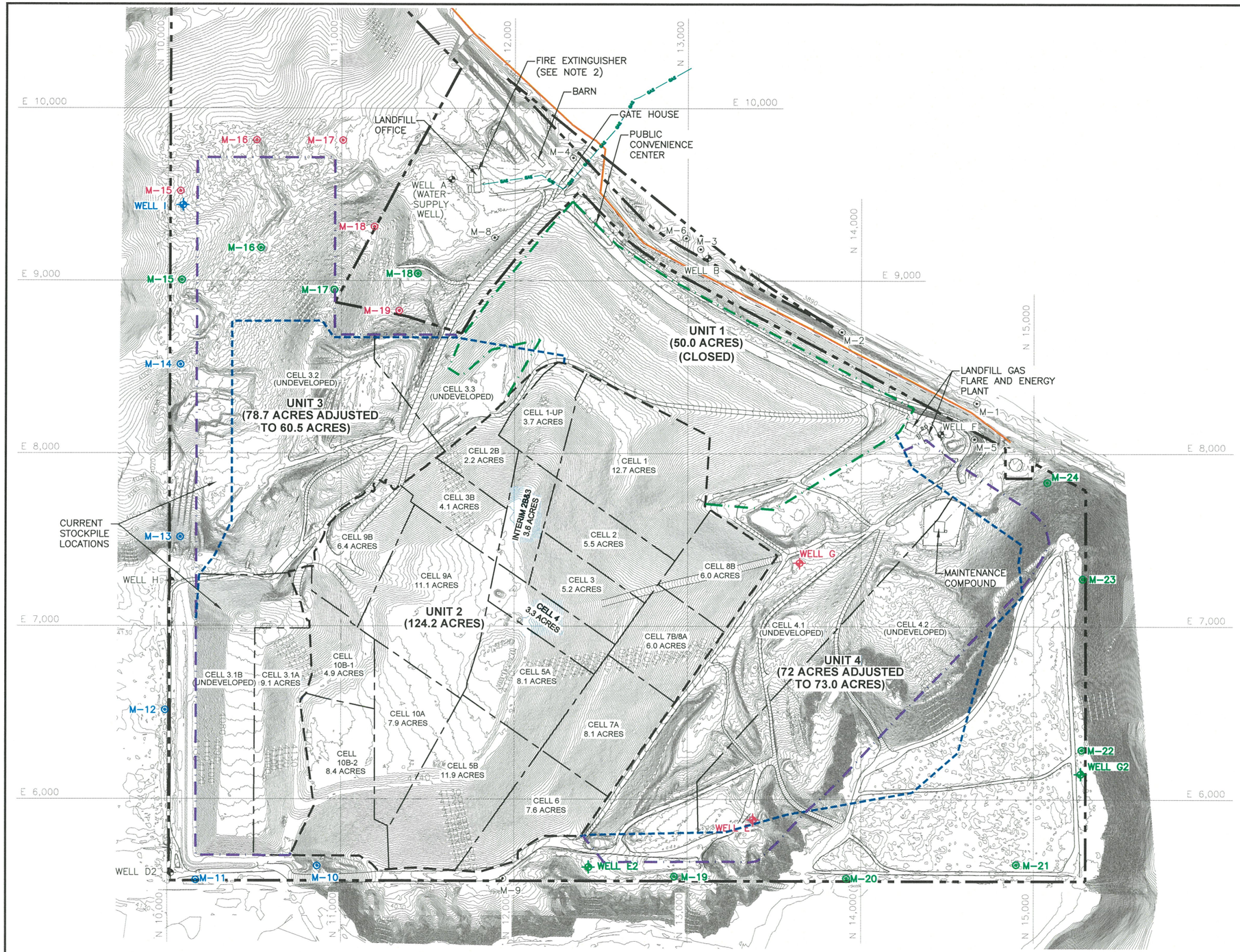
6.2 City of Sunland Park

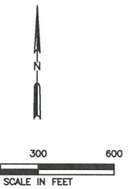
Demographic data for the City of Sunland Park is also presented in Table IV.2-2. Sunland Park's population increased 4.89 percent from 13,321 to 14,106 between 2000 and 2010 and also increased by 7.34 percent between 2010 and 2015 from 14,106 to 15,142. Similar to Doña Ana County, total households increased between 2000 and 2010 by 15.25 percent and saw an increase of 18.60 percent between 2010 and 2015. The median household income increased by 14.91 percent between 2000 and 2010 and by 21.05 percent between 2010 and 2015. Table IV.2-2 also illustrates changes in the male and female populations and the median age of the Sunland Park population.

Table IV.2-2
Demographic/Socioeconomic Profile[1]
City of Sunland Park and Doña Ana County

Category	2000 Census		2010 Census		2015 ACS		% Change 2000 to 2010		% Change 2010 to 2015	
	Sunland Park	Doña Ana County	Sunland Park	Doña Ana County	Sunland Park	Doña Ana County	Sunland Park	Doña Ana County	Sunland Park	Doña Ana County
Total Population	13,321	174,690	14,106	209,233	15,142	215,338	5.89%	19.77%	7.34%	2.92%
Male	6,438	85,786	6,763	102,569	7,302	105,774	5.05%	19.56%	7.97%	3.12%
Female	6,883	88,904	7,343	106,664	7,840	109,564	6.68%	19.98%	6.77%	2.72%
Median Age (years)	25.4	30.2	28.8	32.4	28.6	32.9	13.39%	7.28%	-.69%	1.54%
Total Households	3,370	59,556	3,884	75,532	3,975	77,453	15.75%	26.83%	18.60%	2.54%
Median Household Income (dollars)	$20,164	$29,808	$23,170	$36,657	$28,047	$39,164	14.91%	22.98%	21.05%	6.84%

[1] Data Sources: U.S. Census Bureau, Census 2000; U.S. Census Bureau, Census 2010; U.S. Census Bureau, 2011-2015 American Community Survey (ACS 5-Year Estimates).





LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE FOR UNIT 1 (CLOSED)
- PERMITTED LIMITS OF WASTE FOR UNIT 2
- PERMITTED LIMITS OF WASTE FOR UNITS 3 AND 4
- ADJUSTED LIMITS OF WASTE FOR UNITS 3 AND 4
- CELL BOUNDARY
- E 8,000 — SITE GRID
- 4120 — COMPOSITE TOPOGRAPHY (SEE NOTE 1)
- FIBER OPTICS LINE
- GAS GAS GAS — NATURAL GAS LINE
- ROADS
- WELL B — EXISTING GROUNDWATER MONITOR WELL
- WELL I — PERMITTED GROUNDWATER MONITOR WELL
- WELL G — PERMITTED GROUNDWATER MONITOR WELL (TO BE ABANDONED)
- WELL G2 — PROPOSED GROUNDWATER MONITOR WELL
- M-4 — EXISTING LANDFILL GAS PROBE
- M-11 — PERMITTED LANDFILL GAS PROBE
- M-17 — PERMITTED LANDFILL GAS PROBE (TO BE REPLACED WITH PROPOSED LOCATIONS)
- M-27 — PROPOSED LANDFILL GAS PROBE

NOTES:

1. COMPOSITE TOPOGRAPHY IS A COMPOSITE FROM THE 2005 AND 2022 AERIAL SURVEYS.
2. FIRE EXTINGUISHER ARE MAINTAINED IN ALL MOBILE EQUIPMENT AND ON-SITE STRUCTURES.

JONATHAN VINCENT QUEEN
NEW MEXICO
25844
PROFESSIONAL ENGINEER
4/26/22

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- [ ] DRAFT
- [X] FOR PERMITTING PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 07/2022
FILE: 0601-667-11
CAD: I-3-1-SITE PLAN.DWG

DRAWN BY: JDW
DESIGN BY: KRB
REVIEWED BY: JVQ

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group

SITE PLAN

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE IV.2.1

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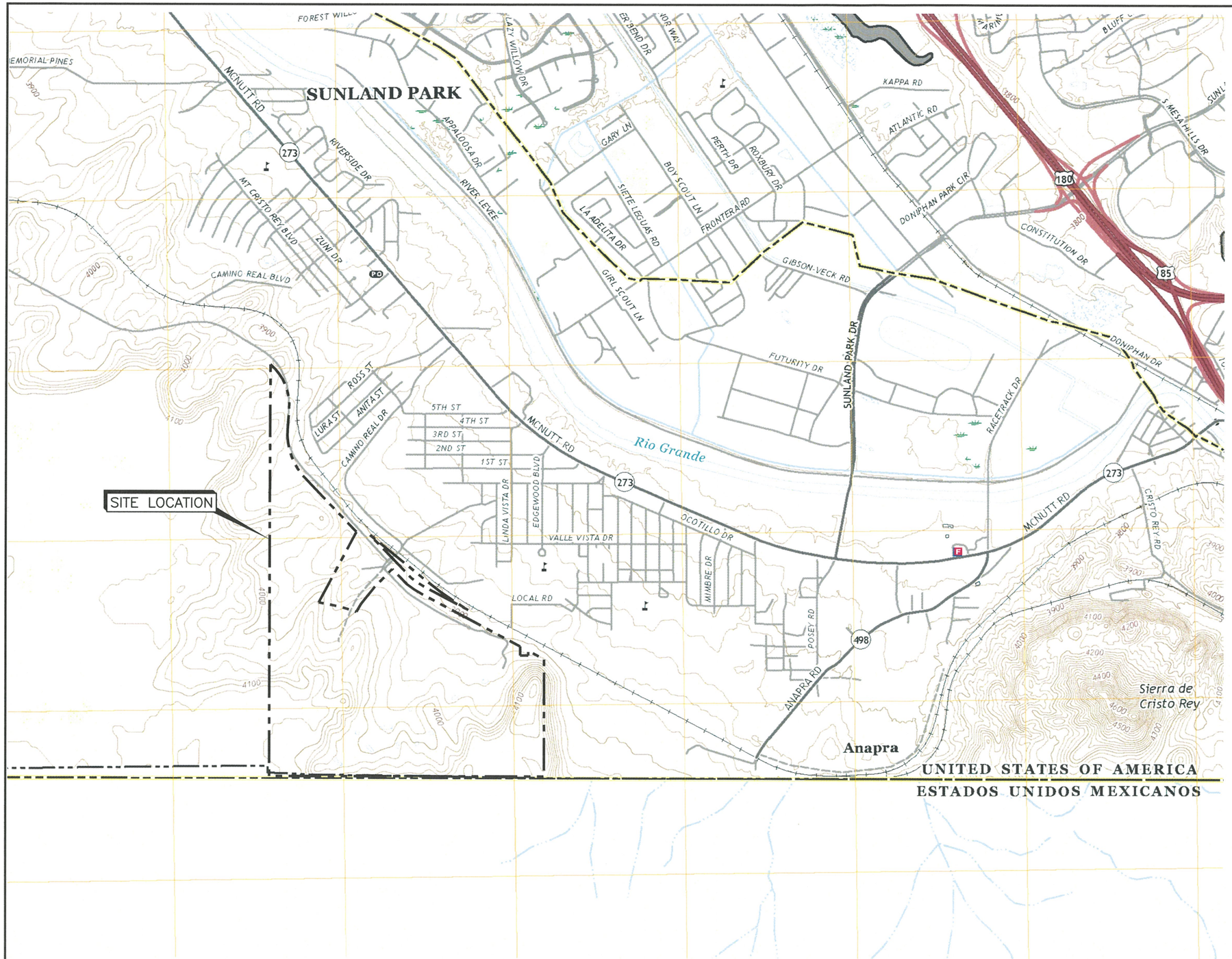

LEGEND

PROPERTY BOUNDARY

NOTES:

1. BASED ON SMELTERTOWN, 2019 USGS QUADRANGLE 7.5' MAP.
2. GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE: 31° 47' 22.67" N. 106° 35' 34.41" W.

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PROFESSIONAL ENGINEER

9/26/22

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DATE: 07/2022
FILE: 0601-667-11
CAD: IV.2.2-SITE LOCATION.DWG

DRAWN BY: JDW
DESIGN BY: KRB
REVIEWED BY: JVQ

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS

NO.	DATE	DESCRIPTION

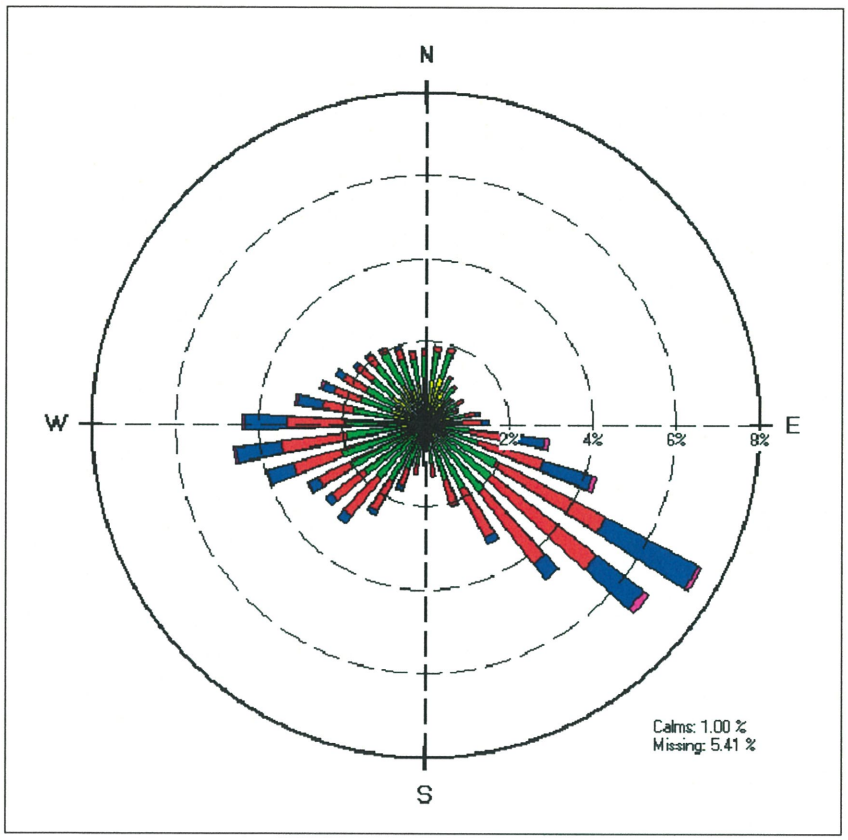
SITE LOCATION MAP

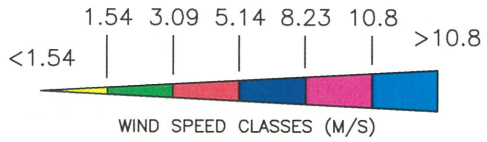
CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE IV.2.2

O:\0601\667\EXPANSION 2019\VOLUME 4\PART 2\IV-2-2-SITE LOCATION.dwg, rarrington, 1:2





JONATHAN VINCENT QUEEN
NEW MEXICO
25844
PROFESSIONAL ENGINEER

9/26/22

NOTES:

1. WINND ROSE REPRODUCED FROM STATION NO. 23044 EL PASO INTERNATIONAL AP, TX 2016.

WIND ROSE

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

Weaver Consultants Group

DRAWN BY: JDW	DATE: 07/2022	FILE: WIND ROSE
REVIEWED BY: JVQ	CAD: 0601-667-11	FIGURE IV.2.3

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O:\0601\667\EXPANSION 2019\VOLUME 4\PART 2\IV-2-3 WIND ROSE.dwg, rarrington, 1:1

ATTACHMENT IV.2-A

CRLF LEGAL DESCRIPTION

SKYLINE ENGINEERING
P.O. BOX 20
SANTA TERESA, NEW MEXICO 88008
(505) 589-5481

475.908 ACRE PARCEL
SITUATE WITHIN
SECTIONS 12 AND 13
TOWNSHIP 29 SOUTH, RANGE 3 EAST
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF SUNLAND PARK
DONA ANA COUNTY, NEW MEXICO

A certain parcel of land situate within Sections 12 and 13, Township 29 South, Range 3 East, New Mexico Principal Meridian, City of Sunland Park, Dona Ana County, New Mexico, and being more particularly described by metes and bounds as follows:

Beginning at a set 5/8 inch rebar with yellow cap No. 5948, said rebar marking the Section Corner common to Sections 11, 12, 13, and 14, Township 29 South, Range 3 East, whence a found 2 inch iron pipe bears west 0.64 feet;

THENCE, along the section line common to Sections 11 and 12, N 00°-05'-20"E, a distance of 1317.94 feet to a point, whence a found 5/8 inch rebar bears, N 89°-57'-27"W, a distance of 0.89 feet;

THENCE, N 00°-05'-20"E, a distance of 1320.79 feet to a point, said point being the West 1/4 corner to Section 12; whence a found 5/8 inch rebar bears N 89°-59'-07"W, a distance of 0.72 feet;

THENCE, N 00°-05'-20"E, a distance of 2150.30 feet to a set 5/8 inch rebar with yellow cap, said rebar marking the point of intersection of the section line common to Sections 11 and 12 with the Southwesterly boundary line of the abandoned Southern Pacific Railroad south line;

THENCE, following the southwesterly boundary line of the abandoned Southern Pacific Railroad south line, (150 foot right-of-way) the following calls, 969.27 feet along the arc of a curve bearing to the right, having a central angle of 53°-05'-32", a radius of 1046.01 feet and a long chord which bears S 22°-45'-30"E, a distance of 934.96 feet to a set 5/8 inch rebar with yellow cap;

THENCE, S 03°-52'-44"W, a distance of 396.71 feet to a set 5/8 inch rebar with yellow cap, said rebar being a point of curve;

THENCE, 964.66 feet along the arc of a curve bearing to the left, having a central angle of 44°-21'-30", a radius of 1246.01 feet and a chord which bears S 18°-25'-52"E, a distance of 940.75 feet, to a set 5/8 inch rebar with yellow cap;

THENCE, S 43°-48'-56"E, a distance of 1502.20 feet to a set 5/8 inch rebar with yellow cap;

THENCE, leaving said southwesterly boundary line of the abandonded Southern Pacific Railroad south line (150 foot right-of-way) the following calls; S 28°-10'-43"W, a distance of 1542.45 feet to a set 5/8" rebar with yellow cap;

THENCE, S 78°-51'-41"E, a distance of 414.81 feet to a set 5/8" rebar with yellow cap;

THENCE, S 72°-24'-46"E, a distance of 363.41 feet to a set 5/8" rebar with yellow cap;

THENCE, N 22°-25'-12"E, a distance of 169.07 feet to a set 5/8" rebar with yellow cap;

THENCE, N 36°-40'-25"E, a distance of 157.63 feet to a set 5/8" rebar with yellow cap;

THENCE, N 39°-01'-23"E, a distance of 142.90 feet to a set 5/8" rebar with yellow cap;

THENCE, N 39°-25'-27"E, a distance of 120.36 feet to a set 5/8" rebar with yellow cap;

THENCE, N 43°-43'-32"E, a distance of 483.66 feet to a set 5/8" rebar with yellow cap on said southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way);

THENCE, following said southwesterly boundary line of the abandoned Southern Pacific Railroad south line the following 3 calls; S 43°-48'-56"E, a distance of 403.76 feet to a set 5/8" rebar with yellow cap, said rebar being a point of curve;

THENCE, 373.89 feet along the arc of a curve, bearing to the left, having a central angle of 10°-39'-30", a radius of 2009.91 feet, and a long chord which bears S 56°-59'-38"E, a distance of 373.35 feet to a set 5/8 inch rebar with yellow cap;

THENCE, S 61°-59'-33"E, a distance of 2637.57 feet to a set 5/8 inch rebar with yellow cap, said rebar marking the point of intersection of the southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way) with the section line common to Section 13, Township 29 South, Range 3 East, and Section 18, Township 29 South, Range 4 East; whence, a found Brass Cap marking the Section Corner common to Sections 12 and 13, Township 29 South, Range 3 East and Sections 7 and 18, Township 29 South, Range 4 East, bears N 00°-00'-03"E, and a distance of 884.78 feet;

THENCE, leaving the southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way) and following the section line common to Section 13, Township 29 South, Range 3 East, and Section 18, Township 29 South, Range 4 East, S 00°-00'-26"W, a distance 2261.06 feet to a found 5/8 inch rebar, said rebar marking the intersection of the said common section line and the north edge of a 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICA AND THE REPUBLIC OF MEXICO;

THENCE, along the 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICAN and the REPUBLIC OF MEXICO, and paralleling the International Border of the UNITED STATES OF AMERICA and the REPUBLIC OF MEXICO, 5287.92 feet along the arc of curve bearing to the right having a central angle of 00°-00'-32", a radius of 33,803,595.94 feet and a long chord which bears N 89°-59'-50"W, a distance of 5287.90 feet to a set 5/8 inch rebar with yellow cap, said rebar being the intersection point of 60 feet wide International Buffer Zone between the UNITED STATES, REPUBLIC OF MEXICO INTERNATIONAL boundary with the section line common to Sections 13 and 14, Township 29 South, Range 3 East;

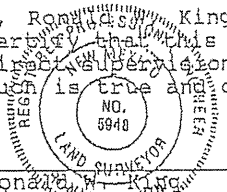
THENCE, leaving the north edge of the 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICA and THE REPBULIC OF MEXICO, and following the Section line common to Sections 13 and 14, Township 29 South, Range 3 East, N 00°-02'-58"E, a distance of 510.95 feet to a found 5/8 inch rebar, said rebar marking the 1/4 corner to the above mentioned Section line;

THENCE, N 00°-02'-58"E, a distance of 1320.00 feet to found 5/8 inch rebar;

THENCE, N 00°-03'-00"E, a distance of 1321.83 feet to the point of beginning of the parcel herein described and containing 475.908 acres (20,730,550 square feet) MORE OR LESS.

"CERTIFICATE"

I, Ronald W. King, New Mexico Registered Land Surveyor, hereby certify that this Legal Description was prepared by me or under my direct supervision from field notes of an actual survey, and that such is true and correct to the best of my knowledge and belief.



Ronald W. King
N.M.P.L.S. NO. 5948
July 5, 1995
Job #975-044

SKYLINE ENGINEERING
P.O. BOX 20
SANTA TERESA, NEW MEXICO 88008
(505) 589-5481

3.637 ACRE PARCEL
SITUATE WITHIN
SECTION 12, TOWNSHIP 29 SOUTH, RANGE 3 EAST
NEW MEXICO PRINCIPAL MERIDIAN
DONA ANA COUNTY, NEW MEXICO

Being a certain parcel of land between the abandoned Southern Pacific Railroad northern right-of-way and the existing Santa Fe Railroad Southern right-of-way, Section 12, Township 29 South, Range 3 East, New Mexico Principal Meridian, Dona Ana County, New Mexico, and being more particularly described by metes and bounds as follows:

Commencing at a found brass cap marking the corner common to Sections 12, and 13, Township 29 South, Range 3 East, and Sections 7 and 18, Township 29, Range 4 East, New Mexico Principal Meridian, Dona Ana County, New Mexico;

THENCE, N 89°-55'-22"W, a distance of 2642.51 feet along the section line between Section 12 and Section 13 to a found 1 1/2" pipe for quarter corner;

THENCE, N 00°-04'-31"E, a distance of 768.18 feet along the quarter section line to a point on the northern right-of-way line of the abandoned Southern Pacific Railroad; said point being the TRUE POINT OF BEGINNING of the parcel herein described;

THENCE, N 43°-44'-43"W, a distance of 1012.14 feet along the northerly right-of-way line of the abandoned Southern Pacific Railroad to a point where the northerly right-of-way line of the abandoned Southern Pacific Railroad and the southerly right-of-way line of the existing Santa Fe Railroad intersect, said point being the most westerly point of the herein described parcel and a point of curvature;

THENCE, 238.14 feet along the arc of a curve to the left and the southerly right-of-way line of the existing Santa Fe Railroad having a central angle of 02°-58'-35", a radius of 4584.31 feet and a chord that bears S 49°-36'-10"E, a distance of 238.11 feet to a point on the southerly right-of-way line of the existing Santa Fe Railroad;

THENCE, S 51°-05'-28"E, a distance of 1202.72 feet along said southerly right-of-way line of the existing Santa Fe Railroad to a point, said point being a point of curvature;

THENCE, 946.13 feet along the arc of a curve to the left and along the southerly right-of-way line of the existing Santa Fe Railroad, curve has a central angle of 08°-30'-15", a radius of 6374.43 feet and a chord that bears S 55°-20'-35"E, a distance of 945.26 feet to a point where the southerly right-of-way line of the existing Santa Fe Railroad and the northerly right-of-way line of the abandoned Southern Pacific Railroad intersect;

THENCE, N 62°-03'-22"W, a distance of 919.66 feet along the northerly right of way line of the abandoned Southern Pacific Railroad to a point, said point being a point of curvature;

THENCE, 345.99 feet along the arc of a curve to the right and along the northerly right-of-way line of the abandoned Southern Pacific Railroad, curve has a central angle of 10°-39'-30", a radius of 1859.91 feet and a chord that bears N 56°-59'-38"W, a distance of 345.49 feet to a point on the southerly right-of-way lline of the abandoned Southern Pacific Railroad;

THENCE, N 43°-44'-43"W, a distance of 134.15 feet, continuing along said northerly right-of-way line of the abandoned Southern Pacific Railroad to the "TRUE POINT OF BEGINNING" of the parcel herein described containing 158,426 Sq. Ft. or 3.637 acres of land MORE OR LESS.

"CERTIFICATE"

I, Ronald W. King, New Mexico Registered Land Surveyor, hereby certify that this Legal Description was prepared by me or under my direct supervision from field notes of an actual survey, and that same is true and correct to the best of my knowledge and belief.

Ronald W. King
N.M.P.E. W& L.S. NO. 5948
October 27, 1995
Job #975-050

ATTACHMENT IV.2-B

VULNERABLE AREA ASSESSMENT

- July 17, 2020 CDM Smith, Inc. Vulnerable Area Assessment
- July 14, 2022 Secretary of State VAA Concurrence Letter

JULY 17, 2020 CDM SMITH, INC.
VULNERABLE AREA ASSESSMENT

Weaver Consultants Group

Project No. 0601-667-11-10
July 17, 2020

Mr. George Schuman
Permit Section Manager
NMED Solid Waste Bureau
P.O. Box 5469
Santa Fe, NM 87502-5469

Re: Vulnerable Area Assessment Submittal
Camino Real Landfill Permit Application
Sunland Park, New Mexico

Dear Mr. Schuman,

The purpose of this letter, submitted on behalf of Camino Real Environmental Center, Inc. (CREC), the owner and operator of the Camino Real Landfill (CRLF), is to present the Vulnerable Area Assessment (VAA) for the CRLF completed by CDM Smith, Inc. in July 2020 to the New Mexico Environment Department (NMED) Solid Waste Bureau (SWB) for review and comment.

CREC is seeking a Permit Modification and Renewal for the CRLF to modify the existing permitted landfill configuration, authorize the acceptance of additional special wastes, and to renew the current permit. The New Mexico Solid Waste Rules (*20.9.3.8.D NMAC*) require that a VAA be completed for permit modifications.

Based on the results of the VAA for the CRLF, the site does not meet all three criteria that would categorize the four-mile radius surrounding the site as a vulnerable area. We appreciate your review of the enclosed VAA and look forward to any comments. Please do not hesitate to contact us with any questions.

Sincerely,
Weaver Consultants Group, LLC

Jonathan V. Queen, P.E.
Project Director

cc: Dacia Tucholke, CDM Smith, Inc.
Brady Stewart, Camino Real Environmental Center, Inc.
Juan Carlos Tomas, Camino Real Environmental Center, Inc.

Attachment: Vulnerable Area Assessment

FINAL

Camino Real Landfill

Vulnerable Area Assessment

Camino Real
Environmental Center, Inc.
(CREC)

July 2020

CDM Smith

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Table of Contents

Section 1 Introduction 1-1
1.1 Environmental Justice and the Solid Waste Rules 1-2
1.2 Regulatory Requirements 1-2
1.3 Site Location 1-3
1.4 Land Use 1-3

Section 2 Vulnerable Area Assessment 2-1

Section 3 Economically Stressed Households 3-1
3.1 American Community Survey (ACS) 2018 (5-Year Estimates) 3-4
3.2 Environmental Protection Agency – EJSCREEN 3-4

Section 4 Population Density 4-1

Section 5 Regulated Facilities 5-1
5.1 Solid Waste Facilities 5-1
5.2 Hazardous Waste Facilities 5-2
5.3 National Priorities List 5-2
5.4 Title V Air Quality Permits 5-2

Section 6 Vulnerable Area Summary 6-1

Section 7 References 7-1

List of Figures

Figure 1 Site Plan 1-4
Figure 1-A Existing and Proposed Landfill Completion Plan Aerial Photo 1-5
Figure 2 Potential Vulnerable Area Radius: Topographic Map 1-6
Figure 3 Potential Vulnerable Area Radius: Aerial Photograph 1-7

List of Tables

Table 1A Households by Income (2018) for New Mexico 3-2
Table 1B Households by Income (2018) for Texas 3-3
Table 2A Percent of Households with Income at or Below $37,650 (2018) for New Mexico 3-5
Table 2B Percent of Households with Income at or Below $37,650 (2018) for Texas 3-5
Table 3 Population Totals (2010) for New Mexico 4-2
Table 4 Population by Census Blocks (2010) that Overlap the Potential Vulnerable Area Radius (New Mexico) 4-3
Table 5 Population by Census Blocks (2010) that Constitute the Densest Square Mile within the Potential Vulnerable Area Radius (New Mexico) 4-9

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Attachments

Attachment A Census 2010
Attachment B Health and Human Services (HHS) Poverty Guidelines (2018)
Attachment C EJSCREEN ACS Summary Report (2013-2017)
Attachment D Census 2010 Aerial Photograph
Attachment E Census 2010 Population Gradient Map (New Mexico)
Attachment F Regulated Facilities within the Four-Mile Radius
Attachment G Permitted Solid Waste Facilities
G.1 – Doña Ana County, New Mexico
G.2 – El Paso County, Texas
Attachment H Hazardous Waste Facilities
H.1 – Doña Ana County, New Mexico
H.2 – El Paso County, Texas
Attachment I National Priorities List Sites (New Mexico & Texas)
Attachment J Title V Facilities
J.1 – Doña Ana County, New Mexico
J.2 - El Paso County, Texas

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Section 1
Introduction

The Camino Real Landfill (CRLF) is a solid waste facility operating in compliance with Permits SWM-030738 and SWM-030738(SP), and the New Mexico Environment Department (NMED) Solid Waste Rules (*20.9.2-20.9.10 NMAC*). The CRLF is owned and operated by the Camino Real Environmental Center, Inc. (CREC), a wholly-owned subsidiary of Waste Connections, Inc. CRLF has been in operation for over 30 years and constitutes a vital component of the solid waste management system for the region.

CREC is seeking a Permit Modification to modify the landfill configuration and authorize the acceptance of four additional types of special waste. CREC is also seeking a Permit Renewal. A summary of the proposed modifications and permit renewal is provided below (detailed information will be provided in the forthcoming *Camino Real Landfill Application for Permit Modification and Renewal* (Weaver Consultants Group, LLC & IKG LLC, 2020).

- **Permit Modification**
  - **Landfill Modifications**: The purpose of the landfill modification is to optimize the use of the permitted footprint without significantly changing the visible impact of the site on the surrounding communities. As shown on **Figures 1** and **1-A**, the Unit 3 footprint will be reduced by approximately 18 acres to create a larger physical buffer between the landfill and the communities located north of the facility. Adjustments to the Unit 4 footprint will result in a net increase of 1 acre. Unit 4 is currently permitted but was not previously designed and the modification will include a detailed engineering design and supporting calculations for Unit 4. The final slope design for the landfill will be updated and slopes not currently designed to 4H:1V will be re-designed to this specification. In addition, a synthetic turf final cover system is proposed for installation on the northern landfill final slope to further enhance the aesthetics of the site.
  - **Special Waste Modifications:** CRLF is permitted to accept sludge, industrial solid waste, and petroleum contaminated soils. As a part of this modification, CREC is seeking authorization to accept the following additional special wastes at CRLF: (1) treated characteristic hazardous wastes; (2) packing house and killing plant offal; (3) spill of a chemical substance or commercial product; and (4) special waste not otherwise specified (SWNOS), including Vehicle Wash Sump Waste. Additional wastes in the SWNOS category may be identified in the future and would be incorporated via administrative updates to CRLF's Special Waste Disposal Management Plan.
- **Permit Renewal**. CRLF's current solid waste operating permit does not expire until July 2028. However, the application includes a request to renew the solid waste operating permit for an additional 20 years from the date of NMED approval since the permit process requirements are the same for the requested permit modification.

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1.1 Environmental Justice and the Solid Waste Rules

Environmental justice is defined by the United States Environmental Protection Agency (USEPA) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In 2004, environmental justice was first addressed by the NMED with listening sessions around New Mexico (NM) to determine the extent and nature of environmental justice issues and concerns in the State, which were detailed in the *Report of Environmental Justice in New Mexico* (Alliance for Transportation Research Institute, November 2004). In 2005, Governor Richardson issued the *New Mexico Environmental Justice Executive Order 2205-056*. This Order requires State government units to utilize environmental and public health data to address impacts to low-income communicates and communicates of color; and in determining siting, permitting compliance, enforcement, and remediation of existing and proposed industrial and commercial facilities.

In 2007, NMED's Solid Waste Bureau updated the Solid Waste Rules to include a requirement for "vulnerable area assessments" in order to address environmental justice concerns for new or expanding landfills or transformation facilities, and to further promote public involvement and participation in the solid waste facility permitting process. Currently, the New Mexico Solid Waste Rules (*20.9.3.8.D NMAC*) require that a Vulnerable Area Assessment (VAA) be completed for facilities seeking a permit modification that includes a lateral or vertical expansion:

> *Any person seeking an initial permit for a landfill or a transformation facility, or for a permit modification of a landfill resulting in a lateral or vertical expansion, excluding an on-site scrap tire monofill, shall first submit to the secretary the information that is necessary for the secretary to determine if the proposed site is in a vulnerable area.*

If a facility is determined to be located within a vulnerable area, the Applicant may be required to perform a Community Impact Assessment. The following assessment describes the regulatory requirements for VAAs, the CRLF facility, and assesses each of the three vulnerable area criteria.

1.2 Regulatory Requirements

The purpose of this VAA is to determine whether or not the four-mile radius surrounding the CRLF constitutes a "vulnerable area". The Solid Waste Rules (*20.9.2.7.V(3) NMAC*) define a vulnerable area as follows:

> *"Vulnerable area" means an area within a four mile radius from the geographic center of a facility or proposed facility, and:*
>
> *(a) has a percentage of economically stressed households greater than the state percentage based on the most recent actual census bureau data within any square mile within the four mile radius surrounding the facility or proposed facility; and*
>
> *(b) where the New Mexico portion has a population of 50 people or more within any square mile within the four mile radius; and*
>
> *(c) has within it 3 or more regulated facilities not including the applicant's facility.*

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1.3 Site Location

The CRLF is an existing solid waste disposal facility that comprises approximately 482-acres of land, including approximately 333 acres currently permitted for disposal, located in portions of Sections 12 and 13, Township 29 South, Range 3 East of the New Mexico Prime Meridian in Sunland Park, Doña Ana County, NM. The facility is physically located at 1000 Camino Real Boulevard, Sunland Park, NM 88063. **Figure 1** provides a site plan for the CRLF. The approximate geographic coordinates for the center of the CRLF site (calculated based on the facility boundary) are: Latitude 31° 47' 24.7272" N and Longitude 106 ° 35' 32.6508" W. These coordinates represent the centroid for the four-mile radius. A topographic map showing the location of the CRLF site and the four-mile radius representing the potential vulnerable area is provided in **Figure 2**. In addition, **Figure 3** provides the site location and four-mile radius imposed on an aerial image.

1.4 Land Use

The 482-acre CRLF site is located within the boundaries of the City of Sunland Park (City), NM and is accessed via NM 273 (McNutt Road) and Camino Real Boulevard. The facility is located on land zoned by the City as M-1/heavy industrial land uses. Lands immediately adjacent to the east and west of the CRLF are generally undeveloped. Lands to the east are zoned by the City as M-1/light industrial land uses; and land to the west of the CRLF is zoned County Rural District by Doña Ana County. Adjacent to the north of the CRLF, lands are zoned for mixed uses including residential and commercial activities. Developed areas of the City are located further to the north and northeast of the site. The CRLF is bounded on the south by the international border with Mexico; and this area is under the jurisdiction of the Mexican Federal Government, the State of Chihuahua and Ciudad Juarez, and is not zoned .

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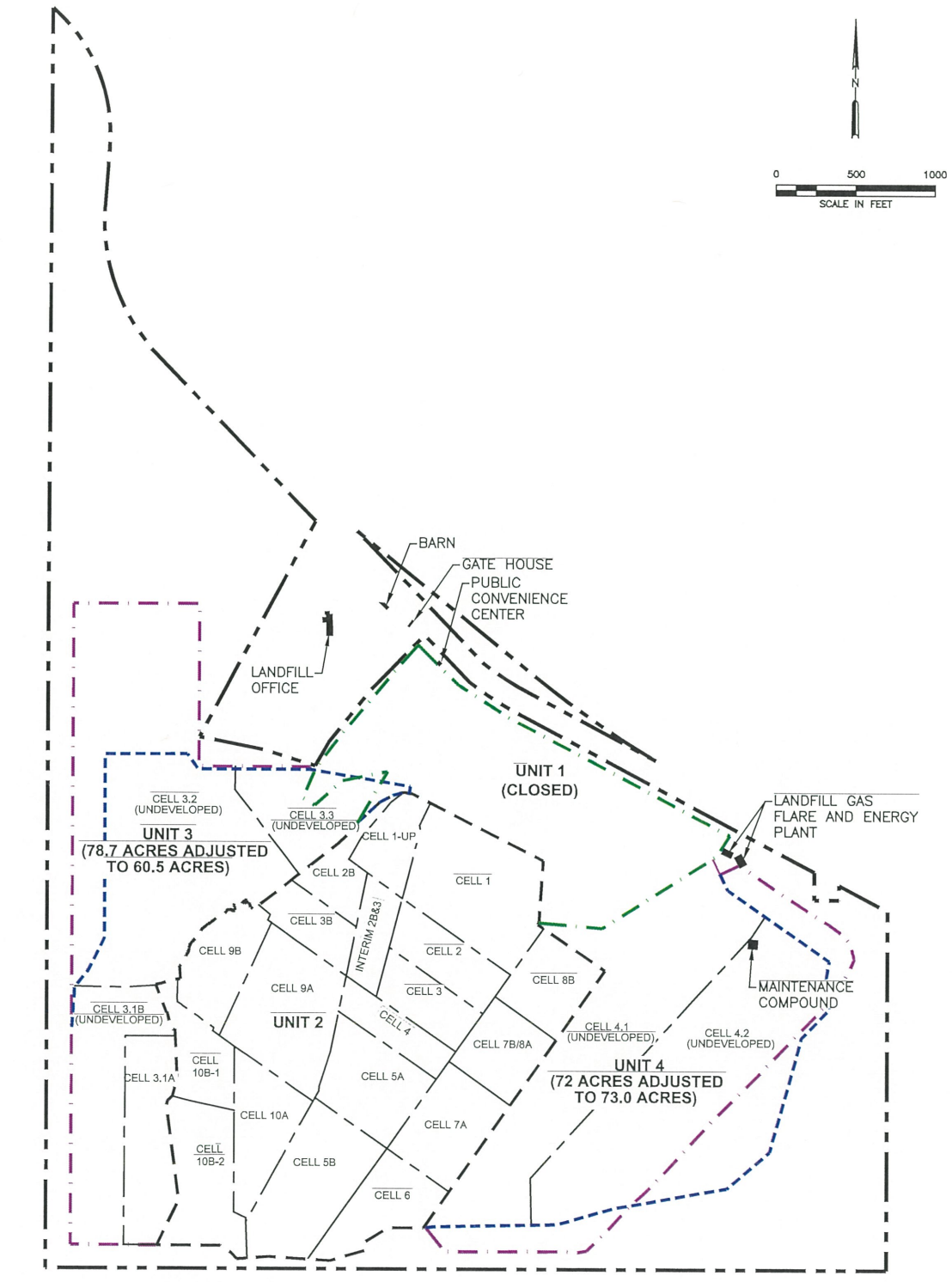

SITE PLAN

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

Weaver Consultants Group

DRAWN BY: JDW	DATE: 02/2020	FILE: SITE PLAN
REVIEWED BY: JVQ	CAD: 0601-667-11	FIGURE 1

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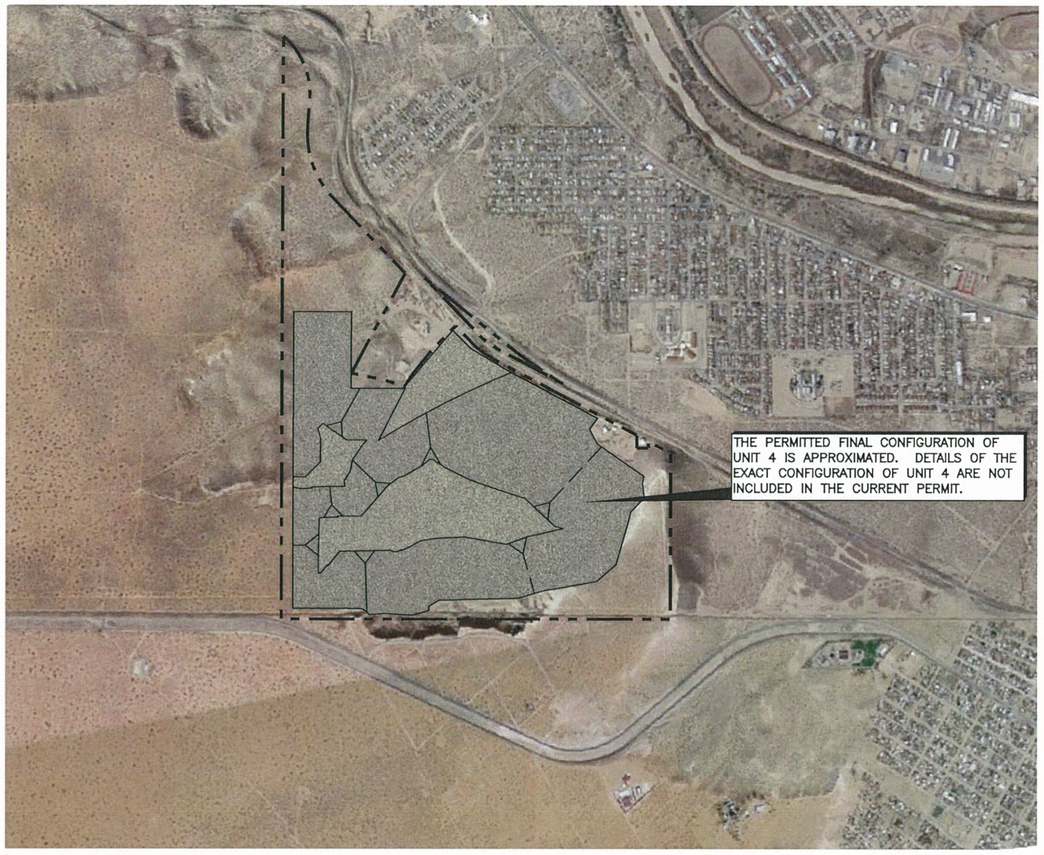
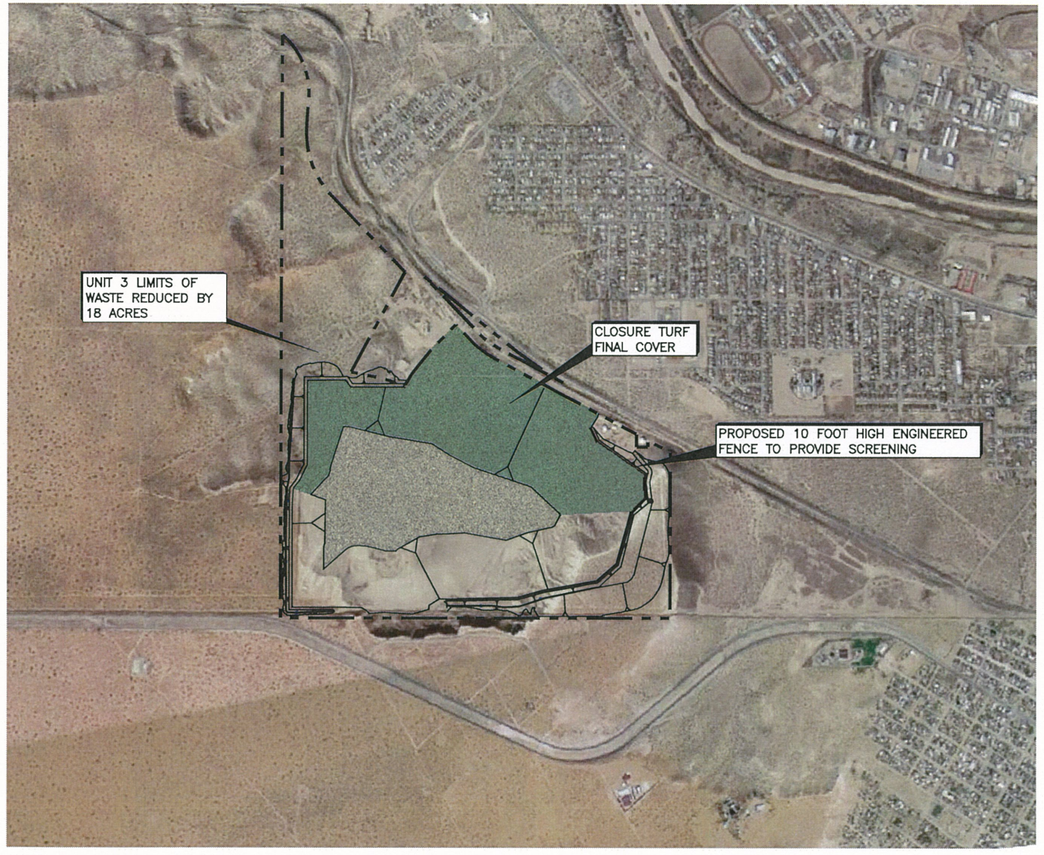


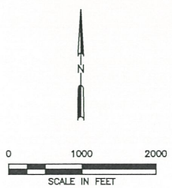
PERMITTED LANDFILL COMPLETION PLAN



PROPOSED LANDFILL COMPLETION PLAN

Landfill Configuration Comparison

Item	Existing	Proposed
Property Boundary	482.0 ACRES	482.0 ACRES
Landfill Disposal Area	333.0 acres	307.7 acres
Capacity	60,000,000 cy	75,000,000 cy
Grade Break Elevation	4,210 ft-msl	4,240 ft-msl
Peak Elevation	4,230 ft-msl	4,270 ft-msl



LEGEND

PROPERTY BOUNDARY

CLOSURE TURF AREA

NOTES:

1. AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH IN JANUARY 2020.

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☐ DRAFT
☒ FOR INFORMATION PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 04/2020
FILE: 0501-567-11
CAD: 1-A FINAL COVER COMPARISON.DWG

DRAWN BY: SRF
DESIGN BY: KRB
REVIEWED BY: JVQ

Weaver Consultants Group

PREPARED FOR
CAMINO REAL ENVIRONMENTAL CENTER, INC.

REVISIONS

NO.	DATE	DESCRIPTION

EXISTING AND PROPOSED LANDFILL COMPLETION PLAN AERIAL PHOTO

CAMINO REAL LANDFILL
SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE 1-A

G:\0501\567\EXPANSION 2019\AAA\1-A SITE PLAN COMPARISON.dwg, rbaker

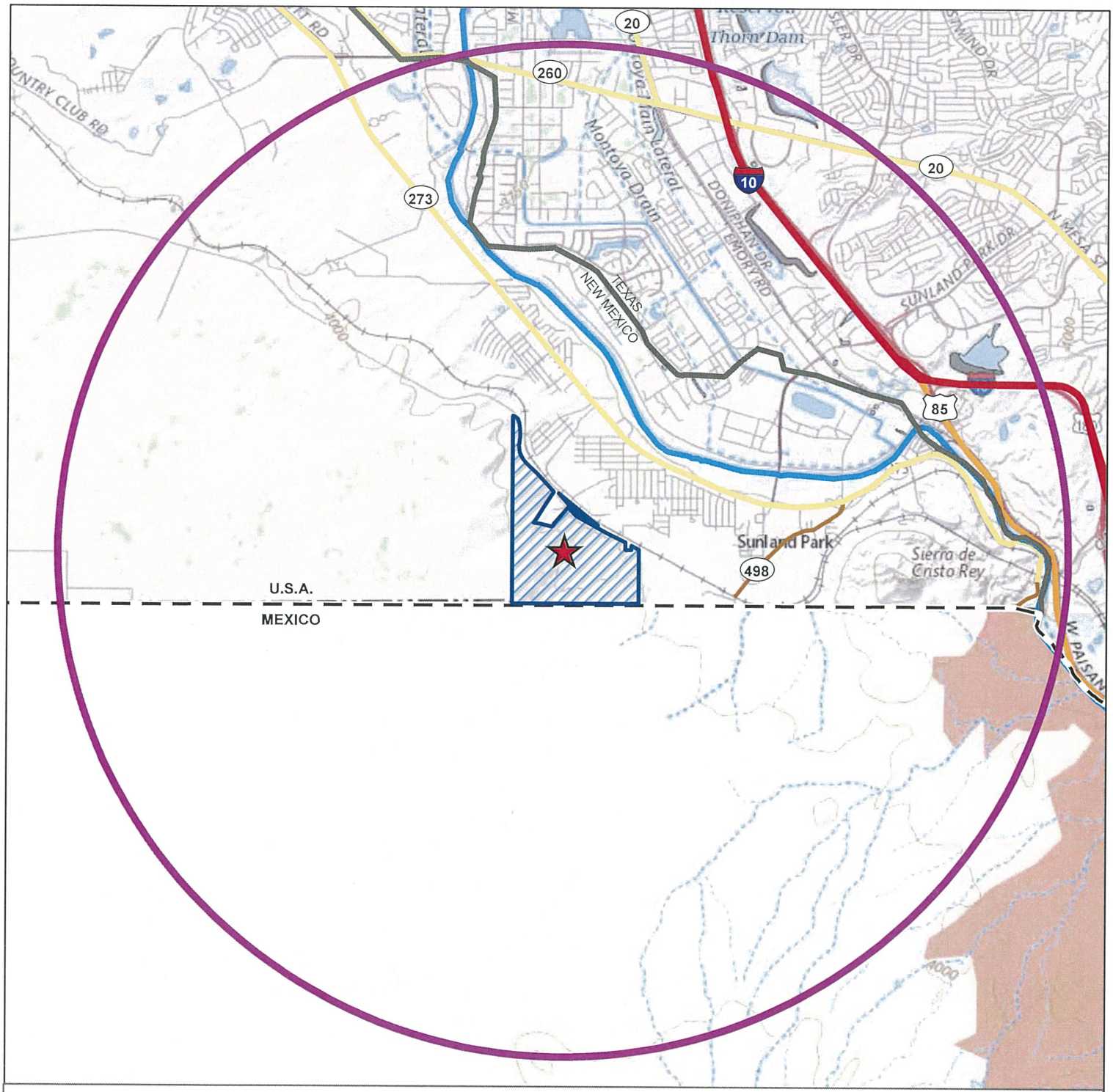

Figure 2
Potential Vulnerable Area Radius Topographic Map

N
W E
S

- Camino Real Landfill Centroid
- Camino Real Facility Boundary
- Four Mile Radius
- International Border
- State Border
- Rio Grande
- Interstate Highway
- U.S. Highway
- State Highway
- Major Road

0 0.5 1 2 Miles

NOTES:
1. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE: 31° 47' 24.7272" N 106° 35' 32.6508" W
2. TOPOGRAPHIC MAP REFERENCE: USGS The National Map. Refreshed July 2017.

CDM Smith

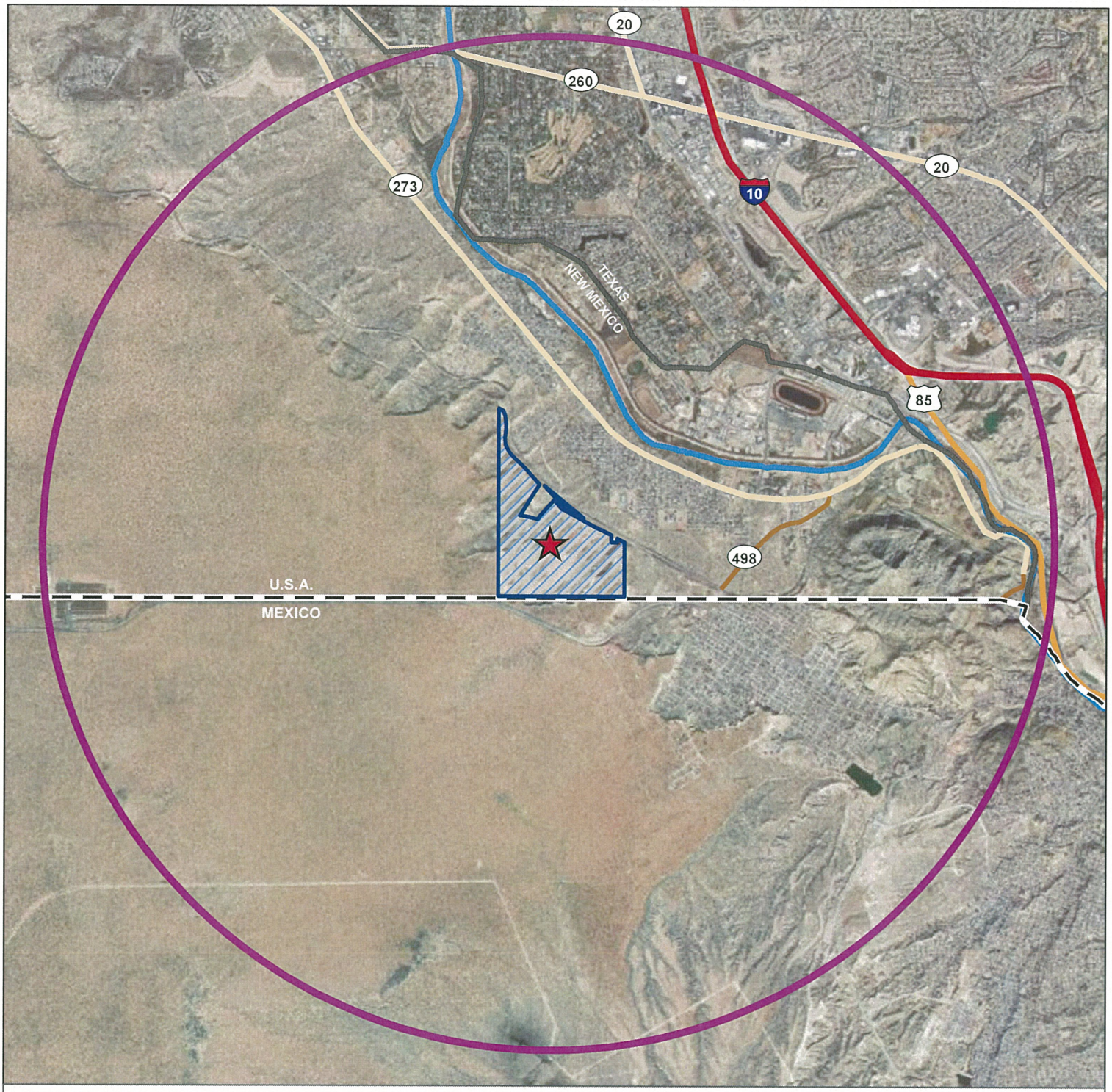

Figure 3
Potential Vulnerable Area Radius
Aerial Photograph

N
W E
S

Camino Real Landfill Centroid

Camino Real Facility Boundary

Four Mile Radius

International Border

State Border

Rio Grande

Interstate Highway

U.S. Highway

State Highway

Major Road

Miles
0 0.5 1 2

NOTES:
1. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE:
   31° 47' 24.7272" N 106° 35' 32.6508" W
2. AERIAL IMAGE REFERENCE:
   Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

CDM Smith

Section 2
Vulnerable Area Assessment

The four-mile radius surrounding the CRLF facility and constituting a potential vulnerable area was assessed for three criteria:

- Economically Stressed Households,
- Population Density, and
- Regulated Facilities.

The four-mile radius must meet all three criteria to be considered a vulnerable area. In the following sections, each of these criteria is assessed. Data from the United States Census Bureau was utilized to address Economically Stressed Households and Populations Density; and data from State and Federal agencies were utilized to address Regulated Facilities.

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Section 3
Economically Stressed Households

The first vulnerable area criterion is economically stressed households (ESHs). The Solid Waste Rules (*20.9.2.7.E(1) NMAC*) define an "economically stressed household" as:

> *... a household that reports at or less than 150 percent of the poverty level as set forth in the most recent federal department of health and human services poverty guidelines for a family of four.*

In order to determine the criteria for ESHs, data from the United States Census Bureau (USCB), including household counts and household income, were analyzed. The most current decennial Census reported is for 2010, however certain economic data, including household income, were not included in the collection and reporting for Census 2010. Therefore, American Community Survey (ACS) estimates were used to evaluate this criterion. The ACS data are available from the USCB and include 5-year estimates. The currently available ACS estimates (2018) were compiled based on data collected during the 2014-2018 timeframe.

The geographic units utilized by the USCB include Census tracts, block groups, and blocks. Counties are broken into census tracts, which are the largest geographic unit and contain an average of 4,000 people. Census tracts include one or more block groups. Block groups are comprised of blocks, the smallest geographical unit. The first number of a block corresponds to the block group within which it is located (e.g., all blocks within block group 3 start with the number 3).

Census tracts are the smallest geographical areas for which household income data are available from the ACS. Doña Ana County, NM census tracts 1701, 1705, 1706, and 1707 overlap or are located within the four-mile potential vulnerable area radius (**Attachment A**). El Paso County, Texas (TX) census tracts 1104, 1113, 1114, 1115, 1201, 1202, 1203, 1301, 1302, and 14 overlap or are located within the four-mile potential vulnerable area radius. Household income data are summarized in **Table 1A (NM)** and **Table 1B (TX)**. The ESH analysis presented herein is conservative because it accounts for all of the ESHs within the census tracts not only contained within the four-mile radius, but also includes all ESHs for census tracts which overlap the four-mile radius (i.e., 1701, 1301, 1201, 1202, 1104, 1113, 1114, 1115, and 14). The actual location of ESHs within a given census tract cannot be specified, and therefore some of the ESHs included in this analysis may actually fall outside of the four-mile radius.

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Table 1A. Households by Income (2018) for New Mexico

Geography	New Mexico					
	New Mexico	Dona Ana County	Census Tract 1701	Census Tract 1705	Census Tract 1706	Census Tract 1707
Total households	775,651	77,453	2,917	920	1,231	1,637
Less than $10,000	71,461	8,281	370	123	181	189
$10,000 to $14,999	46,565	5,731	113	96	156	194
$15,000 to $24,999	92,760	12,345	363	188	413	384
$25,000 to $34,999	84,575	9,063	348	131	107	271
$35,000 to $49,999	105,229	10,660	244	112	88	179
$50,000 to $74,999	134,481	12,408	599	173	135	196
$75,000 to $99,999	87,444	6,652	149	51	60	127
$100,000 to $149,999	91,320	7,674	529	35	91	90
$150,000 to $199,999	32,953	2,574	136	6	0	7
$200,000 or more	28,863	2,065	66	5	0	0

Source: U.S. Census Bureau, 2014 – 2018 American Community Survey 5-Year Estimates

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Table 1B. Households by Income (2018) for Texas

Geography	Texas											
	Texas	El Paso County	Census Tract 1104	Census Tract 1113	Census Tract 1114	Census Tract 1115	Census Tract 1201	Census Tract 1202	Census Tract 1203	Census Tract 1301	Census Tract 1302	Census Tract 14
Total households	9,553,046	265,724	3,195	2,850	2,108	1,622	1,536	1,690	250	1,309	2,262	824
Less than $10,000	609,111	23,295	492	168	205	343	248	138	63	51	134	187
$10,000 to $14,999	415,778	17,387	112	97	217	255	152	100	20	5	10	42
$15,000 to $24,999	885,863	33,399	196	462	269	288	208	142	38	75	113	173
$25,000 to $34,999	916,820	31,324	282	368	309	178	214	121	29	227	58	90
$35,000 to $49,999	1,224,162	40,687	445	510	194	104	189	353	33	78	163	142
$50,000 to $74,999	1,695,206	48,631	723	547	412	209	338	300	43	147	538	124
$75,000 to $99,999	1,168,213	27,591	254	416	256	116	121	248	12	166	262	43
$100,000 to $149,999	1,392,056	27,684	431	122	143	101	54	183	12	243	412	23
$150,000 to $199,999	588,275	9,163	181	120	65	10	12	67	0	172	140	0
$200,000 or more	657,562	6,563	79	40	38	18	0	38	0	145	432	0

Source: U.S. Census Bureau, 2014 – 2018 American Community Survey 5-Year Estimates

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3.1 American Community Survey (ACS) 2018 (5-Year Estimates)

The 2018 United States Department of Health and Human Services (HHS) Poverty Guidelines were applied to the ESH analysis utilizing 2018 ACS data. The HHS Poverty Guidelines for 2018 identify the poverty threshold as $25,100 for a family/household of four persons (**Attachment B**). Based on the definition of ESHs provided in the Rules, an ESH would report at or less than $37,650 (i.e., 150% of $25,100). **Table 1A** provides a comparison of the household income data (ACS 2018) for NM, Doña Ana County, and the four census tracts within or overlapping the four-mile radius (1701, 1705, 1706, and 1707). **Table 1B** provides a comparison of the household income data (ACS 2018) for Texas, El Paso County, and the ten census tracts within or overlapping the four-mile radius (1104, 1113, 1114, 1115, 1201, 1202, 1203, 1301, 1302, and 14). For each census tract, the percentage of ESHs was estimated and the results are presented in **Table 2A (NM)** and **Table 2B (TX)**. In order to accommodate the calculated threshold value of $37,650, household income categories of $49,999 or below (the USCB sorting threshold) were analyzed. The results for NM presented in **Table 2A** indicate that the percentage of ESHs in Doña Ana County census tracts 1705 (71%), 1706 (77%), and 1707 (74%) is greater than the estimated percentage for the state of NM (52%). In addition, the results for TX (**Table 2B**) indicate that the percentage of ESHs in El Paso County census tracts 1104 (48%), 1113 (56%), 1114 (57%), 1115 (72%), 1201 (66%), 1202 (51%), 1203 (73%), and 14 (77%) is greater than the estimated percentage for the state of TX (42%). Therefore, the ESH criterion is met using the ACS 2018 data because the four-mile radius contains more than a square mile of area in which the percentage of ESHs is greater than the state percentage.

3.2 Environmental Protection Agency – EJSCREEN

EJSCREEN is an environmental justice mapping and screening tool developed by the USEPA for use as a preliminary step when considering environmental justice in certain situations. EJSCREEN is a publicly available tool that provides a nationally consistent dataset and approach for combining environmental and demographic indicators for a given geographic area. EJSCREEN was used to examine ESHs within the four-mile potential vulnerable area radius for the CRLF site. EJSCREEN outputs include an ACS Summary Report. The currently available ACS data for EJSCREEN is for 2017 5-Year Estimates (2013-2017). The EJSCREEN ACS Summary Report for CRLF is provided as **Attachment C**. In order to accommodate the estimated threshold of $37,650, household income categories of $50,000 or less (the EJSCREEN sorting threshold) were analyzed. Results indicate that that there are 10,189 households within the four-mile potential vulnerable area radius, and 54% (5,540 households) report a household income of at or below the EJSCREEN sorting threshold of $50,000, which exceeds both the estimated percentages for NM (52%) and TX (42%). Therefore, EJSCREEN data confirm that the ESH criterion is met for the four-mile potential vulnerable area radius because the radius contains a percentage of ESHs greater than the state percentage.

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Table 2A. Percent of Households with Income at or Below $37,650 for New Mexico

Geography	New Mexico					
	New Mexico	Dona Ana County	Census Tract 1701	Census Tract 1705	Census Tract 1706	Census Tract 1707
Percent of Households with Income at or below $49,999	52%	59%	49%	71%	77%	74%

Notes:

1. *Source: U.S. Census Bureau, 2014 – 2018 American Community Survey 5-Year Estimates*
2. *In order to accommodate the estimated threshold value of $37,650, household income categories of $49,999 or less (the USCB sorting threshold) were analyzed.*

Table 2B. Percent of Households with Income at or Below $37,650 for Texas

Geography	Texas											
	Texas	El Paso County	Census Tract 1104	Census Tract 1113	Census Tract 1114	Census Tract 1115	Census Tract 1201	Census Tract 1202	Census Tract 1203	Census Tract 1301	Census Tract 1302	Census Tract 14
Percent of Households with Income at or below $49,999	42%	55%	48%	56%	57%	72%	66%	51%	73%	33%	21%	77%

Notes:

1. *Source: U.S. Census Bureau, 2014 – 2018 American Community Survey 5-Year Estimates*
2. *In order to accommodate the estimated threshold value of $37,650, household income categories of $49,999 or less (the USCB sorting threshold) were analyzed.*

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Section 4
Population Density

The second vulnerable area criterion analyzes population density for the NM portion of the four-mile potential vulnerable area radius. In order to meet this criterion, the NM portion must have a population of 50 people or more within any square mile within the four-mile radius. USCB data for Census 2010, the most recent decennial census, were used to analyze population density. Block-level census data and an aerial photograph were used to analyze population density for the four-mile potential vulnerable area radius. The population of Doña Ana County, NM is 209,233 (Census 2010). With a land area of approximately 3,814 square miles, the County has an overall population density of approximately 55 persons per square mile. The total populations (2010) for NM, Doña Ana County, and census tracts 1701, 1705, 1706, and 1707 are shown on **Table 3**.

A summary of the NM population data by census blocks located within or overlapping the four-mile potential vulnerable area radius is provided in **Table 4**. The NM blocks which fall within or overlap the four-mile radius represent a conservative population of approximately 13,131 persons (Census 2010). **Attachment D** provides an aerial base map overlain with the census tract/block group/block boundaries as well as a one-square mile boundary superimposed over the area that appears to represent the densest population within the potential vulnerable area radius.

The populations for those blocks which fall within or overlap the one-square-mile area are summarized in **Table 5**. These blocks represent a conservative population of approximately 7,240 persons (Census 2010). Census tract 1705, block group 2, block 2018 contains a population of approximately 1,359 persons, which is the highest population of the blocks situated within the one-square-mile radius area. A Population Gradient Map (NM) is provided as **Attachment E**, and identifies the densest populations located north and east of the CRLF. The population density criterion is met for the four-mile potential vulnerable area radius because a population density of greater than 50 persons per square mile is represented within the four-mile radius.

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Table 3. Population Totals (2010) for New Mexico.

Year	New Mexico	Dona Ana County	Census Tract 1701	Census Tract 1704	Census Tract 1705	Census Tract 1706	Census Tract 1707
2010[2]	2,059,179	209,233	5,842	N/A[3]	3,192	3,749	5,749

Source: U.S. Census Bureau, Census 2010, Summary File 1.

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Table 4. Population by Census Blocks (2010) that Overlap the Potential Vulnerable Area Radius (New Mexico)

Census Tract	Block Group	Block	Total Population
1701	1	1165	0
1701	1	1166	44
1701	1	1167	4
1701	1	1168	0
1701	1	1216	0
1701	1	1218	225
1701	1	1219	0
1701	1	1221	0
1701	1	1222	0
1701	1	1227	0
1701	1	1228	97
1701	1	1229	0
1701	1	1230	0
1701	1	1231	37
1701	1	1236	1
1701	1	1237	0
1701	1	1238	0
1701	1	1239	0
1701	1	1240	0
1701	1	1241	10
1701	1	1242	9
1701	1	1243	12
1701	1	1244	2
1701	1	1245	0
1701	1	1265	0
1701	1	1266	0
1701	1	1268	0
1701	1	1270	0
1701	1	1271	0
1701	1	1272	0
1701	1	1282	0
1701	1	1283	0
1701	1	1284	0
1701	1	1337	0
Census Tract 1701 Subtotal			***441***
1705	1	1000	0
1705	1	1001	0
1705	1	1002	0
1705	1	1003	6
1705	1	1004	5

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Census Tract	Block Group	Block	Total Population
1705	1	1005	5
1705	1	1006	2
1705	1	1007	125
1705	1	1008	63
1705	1	1009	4
1705	1	1010	2
1705	1	1011	3
1705	1	1012	10
1705	1	1013	0
1705	1	1014	4
1705	1	1015	0
1705	1	1016	0
1705	1	1017	0
1705	1	1018	0
1705	1	1019	0
1705	1	1020	0
1705	1	1021	243
1705	1	1022	7
1705	1	1023	6
1705	1	1024	0
1705	1	1025	0
1705	1	1026	0
1705	1	1027	0
1705	1	1028	0
1705	1	1029	0
1705	1	1030	0
1705	1	1031	0
1705	1	1032	0
1705	1	1033	0
1705	1	1034	0
1705	1	1035	0
1705	1	1036	0
1705	1	1037	0
1705	1	1038	0
1705	1	1039	0
1705	1	1040	0
1705	1	1041	52
1705	1	1042	56
1705	1	1043	6
1705	1	1044	99
1705	1	1045	4
1705	1	1046	24

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Census Tract	Block Group	Block	Total Population
1705	1	1047	27
1705	1	1048	11
1705	1	1049	103
1705	1	1050	0
1705	1	1051	0
1705	1	1052	12
1705	1	1053	0
1705	1	1054	36
1705	2	2000	0
1705	2	2001	46
1705	2	2002	0
1705	2	2003	0
1705	2	2004	0
1705	2	2005	0
1705	2	2006	0
1705	2	2007	0
1705	2	2008	0
1705	2	2009	1
1705	2	2010	35
1705	2	2011	151
1705	2	2012	7
1705	2	2013	30
1705	2	2014	28
1705	2	2015	0
1705	2	2016	0
1705	2	2017	8
1705	2	2018	1359
1705	2	2019	0
1705	2	2020	0
1705	2	2021	174
1705	2	2022	0
1705	2	2023	86
1705	2	2024	105
1705	2	2025	104
1705	2	2026	93
1705	2	2027	9
1705	2	2028	0
1705	2	2029	0
1705	2	2030	41
1705	2	2031	0
1705	2	2032	0
1705	2	2033	0

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Census Tract	Block Group	Block	Total Population
		Census Tract 1705 Subtotal	*3,192*
1706	1	1000	18
1706	1	1001	0
1706	1	1002	47
1706	1	1003	15
1706	1	1004	33
1706	1	1005	66
1706	1	1006	62
1706	1	1007	51
1706	1	1008	193
1706	1	1009	142
1706	1	1010	111
1706	1	1011	114
1706	1	1012	103
1706	1	1013	338
1706	1	1014	10
1706	1	1015	0
1706	1	1016	0
1706	1	1017	68
1706	1	1018	114
1706	1	1019	121
1706	1	1020	45
1706	1	1021	108
1706	1	1022	97
1706	1	1023	24
1706	1	1024	6
1706	2	2000	66
1706	2	2001	10
1706	2	2002	141
1706	2	2003	28
1706	2	2004	28
1706	2	2005	0
1706	2	2006	0
1706	2	2007	133
1706	2	2008	144
1706	2	2009	144
1706	2	2010	94
1706	2	2011	74
1706	2	2012	97
1706	2	2013	66
1706	2	2014	61
1706	2	2015	69

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Census Tract	Block Group	Block	Total Population
1706	2	2016	90
1706	2	2017	61
1706	2	2018	233
1706	2	2019	15
1706	2	2020	4
1706	2	2021	203
1706	2	2022	44
1706	2	2023	34
1706	2	2024	0
1706	2	2025	0
1706	2	2026	24
		Census Tract 1706 Subtotal	***3,749***
1707	1	1000	60
1707	1	1001	0
1707	1	1002	0
1707	1	1003	46
1707	1	1004	0
1707	1	1005	12
1707	1	1006	0
1707	1	1007	37
1707	1	1008	4
1707	1	1009	0
1707	1	1010	26
1707	1	1011	0
1707	1	1012	48
1707	1	1013	946
1707	1	1014	74
1707	1	1015	0
1707	1	1016	82
1707	1	1017	66
1707	1	1018	38
1707	1	1019	253
1707	1	1020	80
1707	1	1021	50
1707	1	1022	44
1707	1	1023	42
1707	1	1024	97
1707	1	1025	137
1707	1	1026	169
1707	1	1027	57
1707	1	1028	83
1707	1	1029	72

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Census Tract	Block Group	Block	Total Population
1707	1	1030	121
1707	1	1031	60
1707	1	1032	65
1707	1	1033	63
1707	2	2000	64
1707	2	2001	76
1707	2	2002	75
1707	2	2003	125
1707	2	2004	188
1707	2	2005	23
1707	2	2006	412
1707	2	2007	6
1707	2	2008	127
1707	2	2009	115
1707	2	2010	115
1707	2	2011	23
1707	3	3000	99
1707	3	3001	429
1707	3	3002	76
1707	3	3003	76
1707	3	3004	82
1707	3	3005	106
1707	3	3006	173
1707	3	3007	93
1707	3	3008	128
1707	3	3009	135
1707	3	3010	171
		Census Tract 1707 Subtotal	***5,749***
		Total Population	**13,131**

Source: U.S. Census Bureau, Census 2010, Summary File 1.

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Table 5. Population by Census Blocks (2010) that Constitute the Densest Square Mile Within the Potential Vulnerable Area Radius (New Mexico)

Census Tract	Block Group	Block	Total Population
1705	1	1283	0
1705	1	1014	4
1705	1	1021	243
1705	1	1024	0
1705	2	2017	8
1705	2	2018	1,359
1705	2	2019	0
1705	2	2022	0
1706	1	1005	66
1706	1	1006	62
1706	1	1007	51
1706	1	1008	193
1706	1	1013	338
1706	1	1015	0
1706	1	1021	108
1706	1	1022	97
1706	1	1023	24
1706	1	1024	6
1706	2	2000	66
1706	2	2001	10
1706	2	2002	141
1706	2	2003	28
1706	2	2004	28
1706	2	2005	0
1706	2	2006	0
1706	2	2007	133
1706	2	2008	144
1706	2	2009	144
1706	2	2010	94
1706	2	2011	74
1706	2	2012	97
1706	2	2013	66
1706	2	2014	61
1706	2	2015	69
1706	2	2016	90
1706	2	2017	61
1706	2	2018	233
1706	2	2019	15
1706	2	2020	4
1706	2	2021	203

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Census Tract	Block Group	Block	Total Population
1706	2	2022	44
1706	2	2023	34
1706	2	2024	0
1706	2	2025	0
1706	2	2026	24
1707	2	2000	64
1707	2	2001	76
1707	2	2002	75
1707	2	2003	125
1707	2	2004	188
1707	2	2005	23
1707	2	2006	412
1707	2	2007	6
1707	2	2008	127
1707	2	2009	115
1707	2	2010	115
1707	2	2011	23
1707	3	3001	429
1707	3	3002	76
1707	3	3003	76
1707	3	3004	82
1707	3	3005	106
1707	3	3006	173
1707	3	3007	93
1707	3	3008	128
1707	3	3009	135
1707	3	3010	171
Total Population – One Square Mile Area			**7,240**

Source: U.S. Census Bureau, Census 2010, Summary File 1.

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Section 5
Regulated Facilities

The third vulnerable area criterion states that the four-mile radius must contain within it three or more regulated facilities, not including the Applicant's facility (i.e., CRLF). The CRLF holds a NM Solid Waste Facility Permit and a Title V Air Quality Permit. The Solid Waste Rules (*20.9.7.2.R(6) NMAC*) define a regulated facility as

> *a **solid waste facility** permitted to construct, operate, or close pursuant to the Solid Waste Act, NMSA 1978, Sections 74-9-1, et. seq. and 20.9.2 - 20.9.10 NMAC, or pursuant to the laws or regulations of a neighboring state;*
>
> *a **hazardous waste facility** authorized to operate pursuant to interim status or permitted to construct, operate, or close pursuant to the Hazardous Waste Act, NMSA 1978, Sections 74-4-1, et. seq. and the New Mexico hazardous waste management rules, 20.4.1 NMAC, or pursuant to the laws or regulations of a neighboring state, including all units or areas subject to corrective action requirements under the facility permit or order;*
>
> *a site listed on the **National Priorities List** pursuant 42 U.S.C. 9605 or a federal facility required to take response or remedial action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601, et. seq.;*
>
> *a facility that has, or is required to obtain a **Title V** air quality permit, 42 U.S.C. 7661 et seq. and 20.7.2.70 NMAC.*

The four types of regulated facilities categories are discussed in the following sections. Regulated facilities located within the four-mile potential vulnerable area radius are identified on the map provided as **Attachment F**.

5.1 Solid Waste Facilities

Solid waste facilities are regulated in NM by the New Mexico Environment Department's Solid Waste Bureau (NMED-SWB); and regulated in TX by the Texas Commission on Environmental Quality's Office of Waste (TCEQ-OW). Permitted solid waste facilities may include the following:

- Landfills
- Transfer Stations
- Processing Facilities
- Recycling Facilities
- Composting Facilities

The lists of currently permitted solid waste facilities were compiled from NMED-SWB and TCEQ-OW data sources (**Attachment G**). There are no permitted solid waste facilities for NM or TX

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within the four-mile potential vulnerable area radius. The closest permitted solid waste facility in NM is the South Central Solid Waste Transfer Station located approximately 37 miles northwest of the CRLF in Las Cruces, NM. The closest permitted solid waste facility in TX is the City of El Paso Transfer Station Facility located approximately 9 miles southeast of the CRLF in El Paso, TX.

5.2 Hazardous Waste Facilities

NM hazardous waste treatment, storage, and disposal facilities are regulated by the NMED Hazardous Waste Bureau (HWB); and TX hazardous waste facilities are regulated by the TCEQ-OW. Hazardous waste facilities include federal, commercial, and private facilities. The lists of permitted hazardous waste treatment, storage, and disposal facilities were compiled from NMED-SWB and TCEQ-OW data sources (**Attachment H**). There are no permitted hazardous waste facilities for NM or TX within the four-mile potential vulnerable area radius. The closest permitted hazardous waste sites in NM and TX are federal sites located within Fort Bliss. Fort Bliss facilities in NM are located greater than 35 miles north of CRLF; and Fort Bliss facilities in TX are located greater than 9 miles east of the CRLF.

5.3 National Priorities List

The National Priorities List (NPL) identifies priority sites in the United States of known or threatened releases of hazardous substances, pollutants, or contaminants. The NPL is maintained by the USEPA and the intention of the NPL is to identify which sites warrant further investigation. The NPL database was reviewed for NM and TX sites (**Attachment I**). There are no NPL sites within the four-mile potential vulnerable area radius. The closest NPL site appears to be the Griggs & Walnut Ground Water Plume approximately 38 miles north of the CRLF in Las Cruces, NM. The closest NPL site in TX appears to be the Highway 18 Ground Water site approximately 205 miles east of the CRLF in Kermit, TX.

5.4 Title V Air Quality Permits

Title V air quality permits are issued in NM by the NMED Air Quality Bureau (AQB), and the TCEQ Office of Air (OA) issues these permits for TX. The lists of Title V air quality permit holders for NM and TX were reviewed (**Attachment J**). There are two Title V permitted facilities located within the four-mile potential vulnerable area radius as shown on the map provided as **Attachment F**. The Four Peaks Energy Plant No. 1 (1000 B Camino Real Boulevard, Sunland Park, NM) is co-located at the CRLF site. The El Paso Electric – Rio Grande Generating Station (3501 Doniphan Road, Sunland Park, NM) is located approximately 3 miles northeast of the CRLF.

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Section 6
Vulnerable Area Summary

The NM Solid Waste Rules (*20.9.3.8.D NMAC*) require that a Vulnerable Area Assessment be completed for facilities seeking a permit modification which includes a lateral or vertical expansion:

> *Any person seeking an initial permit for a landfill or a transformation facility, or for a permit modification of a landfill resulting in a lateral or vertical expansion, excluding an on-site scrap tire monofill, shall first submit to the secretary the information that is necessary for the secretary to determine if the proposed site is in a vulnerable area.*

The results of the VAA for the CRLF indicate that the four-mile radius from the geographic center of the CRLF does not meet all three vulnerable area criteria. While the radius meets the criteria for ESHs and Population Density, it does not meet the criterion for Regulated Facilities:

1. The four-mile radius **has** a percentage of economically stressed households greater than the state percentage based on the most recent actual census bureau data within any square mile within the four mile radius surrounding the facility or proposed facility.
2. The New Mexico portion of the four-mile radius **has** a population of 50 people or more within any square mile within the four mile radius.
3. The four-mile radius **does not have** within it 3 or more regulated facilities.

As described in the NM Solid Waste Rules (*20.9.3.8.F NMAC*), facilities which are not located in a vulnerable area are not required to prepare a community impact assessment:

> *If the proposed initial landfill or transformation facility permit, or landfill modification resulting in a lateral or vertical expansion is not in a vulnerable area, or is sited in an area that has been designated for the proposed use as the result of a land-use zoning process conducted by the local government that requires a quasijudicial public hearing, with the opportunity for public participation, the applicant is not required to prepare a community impact assessment.*

In summary, the CRLF is not located within a vulnerable area because the four-mile radius from the geographic center of the facility does not meet all three criteria which would define it as a vulnerable area. Therefore, the Applicant is not required to prepare a community impact assessment.

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Section 7
References

1. New Mexico Environment Department, Air Quality Bureau, Permitted Facilities Lat/Long: https://www.env.nm.gov/air-quality/aqb-p_current_permitting_activites/
2. New Mexico Environment Department, Hazardous Waste Bureau, Permitted Facilities: https://www.env.nm.gov/hazardous-waste/permitted-facilities/
3. New Mexico Environment Department, Solid Waste Bureau, List of Facilities and Haulers: https://www.env.nm.gov/solid-waste/lists-of-facilities-and-haulers/
4. New Mexico Environment Department, Solid Waste Rules, 20.9.2-20.9.10 NMAC
5. Texas Commission on Environmental Quality, Office of Air, Status of Air Permits and Permit Applications: https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html
6. Texas Commission on Environmental Quality, Office of Waste, Waste Management Permit Applications, Permits, Registrations, and Facilities: https://www.tceq.texas.gov/agency/data/lookup-data/waste-mgmt-data-records.html
7. United States Census Bureau, American Community Survey: https://www.census.gov/programs-surveys/acs
8. United States Census Bureau, Census 2010: https://www.census.gov/programs-surveys/decennial-census/decade.2010.html
9. United States Census Bureau, Geography Division, 2019, TIGER/Line Shapefiles, Doña Ana County, New Mexico, 2010 Census; and TIGER/Liner Shapefiles, El Paso County, Texas, 2010 Census.
10. United States Department of Health and Human Services Poverty Guidelines: https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references
11. United States Environmental Protection Agency, EJSCREEN: https://www.epa.gov/ejscreen
12. United States Environmental Protection Agency, National Priorities List: https://www.epa.gov/superfund/superfund-national-priorities-list-npl

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Attachment A

Census 2010

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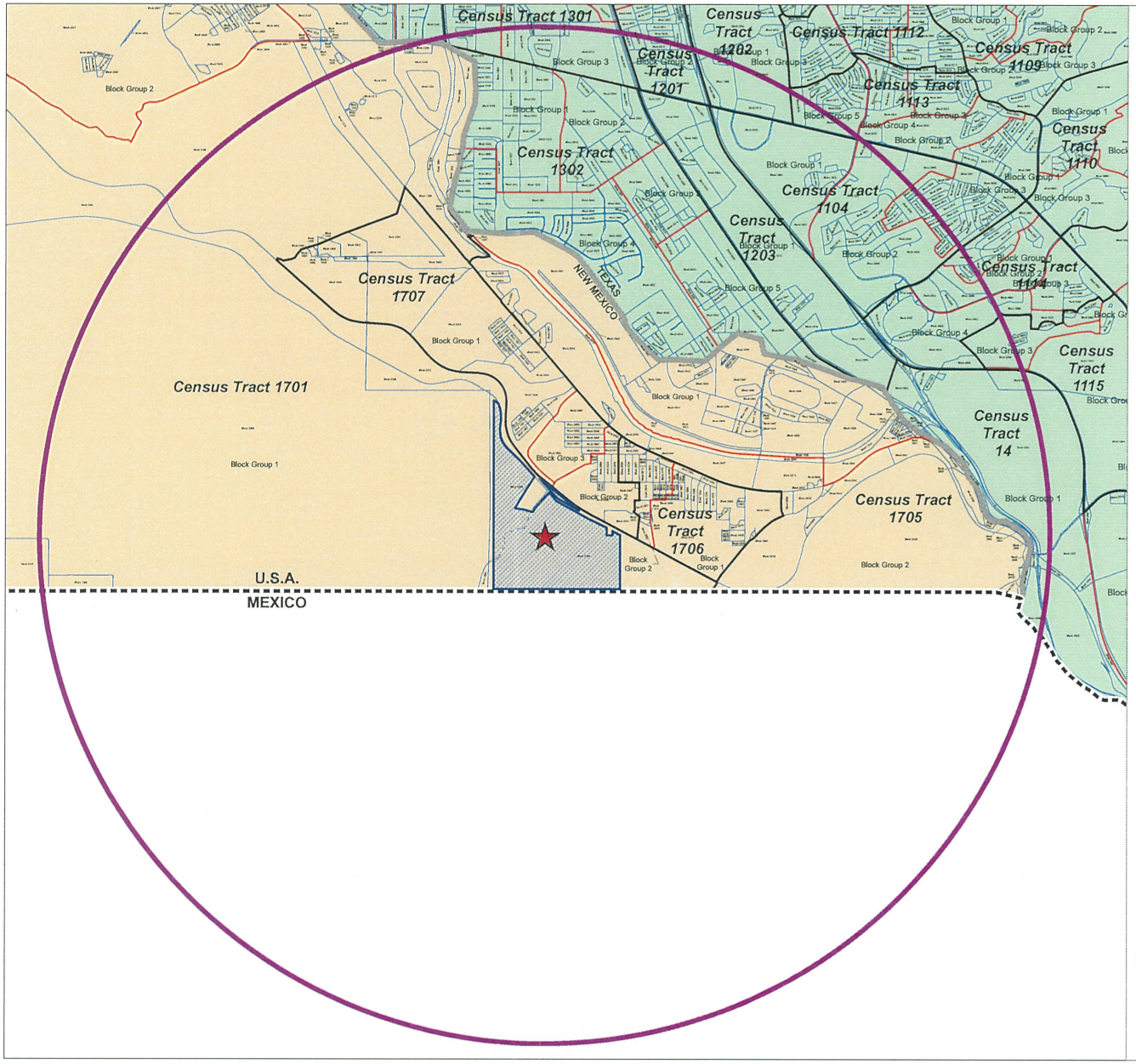

Attachment A
Census 2010

- Camino Real Landfill Centroid
- Camino Real Facility Boundary
- Four Mile Radius
- International Border
- State Border
- New Mexico Census Tracts
- Texas Census Tracts
- Census Block Groups
- Census Blocks

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NOTES:
1. CENSUS DATA REFERENCE:
   U.S. Department of Commerce, U.S. Census Bureau, Geography Division, 2019, TIGER/Line Shapefiles, Dona Ana County, NM, 2010 Census, TIGER/Line Shapefiles, 2019, El Paso County, TX, 2010 Census
2. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE:
   31° 47' 24.7272" N 106° 35' 32.6508" W

Attachment B

Health and Human Services (HHS) Poverty Guidelines (2018)

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U.S. Department of Health & Human Services

ASPE

OFFICE OF THE ASSISTANT SECRETARY
FOR PLANNING AND EVALUATION

2018 POVERTY GUIDELINES

U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Federal Programs

[Federal Register Notice, January 18, 2018 Full text]

[Prior Poverty Guidelines and Federal Register References Since 1982]

[Frequently Asked Questions(FAQs)]

[Further Resources on Poverty Measurement, Poverty Lines, and Their History]

[Computations for the 2018 Poverty Guidelines]

There are two slightly different versions of the federal poverty measure:

- The poverty thresholds, and
- The poverty guidelines.

The **poverty thresholds** are the original version of the federal poverty measure. They are updated each year by the **Census Bureau**. The thresholds are used mainly for **statistical** purposes — for instance, preparing estimates of the number of Americans in poverty each year. (In other words, all official poverty population figures are calculated using the poverty thresholds, not the guidelines.) Poverty thresholds since 1973 (and for selected earlier years) and weighted average poverty thresholds since 1959 are available on the Census Bureau's Web site. For an example of how the Census Bureau applies the thresholds to a family's income to determine its poverty status, see "How the Census Bureau Measures Poverty" on the Census Bureau's web site.

The **poverty guidelines** are the other version of the federal poverty measure. They are issued each year in the *Federal Register* by the **Department of Health and Human Services** (HHS). The guidelines are a simplification of the poverty thresholds for use for **administrative** purposes — for instance, determining financial eligibility for certain federal programs.

The poverty guidelines are sometimes loosely referred to as the "federal poverty level" (FPL), but that phrase is ambiguous and should be avoided, especially in situations (e.g., legislative or administrative) where precision is important.

Key differences between poverty thresholds and poverty guidelines are outlined in a table under Frequently Asked Questions (FAQs). See also the discussion of this topic on the Institute for Research on Poverty's web site.5

The following figures are the 2018 HHS poverty guidelines which are scheduled to be published in the *Federal Register* on January 18, 2018.

2018 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Search in table for...

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
1	$12,140
2	$16,460
3	$20,780
4	$25,100
5	$29,420
6	$33,740
7	$38,060
8	$42,380
For families/households with more than 8 persons, add $4,320 for each additional person.	

2018 POVERTY GUIDELINES FOR ALASKA

Search in table for...

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
1	$15,180
2	$20,580
3	$25,980
4	$31,380
5	$36,780
6	$42,180
7	$47,580
8	$52,980
For families/households with more than 8 persons, add $5,400 for each additional person.	

2017 POVERTY GUIDELINES FOR HAWAII

Search in table for...

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
1	$13,960

For families/households with more than 8 persons, add $4,810 for each additional person.

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
2	$18,930
3	$23,900
4	$28,870
5	$33,840
6	$38,810
7	$43,780
8	$48,750
For families/households with more than 8 persons, add $4,810 for each additional person.	

The separate poverty guidelines for Alaska and Hawaii reflect Office of Economic Opportunity administrative practice beginning in the 1966-1970 period. Note that the poverty thresholds — the original version of the poverty measure — have never had separate figures for Alaska and Hawaii. The poverty guidelines are not defined for Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, the Republic of the Marshall Islands, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and Palau. In cases in which a Federal program using the poverty guidelines serves any of those jurisdictions, the Federal office which administers the program is responsible for deciding whether to use the contiguous-states-and-D.C. guidelines for those jurisdictions or to follow some other procedure.

The poverty guidelines apply to both aged and non-aged units. The guidelines have never had an aged/non-aged distinction; only the Census Bureau (statistical) poverty thresholds have separate figures for aged and non-aged one-person and two-person units.

Programs using the guidelines (or percentage multiples of the guidelines — for instance, 125 percent or 185 percent of the guidelines) in determining eligibility include Head Start, the Supplemental Nutition Assistance Program (SNAP), the National School Lunch Program, the Low-Income Home Energy Assistance Program, and the Children's Health Insurance Program. Note that in general, cash public assistance programs (Temporary Assistance for Needy Families and Supplemental Security Income) do NOT use the poverty guidelines in determining eligibility. The Earned Income Tax Credit program also does NOT use the poverty guidelines to determine eligibility. For a more detailed list of programs that do and don't use the guidelines, see the Frequently Asked Questions(FAQs).

The poverty guidelines (unlike the poverty thresholds) are designated by the year in which they are issued. For instance, the guidelines issued in January 2018 are designated the 2018 poverty guidelines. However, the 2018 HHS poverty guidelines only reflect price changes through calendar year 2017; accordingly, they are approximately equal to the Census Bureau poverty thresholds for calendar year 2017.

The poverty guidelines may be formally referenced as "the poverty guidelines updated periodically in the *Federal Register* by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2)."

Was this page helpful? *

Yes No

NEXT >

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Attachment C

EJSCREEN ACS Summary Report (2013-2017)

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EJSCREEN ACS Summary Report

Location: User-specified point center at 31.790202, -106.592403
Ring (buffer): 4-miles radius
Description: Camino Real Landfill

Summary of ACS Estimates	2013 - 2017
Population	32,031
Population Density (per sq. mile)	1,039
Minority Population	27,557
% Minority	86%
Households	10,189
Housing Units	11,268
Housing Units Built Before 1950	376
Per Capita Income	25,451
Land Area (sq. miles) (Source: SF1)	30.84
% Land Area	99%
Water Area (sq. miles) (Source: SF1)	0.28
% Water Area	1%

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	32,031	100%	886
Population Reporting One Race	31,180	97%	2,463
White	26,233	82%	892
Black	273	1%	174
American Indian	151	0%	99
Asian	613	2%	289
Pacific Islander	152	0%	148
Some Other Race	3,758	12%	861
Population Reporting Two or More Races	851	3%	349
Total Hispanic Population	25,810	81%	893
Total Non-Hispanic Population	6,221		
White Alone	4,475	14%	307
Black Alone	238	1%	174
American Indian Alone	105	0%	99
Non-Hispanic Asian Alone	582	2%	289
Pacific Islander Alone	152	0%	148
Other Race Alone	11	0%	22
Two or More Races Alone	657	2%	349
Population by Sex			
Male	15,885	50%	589
Female	16,147	50%	441
Population by Age			
Age 0-4	2,183	7%	259
Age 0-17	8,555	27%	434
Age 18+	23,477	73%	520
Age 65+	4,179	13%	188

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017 .

EJSCREEN ACS Summary Report

Location: User-specified point center at 31.790202, -106.592403
Ring (buffer): 4-miles radius
Description: Camino Real Landfill

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	19,596	100%	484
Less than 9th Grade	3,184	16%	207
9th - 12th Grade, No Diploma	1,664	8%	144
High School Graduate	3,938	20%	237
Some College, No Degree	4,481	23%	274
Associate Degree	973	5%	106
Bachelor's Degree or more	6,329	32%	282
Population Age 5+ Years by Ability to Speak English			
Total	29,849	100%	749
Speak only English	6,796	23%	360
Non-English at Home[1+2+3+4]	23,053	77%	785
[1]Speak English "very well"	11,530	39%	677
[2]Speak English "well"	6,832	23%	723
[3]Speak English "not well"	2,941	10%	256
[4]Speak English "not at all"	1,750	6%	195
[3+4]Speak English "less than well"	4,691	16%	281
[2+3+4]Speak English "less than very well"	11,523	39%	754
Linguistically Isolated Households*			
Total	2,967	100%	235
Speak Spanish	2,752	93%	215
Speak Other Indo-European Languages	92	3%	95
Speak Asian-Pacific Island Languages	116	4%	78
Speak Other Languages	7	0%	17
Households by Household Income			
Household Income Base	10,189	100%	207
< $15,000	1,807	18%	165
$15,000 - $25,000	1,432	14%	150
$25,000 - $50,000	2,301	23%	207
$50,000 - $75,000	1,779	17%	152
$75,000 +	2,869	28%	191
Occupied Housing Units by Tenure			
Total	10,189	100%	207
Owner Occupied	6,214	61%	196
Renter Occupied	3,975	39%	198
Employed Population Age 16+ Years			
Total	24,524	100%	636
In Labor Force	14,799	60%	487
Civilian Unemployed in Labor Force	1,245	5%	171
Not In Labor Force	9,725	40%	470

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: User-specified point center at 31.790202, -106.592403
Ring (buffer): 4-miles radius
Description: Camino Real Landfill

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	29,040	100%	736
English	6,443	22%	546
Spanish	21,551	74%	774
French	54	0%	216
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	156	1%	365
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	380	1%	347
Chinese	162	1%	226
Japanese	N/A	N/A	N/A
Korean	107	0%	178
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	0	0%	19
Other Asian	54	0%	82
Tagalog	19	0%	45
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	8	0%	19
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	92	0%	102
Total Non-English	22,597	78%	842

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Attachment D

Census 2010 Aerial Photograph

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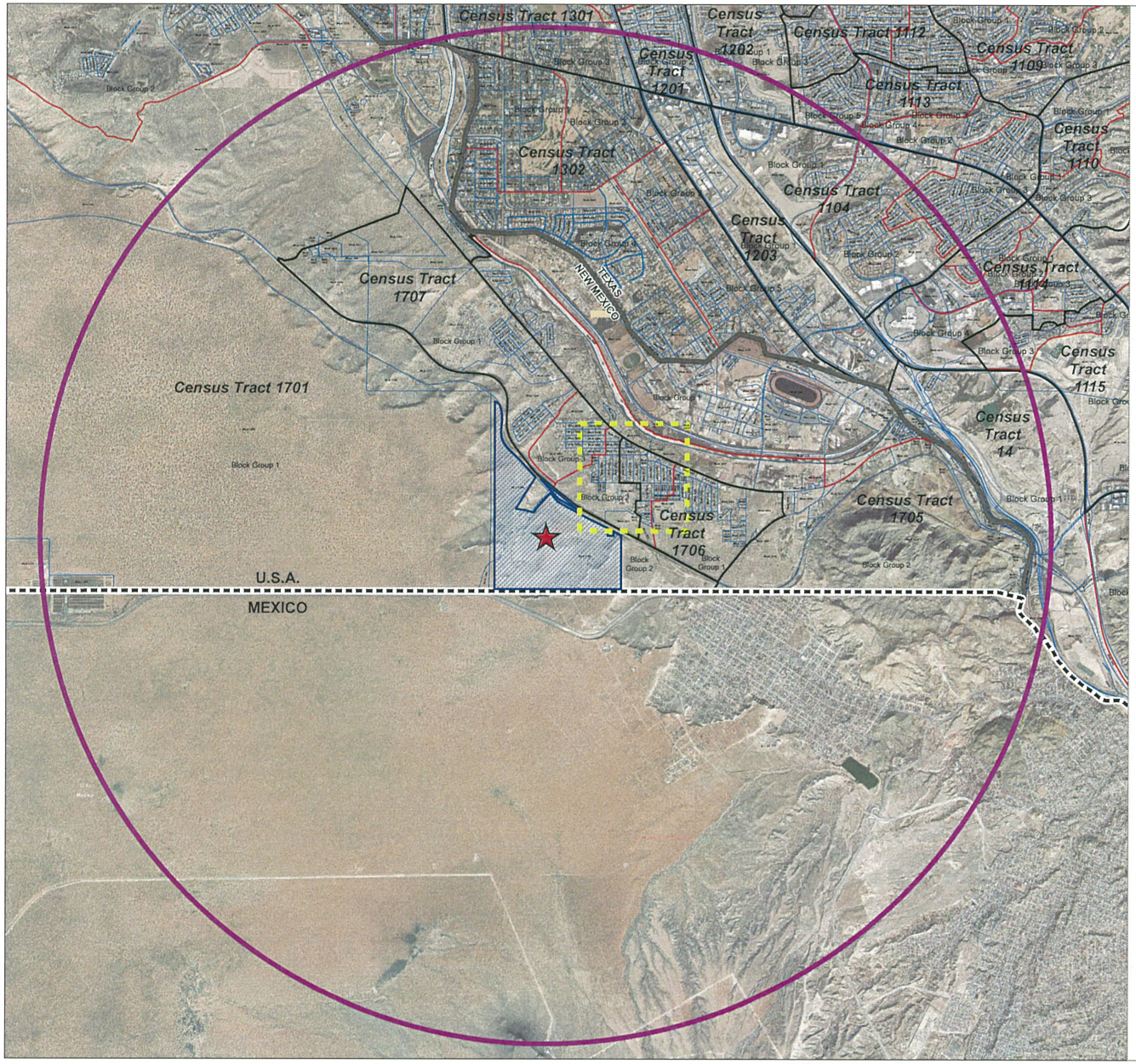

Attachment D
Census 2010
Aerial Photograph

- Camino Real Landfill Centroid
- Camino Real Facility Boundary
- Four Mile Radius
- International Border
- State Border
- Census Tracts
- Census Block Groups
- Census Blocks
- One-Square-Mile Area

N
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S

0 0.5 1 2 Miles

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NOTES:
1. CENSUS DATA REFERENCE:
   U.S. Department of Commerce, U.S. Census Bureau, Geography Division, 2019, TIGER/Line Shapefiles, Dona Ana County, NM, 2010 Census, TIGER/Line Shapefiles, 2019, El Paso County, TX, 2010 Census
2. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE:
   31° 47' 24.7272" N 106° 35' 32.6508" W
3. AERIAL IMAGE REFERENCE:
   Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Attachment E

Census 2010 Population Gradient Map (New Mexico)

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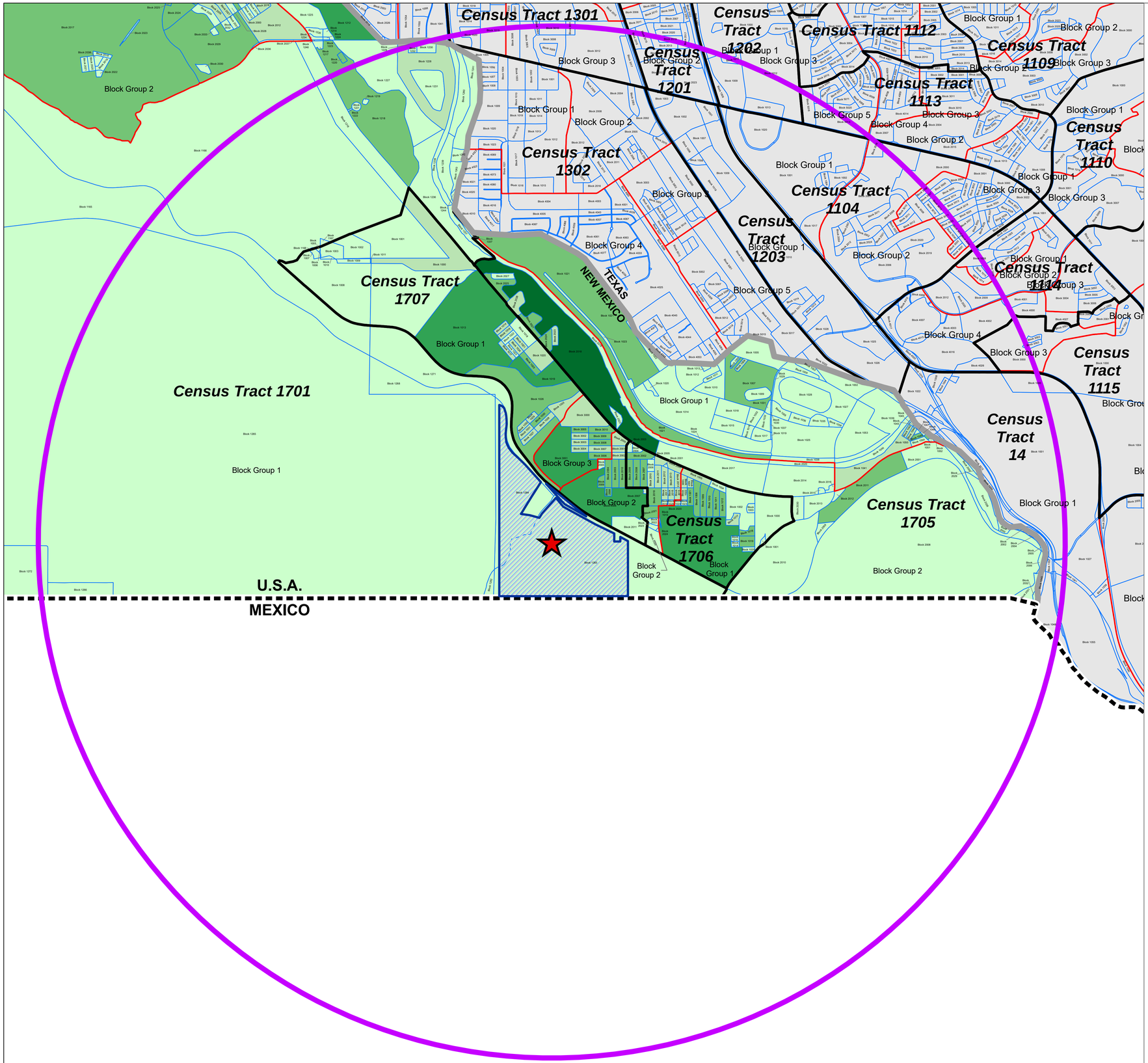
Attachment E
Census 2010
Population Gradient Map
(New Mexico)



- Camino Real Landfill Centroid
- Camino Real Facility Boundary
- Four Mile Radius
- International Border
- State Border
- Census Tracts
- Census Block Groups
- Census Blocks

Census Block Population

- 0 - 49
- 50 - 100
- 101 - 250
- 251 - 1,000
- Greater than 1,000

N W E S

0 0.5 1 2 Miles

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NOTES:

1. CENSUS DATA REFERENCE:
   U.S. Department of Commerce, U.S. Census Bureau, Geography Division, 2019,
   TIGER/Line Shapefiles, Dona Ana County, NM, 2010 Census,
   TIGER/Line Shapefiles, 2019, El Paso County, TX, 2010 Census

2. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE:
   31° 47' 24.7272" N 106° 35' 32.6508" W

Attachment F

Regulated Facilities within the Four-Mile Radius

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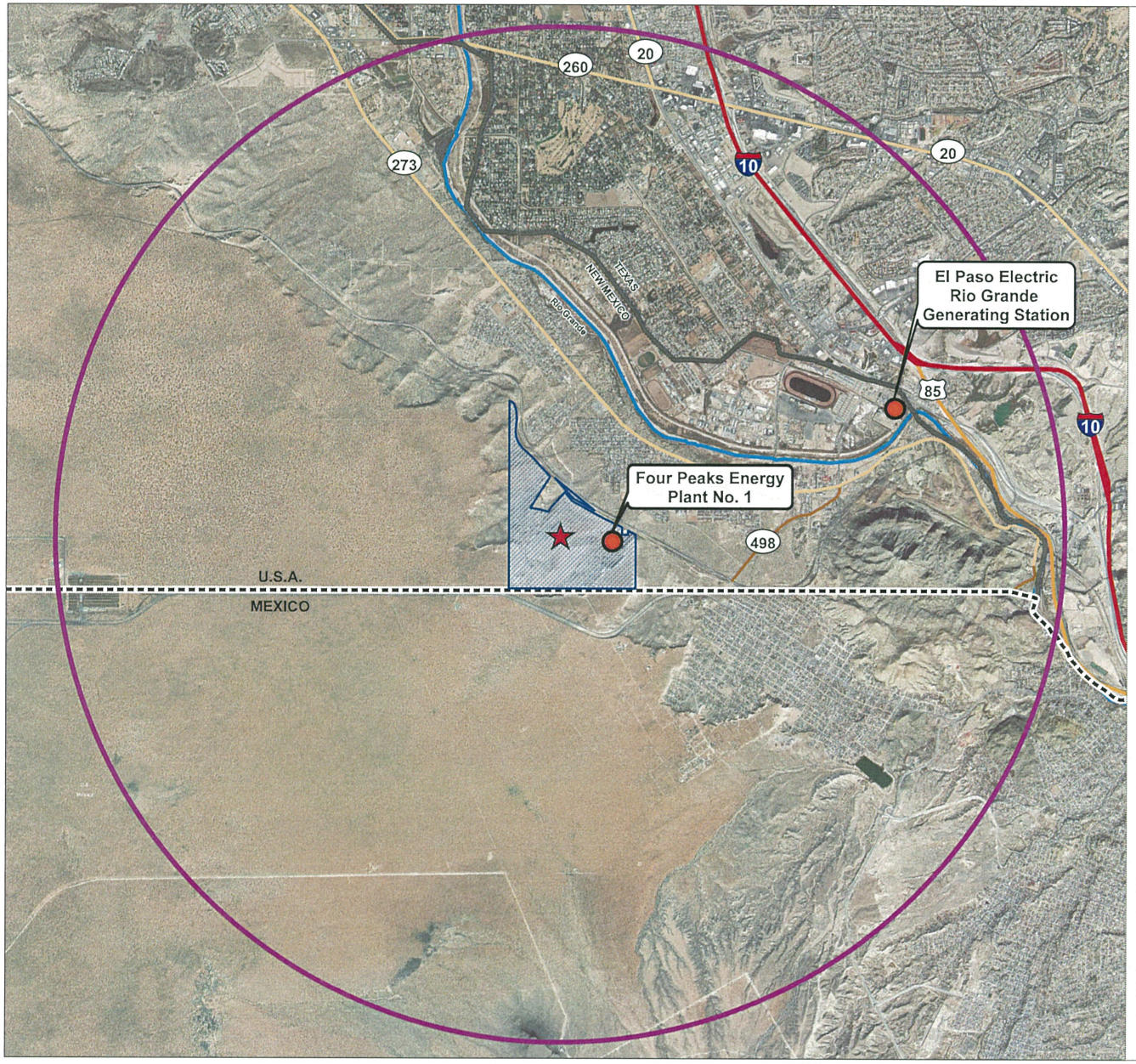

Attachment F
Regulated Facilities Within the Four-Mile Radius

- Camino Real Landfill Centroid
- Camino Real Facility Boundary
- Four Mile Radius
- Title V Air Quality Facility
- International Border
- State Border
- Rio Grande
- Interstate Highway
- U.S. Highway
- State Highway
- Major Road

N
W E
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0 0.5 1 2 Miles

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NOTES:

1. APPROXIMATE GEOGRAPHIC COORDINATES FOR THE CENTER OF THE SITE:
   31° 47' 24.7272" N 106° 35' 32.6508" W

2. AERIAL IMAGE REFERENCE:
   Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

3. DATA SOURCES FOR REGULATED FACILITIES:
   NMED, Solid Waste Bureau
   NMED, Hazardous Waste Bureau
   NMED, Air Quality Bureau
   TCEQ, Office of Waste
   TCEQ, Office of Air
   U.S. EPA, Superfund: National Priorities List

Attachment G

Permitted Solid Waste Facilities

G.1 – Doña Ana County, New Mexico
G.2 – El Paso County, Texas

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ATTACHMENT G.1
Permitted Solid Waste Facilities
Doña Ana County, New Mexico

County	Facility Name	Facility Type	Physical Location	Facility Address	City	State	Zip Code	Facility Contact Name	Facility Contact Phone
Doña Ana	South Central Solid Waste Transfer Station	Transfer Station - permitted	2865 W Amador Ave, Las Cruces NM 88005	2865 W. Amador Avenue	Las Cruces	NM	88005	Patrick Peck	575-528-3800
Doña Ana	Camino Real Landfill	Landfill - permitted	1000 Camino Real BLVD Sunland Park, NM 88063	PO Box 580	Sunland Park	NM	88063	Juan Carlos Tomas	575-589-9440
Doña Ana	Corralitos Regional Landfill	Landfill - permitted	14535 Robert Larson Blvd	2865 W. Amador Avenue	Las Cruces	NM	88005	Patrick Peck	575-528-3800

Data Source: New Mexico Environment Department, Solid Waste Bureau, List of Facilities and Haulers: https://www.env.nm.gov/solid-waste/lists-of-facilities-and-haulers/

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ATTACHMENT G.2
Permitted Solid Waste Facilities
El Paso County, Texas

County	Site Name	Additional ID	Physical Type	*Description**	Physical Address or Description	City	State	Zip	RN
El Paso	Greater El Paso Landfill	2284	1	*Permitted Landfill*	2300 Darrington Rd	EL PASO	TX	79928	RN101478766
El Paso	El Paso Facility	2355	5GG	*Permitted Liquid Waste Processing Facility*	11961 Railroad Dr	EL PASO	TX	79934	RN105336002
El Paso	City of El Paso Transfer Station Facility	728	5TS	*Permitted Solid Waste Transfer Station*	4200 Delta Dr	EL PASO	TX	79905	RN102065554
El Paso	McCombs Landfill	729B	1	*Permitted Landfill*	13600 McCombs St	EL PASO	TX	79934	RN100215599
El Paso	Fort Bliss Landfill	1422	1	*Permitted Landfill*	Approx 0.25 Mile N OF SGM SIMS AND Old Ironside Dr INTX	FORT BLISS	TX	79916	RN100210095

Data Source: Texas Commission on Environmental Quality, Office of Waste, Waste Management Permit Applications, Permits, Registrations, and Facilities: *https://www.tceq.texas.gov/agency/data/lookup-data/waste-mgmt-data-records.html*

*Description based on TCEQ's *Explanation of Municipal Solid Waste Data Fields* , April 2019

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Attachment H

Hazardous Waste Facilities

H.1 – Doña Ana County, New Mexico
H.2 – El Paso County, Texas

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ATTACHMENT H.1
Hazardous Waste Facilities
Doña Ana County, New Mexico

County	Operator Name	EPA ID	NM ID	Permit Issued	Permit Effective
Doña Ana	US Army Air Defense Artillery Center and Fort Bliss (Fort Bliss)	NM4213720101	2393	-	-
Doña Ana	White Sands Missile Range (WSMR)	NM2750211235	2392	12/3/2009	1/8/2010
Doña Ana	National Aeronautics and Space Administration (NASA)	NM8800019434	2399	11/3/2009	12/3/2009

Data Source: New Mexico Environment Department, Hazardous Waste Bureau, Permitted Facilities: https://www.env.nm.gov/hazardous-waste/permitted-facilities/

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ATTACHMENT H.2
Hazardous Waste Facilities
El Paso County, Texas

County	Operator Name	Facility Address	City	State	ZIP Postal	Owner Name	IHW No
El Paso	Western Refining El Paso All Sites	6501 Trowbridge Dr.	El Paso	TX	79905	Western Refining LP	36419
El Paso	Vinton Steel, LLC	P.O. Box 12843	El Paso	TX	79913	Vinton Steel, LLC	50119
El Paso	Safety-Kleen Systems, Inc.	900 Hawkins Blvd, Ste A	El Paso	TX	79915	Lee Shamaley	50247
El Paso	US Army Air Defense Artillery Center & Fort Bliss	1733 Pleasonton, Building 777	Fort Bliss	TX	79916	US Army Air Defense Artillery Center & Fort Bliss	50296

Data Source: Texas Commission on Environmental Quality, Office of Waste, Waste Management Permit Applications, Permits, Registrations, and Facilities: https://www.tceq.texas.gov/agency/data/lookup-data/waste-mgmt-data-records.html

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Attachment I

National Priorities List Sites (New Mexico & Texas)

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An official website of the United States government.

We've made some changes to EPA.gov. If the information you are looking for is not here, you may be able to find it on the EPA Web Archive or the January 19, 2017 Web Snapshot.

Close

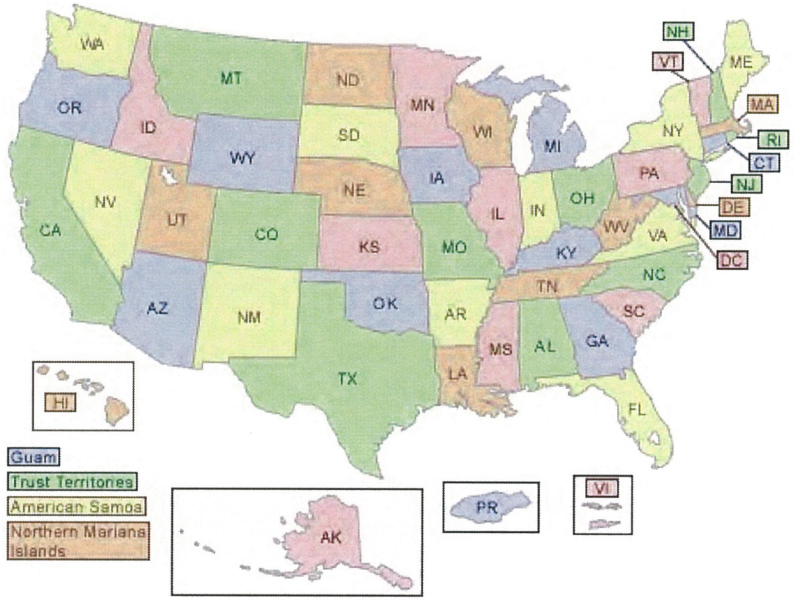
EPA United States Environmental Protection Agency

National Priorities List (NPL) Sites - by State

[View NPL Sites - by Site Name] | [View NPL Sites - by Date]

Choose a state or territory from the map or list below.

Alabama ▾



This page provides information about sites on the NPL; including site name, city, site EPA ID, listing date, federal facility indicator, site narrative, site progress profile, and *Federal Register* Notice. Select a state from the map for a list of NPL sites in that state.

You may need a PDF reader to view some of the files on this page. See EPA's About PDF page to learn more.

New Mexico (16 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
AT&SF (Albuquerque)	Albuquerque	NMD980622864	12/16/1994	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (13 pp, 100 K)	Site Location
Chevron Questa Mine	Questa	NMD002899094	09/16/2011	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (10 pp, 184 K)	Site Location

New Mexico (16 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Cimarron Mining Corp.	Carrizozo	NMD980749378	10/04/1989	38.93	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (19 pp, 302 K)	Site Location
Eagle Picher Carefree Battery	Socorro	NMD001829506	09/19/2007	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 205 K)	Site Location
Fruit Avenue Plume	Albuquerque	NMD986668911	10/22/1999	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 187 K)	Site Location
Grants Chlorinated Solvents Plume	Grants	NM0007271768	07/22/2004	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 205 K)	Site Location

New Mexico (16 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Griggs & Walnut Ground Water Plume	Las Cruces	NM0002271286	06/14/2001	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 192 K)	Site Location
Homestake Mining Co.	Milan	NMD007860935	09/08/1983	34.21	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
Jackpile-Paguate Uranium Mine	Laguna Pueblo	NMN000607033	12/12/2013	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 253 K)	Site Location
Lea and West Second Street	Roswell	NMN000607057	04/07/2016	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 242 K)	Site Location

New Mexico (16 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Lee Acres Landfill (USDOI)	Farmington	NMD980750020	08/30/1990	39.37	Yes	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 293 K)	Site Location
McGaffey and Main Groundwater Plume	Roswell	NM0000605386	09/05/2002	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 193 K)	Site Location
North Railroad Avenue Plume	Espanola	NMD986670156	01/19/1999	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 179 K)	Site Location
Prewitt Abandoned Refinery	Prewitt	NMD980622773	08/30/1990	44.24	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 293 K)	Site Location

New Mexico (16 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
South Valley	Albuquerque	NMD980745558	09/08/1983		No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
United Nuclear Corp.	Church Rock	NMD030443303	09/08/1983	30.36	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Air Force Plant #4 (General Dynamics)	Fort Worth	TX7572024605	08/30/1990	39.92	Yes	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 293 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
ALCOA (Point Comfort)/Lavaca Bay	Point Comfort	TXD008123168	02/23/1994	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (47 pp, 574 K)	Site Location
Bandera Road Ground Water Plume	Leon Valley	TXN000606565	03/07/2007	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 201 K)	Site Location
Brine Service Company	Corpus Christi	TX0000605264	09/05/2002	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 193 K)	Site Location
Circle Court Ground Water Plume	Willow Park	TXN000606965	09/18/2012	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (10 pp, 261 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
City of Perryton Well No. 2	Perryton	TX0001399435	01/19/1999	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 179 K)	Site Location
Conroe Creosoting Company	Conroe	TXD008091951	09/29/2003	48.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 192 K)	Site Location
Crystal Chemical Co.	Houston	TXD990707010	09/08/1983	60.90	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
Delfasco Forge	Grand Prairie	TXD988034328	09/13/2018	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 238 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Donna Reservoir and Canal System	Donna	TX0000605363	03/19/2008	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 214 K)	Site Location
East 67th Street Ground Water Plume	Odessa	TXN000606614	03/07/2007	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 201 K)	Site Location
Eldorado Chemical Co., Inc.	Live Oak	TXD057567216	09/09/2016	38.85	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 245 K)	Site Location
Falcon Refinery	Ingleside	TXD086278058	09/16/2011	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (10 pp, 184 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
French, Ltd.	Crosby	TXD980514814	09/08/1983	63.33	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
Garland Creosoting	Longview	TXD007330053	10/22/1999	49.10	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 187 K)	Site Location
Geneva Industries/Fuhrmann Energy	Houston	TXD980748453	09/21/1984	59.46	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 177 K)	Site Location
Gulfco Marine Maintenance	Freeport	TXD055144539	04/30/2003	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 191 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Hart Creosoting Company	Jasper	TXD050299577	07/22/1999	48.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 183 K)	Site Location
Highlands Acid Pit	Highlands	TXD980514996	09/08/1983	37.77	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
Highway 18 Ground Water	Kermit	TXN000606716	08/03/2017	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 255 K)	Site Location
Jasper Creosoting Company Inc.	Jasper	TXD008096240	07/28/1998	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 179 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Jones Road Ground Water Plume	Houston	TXN000605460	09/29/2003	46.50	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 192 K)	Site Location
Koppers Co., Inc. (Texarkana Plant)	Texarkana	TXD980623904	06/10/1986	31.31	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location
Lane Plating Works, Inc.	Dallas	TXN000605240	05/17/2018	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 242 K)	Site Location
Lone Star Army Ammunition Plant	Texarkana	TX7213821831	07/22/1987	31.85	Yes	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (27 pp, 287 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Longhorn Army Ammunition Plant	Karnack	TX6213820529	08/30/1990	39.83	Yes	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 293 K)	Site Location
Main Street Ground Water Plume	Burnet	TXN000607441	09/30/2015	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 240 K)	Site Location
Malone Service Company, Inc.	Texas City	TXD980864789	06/14/2001	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 192 K)	Site Location
Many Diversified Interests, Inc.	Houston	TXD008083404	01/19/1999	32.07	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 179 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Midessa Ground Water Plume	Odessa	TXN000606668	03/19/2008	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 214 K)	Site Location
Motco, Inc.	La Marque	TXD980629851	09/08/1983		No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
North Cavalcade Street	Houston	TXD980873343	06/10/1986	37.08	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location
North East 2nd Street (formerly Attebury Grain Storage Facility)	Happy	TXN000606760	04/09/2009	32.33	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (10 pp, 173 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Odessa Chromium #1	Odessa	TXD980867279	06/10/1986	42.24	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location
Pantex Plant (USDOE)	Pantex Village	TX4890110527	05/31/1994	51.22	Yes	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (13 pp, 130 K)	Site Location
Patrick Bayou	Deer Park	TX0000605329	09/05/2002	47.83	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 193 K)	Site Location
Petro-Chemical Systems, Inc. (Turtle Bayou)	Liberty County	TXD980873350	06/10/1986	29.94	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
River City Metal Finishing	San Antonio	TXN000606915	05/17/2018	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (7 pp, 242 K)	Site Location
Rockwool Industries Inc.	Bell County	TXD066379645	09/29/1998	48.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 173 K)	Site Location
RSR Corp.	Dallas	TXD079348397	09/29/1995	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (5 pp, 166 K)	Site Location
San Jacinto River Waste Pits	Channelview	TXN000606611	03/19/2008	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 214 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Sandy Beach Road Ground Water Plume	Azle	TXN000605649	09/14/2005	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 209 K)	Site Location
Sheridan Disposal Services	Hempstead	TXD062132147	03/31/1989	30.16	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (21 pp, 376 K)	Site Location
Sikes Disposal Pits	Crosby	TXD980513956	09/08/1983	61.62	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (36 pp, 441 K)	Site Location
Sol Lynn/Industrial Transformers	Houston	TXD980873327	03/31/1989	39.65	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (21 pp, 376 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
South Cavalcade Street	Houston	TXD980810386	06/10/1986	38.69	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location
Sprague Road Ground Water Plume	Odessa	TX0001407444	09/25/1997	43.21	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 132 K)	Site Location
Star Lake Canal	Port Neches	TX0001414341	07/27/2000	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 275 K)	Site Location
State Road 114 Ground Water Plume	Levelland	TXSFN0605177	10/22/1999	42.41	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (8 pp, 187 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Tex-Tin Corp.	Texas City	TXD062113329	09/18/1998	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (6 pp, 173 K)	Site Location
Texarkana Wood Preserving Co.	Texarkana	TXD008056152	06/10/1986	40.19	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (34 pp, 369 K)	Site Location
United Creosoting Co.	Conroe	TXD980745574	09/21/1984	37.29	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (22 pp, 177 K)	Site Location
US Oil Recovery	Pasadena	TXN000607093	09/18/2012	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (10 pp, 261 K)	Site Location

Texas (55 sites)

Site Name	City	Site EPA ID	Listing Date	Site Score	Federal Facility Indicator	Additional Information	Site Location
Van der Horst USA Corporation	Terrell	TXD007357932	03/04/2010	48.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 176 K)	Site Location
West County Road 112 Ground Water	Midland	TXN000606992	03/10/2011	50.00	No	• Site Listing Narrative • Site Progress Profile • Federal Register Notice (PDF) (9 pp, 179 K)	Site Location

Attachment J

Title V Facilities

J.1 – Doña Ana County, New Mexico
J.2 – El Paso County, Texas

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ATTACHMENT J.1
Title V Air Quality Permits
Doña Ana County, New Mexico

County	Industry	Facility Class	Facility Name	Physical Address	Municipality	State	Zip
Doña Ana	ENRG-Power Plant	Major-Title V	El Paso Electric - Rio Grande Generating Station	3501 Doniphan Rd	Sunland Park	NM	88063
Doña Ana	O&G-Compressor Station	Major-Title V	Afton Compressor Station	8 miles west of La Mesa	La Mesa	NM	88044
Doña Ana	FED-Dept of Defense	Major-Title V	White Sands Missile Range	9 mi E of Organ	Organ	NM	88001
Doña Ana	ENRG-Power Plant	Major-Title V	New Mexico State University Campus	1620 Standley Dr.	Las Cruces	NM	88003
Doña Ana	ENRG-Power Plant	Major-Title V	PNM - Afton Generating Station	10100 West Afton Road #5	La Mesa	NM	880449311
Doña Ana	SOLW-Landfill/Municipal	Major-Title V	Camino Real Landfill	2 miles SW of Airport	Sunland Park	NM	88063
Doña Ana	SOLW-Landfill/Municipal	Major-Title V	Corralitos Landfill	12 mi SW of Fairacres	Fairacres	NM	88033
Doña Ana	ENRG-Power Plant	Major-Title V	Four Peaks Energy Plant No1	1000 B Camino Real Blvd	Sunland Park	NM	88063
Doña Ana	MFG-Nonmetallic Materials	Major-Title V	Rogers Foam Corporation, New Mexico Plant	2.5 mi NW of Santa Teresa	Santa Teresa	NM	88008

Data Source: New Mexico Environment Department, Air Quality Bureau, Permitted Facilities Lat/Long: https://www.env.nm.gov/air-quality/aqb-p_current_permitting_activites/

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ATTACHMENT J.2
Title V Air Quality Permits
El Paso County, Texas

County	Permit No.	Company Name	RN	Site Name	Address or Physical Location	Nearest City
EL PASO	80	El Paso Electric Company	RN100211309	NEWMAN POWER STATION	4900 Stan Roberts Senior Blvd	El Paso
EL PASO	294	El Paso Natural Gas Company, L.L.C.	RN101058915	EL PASO NATURAL GAS COMPRESSOR STATION	12600 MCCOMBS ST , EL PASO, TX 79934	El Paso
EL PASO	803	El Paso Electric Company	RN100215490	COPPER STATION	651 HAWKINS BLVD , EL PASO, TX 79915	El Paso
EL PASO	1348	Western Refining Company, L.P.	RN100213016	WESTERN REFINING EL PASO ALL SITES	6501 TROWBRIDGE DR , EL PASO, TX 79905	El Paso
EL PASO	1456	Vinton Steel LLC	RN100213941	VINTON STEEL	8001 BORDER STEEL RD , ANTHONY, TX 79821	Canutillo
EL PASO	1602	Phelps Dodge Refining Corporation	RN100226000	EL PASO REFINERY AND ROD MILL	-	-
EL PASO	1749	CITY OF EL PASO	RN100215599	MCCOMBS LANDFILL	13600 MCCOMBS ST , EL PASO, TX 79934	-
EL PASO	2732	Holly Energy Partners - Operating, L.P.	RN101049195	EL PASO OPERATING EASTSIDE TERMINAL	1000 Eastside Road	El Paso
EL PASO	2865	US Department of the Army	RN100210095	US ARMY FORT BLISS	1733 PLEASONTON RD , FORT BLISS, TX 79916	El Paso
EL PASO	2938	CITY OF EL PASO	RN101478766	GREATER EL PASO LANDFILL	2300 DARRINGTON RD , EL PASO, TX 79928	-
EL PASO	3126	Border Pallets, Inc.	RN101695583	BORDER PALLETS	291 S DARRINGTON RD , EL PASO, TX 79928	-

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ATTACHMENT J.2
Title V Air Quality Permits
El Paso County, Texas

County	Permit No.	Company Name	RN	Site Name	Address or Physical Location	Nearest City
EL PASO	3670	El Paso Electric Company	RN106392624	MONTANA POWER STATION	13511B MONTANA AVE , EL PASO, TX 79938	El Paso
EL PASO	3915	Magellan Pipeline Terminals, L.P.	RN102707718	EL PASO TERMINAL	13551 MONTANA AVE , EL PASO, TX 79938	-
EL PASO	3929	Western Refining Terminals, LLC	RN100213016	WESTERN REFINING EL PASO ALL SITES	6501 TROWBRIDGE DR , EL PASO, TX 79905	El Paso
EL PASO	4134	Dal-Tile Corporation	RN100542976	DAL-TILE EL PASO MANUFACTURING	12001 RAILROAD DR , EL PASO, TX 79934	-

Data Source: Texas Commission on Environmental Quality, Office of Air, Status of Air Permits and Permit Applications: https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

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JULY 14, 2022 SECRETARY OF STATE
VAA CONCURRENCE LETTER

Via Electronic Mail

July 14, 2022

Dalva L. Moellenberg
Gallagher & Kennedy
DLM@gknet.com

RE: Camino Real Landfill, NMED Permit No. SWM-030738, February 11, 2022, Request for Reconsideration of Vulnerable Area Assessment Determination dated February 18, 2021.

Dear Mr. Moellenberg:

The New Mexico Environment Department (Department) received the February 18, 2022 Request for Reconsideration of the Vulnerable Area Assessment Determination (Reconsideration Request) on behalf of Camino Real Environmental Center, Inc. (CREC) for the Camino Real Landfill (CRLF). Following the Department's April 26, 2022 meeting and discussion with you and your client and upon further legal review of the Reconsideration Request; I have determined that the CRLF is not located within a vulnerable area at this time.

Nevertheless, from our conversation I understand that CREC is committed to undertaking a robust public engagement process in advance of the permit hearing in an effort to evaluate changes in the community since the last permit issuance in 2005 and ensure the community has an opportunity to understand operational changes made. To be clear, it is important to me and this Department that the community of Sunland Park is aware of and meaningfully involved in the pending renewal and modification of the CRLF and what that means in terms of the environmental health impact. Further, it is the goal of the New Mexico Solid Waste Management Plan (Plan), required by the Solid Waste Act

> to implement a program that allows all persons in New Mexico an equal share of the benefits of environmental amenities, equal protection from burdens of environmental hazards, opportunities for meaningful involvement in decisions that affect health and the local environment, and equal access to information regarding risks and benefits to gain knowledge to equally participate in rulemaking or permitting processes. Plan, p. 24.

Therefore, I request that CRLF submit a community engagement plan to Joan Snider, Bureau Chief of the Solid Waste Bureau, pursuant to 20.9.3.25.A.5 NMAC, and in advance of the application for renewal and modification. Upon approval by Chief Snider, CRLF may promptly begin implementing the plan. The content of the plan will include elements of environmental justice

principals, including notice to the public of its proposed plans, in English and Spanish; meaningful and inclusive opportunities for public comment; opportunities to meet onsite; information about the changes in the community from 2005 and changes in the operations of CRLF; the identification of any potential health impacts; and ultimately sharing the comments received and the responses and actions taken with Chief Snider.

I look forward to CREC's submission of a robust community engagement plan that supports the above efforts and honors and serves the community in which it sits. The Department has the responsibility to ensure that the renewal and permit modification of the CRLF will not result in a disproportionate effect on the health and environment of the community and your efforts will aid us in this process.

Please contact Chief Snider at 505-660-2209 or joanm.snider@state.nm.us for further information.

Sincerely,

James C. Kenney
Cabinet Secretary

Cc: Rebecca Roose, Deputy Cabinet Secretary of Administration, NMED
Chris Catechis, Acting Director, Resource Protection Division, NMED
Joan Snider, Chief, Solid Waste Bureau, NMED
Christal Weatherly, Assistant General Counsel, NMED
Brady Stewart, Waste Connections, Inc.
Mark Adams, Waste Connections, Inc.

ATTACHMENT IV.2-C

COMMUNITY NOISE ANALYSIS

December 2019

Community Noise Analysis

Camino Real Landfill
Sunland Park, Doña Ana County, New Mexico

Prepared for:

Weaver Consultants Group
6420 Southwest Blvd. | Suite 206
Fort Worth, TX 76109

Prepared by:

Ecosphere Environmental Services, Inc.
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Ecosphere Environmental Services

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Albuquerque, NM
Farmington, NM

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Table of Contents

1. Summary 1
2. Description of Operations 1
3. Noise-Sensitive Receivers 4
4. Noise Measurement Units and Properties 4
5. Regulatory Requirements Associated with Noise 5
5.1 Noise Control Act of 1972 5
5.2 U.S. Department of Housing and Urban Development 5
5.3 Federal Highway Administration 5
6. Site Visit and Noise Measurements 6
7. Predicted Noise Levels 7
7.1 Landfill Operations 7
7.2 Landfill Traffic 8
8. Conclusions 8
9. References 9

List of Tables

Table 1. Measured Noise Levels (dBA Leq) and Traffic Volumes (vehicles per hour) 6
Table 2. Predicted Landfill Operational Noise Levels and Distances from Landfill to Receivers 7
Table 3. Predicted Landfill Traffic-Related Noise Levels 8

List of Figures

Figure 1. Project Location Map 2
Figure 2. Project Detail Map 3

Abbreviations and Acronyms

dB	Decibel
dBA	A-weighted decibel
FHWA	Federal Highway Administration
HUD	US Department of Housing and Urban Development
Landfill	Camino Real Landfill
Ldn	Day-night average noise level
Leq	Equivalent noise level
NAC	Noise abatement criteria
Receivers	Noise-sensitive areas
RCNM	Road Construction Noise Model
TNM	Traffic Noise Model

1. Summary

The following are the findings from a noise analysis of the Camino Real Landfill (Landfill) in southern Doña Ana County, New Mexico, located just north of the United States/Mexico border, south of the BNSF Railway tracks, and within the city limits of Sunland Park, New Mexico (see Figure 1). The purpose of this analysis is to evaluate potential noise effects on surrounding land uses from existing and future operations on the Landfill. The analysis also evaluates noise from truck and other traffic associated with the Landfill within adjacent noise-sensitive areas (receivers). The following analysis addresses existing and future operations of the Landfill, the location and type of receivers in the surrounding area, noise measurement units and properties, applicable noise standards, results from a site field visit and noise measurements, predictions of future noise levels from Landfill operations and traffic, and conclusions regarding the likelihood of impacts.

2. Description of Operations

The Camino Real Landfill is located within a desert area on hilly terrain that slopes downward to the east towards the Rio Grande valley and populated community of Sunland Park. Regional access to the Landfill is provided by NM 273 (McNutt Road). Direct access to the facility is provided via Camino Real Drive, a one-mile paved roadway leading from NM 273 to the Landfill. The area including Landfill location, nearby residential areas, and access travel routes is shown on Figure 1.

The current operation of the Landfill is conducted in Unit 3, Cell 3.1 (see Figure 2), which is situated in the southwest corner of the property. Daily operations are confined to an area of about ½ acre per day. Typical equipment use includes 1 dozer, 1 compactor, 1 loader, 1 scraper, and 1 water truck. Use of this equipment includes backup warning horns. The Landfill operates from 5:30 AM to 5:00 PM during weekdays and from 5:30 AM to 2:00 PM on Saturdays. It is opened to the public from 7:00 AM to 4:00 PM during weekdays and from 7:00 AM to 1:00 PM on Saturdays. The area of current operation is in Unit 3, Cell 3.1. In the future, Landfill operations may be moved to Unit 3, Cell 3.2, in the northwest corner of the site and Unit 4, Cells 4.1 and 4.2, on the east side of the site.

Information on traffic to and from the Landfill was obtained from the Camino Real Landfill District Manager, Dr. Juan Carlos Tomas. The Landfill employees 21 individuals. During daily operations, the records taken at the Landfill entry gate show an average of about 400 vehicles in and out. Of these, approximately 210 are large commercial trash trucks and the remaining 190 are local users of the Landfill in their personal vehicles. All of these vehicles are assumed to use Camino Real Drive.

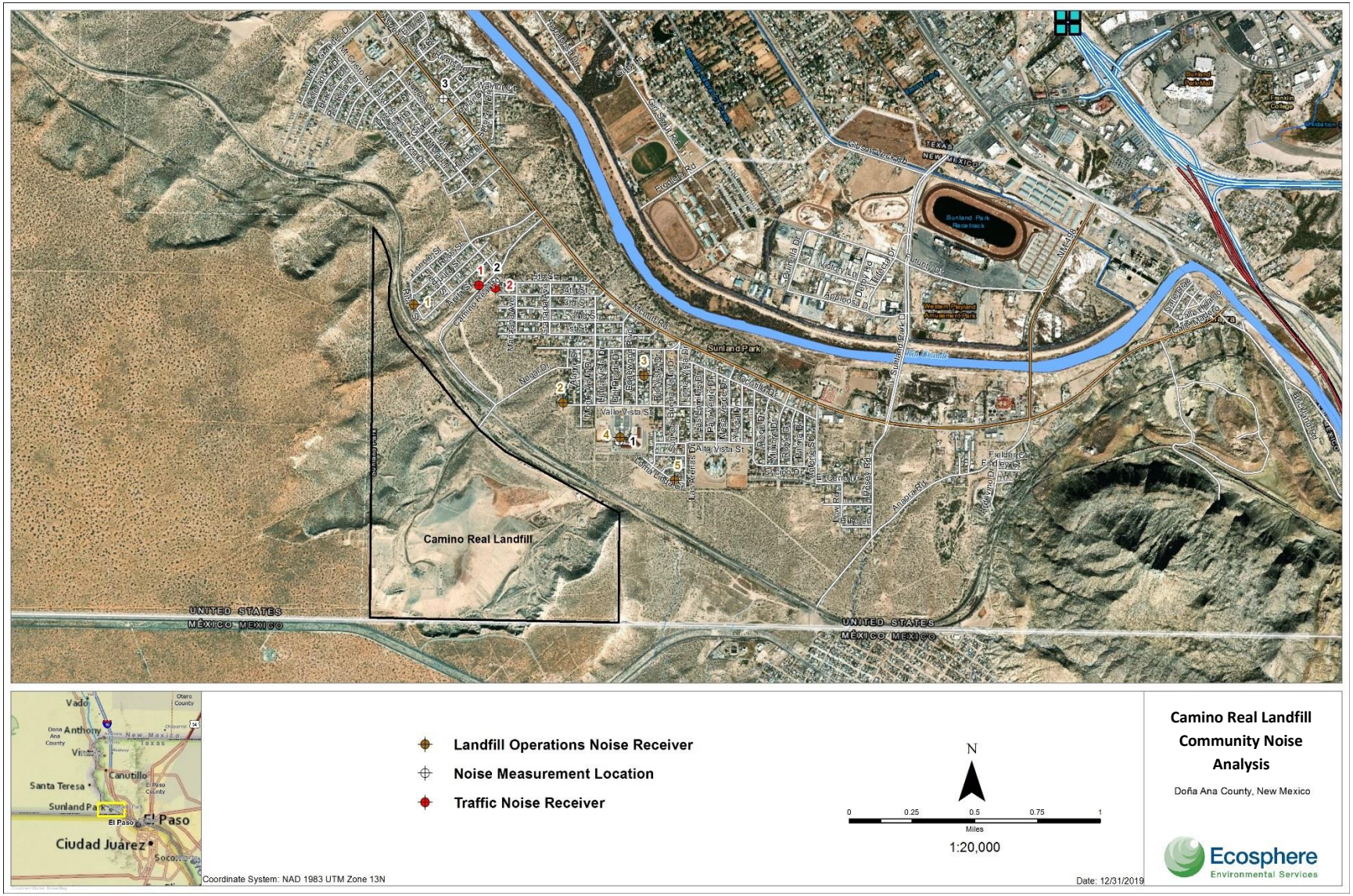

Figure 1. Project Location Map

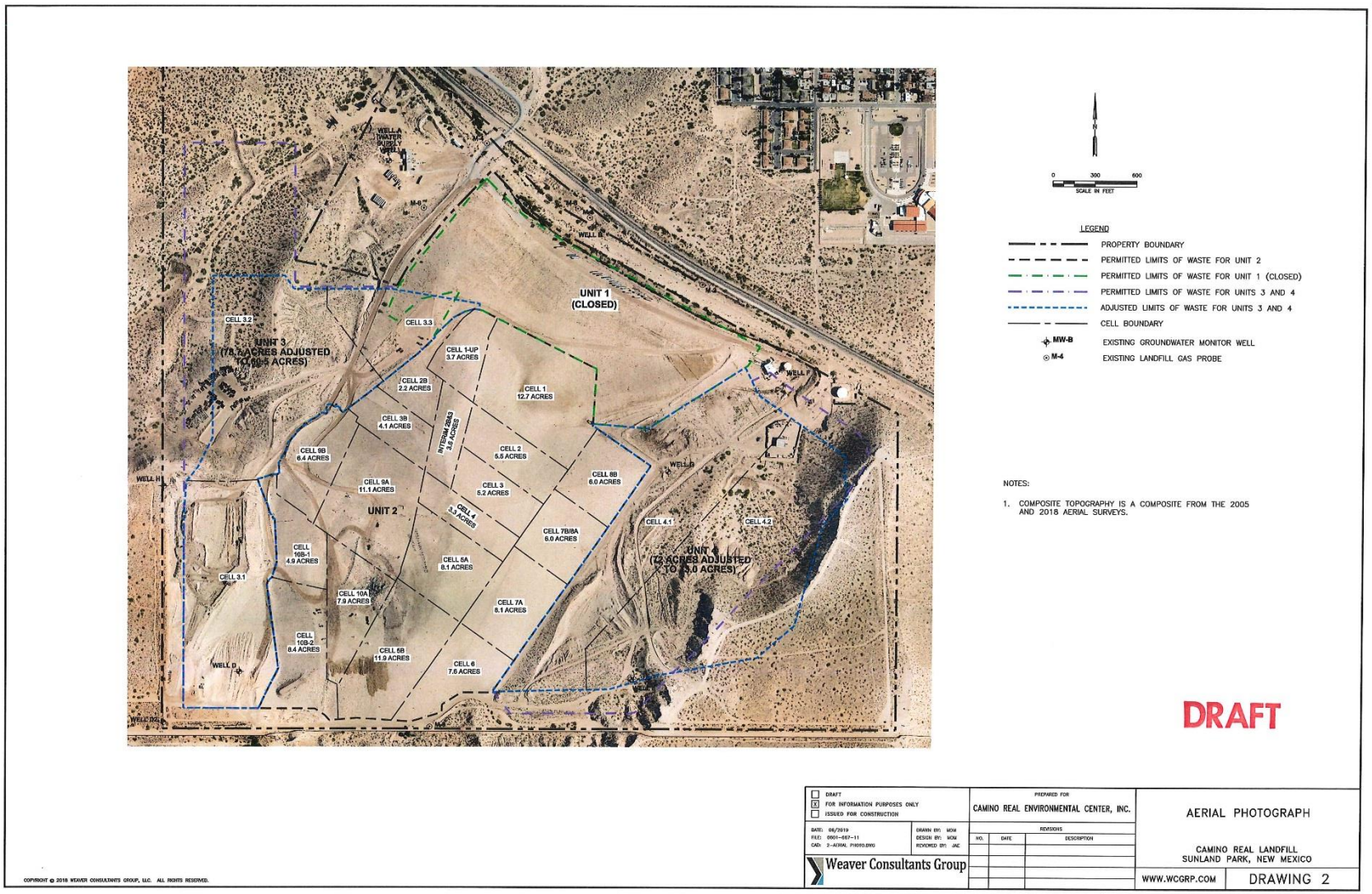

Figure 2. Project Detail Map

3. Noise-Sensitive Receivers

The primary receivers that are exposed to noise from the Landfill and associated traffic are located between the railroad tracks and NM 273 in neighborhoods that contain numerous residences, the Desert View Elementary School, and the Sunland Park Elementary School. The residences along the southwest edges of these neighborhoods and the two schools are the closest to noise sources on the Landfill site. Vacant land between the railroad tracks and the existing neighborhoods is zoned for residential use, so additional housing could develop in this area. The residences that are adjacent to Camino Real Drive are exposed to noise from traffic associated with the Landfill. The commercial and residential development along NM 273 is generally already subject to noise from the high volume of traffic on this roadway and would likely not experience significant additional noise related to the Landfill.

4. Noise Measurement Units and Properties

The relative loudness of sound or noise is described in units of decibels (dB), a measure of sound pressure on a logarithmic scale. A level of 0 dB is roughly equal to the threshold of human hearing, 55-65 dB is the range of normal conversation, and a level of 120 dB is often considered the threshold of pain. For community impact assessments, noise is typically averaged over a peak or representative period and is expressed as an equivalent noise level (Leq). An A-weighted filter is also used to correlate physical noise levels with the frequency sensitivity of human hearing and the subjective response to noise. Thus, community noise is generally discussed as average noise levels (Leq) in A-weighted decibels (dBA).

The difference in daytime and nighttime noise is also important to the degree of impact or annoyance experienced; noise is more disturbing at night than during the day. Noise metrics have been developed to account for the varying noise levels over time to help assess community response to day and nighttime levels. The day-night average noise level (Ldn) represents the 24-hour Leq with a 10-dBA penalty added to the “nighttime” levels between 10:00 pm and 7:00 am.

Human response to noise and the level of annoyance experienced varies with individuals. Generally, the more a new noise exceeds existing ambient noise, the less acceptable it is perceived. Typical experience of changes in noise is described below.

- A 3-dBA change is just perceptible
- A 5-dBA change is clearly perceptible and experienced as a 50-percent increase
- A 10-dBA change is perceived as a doubling in loudness and typically experienced as an adverse effect

5. Regulatory Requirements Associated with Noise

Federal, state, and local regulations and policies are established to limit noise exposure at noise-sensitive land uses. Regulations vary among agencies and jurisdictions, with different noise standard levels of acceptability or impact. These are briefly described below.

5.1 Noise Control Act of 1972

The Noise Control Act of 1972 establishes guidelines for acceptable noise levels for sensitive receivers such as residential areas, schools, and hospitals. The levels set forth are 55-dBA Ldn for outdoor use areas, 45-dBA Ldn for indoor use areas, and a maximum level of 70-dBA Ldn for all areas. These levels provide guidance for local jurisdictions, but do not have regulatory enforceability. In the absence of applicable noise limits, these levels may be used to assess the acceptability of project-related noise.

5.2 U.S. Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) also has guidelines for acceptable noise levels for sensitive receivers such as residential areas, schools, and hospitals (24 CFR 51). HUD's noise levels include guidance for the desirable noise level and for the maximum acceptable noise level. The desirable noise level established by HUD conforms to the Noise Control Act guidance of 55-dBA Ldn for residential outdoor use areas and 45-dBA Ldn for residential indoor areas. The HUD standard establishes a maximum acceptable noise level of 65-dBA Ldn for outdoor areas of residential land uses.

5.3 Federal Highway Administration

The Federal Highway Administration (FHWA) has established policies and procedures for evaluating traffic noise along roadways where federal funding will be utilized for improvements (FHWA 2011). The noise standards of the FHWA are based on a 1-hour dBA Leq, calculated during the peak hour of traffic noise. According to FHWA procedures, noise abatement must be considered when predicted traffic noise levels approach or exceed specified noise abatement criteria (NAC) defined for various land-use categories or when predicted future noise levels exceed existing levels by 10 dBA or more. In New Mexico, the term "approach" is defined as being within 1-dBA of the appropriate NAC. Noise impacts for sensitive land uses such as residential areas, schools, and hospitals occur when predicted noise levels approach or exceed 67 dBA (approach = 66 dBA) or when implementation of a roadway project results in a 10-dBA increase over existing noise levels. The NAC for commercial or other similar non-noise-sensitive areas is 72 dBA.

For purposes of this noise evaluation, the HUD standard of 55 dBA Ldn is considered the desireable threshold for sensitive land uses with a maximum acceptable noise level of 65-dBA Ldn for outdoor areas. The FHWA's criterion of 66 dBA Leq is considered the maximum acceptable level during the peak hour of traffic noise.

6. Site Visit and Noise Measurements

A field visit to the Landfill was conducted on December 12, 2019, to become familiar with site operations and perform noise measurements in the surrounding community. Noise levels vary considerably in a community such as Sunland Park with time of day and proximity to noise sources (vehicular traffic, railroad operations, overhead airplane flights, commercial and industrial land uses, and general neighborhood activities like barking dogs, lawn mowing, or outdoor music). Typically, busy streets and commercial areas are noisy, in the 55 to 70 dBA range, and residential neighborhoods are relatively quiet, in the 45 to 55 dBA range. Three measurements were taken representing areas with different expected ambient noise levels. The measurement locations, shown on Figure 1, included 1) the Desert View Elementary School along Linda Vista Drive, 2) the southeast corner of Camino Real Drive and Mt. Cristo Rey Boulevard, and 3) the southeast corner of NM 273 and Hondo Court. Measurements were collected between approximately 3:00 to 4:20 PM for minimum 15-minute periods [1]. Traffic counts and classifications of autos, medium trucks (two axles but more than four tires), and heavy trucks (three or more axles) were recorded at measurement locations 2 (Camino Real Drive) and 3 (NM 273). The measured noise levels and traffic counts (converted to hourly totals) are shown in Table 1.

Table 1. Measured Noise Levels (dBA Leq) and Traffic Volumes (vehicles per hour)

Measurement Location/Period	Autos	Medium Trucks	Heavy Trucks	Measured Noise dBA Leq
1. Desert View Elementary School mid-block on Linda Vista Drive: 3:01 to 3:16 PM	NA	NA	NA	47.5
2. 70 feet from edge of pavement on Camino Real Drive at Mt. Cristo Rey Boulevard: 3:30 to 3:45 PM	60	8	20	60.1
3. 70 feet from edge of pavement on NM 273 at Hondo Court (this location was outside the current construction zone): 3:53 to 4:08 PM	1,160	80	52	67.4

The measurements are not intended to be an exhaustive inventory of community noise, but represent typical ambient levels in 1) a quiet, mostly residential neighborhood, 2) a busy minor street with heavy truck traffic from the Landfill, and 3) a busy major thoroughfare with a large volume of relatively high-speed traffic and numerous trucks.

[1] Statistical accuracy requires minimum measurements of approximately 8 minutes. Most highway agencies typically use 15-minute time periods to represent the Leq (FHWA 2011). Noise was measured using a Larson Davis Sound Track LxT1, Type I Integrating Sound Level Meter (serial number 6053), which was calibrated before and after each session. Atmospheric conditions were clear and wind speed was light and variable during noise data collection and had little effect on sound propagation.

7. Predicted Noise Levels

7.1 Landfill Operations

To estimate future noise resulting from the operation of the Landfill, the FHWA's Roadway Construction Noise Model (RCNM) was utilized. The RCNM is the FHWA's national model for the prediction of construction noise, based on actual sound-level measurements from various equipment types. The RCNM incorporates an extensive construction equipment noise database and allows these parameters to be modified according to each user's needs. Although the Landfill is not a road construction project, the RCNM includes noise data for similar types of equipment. The model allows analysis of specific pieces of equipment with defined multiple receptor locations, land-use types, and baseline noise levels.

The RCNM was used to calculate existing and future noise from the Landfill at five receivers located to represent typical areas where the community could potentially be exposed to noise during daily operations. As shown on Figure 1, these include 1) residences along Rita Street immediately adjacent to the northern part of the Landfill (Unit 3), 2) residences along Monte Vista Court closest to the center of the Landfill (Units 1 and 2), 3) El Buen Pastor church in the center of the surrounding residential neighborhood, 4) Desert View Elementary School nearest to the southeastern part of the Landfill (Unit 4), and 5) residences along Loma Linda Court near the Sunland Park Elementary School and the southeastern part of the Landfill (Unit 4). Inputs to the RCNM included typical equipment use (1 dozer, 1 compactor, 1 loader, 1 scraper, and 1 water truck). Table 2 shows the distance to the five receivers from the nearest point in each of the three Landfill units and cells where existing or future operations are proposed, and the resulting noise levels calculated with the RCNM.

Table 2. Predicted Landfill Operational Noise Levels and Distances from Landfill to Receivers

Landfill Operations Noise Receiver Location	Unit 3: Cell 3.1		Unit 3: Cell 3.2		Unit 4: Cells 4.1 and 4.2*	
	Distance feet	Noise dBA Leq	Distance feet	Noise dBA Leq	Distance feet	Noise dBA Leq
1. Rita Street-Residential	4,750	44.5	3,240	47.8	5,600	43.0
2. Monte Vista Ct.-Residential	4,650	44.7	3,425	47.3	2,550	49.9
3. Sierra Vista Dr.-El Buen Pastor Church	6,230	42.1	5,095	43.9	3,200	47.9
4. Desert View Elementary School	4,925	44.2	4.010	45.9	1,780	53.0
5. Loma Linda Ct.-Residential/School	6,070	42.3	5,440	43.3	2,035	51.8

* Unit 4: Cells 4.1 and 4.2 are considered together because of their proximity to each other.

7.2 Landfill Traffic

To evaluate Landfill traffic-related noise levels, the FHWA's Traffic Noise Model (TNM) (Version 2.5) (FHWA 2004) was used. Inputs to the TNM model include site-specific information on traffic volumes and speeds, vehicle classifications, roadway geometry, and site acoustical properties to predict hourly noise levels at selected locations. The model uses x, y, and z coordinates to spatially represent roadway noise line sources, receivers, and features such as noise barriers or terrain lines that abate noise over distance. The model results are peak hour noise levels as dBA Leq.

The TNM model was used to evaluate noise from Landfill traffic at residential receivers adjacent to Camino Real Drive. It was assumed that Landfill traffic would become disbursed with existing traffic on NM 273 and other streets and its contribution to roadway noise would not be discernable. As described in Section 2, the Landfill generates about 400 trips per day in each direction, including about 210 heavy trash trucks and 190 personal vehicles. Because the TNM model calculates the peak hour of traffic noise, it was assumed that 20-percent of the daily volume would occur during the peak hour. This would amount to 42 trucks in each direction and 38 personal vehicles, assumed to include 30 autos (80-percent) and 8 medium trucks (20-percent). Traffic noise levels were calculated at two receivers representing the closest residences on the east and west sides of Camino Real Drive (see Figure 1). The distance from the centerline of Camino Rael Drive to these receivers is approximately 140 feet (west side) and 165 feet (east side). Other residences along the roadway are at greater distances. The results of the TNM model are shown in Table 3.

Table 3. Predicted Landfill Traffic-Related Noise Levels

Traffic Noise Receiver Location	Modelled Noise dBA Leq
1. West side Camino Real Drive, 140 feet from centerline	59.7
2. East side Camino Real Drive, 165 feet from centerline	58.9

8. Conclusions

The predictions show that both Landfill operations and traffic-related noise would fall within the applicable standards. For current Landfill operations in Cell 3.1, the HUD desirable threshold of 55 dBA Ldn would be achieved at all times. Predicted noise levels for Cell 3.1 are below 45 dBA Leq; therefore, even with the 10-dBA penalty added to "nighttime" levels to calculate Ldn, noise would remain below 55 dBA Ldn. Noise levels for operations in Cell 3.2 and Unit 4 would slightly exceed the 55 dBA Ldn desirable threshold at some locations during operations between 5:30 and 7:00 AM; however, the maximum acceptable noise level of 65-dBA Ldn would not be exceeded. Noise was calculated with the RCNM at points within the Landfill nearest to the receivers, but over time most operations would occur at greater distances, thus noise levels would be lower than those predicted. The analysis of traffic noise shows that the FHWA's standard for residential land uses would not be approached or exceeded.

9. References

24 CFR Part 51, Subpart B - Noise Abatement and Control.

Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. FHWA-HEP-06-015. August 2006.

FHWA. 2011. Highway Traffic Noise: Analysis and Abatement Guidance. FHWA-HEP-10-025.

FHWA. 2004. Traffic Noise Model (Version 2.5): report no. FHWA-PD-96-010.

Noise Control Act of 1972, P.L. 92-574, 86 Stat. 1234, 42 U.S.C. § 4901 - 42 U.S.C. § 4918.