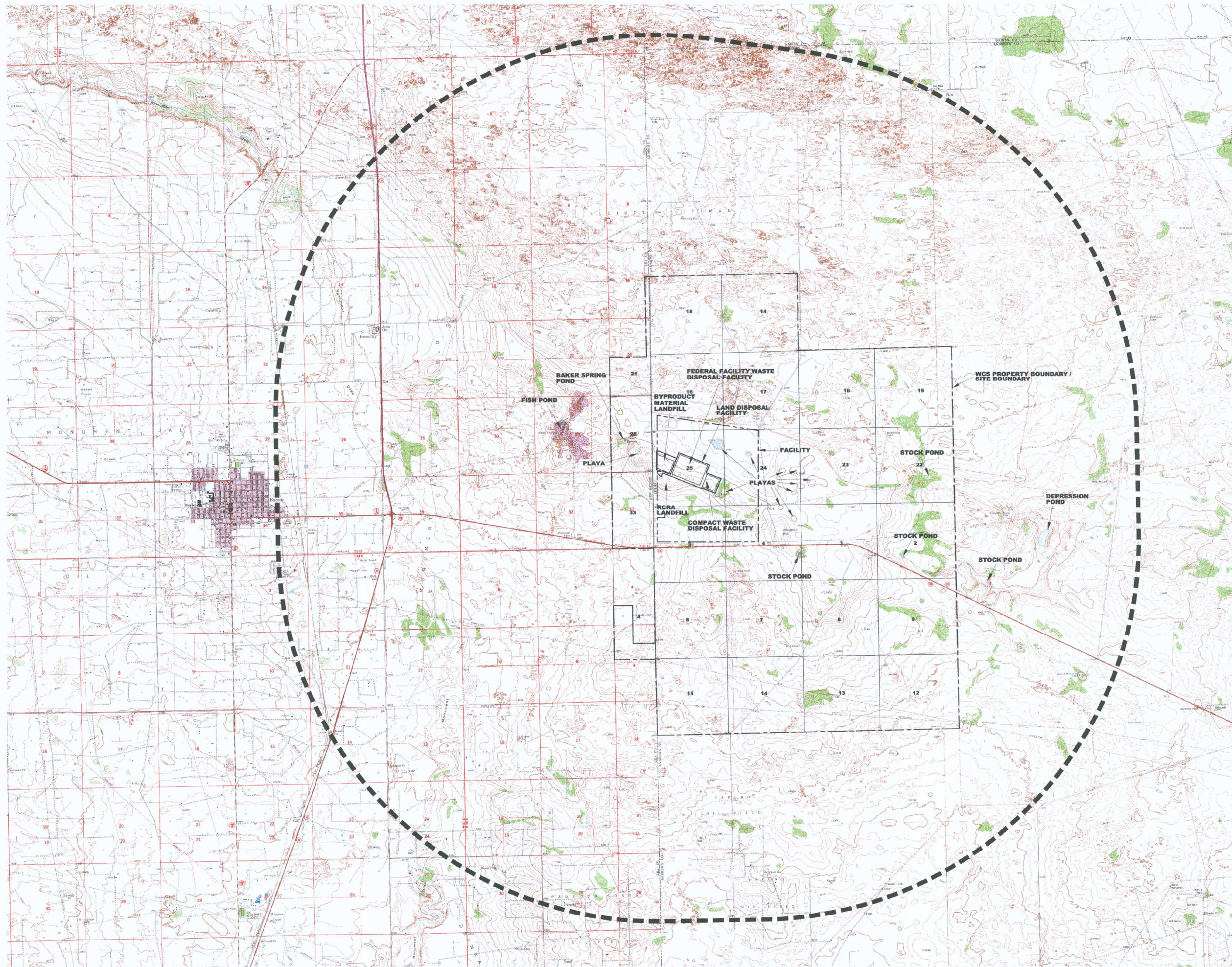


- LEGEND**
- LAND DISPOSAL FACILITY
 - - - FACILITY
 - - - SITE BOUNDARY
 - 5 MILE RADIUS
 - 25 SECTION NUMBERS

- NOTES**
1. SITE IS EQUIVALENT TO LAND DISPOSAL FACILITIES.
 2. FACILITY IS DEFINED AT 30 TAC § 305.2(14).
 3. ALL PLAYAS OUTSIDE THE FACILITY BOUNDARY ARE NOT IDENTIFIED.

May 15, 2007 WCS Letter to USACOE
Enclosure 2 Figure 2



THIS DRAWING IS ISSUED FOR PERMITTING PURPOSES ONLY. IT IS NOT INTENDED FOR BIDDING OR CONSTRUCTION.

BASE MAP SOURCE: WWW.GEOCOMM.COM
USGS 7.5 MIN. TOPOGRAPHIC QUADRANGLE:
EUNICE NE, 1969, PHOTOREVISED 1979
FRANKLIN CITY SW, 1971
JUNIOR HILL, 1971
ERINSON RANCH, 1971
HOBBES SW, 1969, PHOTOREVISED 1979
HOBBES SW, 1969, PHOTOREVISED 1979
EUNICE, 1969, PHOTOREVISED 1979
RATTLESNARE CANYON, 1969, PHOTOREVISED 1979
EUNICE SE, 1969, PHOTOREVISED 1979

REV.	DATE	DESCRIPTION	DR BY	APP BY
1	3/07	ADDED BYPRODUCT LANDFILL	SDB	

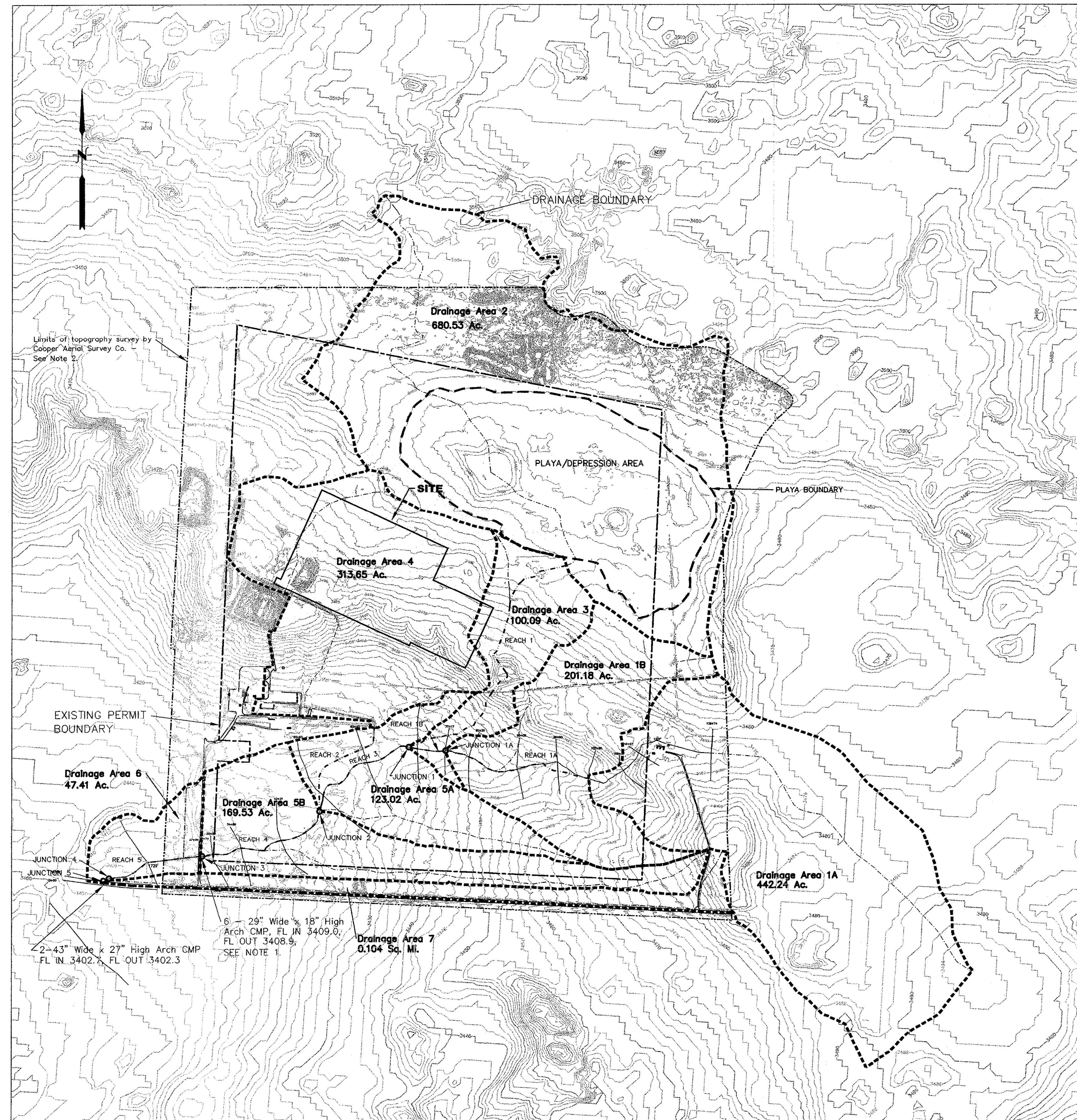


COOK-JOYCE INC.
ENGINEERING AND CONSULTING
612 WEST ELEVENTH
AUSTIN, TEXAS 78701

PROJECT:
WASTE CONTROL SPECIALISTS LLC
ANDREWS COUNTY, TEXAS

SHEET TITLE:
SURFACE WATER BODIES

DES BY	SDB	SCALE: SEE BAR SCALE
DR BY	SDB	PROJECT NO. 03047.05
CHK BY	DHG	CJI NO. 03047138R12a
APP BY	DHG	SHEETS 2 OF 2 SHEETS
DATE ISSUED: 11-30-2005		FIGURE NO. 2.2.1-2



LEGEND

- PLAYA AREA BOUNDARY
- DRAINAGE AREA BOUNDARY
- LIMITS OF TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEY CO.
- EXISTING PERMIT BOUNDARY
- REACH LENGTH
- TRAVEL TIME FLOW PATH
- JUNCTION

May 15, 2007 WCS Letter to USACOE
Enclosure 2 Figure 3

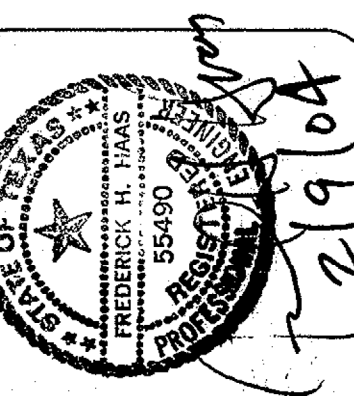


Diana S. Dvorak
10/14/04
Sealed for evidence of
addition of site
boundary.

NOTES:

- Existing pipe sizes taken from field observation. Pipe flowlines taken from Survey by West Texas Consultants, Inc., 305 NW Ave. C, Andrews, TX 79714, (915) 523-2181, Fax: (915) 524-2346, dated 10/07/96.
- Existing topographic information within the limits shown is provided by Cooper Aerial Survey Co., 11402 N. Cave Creek Road, Phoenix, AZ 85020, (602) 678-5111 Fax: (602) 678-5228, 1-800-229-2279.
- Existing topographic information outside the limits shown is based on a digital elevation model (DEM) provided by The Texas Natural Resources Information System (TNRIS).
- Permit boundary and facility information provided by Waste Control Specialists LLC.

Drainage Area Map
SCALE: 1" = 100'



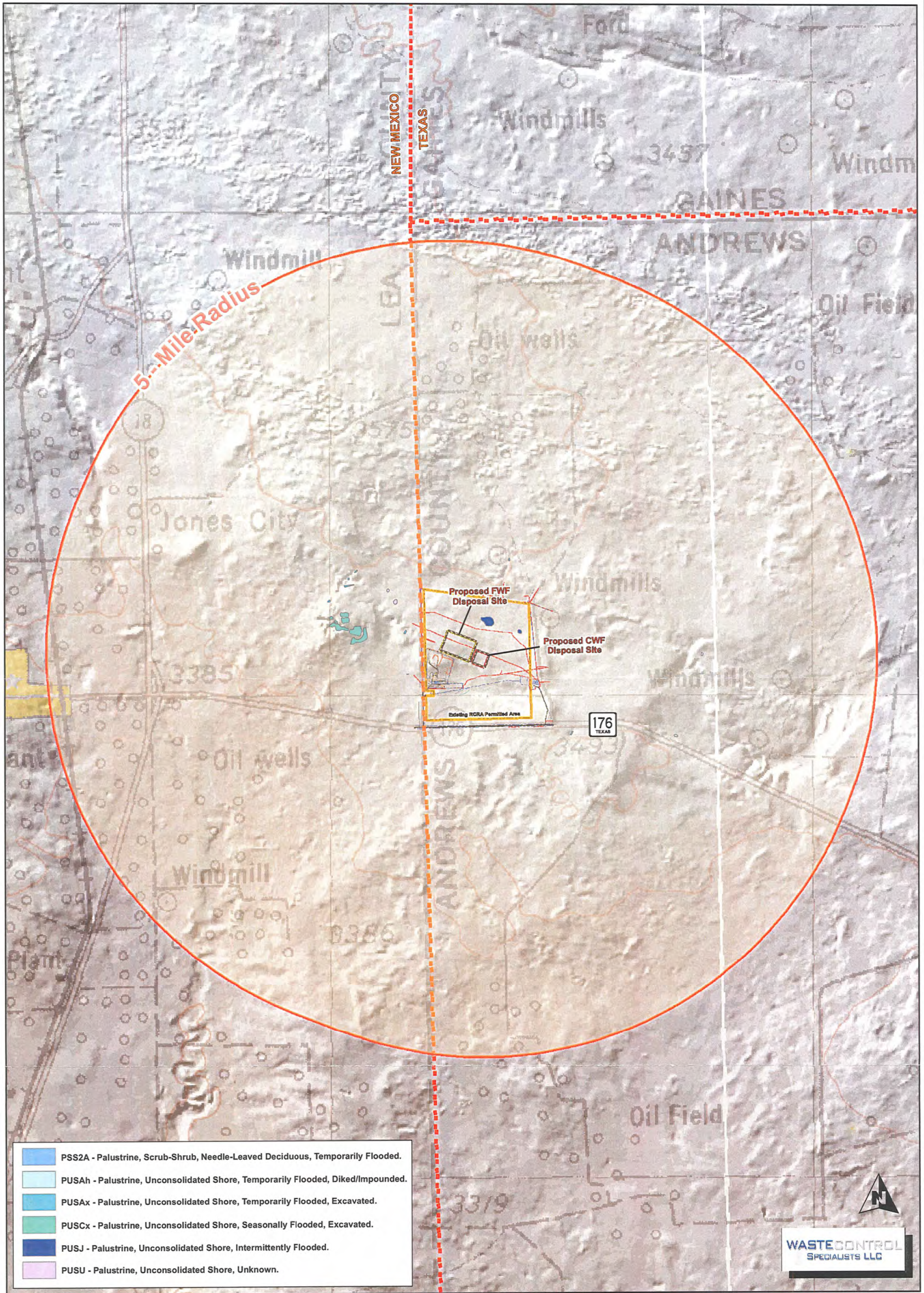
FREDERICK H. HAAS, P.E.
CONSULTING ENGINEER
52-478-8880
988 A SUMMIT BEND
AUSTIN, TEXAS 78756
FAX 512-478-8883



WASTE CONTROL SPECIALISTS LLC
Andrews County, Texas

DGD	DGD	FHH	WCS
2/09/04			DrainageMap
DRAWN BY:	DESIGNED BY:	CHECKED BY:	DATE:
REVISOR:	JOB NAME:	DRAWING NAME:	

II.F.1



Wetlands Location Map

Figure 2.4.2

May 15, 2007 WCS Letter to USACOE
Enclosure 2 Figure 4



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Austin Ecological Services Field Office

10711 BURNET ROAD, SUITE 200

AUSTIN, TX 78758

PHONE: (512)490-0057 FAX: (512)490-0974

URL: www.fws.gov/southwest/es/AustinTexas/;
www.fws.gov/southwest/es/EndangeredSpecies/lists/

Consultation Code: 02ETAU00-2015-SLI-0219

April 14, 2015

Event Code: 02ETAU00-2015-E-00178

Project Name: WCS

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:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that *may* occur within the county of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please note that new information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Also note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of federally listed as threatened or endangered species and to determine whether projects may affect these species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

While a Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment, the Federal Agency must notify the Service in writing of any such designation. The Federal agency shall also independently review and evaluate the scope and content of a biological assessment prepared by their designated non-Federal representative before that document is submitted to the Service.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by a federally funded, permitted or authorized activity, the agency is required to consult with the Service pursuant to 50 CFR 402. The following definitions are provided to assist you in reaching a determination:

- *No effect* – the proposed action will not affect federally listed species or critical habitat. A “no effect” determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.
- *May affect, but is not likely to adversely affect* – the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effect. The Federal agency or the designated non-Federal representative should consult with the Service to seek written concurrence that adverse effects are not likely. Be sure to include all of the information and documentation used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.
- *Is likely to adversely affect* – adverse effects to listed species may occur as a direct or indirect result of the proposed action. For this determination, the effect of the action is neither discountable nor insignificant. If the overall effect of the proposed action is beneficial to the listed species but the action is also likely to cause some adverse effects to individuals of that species, then the proposed action “is likely to adversely affect” the listed species. The analysis should consider all interrelated and interdependent actions. An “is likely to adversely affect” determination requires the Federal action agency to initiate formal section 7 consultation with our office.

Regardless of the determination, the Service recommends that the Federal agency maintain a complete record of the evaluation, including steps leading to the determination of effect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

Migratory Birds

For projects that may affect migratory birds, the Migratory Bird Treaty Act (MBTA) implements various treaties and conventions for the protection of these species. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Migratory birds may nest in trees, brushy areas, or other areas of suitable habitat. The Service recommends activities requiring vegetation removal or disturbance avoid the peak nesting period of March through August to avoid destruction of individuals, nests, or eggs. If project activities must be conducted during this time, we recommend surveying for nests prior to conducting work. If a nest is found, and if possible, the Service recommends a buffer of vegetation remain around the nest until the young have fledged or the nest is abandoned.

For additional information concerning the MBTA and recommendations to reduce impacts to migratory birds please contact the U.S. Fish and Wildlife Service Migratory Birds Office, 500 Gold Ave. SW, Albuquerque, NM 87102. A list of migratory birds may be viewed at <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtintro.html>. Guidance for minimizing impacts to migratory birds for projects including communications towers can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>. Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Finally, please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html).

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: WCS

Official Species List

Provided by:

Austin Ecological Services Field Office

10711 BURNET ROAD, SUITE 200

AUSTIN, TX 78758

(512) 490-0057

<http://www.fws.gov/southwest/es/AustinTexas/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02ETAU00-2015-SLI-0219

Event Code: 02ETAU00-2015-E-00178

Project Type: Land - Disposal / Transfer

Project Name: WCS

Project Description: Disposal of low-level radioactive waste

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: WCS

Project Counties: Andrews, TX



United States Department of Interior
Fish and Wildlife Service

Project name: WCS

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your 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. Note that 3 of these species should be considered only under certain conditions. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Least tern (<i>Sterna antillarum</i>) Population: interior pop.	Endangered		Wind Energy Projects
Lesser prairie-chicken (<i>Tympanuchus pallidicinctus</i>)	Threatened		
northern aplomado falcon (<i>Falco femoralis septentrionalis</i>) Population: Entire, except where listed as an experimental population	Endangered		
Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed	Threatened	Final designated	Wind Energy Projects
Red Knot (<i>Calidris canutus rufa</i>)	Threatened		Wind Energy Projects



United States Department of Interior
Fish and Wildlife Service

Project name: WCS

Critical habitats that lie within your project area

There are no critical habitats within your project area.



COX | McLAIN Environmental Consulting

TRANSMITTAL MEMO

Cox | McLain Environmental Consulting, Inc.

6010 Balcones Drive, Suite 210
Austin, TX 78731
www.coxmclain.com
(512) 338-2223

To: Tiffany Osburn, THC

CC: Scott Kirk, WCS

From: Chris Dayton, CMEC

Date: 07/02/15

RE: Draft Report Submittal: *Intensive Archeological Survey of the Proposed Waste Control Specialists Spent Nuclear Fuel Consolidated Interim Storage Facility, Andrews County, Texas* (NRC)

RECEIVED
JUL 02 2015

Dear Ms. Osburn:

Please find enclosed one (1) unbound copy of the draft report *Intensive Archeological Survey of the Proposed Waste Control Specialists Spent Nuclear Fuel Consolidated Interim Storage Facility, Andrews County, Texas*. The work was carried out under Texas Antiquities Permit 7277 and Section 106 of the National Historic Preservation Act, as amended.

The archeological area of potential effects (APE) consists of the 216.6-acre footprint of the proposed facility. The APE was found to be heavily disturbed by recent grading and road construction and also contained ubiquitous evidence of chaining, root-plowing, and/or brush-hogging in the last several decades, likely related to the parcel's previous use for livestock ranching. The survey consisted of pedestrian examination due to the extent of previous disturbance, the lack of alluvial or dune deposits in the APE, and the high visibility of the ground surface. No archeological materials of any kind were observed within the APE, and no further work is recommended within the APE prior to the construction of the proposed storage facility.

Please do not hesitate to call or email if you have any questions or comments.

Sincerely,

Chris Dayton, PhD, RPA
chris@coxmcclain.com
(512) 338-2223





Susana Martinez
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

August 12, 2015

Emily Reed
Cox/McLain Environmental Consulting
6010 Balcones Drive New Mexico State Parks Division *Sk 210*
~~1220 South St. Francis Dr.~~ *Austin, TX 78731*
~~Santa Fe, NM 87501~~

RE: Consolidated Interim Spent Fuel Storage Facility (HPD log 101784)

Dear Ms. Reed,

On behalf of the New Mexico State Historic Preservation Officer (NMSHPO) I have completed a review of the information provided by Cox/McLain Environmental Consulting concerning the Consolidated Interim Spent Fuel Storage Facility in Andrews County, Texas. The NMSHPO appreciates your efforts to provide us with this information and to comment on the project's potential to affect historic properties in New Mexico. This letter provides NMSHPO comments for the project.

The SHPO concurs that no additional cultural resources identification efforts are needed for this undertaking with the condition that all new ground-disturbing and construction activities are confined to Texas. If, however, any construction related ground- disturbances such as staging areas, equipment or materials storage yards, or access roads are needed in New Mexico, then a cultural resource survey will be required to identify and evaluate historic properties in the area of potential effects.

If you have any questions or comments, please feel free to call me directly at (505) 827-4225 or email me bob.estes@state.nm.us.

Sincerely,

Bob Estes Ph.D.
HPD Staff Archaeologist



May 5, 2015

FORBES
Sarah Birtchet
Texas Historical Commission
History Division
P.O. Box 12276
Austin, TX 78711

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED

by 
for Mark Wolfe
State Historic Preservation Officer
Date 6/1/15

MAY 06 2015

**Re: Project Review under Section 106 for a Proposed Consolidated Interim Spent Fuel Storage Facility
in Andrews County, Texas**

FORBES
Dear Ms. Birtchet:

Waste Control Specialists LLC (WCS) intends to file an application for a license for the independent storage of spent nuclear fuel and reactor-related, greater-than-Class C wastes at a site in western Andrews County, Texas (see **Figure 1**, attached). These activities are regulated by the U.S. Nuclear Regulatory Commission (NRC); the project is therefore subject to Section 106 of the National Historic Preservation Act. This letter addresses historic resources; archeological resources are being coordinated under separate cover. The site is in the northwestern-most corner of Andrews County and is immediately adjacent to the Texas/New Mexico state line; this project is also being shared with the New Mexico State Historic Preservation Office (SHPO).

A previous license for disposal of low-level radioactive waste on the WCS complex was coordinated with the Texas Historical Commission (THC) and the New Mexico SHPO in 2006. The THC and New Mexico SHPO concurred that there would be no historic properties affected on July 20, 2006, and July 21, 2006 respectively.

Project Description

WCS is requesting authorization from the NRC to construct and operate a Consolidated Interim Spent Fuel (CISF) storage facility for spent nuclear fuel on approximately 100 acres of land within the approximately 14,000-acre complex owned by WCS (see **Figure 2**). The project is located in a remote area approximately five miles east of Eunice, New Mexico and north of Highway 176 (also named Highway 87). The area is surrounded by a high density of oil wells to the west and some oil wells to the north; there is little development to the south and east, excluding portions of the existing WCS facility. Operations at the WCS facility began in 1994; none of the development is historic-age.

The proposed facility would house a dry cask storage system. WCS is exploring several different options for the system. One option would be an above-ground system utilizing several low-rise buildings (see **Figure 3**), while another option would store the casks underground. Both the above-ground and below-ground design options are assumed to require the presence of a crane approximately 60 feet in height during the operating license timeframe.

Historic Resources Area of Potential Effect

The Area of Potential Effect (APE) for direct impacts is proposed as the project footprint (see **Figure 4**). Taking into consideration the height of the crane that would be required, the height of the potential above-ground facility, and the relatively flat surrounding terrain, the APE for indirect/visual impacts is



proposed as a one-mile radius from the proposed project footprint (see **Figure 4**). WCS anticipates that the NRC will issue a Final Environmental Impact Statement and License by April 1, 2019. Therefore, a historic-age date of 1974 (45 years prior to 2019) is proposed.

According to a search of the digital Sites Atlas maintained by the THC, no known historic cemeteries, Official State Historical Markers (OSHM), State Antiquities Landmarks (SALs), or properties or districts listed on the National Register of Historic Places (NRHP) are located within the APE for direct or indirect impacts. The nearest previously identified resource is the OSHM for Andrews County, located approximately 17 miles southeast of the project area.

Adjacent to the WCS facility to the west is a large uranium enrichment plant called the National Enrichment Facility, operated by Urenco. This facility was developed within the past 15 years. The proposed project area is located in a very remote area of Texas with little development aside from the non-historic age WCS and Urenco facilities. The proposed project would not result in a direct effect to any historic resources. There do not appear to be any historic resources 45 years or older (dating to 1974 or earlier) within the one-mile indirect effects APE.

The nearest developed area is Eunice, New Mexico, which is located approximately five miles west of the proposed site. There are two large visual obstructions between viewers in Eunice and the proposed crane at the site: red soil mounds approximately 100 feet in height on WCS property, and the Urenco facility (see **Figure 5**). Based on information from WCS, the soil mounds will be in place indefinitely or potentially utilized as fill. As illustrated in **Photos 3-5** in the attached photo sheets, the red soil mounds and the Urenco facility are visible from the outskirts of Eunice but tend to dissolve visually into the horizon. Excluding the crane, the CISF storage facility would be approximately 30 feet above the surface and less visible from Eunice than existing features and structures.

Request for Concurrence

It is the professional opinion of CMEC cultural resources personnel that further historic resources investigations are not warranted prior to construction. We ask for your concurrence with this finding.

Should you have any questions, please contact me at EmilyR@coxmcclain.com or 512-338-2223.

Sincerely,

Emily Reed, Architectural Historian
Cox|McLain Environmental Consulting, Inc.

Attachments

- Figure 1: General Project Location Map
- Figure 2: Detail Facility Map
- Figure 3: Potential CISF Storage Facility Site Design Renderings
- Figure 4: Proposed APE for Historic Resources
- Figure 5: Viewshed Analysis
- Contextual Photographs