

ENVIRONMENTAL ASSESSMENT
EA-NM-067-95-239
Serial No. NM-93931
(Southwestern Public Service)

I. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The proposed actions are to grant a right-of-way to Southwestern Public Service (SPS) for the construction of an overhead powerline, and for SPS to construct a new replacement substation of Department of Energy (DOE) managed lands at the Waste Isolation Pilot Plant (WIPP). The DOE proposes to fund both of these actions. The Bureau of Land Management (BLM), in accordance with the Memorandum of Understanding Between the U. S. Department of Energy and the U. S. Department of the Interior, dated July 19, 1994, is preparing this EA to analyze these related actions, since the majority of the impacts of these actions would be experienced on BLM managed lands. The location of the proposed powerline is in Eddy and Lea Counties, New Mexico. The legal land description is:

T. 23 S., R. 31 E., NMPM
Sec. 20: ~~SEANEX~~,
Sec. 21: ~~SYNPA~~,
Sec. 22: ~~SYNPA~~,
Sec. 23: ~~SYNPA~~,
Sec. 24: ~~SWANEX~~, ~~SYNWA~~, ~~WASEX~~,
Sec. 25: ~~WAEEX~~,
Sec. 36: ~~WAEEX~~.

T. 24 S., R. 31 E., NMPM
Sec. 1: Lot 2, ~~SWANEX~~, ~~SEX~~.

T. 24 S., R. 32 E., NMPM
Sec. 6: Lot 7,
Sec. 7: Lot 1, ~~SWANEX~~, ~~EYANWA~~, ~~SEX~~,
Sec. 8: ~~SWASWA~~,
Sec. 16: ~~SWANWA~~, ~~NANWA~~,
Sec. 17: ~~SYNEX~~, ~~NANWA~~.

The location of the proposed WIPP substation is within:

T. 22 S., R. 31 E., NMPM
Section 21: ~~SWANWASWA~~.

SPS's proposal is for the construction, operation and maintenance of an overhead powerline known as the Sand Dunes to Ochoa project. This line and the construction of a new WIPP substation would provide a redundant electrical power source to the WIPP. If approved, the line will provide additional electrical power to the WIPP site, and would allow for future SPS uses should it be necessary. The powerline would not traverse any WIPP lands, but would eventually tie into an existing line that does provide power to the WIPP site. The line will be a 115 KV transmission line. The structure for this line will be a 2-pole H frame wood poles. The poles would be spaced approximately 700 feet apart. Some of the structures will also include guy wires. The line will be used year round for a 30 year period. Length of the line will be 19.8 miles (104,544 feet) and will have a right-of-way width of 60 feet. The majority of the line would parallel an existing powerline and road right-of-way corridor (see attached map).

The proposed new ring-bus substation would measure approximately 300 feet north to south and 160 feet east to west. The substation would be

mech
units?

designed and constructed for 115,000 volt operation. The design would allow for power to be supplied to the WIPP from either or both transmission lines (new line from Sand Dunes/Ochoa and existing line from No. 1/Potash JNC) and substation transformers. Two 13,800 volt underground feeders will be routed from the ring-bus substation - 100 feet north, then west - 150 feet, then south - 100 feet to the WIPP's existing SPS plant substation.

The new substation would be enclosed by a chain link fence; 7 feet in height with 3-strand barbed wire, 45 degree security top slanted outward from the substation proper.

If the new electrical facilities were approved and became operational, WIPP's existing temporary substation would then be demolished. Demolition would include removal of all equipment, concrete slabs, structures, fences, overhead 69,000 volt transmission lines, utility poles, and underground cable.

Construction of the line and substation would be expected to sometime in January of 1996 and would be completed by March of 1996. No temporary work areas would be required for this powerline project.

The proposed action is 1) to grant a right-of-way to SPS for the construction of a 115 KV in accordance with the Standard Stipulations for Overhead Powerlines in the Roswell District, BLM (refer to the Grant, Exhibit A), and 2) for the SPS to construct a new substation of WIPP lands as described above. SPS would retain ownership and maintenance responsibilities for both the powerline and substation.

B. Purpose and Need for Action:

The WIPP is anticipated to require increased electrical capacity, reliability, and operational flexibility. The existing, temporary single-feed WIPP substation and single power line does not provide a redundant power source and is not capable of delivering higher power levels and reliability. Continued reliance on the existing power supply arrangement could result in operating power levels exceeding substation capacity. Furthermore, a single component failure in the system could result in power being lost to the WIPP facility.

C. Alternatives

1. No Action

Under this alternative the right-of-way application for the powerline would be denied, and the powerline and substation would not be installed.

2. Change the Alignment--Reroute the Project.

An alternate route would be for the powerline to parallel county road 798 in a southerly direction beginning in section 24, T. 23 S., R. 31 E. to the point where the line intersects state highway 128 thus parallel the existing corridor.

DISCLAIMER

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II. DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Critical Elements

The following critical elements (subject to requirements specified in statute, regulation, or executive order) have been evaluated and are either not present or are not affected by the proposed action or the alternatives in this EA:

Areas of Critical Environmental Concern (ACECs)
Cultural/Archaeological Resources
Farm Lands (Prime or Unique)
Floodplains
Native American Religious Concerns
Threatened or Endangered (T&E) Species
Wastes, Hazardous and/or Solid
Water Quality, Drinking and Ground
Wetlands and Riparian Zones
Wild and Scenic Rivers
Wilderness

B. Land Status and Land Use

The proposed powerline is located approximately 30 miles southeast of Carlsbad, New Mexico. The regional industries are ranching, potash mining, and oil & gas development. Occasional use is seasonal hunting. Both the surface and mineral estates are in Federal ownership. The oil and gas leases are NM-38464, NM-38463, NM-0405444-A, NM-0533177-A, NM-0544986, NM-69369, NM-77064, NM-68084, NM-55953, NM-90812 & NM-16353.

The rights-of-way of record are as follows:

NM-14691 pipeline	NM-40908 pipeline	NM-16029 pipeline
NM-11150 pipeline	NM-63208 pipeline	NM-019244 highway
NM-14261 powerline		

Properties impacted by the construction of the WIPP substation are situated within the boundaries of the WIPP Land Withdrawal Area. Management of these lands are administered under the jurisdiction of the DOE in accordance with the principals of multiple land use. In addition to WIPP-specific activities within the Land Withdrawal Area, grazing and seasonal recreation (e.g. hunting) occur. Alternate industrial activities are prohibited.

C. Project Area Description

A topographic map of the project for the powerline area is attached as Appendix A. This map is from the Paduca Breaks Northwest, Bootleg Ridge and Los Medanos 7½' USGS Topographic Quadrangles.

Topography in the area is mainly gently rolling plains with sand dunes present throughout the area.

D. Access

The access to the proposed powerline is as follows: From Carlsbad, go east on state highway 62/180, then south on state highway 31, then southeast on state highway 128 (Jal Highway) to where the powerline would parallel a portion of the Jal Highway.

Access to the proposed WIPP substation is as follows: From mile marker 10 on state highway 128 (Jal Hwy.) proceed north on county road 802 for

approximately 2.7 miles to the intersection of 802 with the WIPP North Access Road. Turn left, and proceed .5 miles to the northernmost entrance to the WIPP facility, then turn east and continue along the north fence of the WIPP Property Protection Area to the construction area near the confluence of the north chain link fence and the east chain link fence.

E. Soils

Soils are characterized as sandy for both related actions. They are well drained and have no apparent drainage problems associated with them. Erosion potential may be significant if plant cover is lost. However, reseeding would be performed after the construction to the line and substation were completed to minimize erosion. See also, Section III C, Mitigation Measures.

F. Vegetation

Vegetation in the areas to be impacted consist mainly of shinnery oak, mesquite, creosote bush, little bluestem, snakeweed and san dropseed grass.

The field examination and a survey of available literature on threatened and endangered plant species found no known Federally listed, or State sensitive species located within the project area.

G. Wildlife

Wildlife in the area comprises mammalian, avian, reptilian, and invertebrate species. Mammal species include deer, foxes, coyotes, rabbits, skunks, various rodents and other small non-game mammals. Avian species consist of several raptor and passerine species. Reptiles are various snakes and lizards. There are no known threatened, endangered wildlife species in the area.

Species of concern that could potentially be located within the construction areas are as follows:

- Loggerhead Shrike (Lanius ludovicianus) - Federal Notice of Review
- * Swift Fox (Vulpes velox) - Federal Notice of Review
- Ornate Box Turtle (Terapene ornata) - Federal Notice of Review
- * Texas Horned Lizard (Phrynosoma cornutum) - Federal Notice of Review

H. Range

The proposed powerline would be within the following grazing allotments:

Antelope Ridge Allotment
J.C. Mills
P.O. Box 190
Abernathy, TX 79311

Allot. #7032
G.R. #6646

Fairview Allotment
Larry Bearden
Route 4, Box 532
Seminole, TX 79360

Allot. #6038
G.R. #6574

No range studies are present. With proper rehabilitation, the proposed project will not result in a permanent reduction of AUMs.

I. Visual Resource Management (VRM)

The subject lands for powerline construction are within a Class IV VRM area. In a Class IV area contrasts caused by a management activity may attract attention and be a dominate feature of the landscape. The powerline would be in an area where numerous oil and gas activities are ongoing.

The subject land area for substation construction are within and around other constructed WIPP facilities, e.g. fencing.

J. Cultural Resources

A cultural resource inventory was conducted for the proposed project. There was a site found during the inventory (see cultural report 95-NM-067-245). A cultural clearance was recommended provided the site be avoided and a monitor be present during construction.

A previously prepared WIPP archeological study, A Report on the Archaeological Site Locations in the WIPP Core Area with Mitigation Recommendations for Bechtel National, Inc. (80-167). was reviewed to look for potential sites that might have been located within the proposed for disturbance by the substation. No sites were located near the area proposed for disturbance. The referenced report had received approval from the New Mexico State Historic Preservation Officer.

K. Planning

The Carlsbad Resource Management Plan has been reviewed and it has been determined that the proposed powerline construction would be in conformance with the terms and conditions as required by 43 CFR 1610.5.

The proposed action does not conflict with any known local or State law, ordinance, planning or zoning. It is consistent with the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1761) and other BLM land use planning.

Section 9.0 of the WIPP Final Environmental Impact Statement (DOE/EIS-0026) addresses specific impacts associated with WIPP construction activities. Section 7.1.1 of the WIPP Final Supplement Environmental Impact Statement (DOE/WIPP 0026-FS) contains an evaluation of performing construction activities in the area in which the new substation would be constructed. Construction of the WIPP substation would be accomplished in accordance with pertinent DOE/WIPP land use regulations, and specifically would be performed within the constraints defined in the WIPP Land Use Management Implementation Plan (DOE/WIPP 94-026).

III. ENVIRONMENTAL IMPACTS

A. Proposed Action

Under this alternative the right-of-way to SPS for the construction of an overhead powerline would be approved. SPS would construct the powerline and would construct a replacement substation within the WIPP Land Withdrawal Area. Approving the proposed action would provide the WIPP a redundant power supply, allow the WIPP to improve the quality of electrical power (experience fewer voltage sags and surges), increase WIPP's electrical capacity, reliability, and operational flexibility, and enhance electrical safety.

Environmental impacts resulting from the construction of the powerline would be minimal. Vegetation would be crushed from vehicular traffic

during construction. This, however, would be short term and mitigated by reseeded the right-of-way upon completion of construction. Fugitive dust would increase during construction and would be minimal. There would be minimal loss of vegetation associated with construction activities. No blading of the right-of-way corridor for the powerline shall be allowed. However, it is expected that some vegetation would be removed at the power pole locations. Similarly, it is anticipated that where vegetative cover is more dense, that clearing would be required to accommodate construction equipment used for line construction. Additionally, soils would be compacted and vegetation destroyed through construction activities. A potential for the powerline route to become a permanent road is a possibility unless precautions are taken to prevent this type of activity.

Wildlife would be temporarily displaced during construction. Rodents and small non-game mammals would be return upon completion of the project. The surface disturbance and associated loss of vegetation with this action would reduce food and cover available for wildlife. The line would not be a threat to raptors due to a required powerline construction design to prevent the electrocution of raptors. Powerlines do provide a perch for raptor hunting activities.

For the WIPP substation, vegetation would be removed from a 300 by 150 feet area. Anticipated surface impacts within the WIPP Land Withdrawal Area would be limited to off-road tracks made by the equipment used in the installation of the additional line(s). Portions of a reclamation top soil berm might need to be relocated to a site adjacent to the new substation. Herbicides, form New Mexico's approved list may be used to control weed growth inside and near the periphery of the substation.

Minor amounts of construction debris would be generated. Approved cleaning solvents would be used on insulators, breaker contacts, and insulated conductors resulting in minor amounts of nonregulated air emissions.

B. Alternatives

1. No Action

The "No Action" alternative would reject the SPS application for a right-of-way to construct the new powerline, and SPS would not construct a new replacement substation on the WIPP site. This alternate would result in no environmental impacts; however, without the addition of a new substation and transmission line, the WIPP would not obtain a redundant power source, and could suffer from insufficient electrical capacity and low delivery voltage. There have been no significant environmental impacts identified which would warrant selection of this alternative.

2. Change the Alignment-Reroute the Project

Under this alternative, the powerline would parallel an existing natural gas pipeline and would cross producing oil and gas well locations. There has been no evidence presented in this analysis that has shown that this alternative would have significantly fewer impacts than, or any clear advantage over, the proposed route. Overall impacts to the natural resources, if an alternate route was required, would be similar to the proposed route, with only minor differences in disturbances to soil, vegetation, and wildlife.

Additionally, this route would traverse existing oil and gas development properties and improvements and could adversely affect safety issues.

C. Mitigation Measures

The standard stipulations and the special cultural stipulations acceptably alleviate the impacts of the proposed action.

Upon completion of the construction of the powerline, the right-of-way shall be reseeded at the rate of 20 pounds/acre, pure live seed (PLS), with the following seed mixture:

- 30% - Prairie Sunflower
- 60% - Sand Dropseed grass
- 10% - Sand Bluestem grass

Soils adjacent to the area disturbed by substation construction would, to the extent possible, be restored. This restoration would consist of the following: leveling excavated soil, removing vegetation from the clearing and grubbing operations, and planting a seed mix on bare soil locations exposed by substation construction.

In the event that WIPP construction activities exceeded the expected degree of surface disturbance, or did not meet acceptable criteria, for example, raptor safe configurations for the substation and connecting lines, or discovery of unknown archeological artifacts, construction would be halted until proper precautions and consultations had taken place. Waste of wire, cable, and transmission line will be minimized by use of reusable reels and standard journeyman conservation practices.

IV. CONSULTATION/COORDINATION

The following individuals have been consulted regarding the proposed action:

Gary Bowers, Realty Specialist, BLM.
Steve Daly, Soil and Range, BLM.
Frank D'Amore, Environmental Coordinator, BLM.
Jim Goodbar, Outdoor Recreation Planner & Karst Specialist, BLM.
Brenda Wilkinson, Archaeologist, BLM.
Eric Dillingham, Archaeologist, BLM.
John Sherman, Wildlife Biologist, BLM.
Miriam Whatley, Environmental staff, Westinghouse.
Bob Wise, Assistant Manager, WIPP project, DOE.
Doug Lynn, Environmental staff, Westinghouse.

The comments and suggestions expressed during the consultation have been incorporated into this EA.

Exhibit "1"

BLM Serial Number
Company Reference

NM-93931
Sand Dunes/Ochoa
page 1 of 2

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES
IN THE ROSWELL DISTRICT, BLM

12-24-9

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

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6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer. 12-24-94

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the powerline crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the powerline extends service to an active, adjoining facility or facilities.

10. Stipulation/Condition of Approval—Whether or not an archeological survey has been conducted and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

11. Special Stipulations:

- A. The holder shall comply with the special cultural stipulations attached as Exhibit "C". These stipulations are required so that impacts to archaeological sites can be avoided. The holder can contact Brenda Wilkinsin of the Bureau of Land Management at (505) 887-6544 if there are any questions concerning these special stipulations.
- B. Upon completion of the construction of the Powerline, the right-of-way shall be reseeded at the rate of 20 pounds/acre, pure live seed (PLS) with the following seed mixture:
- 30% - Prairie Sunflower
 - 60% - Sand Dropseed grass
 - 10% - Sand Bluestem grass

(March 1989)

F - FEDERAL OWNED LAND

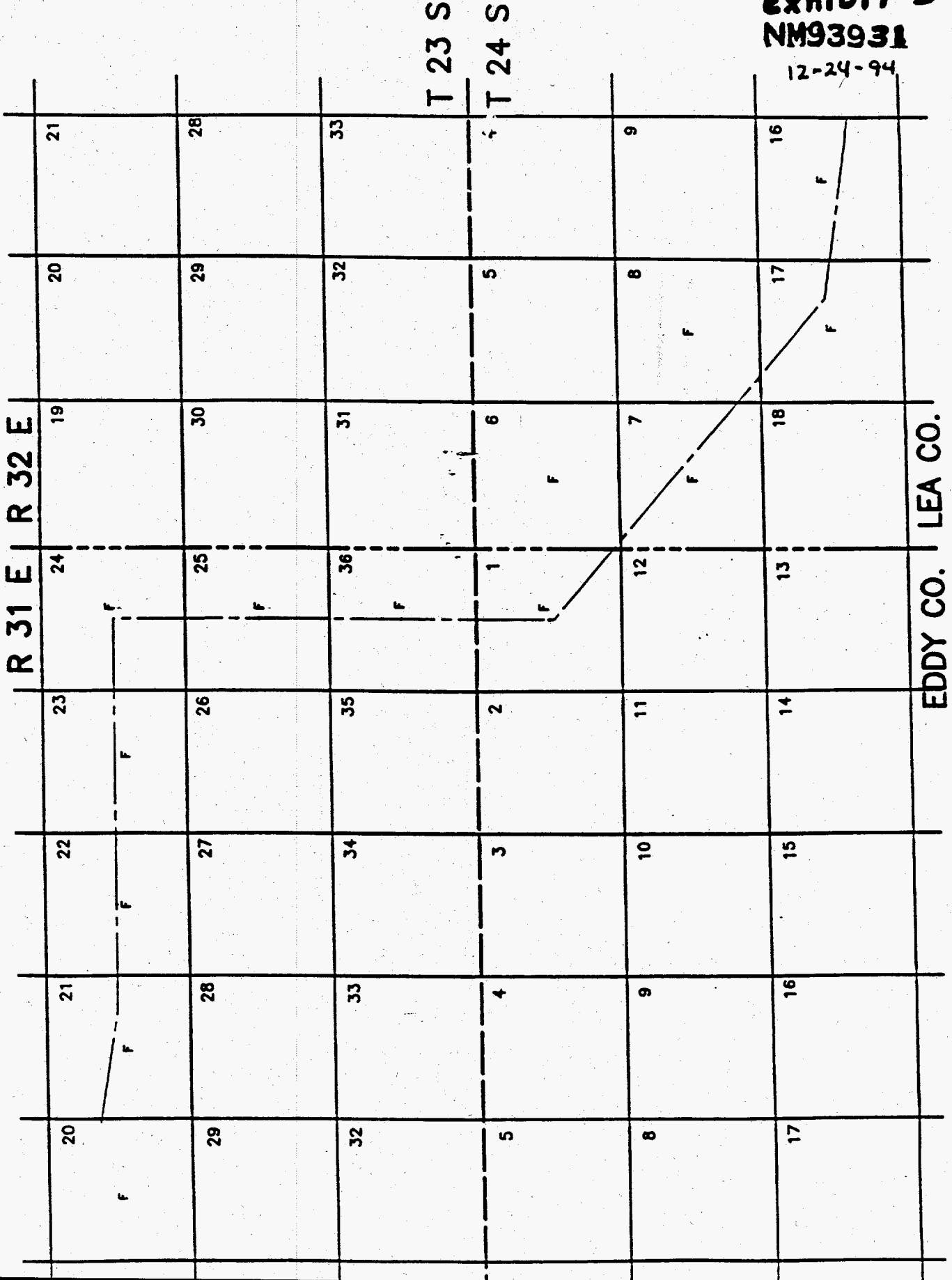
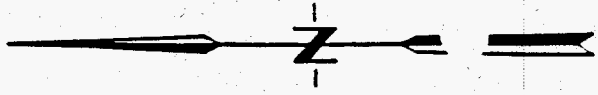


Exhibit "B"
NM93931
12-24-94

EDDY CO. LEA CO.

RESERVED TO GOVERNMENT

CULTURAL RESOURCES STIPULATIONS

2/83 NM-93931
Exhibit "C"
Page 1 of 3
12-24-

PROJECT SPS Sand Dunes to Ochoa Substation Report No. 95-NM-067-245

1. **SITE PROTECTION AND EMPLOYEE EDUCATION:** All employees of the project will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage or disturb cultural resources.

2. Monitoring is required.

a. A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities.

b. No construction activities, including vegetation removal, may begin before the arrival of the monitor.

c. The monitor will:

1. Ensure that the site protection barrier is located as indicated on the attached map(s).

2. Observe all surface disturbing activities within 1000' of LA 70115

3. Other:

4. Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the SLX. These stipulations must be attached to the report.

3. The grantee must select one of the following alternatives:

a. Controlled test excavations to determine if cultural resources are present;

b. Reduction of the project size to avoid all significant cultural materials;

c. Relocation of the project;

d. Preparation and implementation of a data recovery plan for site(s)

4. **SITE BARRIER/FENCING:**

a. A temporary site protection barrier(s) will be erected prior to construction. The barrier will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. There will be no construction activities or vehicle traffic past the barrier. The barrier(s) will remain in place through reclamation and reseedling.

b. A permanent ~~(fence)~~ fence(s) will be erected prior to construction. There will be no construction activities or vehicle traffic past the fence(s).

c. The barrier(s)/fence(s) will be placed as indicated on the attached map(s).

5. **CONSTRUCTION ZONES:** There will be a no construction zone _____

6. **OTHER:** No poles placed within 100' of LA 70115. No vehicular traffic or construction activity within 100' of LA 70115. See attached maps

CRS, Sand Resources to Ochoa Substations, Eddy and Lea Counties

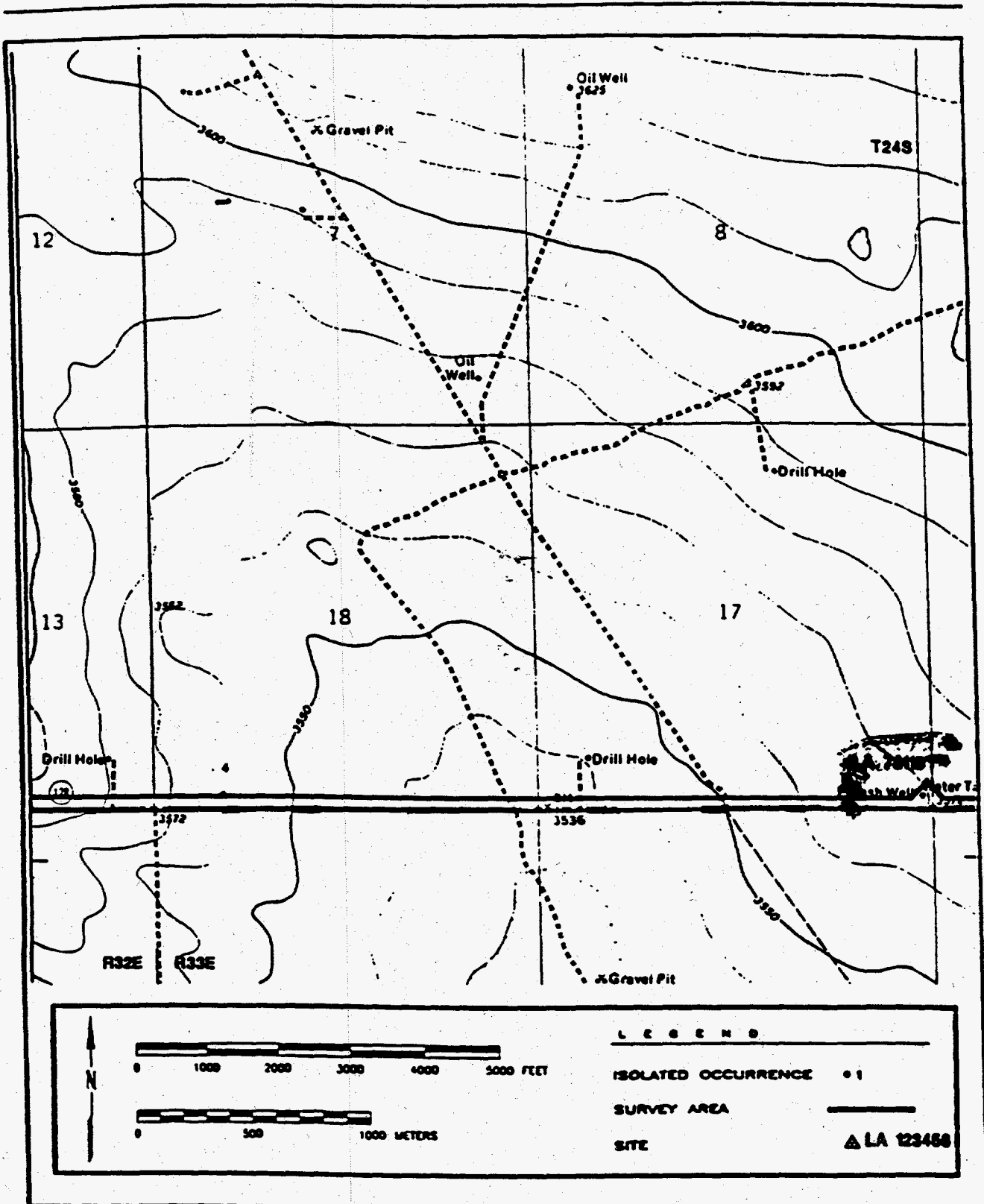


Figure 1.7 Project Location. Based on Bell Lake New Mexico Quadrangle (1973), USGS 7.5' Series (1:24,000 Scale).

12-24-97

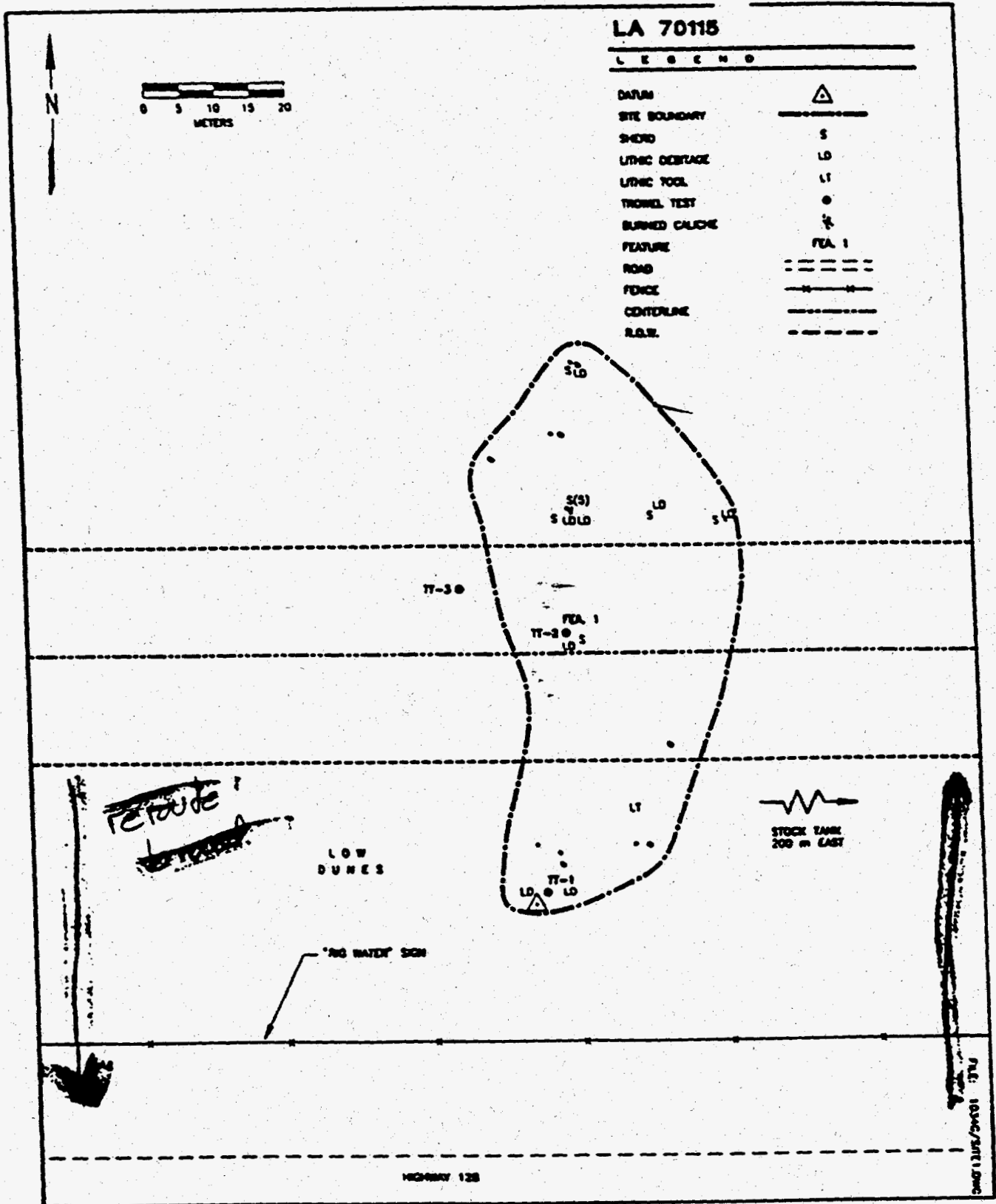


Figure 5.1 Site LA 70115, Site Plan.