

**RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
Of the 23rd Navajo Nation Council---Third Year 2017**

**AN ACTION**

**RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE GRANT OF RIGHT-OF-WAY TO MCKINLEY COUNTY FOR THE COUNTY ROAD 15B OLD CHURCHROCK MINE ROAD LOCATED ON NAVAJO NATION TRUST LANDS IN CHURCHROCK CHAPTER (MCKINLEY COUNTY, NEW MEXICO)**

**BE IT ENACTED:**

**SECTION ONE. AUTHORITY**

Pursuant to 2 N.N.C. Section §501 (B)(2), The Resources and Development Committee of the Navajo Nation Council has the authority to grant final approval for all land withdrawals, non-mineral leases, permits, licenses, rights-of-way, surface easements and bonding requirements on Navajo Nation lands and unrestricted (fee) land. This authority shall include subleases, modifications, assignments, leasehold encumbrances, transfers, renewals, and terminations.

**SECTION TWO. FINDINGS**

A. McKinley County P.O. Box 70, Gallup, New Mexico 87305, has submitted a right-of-way (ROW) application for County Road 15B (the Old Churchrock Mine Road) on, over and across Navajo Nation Trust Lands in Churchrock Chapter vicinity, McKinley County, New Mexico. The application request is attached hereto and incorporated herein as Exhibit "A."

B. The proposed right-of-way is 6,712.15 feet long, 150 feet wide, consisting of 23.11 acres, more or less, and located in SE/4 Section 17; NE/4 Section 20; NW/4 Section 21 of Township 16 North, Range 16 West, McKinley County, New Mexico. Maps are attached hereto and incorporated herein as Exhibit "B."

C. The Project Review Section with the Navajo Land Department identified three grazing permittees on the proposed project site. Consent to use the land was obtained and are attached along with the Project Review Section memorandum dated September 8, 2016 are attached hereto as Exhibit "C."

D. A waiver of consideration is requested. The right-of-way project would serve a public purpose because the project will benefit Navajo residents.

E. The environmental and archaeological studies has been completed and attached hereto and made a part hereof.

### **SECTION THREE. APPROVAL**

A. The Resources and Development Committee of the Navajo Nation Council hereby approves the Grant of Right-of-Way to McKinley County for the County Road 15B (the Old Churchrock Mine Road) on, over and across Navajo Nation Trust Lands in Churchrock Chapter vicinity, McKinley County, New Mexico. The location is more particularly described on the survey map attached hereto as Exhibit "B."

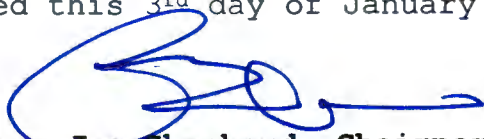
B. The Resources and Development Committee of the Navajo Nation Council hereby waives consideration for the right-of-way project because the project will benefit Navajo residents.

C. The Resources and Development Committee of the Navajo Nation Council hereby approves the right-of-way subject to, but not limited to, the following terms and conditions incorporated herein and attached as Exhibit "D."

D. The Resources and Development Committee of the Navajo Nation Council hereby authorizes the President of the Navajo Nation to execute any and all documents necessary to affect the intent and purpose of this resolution.

### **CERTIFICATION**

I, hereby, certify that the foregoing resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at Navajo Department of Transportation, (Navajo Nation) Tse Bonito, New Mexico, at which quorum was present and that same was passed by a vote of 3 in favor, 0 opposed, 1 abstained this 3<sup>rd</sup> day of January 2017.



**Alton Joe Shepherd, Chairperson  
Resources and Development Committee  
Of the 23<sup>rd</sup> Navajo Nation Council**

Motion: Honorable Davis Filfred  
Second: Honorable Jonathan Perry

Document No. 006321Date Issued: 07/14/2016**EXECUTIVE OFFICIAL REVIEW**Title of Document: McKinley County ROW County Rd 15B Contact Name: DRAPER, HOWARDProgram/Division: DIVISION OF NATURAL RESOURCESEmail: howarddraper@frontiernet.net Phone Number: 928/871-6447

- ☐ **Business Site Lease**
- |   |       |             | Sufficient               | Insufficient             |
|---|-------|-------------|--------------------------|--------------------------|
| 1. Division:  | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Controller:  | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| (only if Procurement Clearance is not issued within 30 days of the initiation of the E.O. review) |       |             |                          |                          |
| 3. Office of the Attorney General:  | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Business and Industrial Development Financing, Veteran Loans, (i.e. Loan, Loan Guarantee and Investment) or Delegation of Approving and/or Management Authority of Leasing transactions**

- |                                    |       |             |                          |                          |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Division:                       | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Fund Management Plan, Expenditure Plans, Carry Over Requests, Budget Modifications**

- |                                     |       |             |                          |                          |
|-------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Office of Management and Budget: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Controller:        | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Office of the Attorney General:  | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Navajo Housing Authority Request for Release of Funds**

- |                                    |       |             |                          |                          |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. NNEPA:                          | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Lease Purchase Agreements**

- |                                    |       |             |                          |                          |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Office of the Controller:       | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| (recommendation only)              |       |             |                          |                          |
| 2. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Grant Applications**

- |                                     |       |             |                          |                          |
|-------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Office of Management and Budget: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Controller:        | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Office of the Attorney General:  | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Five Management Plan of the Local Governance Act, Delegation of an Approving Authority from a Standing Committee, Local Ordinances (Local Government Units), or Plans of Operation/Division Policies Requiring Committee Approval**

- |                                    |       |             |                          |                          |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Division:                       | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

- ☐ **Relinquishment of Navajo Membership**

- |                                    |       |             |                          |                          |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Land Department:                | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Elections:                      | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☐ Land Withdrawal or Relinquishment for Commercial Purposes

Sufficient Insufficient

1. Division: \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. Office of the Attorney General: \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Land Withdrawals for Non-Commercial Purposes, General Land Leases and Resource Leases

1. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. F&W \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 3. HPD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 4. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 5. NNEPA \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 6. DNR \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 7. DOJ \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Rights of Way

1. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. F&W \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 3. HPD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 4. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 5. NNEPA \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 6. Office of the Attorney General: \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 7. OPVP \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Oil and Gas Prospecting Permits, Drilling and Exploration Permits, Mining Permit, Mining Lease

1. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. OPVP \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 3. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Assignment of Mineral Lease

1. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. DNR \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 3. DOJ \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☒ ROW (where there has been no delegation of authority to the Navajo Land Department to grant the Nation's consent to a ROW)

1. NLD \_\_\_\_\_ Date: 1-4 July 16 ☒ ☐  
 2. F&W \_\_\_\_\_ Date: 7/18/16 ☒ ☐  
 3. HPD \_\_\_\_\_ Date: 7/20/16 ☒ ☐  
 4. Minerals \_\_\_\_\_ Date: 7/25/16 ☒ ☐  
 5. NNEPA \_\_\_\_\_ Date: 8-3-2016 ☒ ☐  
 6. DNR \_\_\_\_\_ Date: 8/9/16 ☒ ☐  
 7. DOJ *(fio)* \_\_\_\_\_ Date: 7/28/16 ☒ ☐  
 8. OPVP \_\_\_\_\_ Date: 10-4-16 ☒ ☐

☐ OTHER:

1. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 2. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 3. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 4. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐  
 5. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐



# NAVAJO NATION DEPARTMENT OF JUSTICE

## DOCUMENT REVIEW REQUEST FORM

☐ RESUBMITTAL



DOJ	
09-09-16	305p
DATE / TIME	
<input type="checkbox"/> 7 Day Deadline	
DOC #:	006321
SAS #:	
UNIT:	Nm

\*\*\* FOR NNDJ USE ONLY - DO NOT CHANGE OR REVISE FORM. VARIATIONS OF THIS FORM WILL NOT BE ACCEPTED. \*\*\*

### CLIENT TO COMPLETE

DATE OF REQUEST: Sept. 9, 2016 ENTITY/DIVISION: DNR  
 CONTACT NAME: Kayla Bia / Michelle Hoskins DEPARTMENT: Navajo Land Dept.  
 PHONE NUMBER: X6447 E-MAIL: \_\_\_\_\_  
 TITLE OF DOCUMENT: McKinley County Right-of-Way for County Road 15B.

### DOJ SECRETARY TO COMPLETE

**RECEIVED**  
 DATE/TIME IN UNIT: 9.9.16 REVIEWING ATTORNEY/ADVOCATE: Imvin Chee  
3:32pm 9.20.16  
 DATE/TIME OUT OF UNIT: 9.28.16 @ 12:10pm B

### DOJ ATTORNEY / ADVOCATE COMMENTS

- Document is legally sufficient. According to NCD, the proposed RDC Rsh. is no longer required for County Road ROWs.

REVIEWED BY: (PRINT)	DATE / TIME	SURNAMED BY: (PRINT)	DATE / TIME
<u>Imvin Chee</u>	<u>9/28/16</u>	<u>Vernica Blackbird</u>	<u>9/28/16 10:45</u>

DOJ Secretary Called: Kayla Bia for Document Pick Up on 9.28.16 at 11:35 By: B

PICKED UP BY: (PRINT) \_\_\_\_\_ DATE / TIME: \_\_\_\_\_

COMPLETED



**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS**

RIGHT-OF-WAY APPLICATION MUST IDENTIFY [§169.102(a)]:

1. Applicant Name and Address: McKinley County, PO Box 70, Gallup, NM 87305
2. Tract(s) or parcel(s) affected by the right-of-way: Tribal Trust
3. General location (easement description): NE/4 SE/4 Section 17; NE/4 Section 20; NW/4 Section 21, T. 16 N., R. 16 W., McKinley County, NM.

Said right-of-way across Tribal Trust Lands to be 6,712.15 feet in length, 150 feet in width, and 23.11 acres in size, as shown on attached map and plats of definite location, attached hereto, and made a part hereof.

4. Purpose: Obtain right-of-way for operation and maintenance of County Road 15B (Old Churchrock Mine Road).
5. Term (Renewal, if applicable): 20 Years
6. Identify ownership of permanent improvements associated with the right-of-way and the responsibility for constructing, operating, maintaining, and managing; or removal of permanent improvements under §169.105:

REQUIRED SUPPORTING DOCUMENTS [§169.102(b)]:

1. Accurate legal description of the right-of-way, its boundaries, and parcels associated with the right-of way;
2. A map of definite location of the right-of-way; (25 CFR 169.102((b)(2); survey plat signed by professional surveyor or engineer showing the location, size, and extent of the ROW and other related parcels, with respect to each affected parcel of individually owned land, tribal land, or BIA land and with reference to the public surveys under 25 U.S.C. § 176, 43 U.S.C. § 2 AND § 1764, and showing existing facilities adjacent to the proposed project.)
3. Bond(s), insurance, and/or other security meeting the requirements of §169.103;
4. Record of notice that the right-of-way was provided to all Indian landowners;
5. Record of consent that the right-of-way meets the requirements of §169.107, or a statement documenting a request for a right-of-way without consent under §169.107(b);
6. If applicable, a valuation meeting the requirements of §§ 169.110, 112, 114;
7. With each application, if the applicant is a corporation, limited liability company, partnership, joint venture, or other legal entity, except a tribal entity, information such as organizational documents, certificates, filing records, and resolutions, demonstrating that:

- a. The representative has authority to execute the application;
  - b. The right-of-way will be enforceable against the applicant; and
  - c. The legal entity is in good standing and authorized to conduct business in the jurisdiction where the land is located.
8. Current environmental and archaeological reports, surveys, and site assessments, as needed to facilitate compliance with applicable Federal and tribal environmental and land use requirements;
  9. If required, a statement from the appropriate tribal authority that the proposed right-of-way is in conformance with applicable tribal law.

THE APPLICANT FURTHER STIPULATES AND EXPRESSLY AGREES AS FOLLOWS:

To conform and to abide by all applicable requirements with respect to the right-of-way herein applied for. The applicant agrees to conform to and abide by the rules, regulations, and requirements contained in the *Code of Federal Regulations*, Title 25 Indians, Part 169, as amended, and by reference includes such rules, regulations and requirements as a part of this application to the same effect as if the same were herein set out in full.

Applicant Point of Contact Information:

Name: Anthony Dimas

Address: McKinley County Emergency Management Services, PO Box 70, Gallup NM, 87305

Phone: 505-722-4248

Fax: 505-722-9009

Email: [adimas@co.mckinley.nm.us](mailto:adimas@co.mckinley.nm.us)

Date: 6-20-16

Applicant Signature: 

Applicant (Print Name): Anthony Dimas



Scale: 1"=500'

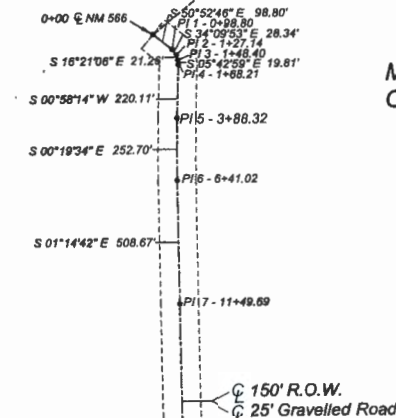
Basis of Bearings:  
The New Mexico Coordinate System  
West Zone

Tie to NE Cor. Sec. 17, Fd. BLM accepted cap LS 8540  
N 49°43'17" E 2381.92'

# McKinley County Road Right-of-Way Survey Old Church Rock Mine Road (CR 15B)

## Crossings

0+89 Cattle Guard  
28+31 Conc. Culv.  
29+05 Conc. Culv.  
43+11 Culv.  
64+66 Culv.  
65+62 Waterline



S 01°21'39" E 1432.79'

Navajo Tribal Trust Lands

Sec.17  
4080.74 LF

Sec.16

T16N, R16W

S 06°22'22" E 82.04' PI9 - 29+58.70  
S 14°19'48" E 74.00' PI10 - 30+40.74  
S 23°31'26" E 42.86' PI11 - 31+14.74  
S 27°32'48" E 37.05' PI12 - 31+57.60  
S 35°41'24" E 78.69' PI13 - 31+94.65  
S 39°06'03" E 92.11' PI14 - 32+73.34  
S 40°37'05" E 121.03' PI15 - 33+68.05  
S 42°01'50" E 201.40' PI16 - 34+87.08  
S 43°18'44" E 111.89' PI17 - 36+88.48  
S 46°51'24" E 143.32' PI18 - 38+00.37  
S 52°44'05" E 74.88' PI19 - 39+43.69  
S 58°36'28" E 73.93' PI20 - 40+18.35  
S 55°59'29" E 52.06' PI21 - 41+88.33  
S 48°29'36" E 50.55' PI22 - 42+88.33  
S 40°32'07" E 54.37' PI23 - 43+88.33  
S 34°08'40" E 55.62' PI24 - 44+88.33  
S 31°58'41" E 50.12' PI25 - 45+88.33  
S 28°10'58" E 531.00' PI26 - 46+88.33  
S 24°29'47" E 97.27' PI27 - 47+88.33  
S 21°35'03" E 57.28' PI28 - 48+88.33  
S 19°02'34" E 77.03' PI29 - 49+88.33  
S 14°34'24" E 73.78' PI30 - 50+88.33  
S 11°06'05" E 76.03' PI31 - 51+88.33  
S 08°20'43" E 75.38' PI32 - 52+88.33  
S 04°14'12" W 77.22' PI33 - 53+88.33  
S 12°28'35" W 239.48' PI34 - 54+88.33  
S 14°27'14" W 91.77' PI35 - 55+88.33  
S 12°28'35" W 239.48' PI36 - 56+88.33  
S 14°27'14" W 91.77' PI37 - 57+88.33  
S 12°28'35" W 239.48' PI38 - 58+88.33  
S 14°27'14" W 91.77' PI39 - 59+88.33  
S 12°28'35" W 239.48' PI40 - 60+88.33  
S 14°27'14" W 91.77' PI41 - 61+88.33  
S 12°28'35" W 239.48' PI42 - 62+88.33  
S 14°27'14" W 91.77' PI43 - 63+88.33  
S 12°28'35" W 239.48' PI44 - 64+88.33  
S 14°27'14" W 91.77' PI45 - 65+88.33

Navajo Tribal Trust Lands

Sec.20

1085.93 LF

Navajo Tribal Trust Lands

Sec.21  
1545.48 LF

## Tabulation of Length

Sec.17 : 4080.74 LF 14.05 Ac.±  
Sec.20 : 1085.93 LF 3.74 Ac.±  
Sec.21 : 1545.48 LF 5.32 Ac.±  
Total : 6712.15 LF 23.11 Ac.±

## SURVEYORS CERTIFICATE

I, WILLIAM E. MAHNKE II, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THE SURVEY SHOWN HEREON, AND THAT THE SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN THE STATE OF NEW MEXICO.  
I FURTHER CERTIFY THAT THIS IS NOT A SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS IS A SURVEY OF AN EXISTING ROAD.

WILLIAM E. MAHNKE II  
NEW MEXICO P.L.S. # 8466



Red Skies Surveying & Mapping, Inc.  
A Native American Owned Company  
101 Fawcett Ln.  
Bloomfield, NM 87413  
Telephone (505) 632-3863 Cell: 793-5325

Rev. 10 May 2016  
Rev. 02 May 2016

Field Completion Date: 05 Apr 2016

# McKinley County Old Church Rock Mine Rd

Sections 17, 20, & 21, T.16N, R.16W  
County Road 15B  
McKinley County, New Mexico

USGS Quad(s): Church Rock

Project Area

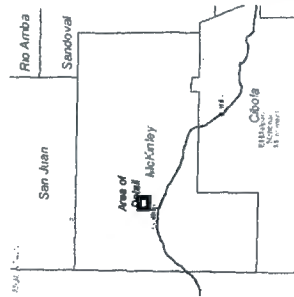


NAD 1983 New Mexico State Plane West  
FPS 3003 Meters



PERMIT  
APPROVED FOR THE LAND

Prepared by Permit West, Inc., May 6, 2016  
for McKinley County, New Mexico





THE NAVAJO NATION

## Navajo Land Department

P.O. Box # 2249 · Window Rock, Arizona 86515 · (928) 871-6401 · FAX: (928) 871-7039



### MEMORANDUM

TO : Elerina Yazzie, Supervisor  
Project Review Section, NLD

FROM : *Esther Kee*  
Esther Kee, R/W Agent  
Project Review Section, NLD

DATE : September 8, 2016

SUBJECT: McKinley County Road 15B Right of Way

McKinley County of Post Office Box 70 Gallup, New Mexico 87305, submitted an application for right of way to realign, reconstruct and maintain County Road 15B (Old Churchrock Mine Road) all on Navajo Trust land near the vicinity of Churchrock Chapter.

The right of way will be 6,712.15 feet in length, 150 feet in width, 23.11 acres, located in NE/4 SE/4 of Section 17; NE/4 of Section 20; NW/4 of Section 21, Township 16 North, Range 16 West, McKinley County, New Mexico.

The proposed project is within District 16, Churchrock Range Unit 7, permitted to Valrene Chee, Velma Nahkai, Glen Hood, for grazing. I informed the affected grazing permittees on the proposed request and they had no objection. I obtained all the land users consent along with the concurrence of the District 16 Land Board member, Emery Chee.

Field clearance completed, land users consent, map and supporting documents are all attached for your information and reference.

cc: Project file

**CONSENT 3**

(Waiver of compensation for damages)

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN:**

I, Velma Nahkai, hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit **McKinley County, Post Office Box 70, Gallup, New Mexico 87305**, to use a portion of my land use area for the following purpose **Right of way to construct and maintain existing County Road 15B (Old Churchrock Mine Road)**, the proposed project will be **6,712.15 feet (1.27 miles) in length, 150 feet in width, 23.11 acres, on Navajo Trust lands in NE/4 SE/4 Section 17; NE/4 Section 20; NW/4 Section 21, T16N, R16W, McKinley County, New Mexico**, as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:**

8/31/16  
Date

x Velma Nahkai  
Land User Signature (or Thumbprint)

Churchrock RL.7  
Census No. Permit No.

WITNESS: \_\_\_\_\_

7-8-16  
Date

[Signature]  
Grazing Committee or Land Board Member

16  
District No.

**Acknowledgement of Field Agent**

I acknowledge that the contents of this consent form was read// or fully explained to to the land user in Navajo to or English// (check where applicable)

[Signature]  
Field Agent Signature

**CONSENT 3**

(Waiver of compensation for damages)

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN:**

I, Valrene R. Chee, hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit **McKinley County, Post Office Box 70, Gallup, New Mexico 87305**, to use a portion of my land use area for the following purpose **Right of way to construct and maintain existing County Road 15B (Old Churchrock Mine Road)**, the proposed project will be **6,712.15 feet (1.27 miles) in length, 150 feet in width, 23.11 acres, on Navajo Trust lands in NE/4 SE/4 Section 17; NE/4 Section 20; NW/4 Section 21, T16N, R16W, McKinley County, New Mexico**, as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:**

9/8/16  
Date

Valrene R. Chee  
Land User Signature (or Thumbprint)

Churchrock RU 7  
Census No. Permit No.

WITNESS: \_\_\_\_\_

9-8-16  
Date

Ernest Chee  
Grazing Committee or Land Board Member

16  
District No.

**Acknowledgement of Field Agent**

I acknowledge that the contents of this consent form was read// or fully explained ~~to~~ to the land user in Navajo ~~to~~ or English// (check where applicable)

Esther Kee  
Field Agent Signature

**CONSENT 3**

(Waiver of compensation for damages)

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN:**

I, Glen Hood, hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit **McKinley County, Post Office Box 70, Gallup, New Mexico 87305**, to use a portion of my land use area for the following purpose **Right of way to construct and maintain existing County Road 15B (Old Churchrock Mine Road)**, the proposed project will be **6,712.15 feet (1.27 miles) in length, 150 feet in width, 23.11 acres, on Navajo Trust lands in NE/4 SE/4 Section 17; NE/4 Section 20; NW/4 Section 21, T16N, R16W, McKinley County, New Mexico**, as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:**

8/16 Glen Hood Churchrock R47  
Date Land User Signature (or Thumbprint) Census No. Permit No.

**WITNESS:**

8-2-16 Emory A 16  
Date Grazing Committee or Land Board Member District No.

**Acknowledgement of Field Agent**

I acknowledge that the contents of this consent form was read// or fully explained to to the land user in Navajo to or English// (check where applicable)

Esper Kee  
Field Agent Signature



EXHIBIT "~~E~~" D

NAVAJO NATION RIGHT-OF-WAY TERMS AND CONDITIONS

McKinley County

(GRANTEE)

County Road 15B (Old Churchrock Mine Road)

1. The term of the right-of-way shall be for twenty (20) years, beginning on the date the right-of-way is granted by the Secretary of Interior.
2. Consideration for the right-of-way is assessed at \$332,833.88 and shall be paid in full to the Controller of the Navajo Nation, in lawful money of the United States, and a copy of the receipt for such payment provided to the Navajo Nation Minerals Department, or its successor, within 10 days of approval of and consent to the grant of the right-of-way by the Navajo Nation.

In case consideration is waived by the Resources and Development Committee of the Navajo Nation Council, <sup>^</sup>if consideration has been waived, the Navajo Nation contributes the amount listed above to the project because the project serves a public purpose and will benefit Navajo residents.

3. The Grantee may develop, use and occupy the right-of-way for the purpose(s) of repairing flood damage to bridge and roadway and performing ongoing The Grantee may not develop, use or occupy the right-of-way for any other purpose, nor allow others to use or occupy the right-of-way for any other purpose, without the prior written approval of the Navajo Nation and the Secretary of the Interior. The approval of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation. The Grantee may not develop, use or occupy the right-of-way for any unlawful purpose.  
& maint-  
enance  
of road.
4. In all activities conducted by the Grantee within the Navajo Nation, the Grantee shall abide by all laws and regulations of the Navajo Nation and of the United States, now in force and effect or as hereafter may come into force and effect, including but not limited to the following:
  - a. Title 25, Code of Federal Regulations, Part 169; subject to the terms of this right-of-way.
  - b. All applicable federal and Navajo Nation antiquities laws and regulations, with the following additional condition: In the event of a discovery all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified immediately. As used herein, "discovery" means any previously unidentified or incorrectly identified cultural resources, including but not limited to archaeological deposits, human remains, or location reportedly associated with Native American religious/traditional beliefs or practices;
  - c. The Navajo Preference in Employment Act, 15 N.N.C. §§ 601 et seq., and the Navajo Nation Business Opportunity Act, 5 N.N.C. §§ 201 et seq.; and
  - d. The Navajo Nation Water Code, 22 N.N.C. § 1101 et seq. Grantee shall apply for and submit all applicable permits and information to the Navajo Nation Water Resources Department, or its successor.
5. The Grantee shall ensure that the air quality of the Navajo Nation is not jeopardized due to violation of applicable laws and regulations by its operations pursuant to the right-of-way.

6. The Grantee shall clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way, and shall dispose of all vegetation and other materials cut, uprooted or otherwise accumulated during any surface disturbance activities.
7. The Grantee shall reclaim all surface lands disturbed related to the right-of-way, as outlined in a restoration and revegetation plan, which shall be approved by the Navajo Nation Environmental Protection Agency (NNEPA) prior to any surface disturbance. The Grantee shall comply with all provisions of such restoration and revegetation plan and shall notify the Director of the NNEPA immediately upon completion of the surface disturbance activities so that a site inspection can be made.
8. The Grantee shall at all times during the term of the right-of-way and at the Grantee's sole cost and expense, maintain the land subject to the right-of-way and all improvements located thereon and make all necessary and reasonable repairs.
9. The Grantee shall obtain prior written permission to cross existing rights-of-way, if any, from the appropriate parties.
10. The Grantee shall be responsible for and promptly pay all damages when they are sustained.
11. The Grantee shall indemnify and hold harmless the Navajo Nation and the Secretary of the Interior and their respective authorized agents, employees, landusers and occupants, against any liability for loss of life, personal injury and property damages arising from the development, use or occupancy or use of right-of-way by the Grantee.
12. The Grantee shall not assign, convey, transfer or sublet, in any manner whatsoever, the right-of-way or any interest therein, or in or to any of the improvements on the land subject to the right-of-way, without the prior written consent of the Navajo Nation and the Secretary of the Interior. Any such attempted assignment, conveyance or transfer without such prior written consent shall be void and of no effect. The consent of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation.
13. The Navajo Nation may terminate the right-of-way for violation of any of the terms and conditions stated herein. In addition, the right-of-way shall be terminable in whole or part by the Navajo Nation for any of the following causes:
  - a. Failure to comply with any term or condition of the grant or of applicable laws or regulations;
  - b. A non-use of the right-of-way for the purpose for which it is granted for a consecutive two year period; and
  - c. The use of the land subject to the right-of-way for any purpose inconsistent with the purpose for which the right-of-way is granted.
  - d. An abandonment of the right-of-way.
14. At the termination of this right-of-way, the Grantee shall peaceably and without legal process deliver up the possession of the premises, in good condition, usual wear and tear excepted. Upon the written request of the Navajo Nation, the Grantee shall provide the Navajo Nation, at the Grantee's sole cost and expense, with an environmental audit assessment of the premises at least sixty (60) days prior to delivery of said premises.
15. Holding over by the Grantee after the termination of the right-of-way shall not constitute a renewal or extension thereof or give the Grantee any rights hereunder or in or to the land subject to the right-of-way or to any improvements located thereon.

16. The Navajo Nation and the Secretary of the Interior shall have the right, at any reasonable time during the term of the right-of-way, to enter upon the premises, or any part thereof, to inspect the same and any improvements located thereon.
17. By acceptance of the grant of right-of-way, the Grantee consents to the full territorial legislative, executive and judicial jurisdiction of the Navajo Nation, including but not limited to the jurisdiction of the Navajo Nation, including but not limited to the jurisdiction to levy fines and to enter judgments for compensatory and punitive damages and injunctive relief, in connection with all activities conducted by the Grantee within the Navajo Nation or which have a proximate (legal) effect on persons or property within the Navajo Nation.
18. By acceptance of the grant of right-of-way, the Grantee covenants and agrees never to contest or challenge the legislative, executive or judicial jurisdiction of the Navajo Nation on the basis that such jurisdiction is inconsistent with the status of the Navajo Nation as an Indian nation, or that the Navajo Nation government is not a government of general jurisdiction, or that the Navajo Nation government does not possess full police power (i.e., the power to legislate and regulate for the general health and welfare) over all lands, persons and activities within its territorial boundaries, or on any other basis not generally applicable to a similar challenge to the jurisdiction of a state government. Nothing contained in this provision shall be construed to negate or impair federal responsibilities with respect to the land subject to the right-of-way or to the Navajo Nation.
19. Any action or proceeding brought by the Grantee against the Navajo Nation in connection with or arising out of the terms and conditions of the right-of-way shall be brought only in the Courts of the Navajo Nation, and no such action or proceeding shall be brought by the Grantee against the Navajo Nation in any court of any state.
20. Nothing contained herein shall be interpreted as constituting a waiver, express or implied, of the sovereign immunity of the Navajo Nation.
21. Except as prohibited by applicable federal law, the law of the Navajo Nation shall govern the construction, performance and enforcement of the terms and conditions contained herein.
22. The terms and conditions contained herein shall extend to and be binding upon the successors, heirs, assigns, executors, administrators, employees and agents, including all contractors and subcontractors, of the Grantee, and the term "Grantee," whenever used herein, shall be deemed to include all such successors, heirs, assigns, executors, administrators, employees and agents.
23. There is expressly reserved to the Navajo Nation full territorial legislative, executive and judicial jurisdiction over the right-of-way and all lands burdened by the right-of-way, including without limitation over all persons, including the public, and all activities conducted or otherwise occurring within the right-of-way; and the right-of-way and all lands burdened by the right-of-way shall be and forever remain Navajo Indian Country for purposes of Navajo Nation jurisdiction.
24. The Navajo Nation reserves the right to grant rights-of-way within the right-of-way referenced herein for utilities, provided that such rights-of-ways do not unreasonably interfere with the Grantee's use of the right-of-way.



## THE NAVAJO NATION

RUSSELL BEGAYE PRESIDENT  
JONATHAN NEZ VICE PRESIDENT



### ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF EXECUTIVE DIRECTOR/ADMINISTRATION

OFFICE OF ENVIRONMENTAL REVIEW

PO BOX 339 WINDOW ROCK ARIZONA 86515 Office: 928/871-7188 Fax: 928/871-7996

Website: [www.navajonationepa.org](http://www.navajonationepa.org)

## M E M O R A N D U M

**TO:** Howard Draper, Program & Project Specialist  
Project Review Office  
Navajo Land Department  
Division of Natural Resources

**FROM:**

Rita Whitehorse-Larsen, Senior Environmental Specialist  
Office of the Executive Director/Administration  
NNEPA

**DATE:** August 4, 2016

**SUBJECT:** 164 EOR 006321 McKinley County Right-of-way (ROW) County Road 15B

The Navajo Nation Environmental Protection Agency (NNEPA) reviewed<sup>1</sup> and recommends *conditional approval* for the proposed ROW for McKinley County, PO Box 70, Gallup, New Mexico, 87305. McKinley County submitted a 20-year ROW for the existing Old Churchrock Mine Road (CR 15B). The Churchrock Mine Road Project is 6,712.15 feet (1.27 miles) in length and 150 feet wide. The total land use for the proposed project is 23.11 acres. Road improvement and maintenance is necessary to serve the needs of residents living in the project area to protect from flooding or erosion events by upgrading crossings, culverts and bridges.

If the following recommendations from NNEPA are adhered to, the proposed project will not have a significant effect (direct, indirect, or cumulative) on the quality of the human environment considering the context and intensity of impacts.

**1. Navajo Nation Clean Water Act:**

- a. §Section 401 is required due to Puerco River crossing.

<sup>1</sup> Permits West Inc. Environmental Assessment for McKinley County Right-of-way Acquisition for Road, Bridge and Culvert Repair and Ongoing Maintenance along the Existing Old Churchrock Mine Road (CR 15B) on Navajo Tribal Trust Lands in Sections 17, 20 and 21, Township 16 North, Range 16 West, McKinley County, New Mexico. May 2016.

- 164 EOR006321 McKinley County ROW Old Churchrock Mine Road Transportation  
Page 2 of 3  
8/4/2016

If there are any questions, you may contact me at 928/871-7188. Thank you.

Cc: McKinley County, PO Box 70, Gallup, New Mexico, 87305  
Permits West, Inc., 37 Verano Loop, Santa Fe, New Mexico, 87508  
*Contact person: Jeanette Reisenburg, Agent, 505-466-8120*

**ENVIRONMENTAL ASSESSMENT**  
**FOR**

**MCKINLEY COUNTY  
RIGHT-OF-WAY ACQUISITION FOR  
ROAD, BRIDGE, AND CULVERT REPAIR AND  
ONGOING MAINTENANCE ALONG THE EXISTING  
OLD CHURCHROCK MINE ROAD (CR 15B)**

**MCKINLEY COUNTY  
P.O. BOX 70  
GALLUP, NM**

**ON NAVAJO TRIBAL TRUST LANDS IN  
SECTIONS 17, 20, AND 21, T. 16 NORTH, RANGE 16 WEST,  
MCKINLEY COUNTY, NM**

**May 9, 2016**

**Prepared by:**



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## **1. Introduction**

McKinley County proposes to apply for a 20 year Right-of-Way in order to conduct general maintenance and road improvement operations along the existing Old Churchrock Mine Road (CR 15B), approximately five miles northwest of the community of Churchrock, NM (Proposed Action). The Proposed Action is located in Sections 17, 20, and 21, T. 16 North, R. 16 West, within the Churchrock 7.5-Minute Quadrangle, McKinley County, NM. The Churchrock Mine Road project area proposed Right-of-Way (ROW) is 6712.15 feet (1.27 miles) in length and 150 feet wide. The proposed ROW crosses Navajo Tribal Trust lands along its 1.27 mile length. The total land use for the proposed project is 23.11 acres. The Proposed Action detail and topographic map of the project location are attached as Appendix 1. This Environmental Assessment (EA) will address the Proposed Action with regards to potential impacts on the surrounding environment.

### **1.1 Purpose and Need**

The purpose of the Proposed Action is to secure a 20 year Right-of-Way so that road improvement projects and general maintenance may be conducted by McKinley County at several specific locations, and along the general length of the existing Right-of-Way of Old Churchrock Mine Road. Road improvement and maintenance is necessary to serve the needs of residents living in the project area as well as protect roads from future flooding or erosion events by upgrading crossings, culverts, and bridges.

### **1.2 Conformance with Applicable Land Use Plans and Other Environmental Assessments**

This EA addresses the potential impacts on surrounding resources by the Proposed Action. Impacts are presented on a site-specific basis as required by the National Environmental Policy Act (NEPA), as amended (NEPA 1969). The proposed project will not be in conflict with any local, county, or state plans. McKinley County will file a right-of-way (ROW) application with the Bureau of Indian Affairs (BIA).

### **1.3 Federal, State, or Local Permits, Licenses, or Other Consultation Requirements**

Compliance with Section 106, Responsibilities of the National Historic Preservation Act, are adhered to by following the Navajo Nation Cultural Resources Protection Act, the Bureau of Land Management (BLM) – New Mexico State Historic Preservation Officer (SHPO) protocol agreement, which is authorized by the National Programmatic Agreement between the BLM, the Advisory Council on Historic Preservation, and the National

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Conference of State Historic Preservation Officers, and other applicable BLM handbooks (NHPA 1966).

The Navajo Nation Department of Fish & Wildlife (NNDFW) Natural Heritage Program has been consulted with respect to species of concern that are known to occur, or that have the potential to occur, within the area of the Proposed Action (Appendix 2). Species of concern listed by the NNDFW will be evaluated in Section 3 of this document and in the Wildlife and Plant Survey Reports attached as Appendices 3 and 4, respectively.

Complete Archeological Service Associates performed a Class III Cultural Resources Inventory of the Proposed Action area. Two cultural resource sites were recorded during the surveys. A request for archeological clearance with mitigation for the two recorded sites was submitted to the Navajo Nation Historic Preservation Department (NNHPD). The Cultural Resources Compliance Form is attached as Appendix 5.

Additionally, McKinley County is required to:

- Comply with all applicable federal, state, and local laws and regulations.
- Obtain the necessary permits for construction of the power line.

## **2. Alternatives Including the Proposed Action**

### **2.1 Alternative A - No Action**

The BLM NEPA Handbook (H-1790-1) states that in EAs for externally initiated proposed actions, the No Action Alternative generally means that the proposed activity will not take place (USDI BLM 2008). This alternative would deny approval to construct the power line and the current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

The No Action Alternative is presented for baseline analysis of resource impacts.

### **2.2 Alternative B - Proposed Action**

McKinley County proposes to apply for a 20 year Right-of-Way within the existing Right-of-Way of Old Churchrock Mine Road in order to conduct general road maintenance and improvement operations along an approximate 1.27 mile length of Old Churchrock Mine Road (CR 15B), in McKinley County, NM. The Churchrock Mine Road project area proposed Right-of-Way (ROW) in which the construction and maintenance projects would occur is 6712.15 feet (1.27 miles) in length and 150 feet wide. Total land use for the proposed ROW would be approximately 23.11 acres.

The proposed ROW crosses Navajo Tribal Trust lands as indicated on the topographic map (Appendix 1). The Old Churchrock Mine Road proposed ROW begins at its junction with NM State Highway 566 in the NE/4 of Section 17, T. 16 North, R. 16 West. The proposed ROW ends in the NW/4 of Section 21, T. 16 North, R. 16 West (Appendix 1).

Table 2.1 summarizes the project land use specifications. The estimated duration of the maintenance and construction projects within the ROW is "as needed" over the course of the proposed 20 ROW term.

**Table 2.1: Land Use Specifications Summary**

<i>Land Ownership</i>	<i>Location (Churchrock Mine Road)</i>	<i>ROW Centerline Length (feet)</i>	<i>ROW Width</i>	<i>Total Land Use Area for ROW (acres)</i>
Tribal Trust	Section(s) 17, 20 and 21; T. 16 N., R. 16 W.	6712.15	150 feet	23.11

The landscape surrounding the project area is marked by steep walled mesas and rocky outcroppings. The project area itself is located within a broad valley drained by a deeply incised ephemeral wash. Vegetation consists of desert grassland and scrubland with scattered pinyon stands of pinyon pine (*Pinus edulis*) and juniper trees (*Juniperus monosperma*). In general, the grassland areas within the project boundaries have been subject to intense grazing pressure from livestock over many years. There are scattered homes, horse pastures, fencing, and outbuildings, as well as roads and power lines within the project area. Bank destabilization and erosion, as well as loss of soils and presence of invasive weedy species are evident throughout the project area, especially in pastures and along drainages. Dominant plant species include Greene's rabbitbrush (*Chrysothamnus Greenei*), broom snakeweed (*Gutierrezia sarothrae*), blue grama (*Bouteloua gracilis*), and kochia (*Bassia scoparia*).

Road improvement projects within the proposed ROW would include, but would not be limited to, bridge and culvert repair, grading, and cut and fill work. Work would be performed on an as needed basis and would be prioritized according to funding. Work would be performed with heavy equipment such as backhoes, cranes, and front end loaders. Appropriate signage and traffic coordinators would alert motorists using the ROW to pending and ongoing construction projects. All road improvement construction projects would occur within the boundaries of the proposed ROW.

Road improvement construction within the proposed ROW will only be performed when the soil is dry enough to adequately support construction equipment and vehicles. When the soil is too wet (ruts more than six inches deep), construction will be postponed until conditions improve. Maintenance will be conducted along the proposed ROW as necessary.

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## **2.3 Reclamation**

Areas disturbed from construction within the proposed ROW will be restored as closely as possible to their original condition or be improved from their original condition (as in the cases of road improvement projects) upon completion of construction. Reclamation measures for natural areas (i.e., areas adjacent to the road way) within the proposed ROW will include ripping compacted and disturbed areas at least 12 inches deep on the contour, harrowing, applying a native seed mix as prescribed by the BIA or Navajo Nation, and mulching. Noxious weeds will be controlled in accordance with Navajo Nation Environmental Protection Agency (EPA) requirements.

## **2.4 Alternatives Considered But Not Analyzed In Detail**

No other alternatives were considered for the proposed Churchrock Mine Road ROW other than the No Action alternative. The No Action alternative would mean that no road improvement or maintenance projects would be conducted by McKinley County along Old Churchrock Mine Road within the proposed ROW.

No significant issues were identified for the present location of the Proposed Action during the following activities:

- on-site inspections;
- Cultural Resources Inventory;
- Threatened, Endangered, and Special Status Species Survey; and
- a review of NNDFW species of concern that are known to occur in or with the potential to occur in the 7.5-Minute Churchrock, NM Quadrangle.

Therefore, no further alternatives other than the No Action Alternative were considered.

## **3. Description of Affected Environment**

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Only aspects of the affected environment that are potentially impacted are described.

### **3.1 Air Resources**

The proposed project is located in McKinley County, NM on Navajo Tribal Trust lands. The US Environmental Protection Agency (USEPA), Region 9, and the Navajo Nation

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Environmental Protection Agency Air Quality Control Program are responsible for administering air quality regulations on Navajo lands in New Mexico. The Navajo Nation Air Quality Control Program (NNAQCP) is responsible for the implementation and enforcement of the Navajo Air Pollution Prevention and Control Act (NAPPCA) (Navajo Nation Council 2004). In addition, the project area lies within the USEPA's designated Four Corners Interstate Air Quality Control Region (USEPA 1971).

Air resources include air quality and climate. The USEPA has the primary responsibility for regulating air quality, including seven nationally regulated ambient air pollutants. Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology, and terrain; and also includes applications of noise, smoke management, and visibility. Greenhouse gas (GHG) emissions, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), water vapor, and several trace gases, can affect air quality (USEPA April 2013).

Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. GHGs also affect climate. Through complex interactions on a global scale, GHG emissions may cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and the burning of fossil carbon sources have caused GHG concentrations to measurably increase, and have contributed to overall climatic changes, typically referred to as global warming (NRC 2010). GHGs are not regulated by the USEPA. However, climate is important to consider because it has the potential to influence renewable and non-renewable resource management.

#### **Air Quality**

The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

Air quality in the area near the proposed project is generally good and the Proposed Action is not located in an area designated by the USEPA as a "non-attainment area" for any listed pollutants regulated under the Clean Air Act (USEPA July 2013).

The USEPA's Inventory of US Greenhouse Gas Emissions and Sinks found that total U.S. GHG emissions were over 6.7 billion metric tons and that total U.S. GHG emissions have increased by 8.4% from 1990 to 2011. Emissions decreased from 2010 to 2011 by 1.6% (108.0 million metric tons CO<sub>2</sub> Eq.). The decrease was due to a decrease in carbon intensity of fuels consumed to generate electricity (due to a substitution of natural gas for coal and an increase in hydropower use), and relatively mild winter conditions (USEPA Apr. 2013). Since 1990, U.S. emissions have increased at an average annual rate of 0.4 percent (USEPA Apr. 2013). It is likely, then, that levels of these GHGs will continue to increase. But, it is

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hoped that the rate of increase will continue to slow as greater awareness of the potential environmental and economic costs associated with increased levels of GHGs result in behavioral and industrial adaptations.

### **Climate**

The average global temperature has risen about 1.4°F (0.8°C) from 1880 to 2012. The continued increase in GHG levels in Earth's atmosphere assures a long-term rise in global temperatures. On the current course of GHG increases, scientists expect each successive decade to be warmer than the previous one (Hansen 2013).

In 2007, the Intergovernmental Panel on Climate Change (IPCC) predicted a warming of about 0.2°C per decade for the next two decades, and then a further warming of about 0.1°C per decade (IPCC 2007). The National Academy of Sciences (NAS) believes that the need for urgent action to address climate change is now indisputable and it has called upon the G8+5 nations to seize all opportunities to coordinate their simultaneous work on the climate and economic agendas (NAS 2009).

A report on climate change by the U.S. Government Accountability Office (USGAO) found that, "federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring. These effects include, among others: 1) physical effects such as droughts, floods, glacial melting, and sea level rise; 2) biological effects, such as increases in insect and disease infestations, shifts in species distribution, and changes in the timing of natural events; and 3) economic and social effects, such as adverse impacts on tourism, infrastructure, fishing, and other resource uses" (USGAO 2007). However, it is not possible to predict with any certainty, the regional or site-specific effects on climate relative to the Proposed Action and subsequent actions.

### **3.1.1 No Action Alternative**

#### **3.1.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Old Churchrock Mine Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to air resources would occur.

### **3.1.2 Proposed Action**

#### **3.1.2.1 Direct and Indirect Effects**

##### **Air Quality**

- 
1. During road improvement activities within the proposed ROW, there would be short-term (approximately two days to four weeks, for each project, depending on project scope) increases in dust during each construction project within the Proposed Action area. This impact would subside as disturbed areas are reclaimed.
  2. There will be minor, short-term increases during project activity in local combustive emissions from operating vehicles and earth moving equipment.
  3. There will be a minor long-term (20 years) impact to air quality from motorized vehicles and equipment performing periodic maintenance.
  4. There will be minor and sporadic, long-term (over 20 years) fugitive dust creation during maintenance activities within the ROW.

#### **Climate**

No quantifiable impacts to the climate are anticipated as a result of the Proposed Action.

#### **3.1.2.2 Mitigation**

1. McKinley County will apply water for dust control, if necessary.
2. Surface disturbance and vehicular traffic will be limited to the approved locations to reduce combustive emissions and dust.
3. McKinley County will comply with U.S. Environmental Protection Agency's Clean Air Act, and all applicable state and local regulations.

### **3.2 Cultural Resources**

Complete Archeological Service Associates performed a Class III Cultural Resources Inventory of the Proposed Action area. Two cultural resource sites were recorded during the surveys. A request for archeological clearance with mitigation for the two recorded sites was submitted to the Navajo Nation Historic Preservation Department (NNHPD). The Cultural Resources Compliance Form is attached as Appendix 5.

#### **3.2.1 No Action Alternative**

##### **3.2.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Old Churchrock Mine Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to cultural resources would occur.

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### **3.2.2 Proposed Action**

#### **3.2.2.1 Direct and Indirect Effects**

The potential exists to impact undiscovered or improperly inventoried cultural resources that may be discovered during road construction or maintenance activities within the proposed ROW.

#### **3.2.2.2 Mitigation**

1. Existing sites identified during the cultural resources survey conducted April 7, 2016 will be appropriately flagged and avoided during construction projects.
2. Any other cultural and/or paleontological resource (historic or prehistoric site or object) discovered during the Proposed Action by McKinley County, or any person working on their behalf, will be immediately reported to the NNHPD at (928) 871-7148, and to any other necessary agencies. McKinley County will suspend all operations in the immediate area of such discovery until approval to proceed is issued by the NNHPD. An evaluation of the discovery will be made by the NNHPD archaeologist to determine appropriate action to prevent the loss of significant cultural or scientific values.

### **3.3 Environmental Justice**

Executive Order 12898 requires federal agencies to assess projects to ensure there are no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations (1994). Minorities comprise a high percentage of the population residing in McKinley County.

#### **3.3.1 No Action Alternative**

##### **3.3.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Old Churchrock Mine Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to environmental justice would occur.

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### **3.3.2 Proposed Action**

#### **3.3.2.1 Direct and Indirect Effects**

The purpose of the Proposed Action is to provide a ROW access so that McKinley County can improve and maintain Old Churchrock Mine Road. This would be an overall positive effect for residents that live in the vicinity of the Proposed Action. Negative direct effects to minority or low-income populations would include an increase in construction and maintenance activities, increased traffic, and noise disturbance within the ROW over a 20 year period.

#### **3.3.2.2 Mitigation**

Mitigation for construction and maintenance activities within the proposed ROW that would reduce negative impacts to low income or minority populations living in the project area include watering roads to reduce dust, notifying residents of pending construction activities, providing appropriate signage and traffic direction during construction activities, and identifying and directing motorists to alternate routes when necessary. Regarding an increase in noise disturbance, see Section 3.8.

### **3.4 Floodplains**

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the Proposed Action crosses a Zone A flood hazard zone (1% Annual Chance of Flood Hazard). The Zone A area is a large ephemeral wash which is crossed by Old Churchrock Mine Road in the SE/4 of Section 16, T. 16 North, R. 16 West (USDHS FEMA 2010). The remainder of the project area is located within Zone X area of minimal flood hazard. There are no perennial or intermittent streams, riparian areas, or wetlands in the project area.

#### **3.4.1 No Action Alternative**

##### **3.4.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to floodplains would occur.

#### **3.4.2 Proposed Action**

##### **3.4.2.1 Direct and Indirect Effects**

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A portion of the Proposed Action is located in the 100-year floodplain of an ephemeral wash (FEMA map Zone A). Therefore, McKinley County would need to ensure construction activities are within EPA Clean Water Act requirements. This may include 2012 Construction General Permit authorization under the Stormwater Discharges from Construction Activities portion of the National Pollutant Discharge Elimination System (NPDES), depending on the number of acres included in the construction project within the Proposed Action area (EPA, 2016).

### **3.5 General Topography**

The Proposed Action area is located approximately five miles northeast of the community of Churchrock, New Mexico. Elevation in the project area is approximately 6700 feet. General topography surrounding the project area consists of wide valleys rimmed with mesas and buttes, and drained by sandy, ephemeral washes. Exposed sandstone bedrock is present along steep slopes, mesa rimrock, and hillsides. The broad valleys are gently rolling plains. Large ephemeral drainages with deeply incised channels indicate unstable, fine soils. The area has been historically grazed by livestock and grasses are sparse and patchy. There are no unique habitat elements within the proposed ROW. There are no perennial or intermittent streams, riparian areas, or wetlands in the project area. The project crosses the floodplain and channel of a large ephemeral wash in the SE/4 of Section 17, T. 16 North, R. 16 West (Appendix 1).

#### **3.5.1 No Action Alternative**

##### **3.5.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no construction or maintenance would be performed by McKinley County along Old Churchrock Mine Road. Therefore, no direct or indirect impacts to general topography would occur.

#### **3.5.2 Proposed Action**

##### **3.5.2.1 Direct and Indirect Effects**

1. A direct effect to the natural topography will result from construction and maintenance activities within the proposed ROW.
2. The indirect effect of construction disturbance includes soil losses from erosion of exposed soils as well as seed bank losses.

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### **3.5.2.2 Mitigation**

1. Surface disturbance and vehicular traffic will be limited to areas approved within the proposed ROW.
2. Disturbed areas will be reclaimed pursuant to Section 2.3. Reseeding will help prevent soil loss and seed bank disturbance/loss. Successful reclamation will take two to three years.
3. Best Management Practices (BMPs) including sediment barriers, rip/rap, hay bales, or other protections to reduce erosion and soil losses will be implemented during construction and maintenance activities. Road improvement construction within the proposed ROW will only be performed when the soil is dry enough to adequately support construction equipment and vehicles. When the soil is too wet (ruts more than six inches deep), construction will be postponed until conditions improve.

## **3.6 Soils**

Soils in the northern two-thirds of the Proposed Action area are composed of the Sparank-San Mateo-Zia complex, 0 to 3 percent slopes. These soils are formed from stream alluvium derived from calcareous sandstone. A typical profile of this well drained complex consists of silty clay loam (0 to 2 inches), and clay (2 to 65 inches). Soils in the southern third of the project area are comprised of the Buckle-Gapmesa-Barboncito complex (1 to 6 percent slopes). This complex is derived from eolian deposits over fan and slope alluvium derived from Dakota and Gallup sandstones and Mancos shale. The soil texture ranges from loamy fine sand, clay loam (1 to 7 inches), sandy clay loam (7 to 25 inches), clay loam (25 to 35 inches), and fine sandy loam to a depth of 80 inches (NRCS 2016).

### **3.6.1 No Action Alternative**

#### **3.6.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and McKinley County would not conduct any road improvement or maintenance activities within the Old Churchrock Mine Road ROW. Therefore, no direct or indirect impacts to soils would occur.

### **3.6.2 Proposed Action**

#### **3.6.2.1 Direct and Indirect Effects**

1. A direct effect to soils from construction and maintenance activities within the ROW would come from mixing, blading, filling, and grading. Soils

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will be compacted and structurally reduced and exposed to an undetermined amount of erosion.

2. Indirect effects would come from soil losses from wind and precipitation events on soils left exposed immediately after construction or maintenance events.

### **3.6.3 Mitigation**

In the short term, direct and indirect impacts to soils exposed during and immediately after construction and maintenance activities within the proposed ROW would be mitigated by utilizing BMPs within the ROW to minimize soil loss. Reclamation and reseeding would further protect soils from long term losses from wind and precipitation events. Once vegetation is established, soils will be more stabilized. Revegetation and soil stabilization may take up to three years.

## **3.7 Invasive, Non-native Species**

There are seventeen species listed on the BIA Navajo Noxious Weed List (USDI OSM 1999). None of these species are present in the project area. Several species of invasive weeds are present within the project area. These species include Russian thistle (*Salsola tragus*) and Kochia (*Bassia scoparia*).

### **3.7.1 No Action Alternative**

#### **3.7.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no new direct or indirect impacts from invasive or non-native species would occur. The current condition of invasive species present within the project area would remain the same.

### **3.7.2 Proposed Action**

#### **3.7.2.1 Direct and Indirect Effects**

Noxious weeds may become established in disturbed areas within the Proposed Action area as a result of construction or maintenance activities. Bare soils are vulnerable to invasive or noxious weed species establishment.

#### **3.7.2.2 Mitigation**

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1. Any disturbed areas will be reclaimed and seeded with an approved seed mix.
  2. McKinley County will make every effort to ensure that noxious weeds do not spread over disturbed areas. If noxious weeds become established within the Proposed Action area, McKinley County will contact the Navajo Nation and the EPA Pesticides Program for a list of approved herbicides and applicators.

### **3.8 Land Use**

The Proposed Action is located on Navajo Tribal Trust lands. Current land uses include residential living, livestock grazing, and dirt roads, and pastures. There are no farmlands in the Proposed Action area.

#### **3.8.1 No Action Alternative**

##### **3.8.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved or constructed and no direct or indirect impacts to current land uses would occur.

#### **3.8.2 Proposed Action**

##### **3.8.2.1 Direct and Indirect Effects**

Because construction and maintenance projects would be limited to smaller areas within the proposed ROW, the Proposed Action would potentially affect much less than the approximately 23.11 acres of Tribal Trust land that is included within the proposed ROW. Much of the road improvement construction and maintenance will occur within the Old Churchrock Mine Road footprint, which is an existing disturbance and designated land use (i.e., a road). The large width of the proposed ROW (150 feet) is necessary to accommodate the potential need for realignment at bridges and culvert crossings. At this time, it is unknown how much acreage of undisturbed land within the proposed ROW would be needed for potential re-alignment, but it would certainly be less than 23.11 acres and is likely to be closer to two or three acres. In any case, land use within the proposed ROW is primarily used for pasture and/or grazing livestock and is already heavily impacted by grazing. Construction within these areas would result in a loss of some grazing vegetation.

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### **3.8.2.2 Mitigation**

1. Reclamation (seeding) of the Proposed Action areas that are disturbed from construction or maintenance of the Old Churchrock Mine Road will replace, and may even enhance, vegetative cover with the proposed ROW. Successful reclamation is expected to take two to three years and may require fencing or exclosures to keep livestock out.
2. If grazing permits are identified in the project area, the grazing permittees will be contacted to gain written permission for construction or maintenance within that portion of the proposed ROW that overlaps permitted grazing allotments.

## **3.9 Noise**

Noise is not currently regulated or managed by the Navajo Nation. The Proposed Action is in a rural location and is not in any BLM-designated Noise Sensitive Area. Several residences are located within 200 feet of the proposed ROW. Maintenance and construction activities near these homes may cause some moderate-level noise.

### **3.9.1 No Action Alternative**

#### **3.9.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect noise impacts would occur.

### **3.9.2 Proposed Action**

#### **3.9.2.1 Direct and Indirect Effects**

1. Noise will be generated as part of construction and maintenance activities associated with the proposed ROW.
2. Occasional maintenance vehicles will travel to and within the project area over a period of approximately 20 years.

#### **3.9.2.2 Mitigation**

1. Construction will be conducted during daylight hours and will be limited to approved locations within the proposed ROW.
2. Vehicular traffic will be restricted to approved areas within the ROW and will not exceed what is necessary for the construction and maintenance.

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3. Noise associated with construction activities will cease after construction is completed (approximately two days to four weeks, depending on project scope). Once construction is complete, noise will return to background level except during periodic maintenance activities.

### **3.10 Public Health and Safety**

The proposed ROW occurs along a moderately traveled dirt road accessing residences. During construction, residents living in the vicinity of construction activity may be subject to safety concerns, including increased construction traffic, temporary detours, and changing road conditions.

#### **3.10.1 No Action Alternative**

##### **3.10.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and McKinley County would not be conducting road improvement or maintenance activities along Old Churchrock Mine Road. Therefore no direct or indirect impacts to public health and safety would occur.

#### **3.10.2 Proposed Action**

##### **3.10.2.1 Direct and Indirect Effects**

Risks to the public associated with road construction and maintenance include increased traffic and potential air (dust and vehicle exhaust) emissions exposure.

##### **3.10.2.2 Mitigation**

1. Only approved areas within the ROW will be used during construction and maintenance to minimize hazards McKinley County road workers and the general public.
2. All applicable laws, regulations, and policies will be followed during construction and maintenance activities, or while responding to any emergency.
3. BMPs and appropriate Occupational Safety and Health Administration standards and guidelines will be implemented to minimize negative effects to public health and safety, including appropriate signage and use of traffic directors (flaggers) where needed.

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### **3.11 Threatened, Endangered, and Special Status Species**

A wildlife biologist conducted a pedestrian wildlife survey of the project area to inspect for the potential presence of threatened, endangered, or special status species on April 12, 2016. No federal or Navajo Endangered Species List (NESL) listed threatened, endangered, or special status species were observed during the wildlife survey. The wildlife habitat available in the project area is heavily degraded from over-grazing and only common species tolerant of human activity are expected to occur within the vicinity. A report addressing wildlife in the project area is attached as Appendix 3.

Six bird species that are protected under the MBTA were observed during the wildlife survey. These were the American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), Brewer's blackbird (*Euphagus cyanocephalis*), western meadowlark (*Sturnella neglecta*), and Say's phoebe (*Sayornis saya*). Mitigation measures outlined in Section 3.11.2.2, below, will minimize the potential take of migratory birds from the Proposed Action area.

No plant species of concern to the Navajo Natural Heritage Program or the United States Fish and Wildlife Service will be impacted by the proposed project. The full Plant Survey Report is attached as Appendix 4.

#### **3.11.1 No Action Alternative**

##### **3.11.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW would not be approved and no road improvement projects would take place along Old Churchrock Mine Road. No direct or indirect impacts to threatened, endangered, or special status species would occur.

#### **3.11.2 Proposed Action**

##### **3.11.2.1 Direct and Indirect Effects**

1. The removal of vegetation from areas proposed for construction improvements may impact nesting migratory birds within the project area and will remove potential nesting or foraging habitat.
2. The MBTA protects migratory birds from a "take". Take is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities". A "take" does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or

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parts thereof. Nesting migratory birds could be adversely impacted by a potential take.

#### **3.11.2.2 Mitigation**

1. Construction should not take place during migratory bird nesting season, which is generally May 1 -August 30 for the project area. If construction activities must occur during this period, surveys for nests should be conducted beforehand to identify any nests that may be impacted by construction activities.
2. McKinley County should avoid shrub removal and damage to vegetation as much as possible, cleaning up and removing any spills and/or trash from construction, and using only authorized rights-of-way and roads for construction and installation.
3. McKinley County should minimize soil disturbance during construction to reduce impacts to small mammals and reptiles.
4. McKinley County should use of effective reclamation methods to ensure a viable native plant community that would provide wildlife habitat at the end of reclamation efforts and monitor for invasive or noxious plant species that would hamper reclamation success.

### **3.12 Vegetation, Forestry**

Due to instensive grazing, drought, and human activity, vegetation is sparse. The vegetation community is best represented by desert grassland with scattered individual trees of pinyon (*Pinus edulis*) and juniper (*Juniperus monosperma*). Rabbitbrush (*Chrysothamnus* sp.) and invasive weeds such as Russian thistle (*Salsola tragus*) and kochia (*Bassius scoparia*) are present along the washes and road-sides. A complete inventory of plant species can be found in Appendix 4.

#### **3.12.1 No Action Alternative**

##### **3.12.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to vegetation or forestry would occur.

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### **3.12.2 Proposed Action**

#### **3.12.2.1 Direct and Indirect Effects**

The Proposed Action will affect approximately 23.11 acres of Navajo Tribal Trust lands during road improvement projects along Old Churchrock Mine Road.

#### **3.12.2.2 Mitigation**

Reclamation, as outlined in Section 2.3, will mitigate impacts to vegetation from construction within the Proposed Action area. Reseeding will replace vegetation removed or damaged during construction. Successful reclamation is expected to take two to three years.

### **3.13 Visual Resources**

Visual resources are not currently inventoried or managed by the Navajo Nation. However, the BLM has developed a Visual Resource Management (VRM) classification system designed to maintain or enhance visual qualities and describe different degrees of modification to the landscape. There are four VRM classes (Classes I through IV), which identify suggested degrees of allowed human modification to a landscape. Class I allows the least modification and Class IV allows the most (USDI BLM 2003).

Due to the presence of roads, residents, and an old mining area, the project area most likely falls into a BLM Class IV area. Class IV areas are permitted to implement major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements of the landscape (USDI BLM 2003).

In any case, improvements to wash crossings, bridges, and roads will likely enhance Visual Resources rather than negatively impact them.

#### **3.13.1 No Action Alternative**

##### **3.13.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to visual resources would occur.

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### **3.13.2 Proposed Action**

#### **3.13.2.1 Direct and Indirect Effects**

Short-term impacts to visual resources could come from dust, truck traffic, and placement of heavy equipment during construction.

#### **3.13.2.2 Mitigation**

Short-term impacts to visual resources from construction will cease after approximately two to six weeks depending on which project is occurring within the proposed ROW.

### **3.14 Wastes, Hazardous and Solid**

As a result of the construction within the Proposed Action area, solid waste materials will be generated. These materials may include typical field waste such as charts and plats, excess concrete pieces, old culverts, and bridge beams, scrap lumber, laths, stakes, flagging, nylon rope, lunch trash, and cardboard. Generation of hazardous waste is not expected. If hazardous waste were inadvertently generated, the proper authorities would be consulted regarding the disposal of such waste.

#### **3.14.1 No Action Alternative**

##### **3.14.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts from wastes, hazardous or solid, would occur.

#### **3.14.2 Proposed Action**

##### **3.14.2.1 Direct and Indirect Effects**

Trash and unwanted materials will be generated by construction.

##### **3.14.2.2 Mitigation**

All trash will be placed in a portable trash cage and hauled to an approved landfill. There will be no burial or burning of trash. Human waste will be disposed of in chemical toilets if necessary and hauled to an approved dump station off of the reservation.

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### 3.15 Water Resources

The Colorado Plateaus aquifers underlay the northwestern portion of New Mexico. The principal aquifers and aquifer systems are the Uinta-Animas, the Mesaverde, the Coconino-De Chelly, and the Dakota-Glen Canyon. Smaller, more localized aquifers are also defined as part of the Colorado Plateaus aquifers. The San Andres Limestone-Glorieta Sandstone, Dakota-Westwater Sandstones, and the Gallup Sandstone of the Mesaverde Group at and near the project area, form aquifers that produce most of the ground water for the communities of Gallup and Rehoboth (Cooper and West 1967). The quality of water from these aquifers and systems throughout the Four Corners area has been described by the USGS as being highly variable with total dissolved solids generally measuring under 1,000 mg/L, though several areas reported concentrations as high as 35,000 mg/L (Robson and Banta 1995).

The Gallup Sandstone is recharged in its outcrop areas by infiltration of precipitation and runoff. Locally, it is recharged by downward percolation of water from the overlying unconsolidated sediments. Water from the sandstone is discharged naturally through small springs and seeps in the outcrop areas and by vertical or lateral leakage percolation into adjacent unconsolidated deposits.

The project area receives approximately 11.08 inches of annual precipitation (WRCC 2014). However, annual groundwater recharge is limited in the Gallup region as indicated by recent and significant declines in water levels in the area's wells. In the Gallup area, the water table dropped about 200 feet between 1999 and 2009 and is not expected to meet the demands of the population by 2019 (Bushnell 2012). The chemical quality of the water in the aquifers varies widely, probably because of variations in the quality of recharge water and because of the presence locally of coal beds and carbonaceous shale within the formation (Cooper and West 1967). The city's 17 wells are located up to 10 miles from the city center and range from 300 to 3,500 feet deep. As such, they receive no recharge from surface sources (such as rain or snow) immediately above each well site.

Wells in the vicinity of the project area are similarly confined, deep, and well-protected, since they draw from the San Andres-Glorieta aquifer, a 200 ft thick aquifer, 1100 ft below the ground surface.

The hydrologic setting of the project area is characterized by several large, ephemeral drainages filled with eolian deposits and sandy alluvium. Surface flows are associated with small ephemeral flows from snow melt and summer thunderstorms. Drainages in the project area are categorized as sandy. Most discharge to alluvial channels is lost by evapotranspiration. However, some water may move laterally through the underlying sandstones as subsurface flow.

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### **3.15.1 No Action Alternative**

#### **3.15.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no road improvement construction projects would occur along Old Churchrock Mine Road.

### **3.15.2 Proposed Action**

#### **3.15.2.1 Direct and Indirect Effects**

1. A direct effect from construction is the increased sediment loading to the adjacent surface drainages through runoff of disturbed soils.
2. Natural surficial drainage patterns may be slightly disrupted by construction within the proposed ROW.
3. Although no hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) will be used during construction activities, and no Resources Conservation and Recovery Act-defined hazardous wastes will be generated during construction or operation, construction equipment could experience a spill of on-board fluids and/or materials that could potentially get into the surface or groundwater system.

#### **3.15.2.2 Mitigation**

1. BMPs in Section 2.2 will be implemented to prevent erosion and off-site migration of soils and other materials, and to reduce impacts to watershed and hydrology.
2. Any spilled contaminants will be cleaned up as soon as possible to prevent run-off of contaminants into surface waters or infiltration into groundwater.
3. Construction areas within the proposed ROW will be reclaimed as outlined in Section 2.3. Re-seeding will reduce sediment loading by stabilizing the soil. Successful reclamation is expected to take two to three years.

### **3.16 Wildlife**

Wildlife species occurring in the project area are typical of arid grasslands of the Great Basin Desert. Representative mammals include coyotes (*Canis latrans*), ground squirrels (*Spermophilus* spp.), and black-tailed jackrabbits (*Lepus californicus*). Common summer

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resident bird species include black-throated sparrow (*Amphispiza bilineata*) and chipping sparrow (*Spizella pallida*) and common year-round avian residents include horned lark (*Eremophila alpestris*), and common raven (*Corvus corax*). Reptilian species include whiptail lizards (*Aspidoscelis* spp.).

A complete inventory of wildlife species observed in the project area is included in Appendix 3.

### **3.16.1 No Action Alternative**

#### **3.16.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to wildlife would occur.

### **3.16.2 Proposed Action**

#### **3.16.2.1 Direct and Indirect Effects**

1. The wildlife that uses the site may die or be displaced during construction. Removal of or damage to vegetation during construction of the Proposed Action may reduce wildlife forage and cover in the area.
2. Wildlife movement patterns may be disrupted by increased human activity in construction areas.

#### **3.16.2.2 Mitigation**

1. Reclamation of the proposed ROW road improvement and construction areas, as outlined in Section 2.3, will reduce the long-term impacts to wildlife that use the area. Reseeding disturbed areas will replace vegetation removed during construction. In some instances, there may be a benefit from successful reclamation due to an increase in vegetative cover and wildlife forage. Successful reclamation is expected to take two to three years.
2. Vehicles will be restricted to existing roads and approved temporary use or Row areas to reduce impacts to ground dwelling wildlife at the project site.
3. McKinley County workers and contractors to McKinley County will observe speed limits to reduce impacts to wildlife from vehicle collisions.
4. No trenches or ditches are to be left open over night to prevent wildlife from falling in. If leaving trenches or ditches open is necessary then an escape ramp should be constructed to allow animals to escape entrapment.

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Escape ramps should be at a slope of 3:1 and should be directed away from roads and traffic.

### **3.17 Cumulative Effects**

#### **3.17.1 No Action Alternative**

Under the No Action Alternative, the Old Churchrock Mine Road ROW would not be approved and McKinley County would not be performing road improvement projects within the ROW.

#### **3.17.2 Proposed Action**

The Proposed Action will affect approximately 23.11 acres on Navajo Tribal Trust. Reasonably foreseeable future development in the project area may include more residences, more traffic, more livestock grazing, and perhaps more road development and/or improvement projects. These installations would add to the cumulative disturbance in the area.

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## 4. Consultation/Coordination

This section identifies the interdisciplinary team that participated in the development of this document.

**Table 4.1: Interdisciplinary Project Team**

Member	Title	Organization	Onsite Inspection	Date of Inspection
Celia Cook	Consultant/Author	Permits West, Inc.	yes	4/12/2016
Celia Cook	Wildlife Biologist	Permits West, Inc.	yes	4/12/2016
Robyn Tierney	Botanist	Permits West, Inc.	yes	4/12/2016
Mary Errickson	Archaeologist	Complete Archeological Services Associates, Inc.	yes	4/7/2016
Mike Deutsch	Project Coordinator	Permits West, Inc.	yes	3/10/2016

## 5. Contact Information

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87305

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## 6. References

Bushnell, Darcy. *Groundwater in New Mexico*. October 1, 2012. Web.  
<http://uttoncenter.unm.edu/pdfs/GroundwaterInNewMexico.pdf>.

Cooper, James B. and S. W. West. 1967. *Principal Aquifers and Uses of Water Between Lagun Pueblo and Gallup, Valencia and McKinley Counties, New Mexico*. In: Defiance, Zuni, Mt. Taylor Region (Arizona and New Mexico), Trauger, F. D.; [ed.], New Mexico Geological Society 18th Annual Fall Field Conference Guidebook, 228 p.

Executive Order 12898, 59 *Federal Register*, 11 Feb. 1994.

Hansen, J.E., R. Ruedy, M. Sato, and K. Lo. *NASA GISS Surface Temperature (GISTEMP) Analysis*. In *Trends: A Compendium of Data on Global Change*. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, 2013. Web. Sep 2013.

Intergovernmental Panel on Climate Change. *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. Geneva, Switzerland, 2007. 104 pp.

National Academy of Sciences. *G8+5 Academies' Joint Statement: Climate Change and the Transformation of Energy Technologies for a Low Carbon Future*. May 2009. Web.

National Environmental Policy Act. Public Law 91-90, 42 USC 4321 et seq., 1969.

National Historic Preservation Act. Public Law 39-665, 16 USC 470 et seq., 1966.

New Mexico Bureau of Geology and Mineral Resources (NMBGMR). 2003. *Geologic Map of New Mexico*. 1:500,000. New Mexico Bureau of Geology and Mineral Resources.

National Research Council (NRC). 2010. *Advancing the Science of Climate Change*. National Research Council. The National Academies Press, Washington, DC, USA. Available at: <http://nas-sites.org/americasclimatechoices/sample-page/panel-reports/87-2/>.

Navajo Nation Council. Navajo Nation Air Pollution Prevention and Control Act. Fort Defiance, AZ, 22 Apr. 2004.

Prall, Dexter. March 25, 2016. Navajo Endangered Species List (NESL) information for Sections 17, 20, and 21, T. 16 North, R. 16 West, McKinley County, New Mexico. *Correspondence*

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*with Permits West Inc.* Navajo Department of Fish and Wildlife, Navajo Natural Heritage Program. P. O. Box 1480, Window Rock, AZ.

Robson, S. G. and E. R. Banta. 1995. Groundwater Atlas of the United States, Arizona, Colorado, New Mexico, Utah. HA 730-C. Web. [http://pubs.usgs.gov/ha/ha730/ch\\_c/](http://pubs.usgs.gov/ha/ha730/ch_c/).

U. S. Department of Agriculture Natural Resources Conservation Services (NRCS), U.S. Department of Agriculture. 2016. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed April 14, 2016.

U.S. Environmental Protection Agency. *Currently Designated Nonattainment Areas for All Criteria Pollutants*. Web. 31 Jul. 2013.

U.S. Environmental Protection Agency. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2011*. Washington, D.C., Apr. 2013.

U.S. Environmental Protection Agency. "Causes of Climate Change." 9 Sep. 2013. Web. Nov. 2013.

U. S. Environmental Protection Agency (EPA). National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Construction Activities. Web. <https://www.epa.gov/npdes/stormwater-discharges-construction-activities#overview>. April 2016.

U.S. Department of Homeland Security. Federal Emergency Management Agency, Map Service Center. Map Service Center Flood Maps. 2010. FEMA Flood Map 35031C1575E, McKinley County. Web. <https://msc.fema.gov/portal/search#searchresultsanchor>

U.S. Department of the Interior. Bureau of Land Management, Farmington Field Office. *Farmington Proposed Resource Management Plan and Final Environmental Impact Statement*. Farmington, NM, Mar. 2003.

U.S. Department of the Interior. Bureau of Land Management. NEPA Handbook (H-1790-1). Jan. 2008.

U.S. Department of the Interior. Office of Surface Mining (OSM). *A Guide to Noxious Weeds of the Navajo Reservation*. U.S. Department of the Interior, 1999.

U.S. Fish and Wildlife Service. *National Wetlands Inventory*. Available at: <http://www.fws.gov/wetlands>. 2014.

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U.S. Government Accountability Office. *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources* (GAO-07-863). 7 Aug. 2007.

Western Regional Climate Center (WRCC). Gallup FAA, AP, NM (293422), Period of Record Monthly Climate Summary Period of Record: 1/1/1921 to 3/31/2013. Available at: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?nm3422>.

# **McKinley County Old Church Rock Mine Rd**

Sections 17, 20, & 21, T.16N, R.16W  
County Road 15B  
McKinley County, New Mexico

USGS Quad(s): Church Rock

Project Area

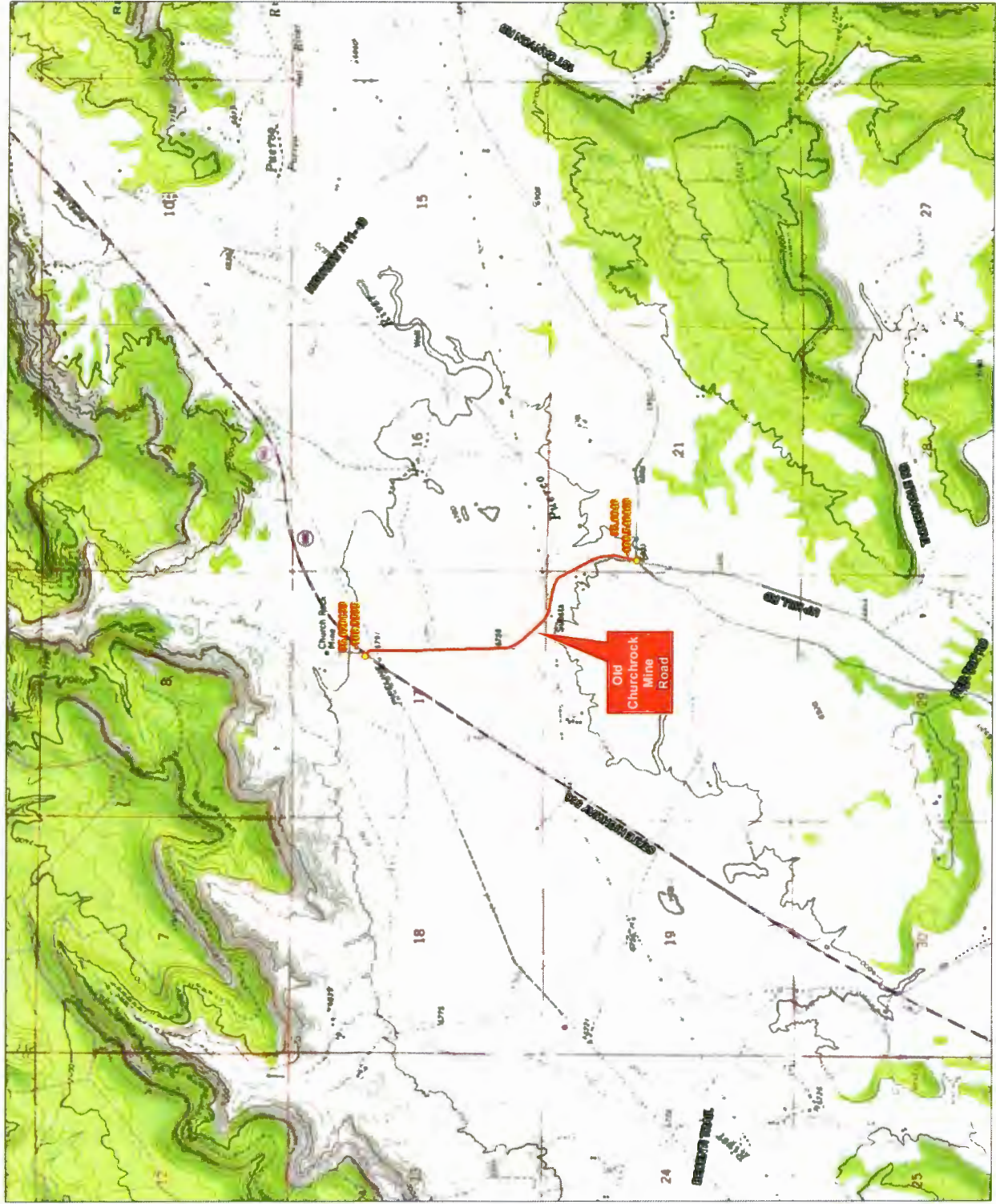


NAD 1983 New Mexico State Plane West  
FIPS 3003 Meters



PERMIT'S WEST

Prepared by Permits West, Inc., May 6, 2016  
for McKinley County, New Mexico





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16perm104

25-March-2016

Mike Deutsch - Project Director  
Permits West, Inc  
37 Verano Loop  
Santa Fe, NM 87508

**SUBJECT: County Road Project on behalf of McKinley County**

Mike Deutsch,

NNHP has performed an analysis of your project in comparison to known biological resources of the Navajo Nation and has included the findings in this letter. The letter is composed of seven parts. The sections as they appear in the letter are:

1. **Known Species** – a list of all species within relative proximity to the project
2. **Potential Species** – a list of potential species based on project proximity to respective suitable habitat
3. **Quadrangles** – an exhaustive list of quads containing the project
4. **Project Summary** – a categorized list of biological resources within relative proximity to the project grouped by individual project site(s) or quads
5. **Conditional Criteria Notes** – additional details concerning various species, habitat, etc.
6. **Personnel Contacts** – a list of employee contacts
7. **Resources** – identifies sources for further information

Known Species lists "species of concern" known to occur within proximity to the project area. Planning for avoidance of these species is expected. If no species are displayed then based upon the records of the Navajo Nation Department of Fish and Wildlife (NNDFW) there are no "species of concern" within proximity to the project. Refer to the Navajo Endangered Species List (NESL) Species Accounts for recommended avoidance measures, biology, and distribution of NESL species on the Navajo Nation ([http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm)).

Potential Species lists species that are potentially within proximity to the project area and need to be evaluated for presence/absence. If no species are found within the Known or Potential Species lists, the project is not expected to affect any federally listed species, nor significantly impact any tribally listed species or other species of concern. Potential for species has been determined primarily on habitat characteristics and species range information. A thorough habitat analysis, and if necessary, species specific surveys, are required to determine the potential for each species.

Species of concern include protected, candidate, and other rare or otherwise sensitive species, including certain native species and species of economic or cultural significance. For legally protected species, the following tribal and federal statuses are indicated: NESL, federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Eagle Protection Act (EPA). No legal protection is afforded species with only ESA candidate, NESL group 4 status, and species listed on the Sensitive Species List. Please be aware of

these species during surveys and inform the NNDFW of observations. Reported observations of these species and documenting them in project planning and management is important for conservation and may contribute to ensuring they will not be up listed in the future.

In any and all correspondence with NNDFW or NNHP concerning this project please cite the Data Request Code associated with this document. It can be found in this report on the top right corner of the every page. Additionally please cite this code in any biological evaluation documents returned to our office.

## 1. Known Species *(NESL=Navajo Endangered Species List, FE=Federally Endangered, FT=Federally Threatened, FC=Federal Candidate)*

### Species

AQCH = Aquila chrysaetos / Golden Eagle NESL G3

## 2. Potential Species

### Species

AQCH = Aquila chrysaetos / Golden Eagle NESL G3

ATCU = Athene cunicularia / Burrowing Owl NESL G4

EMTRESX = Empidonax traillii extimus / Southwestern Willow Flycatcher NESL G2 FE

ERAC = Erigeron acomanus / Acoma Fleabane NESL G3

ERRH = Erigeron rhizomatus / Rhizome Fleabane/zuni Fleabane NESL G2 FT

ERSI = Erigeron sivistskii / Sivistskii's Fleabane NESL G4

FAPE = Falco peregrinus / Peregrine Falcon NESL G4

LENA = Lesquerella navajoensis / Navajo Bladderpod NESL G3

## 3. Quadrangles (7.5 Minute)

### Quadrangles

Church Rock (35108-E5) / NM

## 4. Project Summary *(EO1 Mile/EO 3 Miles=elements occurring within 1 & 3 miles., MSO=mexican spotted owl PACs, POTS=potential species, RCP=Biological Areas)*

SITE	EO1MI	EO3MI	QUAD	MSO	POTS	AREAS
Challenger Rd	None	AQCH	Church Rock (35108-E5) / NM	None	FAPE, EMTRESX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC	Area 3
Old Church Rock Mine Rd	None	None	Church Rock (35108-E5) / NM	None	FAPE, EMTRESX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC	Area 3

SITE	EO1MI	EO3MI	QUAD	MSO	POTS	AREAS
Superman Canyon Rd	None	AQCH	Church Rock (35108-E5) / NM	None	FAPE, EMTREX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC	Area 3
Telstar Rd	None	AQCH	Church Rock (35108-E5) / NM	None	FAPE, EMTREX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC	Area 3
Uphill Rd	None	AQCH	Church Rock (35108-E5) / NM	None	FAPE, EMTREX, AQCH, LENA, ERSI, ERRH, ERAC	Area 3

**5. Conditional Criteria Notes** *(Recent revisions made please read thoroughly. For certain species, and/or circumstances, please read and comply)*

- A. **Biological Resource Land Use Clearance Policies and Procedures (RCP)** - The purpose of the RCP is to assist the Navajo Nation government and chapters ensure compliance with federal and Navajo laws which protect, wildlife resources, including plants, and their habitat resulting in an expedited land use clearance process. After years of research and study, the NNDFW has identified and mapped wildlife habitat and sensitive areas that cover the entire Navajo Nation.
- The following is a brief summary of six (6) wildlife areas:
1. **Highly Sensitive Area** – recommended no development with few exceptions.
  2. **Moderately Sensitive Area** – moderate restrictions on development to avoid sensitive species/habitats.
  3. **Less Sensitive Area** – fewest restrictions on development.
  4. **Community Development Area** – areas in and around towns with few or no restrictions on development.
  5. **Biological Preserve** – no development unless compatible with the purpose of this area.
  6. **Recreation Area** – no development unless compatible with the purpose of this area.
- None** - outside the boundaries of the Navajo Nation
- This is not intended to be a full description of the RCP please refer to the our website for additional information at <http://www.nndfw.org/clup.htm>.
- B. **Raptors** – If raptors are known to occur within 1 mile of project location: Contact Chad Smith at 871-7070 regarding your evaluation of potential impacts and mitigation.
- o **Golden and Bald Eagles**- If Golden or Bald Eagle are known to occur within 1 mile of the project, decision makers need to ensure that they are not in violation of the Golden and Bald Eagle Nest Protection Regulations found at [http://nnhp.nndfw.org/docs\\_reps/gben.pdf](http://nnhp.nndfw.org/docs_reps/gben.pdf).
  - o **Ferruginous Hawks** – Refer to "Navajo Nation Department of Fish and Wildlife's Ferruginous Hawk Management Guidelines for Nest Protection" [http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm) for relevant information on avoiding impacts to Ferruginous Hawks within 1 mile of project location.
  - o **Mexican Spotted Owl** - Please refer to the Navajo Nation Mexican Spotted Owl Management Plan [http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm) for relevant information on proper project planning near/within spotted owl protected activity centers and habitat.

- C. **Surveys** – Biological surveys need to be conducted during the appropriate season to ensure they are complete and accurate please refer to NN Species Accounts [http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm). Surveyors on the Navajo Nation must be permitted by the Director, NNDFW. Contact Jeff Cole at (928) 871-7068 for permitting procedures. Questions pertaining to surveys should be directed to the NNDFW Zoologist (Chad Smith) for animals at 871-7070, and Botanist (Andrea Hazelton) for plants at (928)523-3221. Questions regarding biological evaluation should be directed to Jeff Cole at 871-7068.
- D. **Oil/Gas Lease Sales** – Any settling or evaporation pits that could hold contaminants should be lined and covered. Covering pits, with a net or other material, will deter waterfowl and other migratory bird use. Lining pits will protect ground water quality.
- E. **Power line Projects** – These projects need to ensure that they do not violate the regulations set forth in the Navajo Nation Raptor Electrocution Prevention Regulations found at [http://nnhp.nndfw.org/docs\\_reps/repr.pdf](http://nnhp.nndfw.org/docs_reps/repr.pdf).
- F. **Guy Wires** – Does the project design include guy wires for structural support? If so, and if bird species may occur in relatively high concentrations in the project area, then guy wires should be equipped with highly visual markers to reduce the potential mortality due to bird-guy wire collisions. Examples of visual markers include aviation balls and bird flight diverters. Birds can be expected to occur in relatively high concentrations along migration routes (e.g., rivers, ridges or other distinctive linear topographic features) or where important habitat for breeding, feeding, roosting, etc. occurs. The U.S. Fish and Wildlife Service recommends marking guy wires with at least one marker per 100 meters of wire.
- G. **San Juan River** – On 21 March 1994 (Federal Register, Vol. 59, No. 54), the U.S. Fish and Wildlife Service designated portions of the San Juan River (SJR) as critical habitat for *Ptychocheilus lucius* (Colorado pikeminnow) and *Xyrauchen texanus* (Razorback sucker). Colorado pikeminnow critical habitat includes the SJR and its 100-year floodplain from the State Route 371 Bridge in T29N, R13W, sec. 17 (New Mexico Meridian) to Neskahai Canyon in the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian) up to the full pool elevation. Razorback sucker critical habitat includes the SJR and its 100-year floodplain from the Hogback Diversion in T29N, R16W, sec. 9 (New Mexico Meridian) to the full pool elevation at the mouth of Neskahai Canyon on the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian). All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of critical habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.
- H. **Little Colorado River** - On 21 March 1994 (Federal Register, Vol. 59, No. 54) the U.S. Fish and Wildlife Service designated Critical Habitat along portions of the Colorado and Little Colorado Rivers (LCR) for *Gila cypha* (humpback chub). Within or adjacent to the Navajo Nation this critical habitat includes the LCR and its 100-year floodplain from river mile 8 in T32N R6E, sec. 12 (Salt and Gila River Meridian) to its confluence with the Colorado River in T32N R5E sec. 1 (S&GRM) and the Colorado River and 100-year floodplain from Nautuloid Canyon (River Mile 34) T36N R5E sec. 35 (S&GRM) to its confluence with the LCR. All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of Critical Habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.

- I. **Wetlands** – In Arizona and New Mexico, potential impacts to wetlands should also be evaluated. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) maps should be examined to determine whether areas classified as wetlands are located close enough to the project site(s) to be impacted. In cases where the maps are inconclusive (e.g., due to their small scale), field surveys must be completed. For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. NWI maps are available for examination at the Navajo Natural Heritage Program (NNHP) office, or may be purchased through the U.S. Geological Survey (order forms are available through the NNHP). The NNHP has complete coverage of the Navajo Nation, excluding Utah, at 1:100,000 scale; and coverage at 1:24,000 scale in the southwestern portion of the Navajo Nation. In Utah, the U.S. Fish & Wildlife Service's National Wetlands Inventory maps are not yet available for the Utah portion of the Navajo Nation, therefore, field surveys should be completed to determine whether wetlands are located close enough to the project site(s) to be impacted. For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. For more information contact the Navajo Environmental Protection Agency's Water Quality Program.
- J. **Life Length of Data Request** – The information in this report was identified by the NNHP and NNDFW's biologists and computerized database, and is based on data available at the time of this response. If project planning takes more than two (02) years from the date of this response, verification of the information provided herein is necessary. It should not be regarded as the final statement on the occurrence of any species, nor should it substitute for on-site surveys. Also, because the NNDFW information is continually updated, any given information response is only wholly appropriate for its respective request.
- K. **Ground Water Pumping** - Projects involving the ground water pumping for mining operations, agricultural projects or commercial wells (including municipal wells) will have to provide an analysis on the effects to surface water and address potential impacts on all aquatic and/or wetlands species listed below. NESL Species potentially impacted by ground water pumping: *Carex specuicola* (Navajo Sedge), *Cirsium rydbergii* (Rydberg's Thistle), *Primula specuicola* (Cave Primrose), *Platanthera zothecina* (Alcove Bog Orchid), *Puccinellia parishii* (Parish Alkali Grass), *Zigadenus vaginatus* (Alcove Death Camas), *Perityle specuicola* (Alcove Rock Daisy), *Symphyotrichum welshii* (Welsh's American-aster), *Coccyzus americanus* (Yellow-billed Cuckoo), *Empidonax traillii extimus* (Southwestern Willow Flycatcher), *Rana pipiens* (Northern Leopard Frog), *Gila cypha* (Humpback Chub), *Gila robusta* (Roundtail Chub), *Ptychocheilus lucius* (Colorado Pikeminnow), *Xyrauchen texanus* (Razorback Sucker), *Cinclus mexicanus* (American Dipper), *Speyeria nokomis* (Western Seep Fritillary), *Aechmophorus clarkia* (Clark's Grebe), *Ceryle alcyon* (Belted Kingfisher), *Dendroica petechia* (Yellow Warbler), *Porzana carolina* (Sora), *Catostomus discobolus* (Bluehead Sucker), *Cottus bairdi* (Mottled Sculpin), *Oxyloma kanabense* (Kanab Ambersnail)

## 6. Personnel Contacts

### Wildlife Manager

Sam Diswood

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[sdiswood@nndfw.org](mailto:sdiswood@nndfw.org)

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### Botanist

Vacant

### Biological Reviewer

Pamela Kyselka

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### GIS Supervisor

Dexter D Prall

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### Wildlife Tech

Sonja Detsoi

928.871.6472

[sdetsoi@nndfw.org](mailto:sdetsoi@nndfw.org)

## 7. Resources

National Environmental Policy Act

Navajo Endangered Species List:

<http://nnhp.nndfw.org/endangered.htm>

Species Accounts:

[http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm)

Biological Investigation Permit Application

[http://nnhp.nndfw.org/study\\_permit.htm](http://nnhp.nndfw.org/study_permit.htm)

Navajo Nation Sensitive Species List

[http://nnhp.nndfw.org/study\\_permit.htm](http://nnhp.nndfw.org/study_permit.htm)

Various Species Management and/or Document and Reports

[http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm)

Consultant List

(Coming Soon)

*Dexter D Prall*

Digitally signed by Dexter D Prall  
DN: cn=Dexter D Prall, o=Navajo Nation  
Department of Fish and Wildlife,  
ou=Navajo Natural Heritage Program,  
email=prall@nndfw.org, c=US  
Date: 2016.03.25 10:48:39 -07'00'

Dexter D Prall, GIS Supervisor - Natural Heritage Program  
Navajo Nation Department of Fish and Wildlife

**WILDLIFE SURVEY REPORT**  
**FOR**  
**MCKINLEY COUNTY**  
**SUPERMAN CANYON ROAD (CR 15B)**  
**RIGHT-OF-WAY**

**SECTIONS 17, 20, AND 21, T. 16 NORTH R. 16 WEST**  
**MCKINLEY COUNTY, NEW MEXICO**

**1.0 INTRODUCTION**

Threatened, endangered and special status wildlife surveys were conducted April 12, 2016 at the location of McKinley County's proposed Old Churchrock Mine Road Right-of-Way (ROW). The proposed ROW would be necessary for upcoming road improvement projects at specific locations along Old Churchrock Mine Road. The proposed ROW is approximately 6705.6 feet (1.27 miles) in length and 150 feet wide. The proposed ROW crosses Navajo Tribal Trust lands along its 1.27 mile length in Sections 17, 20, and 21, T. 16 North, R. 16 West, McKinley County, New Mexico and approximately five miles northwest of the community of Churchrock. The ROW term would be 20 years. The total land use for the proposed ROW is approximately 23.09 acres.

**2.0 METHODS**

Prior to the field survey, the Navajo Department of Fish and Wildlife's Navajo Natural Heritage Program (NNHP) was consulted regarding the potential for listed or special status wildlife species to occur in the project area and within the *Churchrock, NM* 7.5 minute quadrangle map. A reply (Prall 2016, 16perm104) was received from NNHP March, 25, 2016, and included pertinent information on Navajo Endangered Species List (NESL) species, Biological Resource Land Use Policies and Procedures Area designations, and federally listed species. Additional information on the potential for listed or special status wildlife species to occur in the project area was obtained from the U.S. Fish and Wildlife Service's Information, Planning, and Conservation website (IPaC, 2016).

Permits West, Inc. wildlife biologist, Celia Cook, conducted a pedestrian survey of the proposed Old Churchrock Mine Road ROW April 12, 2016. The purpose of the survey was to inspect for the potential presence of listed or special status wildlife species and evaluate existing habitat conditions.

Weather during surveys was partly cloudy and breezy, with temperatures in the mid-50s (°F) and winds at 7-10 miles per hour.

The surveyed area consisted of the proposed 6705.6 ft x 150 ft ROW, including the existing footprint of Old Churchrock Mine Road. Additional areas beyond this boundary were surveyed as needed. A 0.5-mile radius around the project area was

surveyed with binoculars, and in some areas on foot, for structures or land formations that would support raptor nests and other unique habitat elements that would benefit listed or special status species and wildlife in general.

### **3.0 DESCRIPTION OF EXISTING HABITAT**

The proposed ROW originates at the intersection of Old Churchrock Mine Road and NM State Highway 566 in the SW/4 of the NE/4 of Section 17, T. 16 North, R 16 West. The proposed ROW ends in the SW/4 of the NW/4 of Section 21, T. 16 North, R. 16 West. The entire project is on Navajo Tribal Trust land. Topographic features within the project area include a substantial ephemeral drain and alluvial valley floor with hilly alluvial deposits. Further out, the valley is surrounded by mesas with exposed sandstone, cliff faces, broken escarpments, alcoves, and hoodoos. The vegetation type is desert scrub and grassland. Dominant plants include snakeweed (*Gutierrezia sarothrae*), rabbitbrush (*Chrysothamnus spp.*), blue grama (*Bouteloua gracilis*), and kochia (*Bassia scoparia*).

Existing disturbances within the project area include intensively grazed pastures, roads, fences, power lines, scattered home sites and associated outbuildings.

Elevation within the project area is approximately 6800 feet. Common wildlife occurring in the area are represented by species such as coyote (*Canis latrans*), Gunnison's prairie dog (*Cynomys gunnisoni*), and house finch (*Carpodacus mexicanus*).

The project area is designated by NNHP as an Area 3 *Less Sensitive Area* for wildlife resources under the Navajo Biological Resource Land Use Clearance Policies and Procedures (Prall 2016).

### **4.0 THREATENED, ENDANGERED, AND SPECIAL STATUS WILDLIFE SPECIES**

According to the March 25, 2016 correspondence from the NNHP (Prall 2016) and the IPaC website (2016), the species indicated in Table 1 have the potential to occur on or near the project area.

**Table 1. Species of Concern with Potential to occur in the Project Area.**

<b>Species</b>	<b>Status*</b>	<b>Habitat</b>	<b>Presence**</b>
Golden eagle <i>Aquila chrysaetos</i>	NESL Group 3, MBTA, EPA	A wide variety of open habitats, typically nests in steep cliffs typically > 30 meters in height.	NS. Closest suitable cliff habitat more than 1.0 mile from project area
Burrowing owl <i>Athene cunicularia</i>	NESL Group 4, MBTA	Disturbed grasslands and shrublands; often associated with prairie dog colonies.	NS. No nest burrows observed within project area.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	NESL Group 2, Federal E MBTA	Dense cottonwood-willow or tamarisk-Russian olive habitats along streams and rivers, wetlands and marshes	NP.

Peregrine falcon <i>Falco peregrinus</i>	NESL Group 4 MBTA	Open landscapes with cliffs; along coasts, lakes, and rivers.	NS. Closest suitable cliff habitat more than 1.0 mile from project area.
Mexican spotted owl <i>Strix occidentalis lucida</i>	NESL Group 3 Federal T MBTA	In New Mexico, steep, forested, canyon habitats, often with riparian component.	NP.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	NESL Group 2 Federal T MBTA	Mature closed canopy riparian woodlands with dense under stories, also orchards adjacent to river bottoms (NNHP, 2008)	NP.

**Status\***

Federal Status: E = Endangered; T = Threatened; C = Candidate; EPA = Eagle Protection Act; MBTA = Migratory Bird Treaty Act

Tribal Status: NESL = Navajo Endangered Species List Group 1-4 (NNHP, 2008)

**Presence\*\***

K = Known, documented observation within project area.

S = Habitat suitable and species suspected to occur within or near the project area.

NS = Habitat suitable but species is not suspected to occur within the project area.

NP = Habitat not present and species unlikely to occur within the project area.

### **Migratory Birds**

The U.S. Fish and Wildlife Service's Migratory Bird Program is a 1988 amendment to the Fish and Wildlife Conservation Act which provides a mandate for USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973". Birds of Conservation Concern (BCC) [USFWS, 2008] potentially occurring in the vicinity of the proposed project are presented with IPaC trust resources report (IPaC, 2016).

Additional protections for migratory birds are provided by the federal Migratory Bird Treaty Act (MBTA). Birds protected under the Act include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows and others, including their body parts (feathers, plumes etc.), nests, and eggs. The Act protects migratory birds from a "take". Take is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities". A "take" does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof.

Several species of migratory birds were observed during the survey and are likely breeders in the project area. These species are listed in Section 6.0.

### **Critical Habitat**

No federally designated critical habitat is located within the project area. The closest designated critical habitat is approximately 15 miles south of the project area (ECOS, 2016b).

## **5.0 RESULTS**

### ***Listed Species:***

No NESL listed or federally listed species presented in Table 1 were observed during the April 12, 2016 wildlife surveys. Habitat for the burrowing owl is present within the proposed ROW, but no burrowing owls or sign of burrowing owl presence were observed during the survey. The golden eagle and peregrine falcon have the potential to pass through the project area, but no suitable nest habitat for these species is located within 1.0 miles of the project area.

### ***Migratory Birds and Birds of Conservation Concern:***

Several migratory bird species were observed during the survey (Section 6.0).

BCC species with potential to occur in the project area include the golden eagle, western burrowing owl, and peregrine falcon, which are discussed under listed species above. There is a potential for nesting migratory birds to occur within the project area.

### ***General Wildlife:***

The presence of human activity (roads and homes) likely results in most wildlife avoiding the project area. However, there is the potential for nesting migratory birds to occur within the project area.

The following species were identified during the survey by direct observation of individuals, tracks, droppings or scat, or other sign.

### ***Avian species observed:***

American kestrel	<i>Falco sparverius</i>
Say's phoebe	<i>Sayornis saya</i>
Mourning dove	<i>Zenaida macroura</i>
House finch	<i>Carpodacus mexicanus</i>
Western meadowlark	<i>Sturnella neglecta</i>
Brewer's blackbird	<i>Euphagus cyanocephalis</i>

### ***Mammalian species observed:***

Domestic horse	<i>Equus ferus caballus</i>
Gunnison's prairie dogs	<i>Cynomys gunnisoni</i>
Coyote	<i>Canis latrans</i>

## **6.0 RECOMMENDATIONS**

It is recommended that road improvement projects and construction within the proposed Old Churchrock Mine Road proposed ROW be conducted outside of the breeding bird dates of May 1- August 15 to reduce impacts to migratory birds that may be nesting in the project area. Alternatively, site specific breeding bird surveys could be conducted no more than one week prior to start of construction to inspect for breeding migratory birds.

Additional recommendations include avoiding shrub and tree removal, and damage to vegetation as much as possible, cleaning up and removing any spills and/or trash from construction, and using only authorized ROW and roads for construction and installation.

## **7.0 REFERENCES**

Migratory bird Treat Act (MBTA) 16 U.S.C. 703-712.

Mikesic, D.G. 2008. Species Account for *Coccyzus americanus*. Navajo Natural Heritage Program, P.O. Box 1480, Window Rock, AZ 86515. On the Web at <http://www.nndfw.org/nnhp/Animals/coam.pdf>.

Prall, Dexter. March 25, 2016. Navajo Endangered Species List (NESL) information for Sections 17, 20, and 21, T. 16 North, R. 16 West, McKinley County, New Mexico. *Correspondence with Permits West Inc.* Navajo Department of Fish and Wildlife, Navajo Natural Heritage Program. P. O. Box 1480, Window Rock, AZ.

Navajo Natural Heritage Program-Navajo Fish and Wildlife Department (NNHP-NNFWD). 2008. Navajo Nation Division of Natural Resources Department of Fish and Wildlife Endangered Species List, September 10, 2008. P.O. Box 1480, Window Rock, Arizona, 86515.

U. S. Fish and Wildlife Service Environmental Conservation Online System (ECOS). 2016b. Critical Habitat Mapper. Web. April 2016.

<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>

Information, Planning, and Conservation (IPaC). Trust Resources Report: downloaded from web April 27, 2016.

<https://ecos.fws.gov/ipac/project/RKZD6R3QLJDL5DKJHE5ULRIUQY/resources>

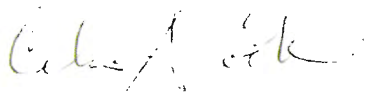
Migratory Bird Program. Birds of Conservation Concern. April 2016c. Web.

<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

Division of Migratory Bird Management. 2008. *Birds of Conservation Concern 2008*. Web.

<http://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf>

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**McKinley County, FEMA Road and Bridge Repairs**

**Proposed Old Church Rock Mine Road Right-of-Way Project**

**NE/4 Section 17 T. 16 N., R. 16 W., NE/4 of Section 20, T. 16 N., R. 16 W. and NW/4 of Section 21, T. 16 N., R. 16 W., McKinley County, New Mexico**

**Plant Survey Report**

**Prepared by Robyn W. Tierney, Permits West, Inc., Santa Fe, New Mexico**

**April 15, 2016**

This report discusses the potential for disturbance to Navajo Natural Heritage Program (NNHP) plant species of concern that have the potential to occur within the project area located on the Church Rock, NM, 7.5 minute quadrangle. The potential for disturbance to Zuni fleabane (*Erigeron rhizomatous*) listed as Group 2 by the NNHP (2008) and Threatened by the U.S. Fish and Wildlife Service (IPaC 2016) was evaluated. The potential for disturbance to Naturita milkvetch (*Astragalus naturitensis*), Acoma fleabane (*Erigeron acomanus*), and Navajo bladderpod (*Lesquerella navajoensis*) -- listed as NESL Group 3 (NNHP 2008), was similarly evaluated.

The potential presence/absence of Parish's alkali grass (*Puccinellia parishii*) and its habitats of wetlands or seasonally wet areas containing white alkaline conditions that are favored by the plant (Prall 2016, File#16perm 104) and Sivinski's fleabane (*Erigeron sivinskii*) in NESL Group 4 was also evaluated; though that the Navajo Natural Heritage Program (NNHP) currently does not have sufficient information to support these species being listed as endangered, but has reason to consider them in most undertakings (NNHP, 2008).

**Project Description**

The proposed project consists of obtaining a 1.27 mile-long road right-of-way from the Navajo Nation and approval from the BIA for a portion of the Old Church Rock Mine Road in Sections 17, 20, and 21, T. 16 N, R. 16 W. The right-of-way would begin at the intersection of Old Church Rock Mine Road (McKinley CCR 15B) and New Mexico State Highway 566 in the NE/4, Section 17 T. 16 N, R. 16 W and would extend south into the NE/4 of Section 20, then southeast into the NW/4 of Section 21, T. 16 N., R. 16 W.

The proposed right-of-way is located on Navajo Nation Tribal Trust lands in Sections 17, 20, and 21, McKinley County, approximately 4.5 miles north of Church Rock, New Mexico and 11 miles north of Rehoboth, New Mexico.

Most of the soils in the project area consist of deep alluvial and eolian deposits on sandstone, with species such as three-awn (*Aristida* sp.), flaxweed (*Descurainia sophia*), and Russian thistle (*Salsola tragus*) evidencing past grazing practices and other disturbances.

Soils in the northern two-third of the proposed rights-of-way are composed of the Sparank-San Mateo-Zia complex, 0 to 3 percent slopes. These soils are formed from stream alluvium derived from calcareous sandstone. A typical profile of this well drained complex consists of silty clay loam (0 to 2 inches), and clay (2 to 65 inches). Soils in the southern third of the project area are comprised of the Buckle-Gapmesa-Barboncito complex (1 to 6 percent slopes). This complex is derived from eolian deposits over fan and slope alluvium derived from Dakota and Gallup sandstones and Mancos shale. The soil texture ranges from loamy fine sand, clay loam (1 to 7 inches), sandy clay loam (7 to 25 inches), clay loam (25 to 35 inches), and fine sandy loam to a depth of 80 inches (NRCS 2016b).

The elevation of the project area ranges from 6791 feet at the north end of the right-of-way corridor and approximately 6755 feet at the south end of the corridor. The project corridor is located in Area 3 – Low Sensitivity Wildlife Resources (Prall 2016, File#16perm 104). Disturbances in the project area include: dirt roads, pipe fences, scattered residences, other disturbances, and grazing by horses and cattle. Most of the area has been heavily grazed by livestock.

## **METHODOLOGY**

Prior to the survey, a data request was made to the Navajo Natural Heritage Program (NNHP) for Navajo Nation endangered species known to occur, or with the potential to occur, on the 7.5-Minute *Church Rock, NM* Quadrangle. A reply (Prall 2016, File#16perm 104) to the request was received on March 25, 2016.

The proposed Old Church Rock Mine Road right-of way was surveyed on April 13, 2016, by botanist Robyn Tierney. Weather during the survey was sunny, with high temperatures in the low 70's F. Sensitive plant species listed by the Navajo Natural Heritage Program (NNHP) and the U.S. Fish and Wildlife Service (IPAC 2016) and those identified in Table 1 were the focus of the survey, although all species encountered were examined (NNHP 2008). The pedestrian survey was conducted as a zigzag transect along each side of the centerline, covering both the 20-foot width of the roadbed and a buffer zone of 200 feet on each side of the proposed right-of-way. The purpose of the survey was to inspect for and identify species of concern. All plants observed in the project area were identified in order to provide a more complete description of the project area environment. A list of the plants observed in the project area is included at the end of this report.

## **Appendix 4-2**

## SURVEY RESULTS

**Species of Interest to the Navajo Natural Heritage Program (NNHP) and the U.S. Fish and Wildlife Service (USFWS):** This report discusses the potential for disturbance to the plant species of concern identified by the NNHP and the USFWS as having the potential to occur in the project area (Prall 2016, File#16perm 104; IPaC 2016). Details of the status, habitat, and the potential to occur in the project area for each of these species are presented in the following table.

**Table 1. Status, habitat, and potential to occur in the project project area.**

SPECIES STATUS	HABITAT	POTENTIAL TO OCCUR IN THE PROJECT AREA*
<i>Astragalus naturitensis</i> Naturita milkvetch NESL Group 3	Sand filled pockets of sandstone slickrock and rimrock pavement along canyons in the piñon juniper zone (NNHP). Sandstone ledges and rimrock along canyons in piñon-juniper woodland; 5,400-6,200 ft. (NMRPTC 1999, Roth 2001).	<b>No appropriate habitat:</b> there are no barren detrital clay hillsides with soils derived from Chinle or Baca shale formations in the project area. (NP)
<i>Erigeron acomanus</i> Acoma fleabane NESL Group 3	Species is a narrow substrate endemic found on sandy slopes and benches beneath sandstone cliffs of the Entrada Sandstone Formation in piñon-juniper woodland; 6,900-7,100 ft. (NMRPTC 1999).	<b>No appropriate habitat:</b> there are no sandy slopes or benches beneath Entrada Sandstone Formation cliffs in the project area. (NP)
<i>Erigeron rhizomatus</i> Zuni fleabane USFWS Threatened NESL Group 2	Species is found on nearly barren detrital clay hillsides with soils derived from shales of the Chinle or Baca formations (often seleniferous); most often on north or east-facing slopes in open piñon-juniper woodlands at 7,300-8,000 ft. (NMRPTC 1999, Sivinski and Lightfoot Sivinski and Tonne 1991, Sivinski and Tonne 2004, USFWS 2007, Knight 1988, Christie 2004).	<b>No appropriate habitat:</b> there are no barren detrital clay hillsides with soils derived from Chinle or Baca shale formations in the project area. (NP)
<i>Erigeron sivinskii</i> Sivinski's fleabane NESL Group 4	Chinle shale in piñon-juniper woodland and Great Basin desert scrub; 6,100-7,400 ft. (NMRPTC 1999).	<b>No appropriate habitat:</b> there is no Chinle shale formation in the project area. (NP)

<i>Lesquerella navajoensis</i> Navajo bladderpod NESL Group 3	Mesa rims of Todilto limestone in sparse piñon-juniper woodland; 7,200-7,600 ft. (NMRPTC 1999).	<b>No appropriate habitat:</b> there are no mesa rims of Todilto limestone in the project area. The project area is below the known elevation range of the species. (NP)
<i>Puccinellia parishii</i> Parish's alkali grass NESL Group 4	The species requires continuously damp soils during its late winter to spring growing period and is found near white-crusts alkaline springs, seeps, and seasonally wet areas that occur at the heads of drainages or on gentle slopes at 2,600-7,200 ft. range-wide (NMRPTC 1999).	<b>No appropriate habitat:</b> there are no white-crusts alkaline springs, seeps, or seasonally wet areas in the project area. (NP)

Status USFWS – U.S Fish and Wildlife Service (ECOS, 2014)

Endangered – An animal or plant species in danger of extinction throughout all or a significant portion of its range.

Threatened – An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

NESL – Navajo Endangered Species List (NNHP, 2008)

Group 2 (G2) and Group 3 (G3) – Endangered: A species or subspecies whose prospects of survival or recruitment within the Navajo Nation are in jeopardy or are likely within the foreseeable future to become so.

Group 4 – Any species or subspecies for which the Navajo Nation Department of Fish and Wildlife (NNDFWL) does not currently have sufficient information to support their being listed in G2 or G3 but has reason to consider them.

Potential to Occur

K – Known, documented observation within project area.

S – Habitat suitable and species suspected to occur within the project area.

NS – Habitat suitable but species is not suspected to occur within the project area.

NP – Habitat not present and species unlikely to occur within the project area

NMRPTC - New Mexico Rare Plant Technical Council (NMRPTC 1999, updated 2015)

Although no wetlands were observed during the survey, the proposed road right-of-way does encompass the road crossing for the Puerco River. The area around the bridge was evaluated for wetland conditions containing the white alkaline crusts that favor Parish's alkali grass, a NESL Group 4 species and a USFWS species of concern. No such conditions were observed in the project area.

No noxious plants identified by the Bureau of Indian Affairs Navajo Area (OSM 1999), nor the State of New Mexico (Gonzales 2009) were observed in the project area.

No sensitive species were observed.

Plant species that were observed are listed in Table 2.

## DISCUSSION

No plant species of concern to the Navajo Natural Heritage Program or the U.S. Fish and Wildlife Service will be impacted by the proposed project.

## **Appendix 4-4**

Robyn W. Tierney

Signature of Author: \_\_\_\_\_  
Robyn W. Tierney

April 15, 2016

**Table 2. Plants observed in the vicinity of the proposed Old Church Rock Mine Road right-of-way**

Scientific names according to USDA Plants Database . Identifications based on Ivey 2008, Heil et al, 2013, and Weber and Wittman 2012.

**Shrubs and Subshrubs**

<i>Chrysothamnus Greenei</i>	Greene's rabbitbrush
<i>Ericameria nauseosa</i> var. <i>bigelovii</i>	Bigelow's rabbitbrush
<i>Gutierrezia sarothrae</i>	Broom snakeweed

**Grasses and Grass-like Plants**

<i>Aristida purpurea</i>	Purple threeawn
<i>Bouteloua gracilis</i>	Blue grama
<i>Pascopyrum smithii</i>	Western wheatgrass
<i>Sporobolus airoides</i>	Alkali sacaton

**Forbs**

<i>Bassia scoparia</i>	Kochia
<i>Descurainia sophia</i>	Flixweed
<i>Salsola tragus</i>	Russian-thistle

**REFERENCES**

Christy, K. 2004. *Erigeron rhizomatus* – Survey and Status Report. Unpublished report prepared for the Navajo Nation. <http://www.nndfw.org/nnhp/Plants/errh.pdf>, accessed April 14, 2016.

Dane, C. H., G. O. Bachman. 1957. The Dakota Sandstone and Mancos Shale in the Gallup Area. Pages 95-98, in Four Corners Geol. Soc. 2<sup>nd</sup> Field Conf. Guidebook, Geology of the southwestern San Juan

Basin. [http://nmgs.nmt.edu/publications/guidebooks/downloads/11/11\\_p0063\\_p0074.pdf](http://nmgs.nmt.edu/publications/guidebooks/downloads/11/11_p0063_p0074.pdf), accessed April 14, 2016.

Gonzales, I.M. 2009. New Mexico Noxious Weed List. New Mexico Dept. of Agriculture memorandum dated April 1, 2009. New Mexico State University, Las Cruces, NM.

Hazelton, A. 2014. Telephone conversation of September 8, 2014, with Robyn Tierney, Botanist, Permits West, regarding potential species including the Zuni milkvetch in Rehoboth project area.

Heil, Kenneth D., Steve L. O'Kane, Jr., Linda Mary Reeves, Arnold Clifford. 2013. *Flora of the Four Corners Region: Vascular Plants of the San Juan River Drainage, Arizona, Colorado, New Mexico, and Utah*. Missouri Botanical Garden Press, St. Louis, Missouri.

Information, Planning, and Conservation System (IPAC), U.S. Fish and Wildlife Service, U.S. Department of the Interior, Listed and Sensitive Species. 2016. <https://ecos.fws.gov/ipac/>, accessed April 14, 2016.

Ivey, Robert DeWitt. 2008. *Flowering Plants of New Mexico, fifth edition*. R. D. & V. Ivey, Publishers. Albuquerque, NM

Knight, P. 1988. Recovery plan for Zuni fleabane (*Erigeron rhizomatus* Cronquist). Submitted to U.S. Fish & Wildlife Service, Region 2, Albuquerque, NM

Mikesic, D., J. Nystedt and D. Roth. 2005. Navajo Nation endangered species list: Species accounts, Version 2.05. Navajo Fish & Wildlife Department, Window Rock, AZ.  
[http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm), accessed April 14, 2016.

Navajo Natural Heritage Program, Navajo Nation Department of Fish and Wildlife (NNHP). 2008. *Navajo Endangered Species List*. Resources Committee Resolution No. RCS-41-08.  
[http://nnhp.nndfw.org/nnhp\\_nesl.pdf](http://nnhp.nndfw.org/nnhp_nesl.pdf), accessed April 14, 2016.

Daniela Roth. 2001 (revised 2008). Species account for *Astragalus naturitensis*, Naturita milkvetch.  
<http://www.nndfw.org/nnhp/Plants/asna.pdf>

Daniela Roth. 2001 (revised 2008). Species account for *Erigeron acomanus*, Acoma fleabane.  
<http://www.nndfw.org/nnhp/Plants/erac.pdf>

Daniela Roth. 2001 (revised 2008). Species account for *Erigeron rhizomatus*, Zuni fleabane.  
<http://www.nndfw.org/nnhp/Plants/errh.pdf>

Daniela Roth. 2001 (revised 2008). Species account for *Erigeron sivinskii*, Sivinski's fleabane.  
<http://www.nndfw.org/nnhp/Plants/ersi.pdf>

Daniela Roth. 2001 (revised 2008). Species account for *Physaria navojensis*, Navajo bladderpod.  
<http://www.nndfw.org/nnhp/Plants/lena.pdf>

## **Appendix 4-6**

New Mexico Bureau of Geology and Mineral Resources (NMBGMR). 2003. *Geologic Map of New Mexico*. 1:500,000.

New Mexico Rare Plant Technical Council. 1999. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. <http://nmrareplants.unm.edu> (Latest update: 20 April 2015), accessed April 14, 2016.

Daniella Roth. 2001. Taxon report for *Astragalus naturitensis*, Naturita milkvetch  
[http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=30](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=30)

Daniella Roth. 1999. Taxon report for *Erigeron acomanus*, Acoma fleabane  
[http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=73](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=73)

Charlie McDonald. 1999 (last updated 2006). Taxon report for *Erigeron rhizomatus*, Zuni fleabane [http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=75](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=75)

Phil Tonne. 1999. Taxon report for *Erigeron sivinskii*, Sivinski's fleabane  
[http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=78](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=78)

Robert Sivinski. 2000. (updated 2006). Taxon report for *Physaria navajoensis*, Navajo bladderpod [http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=112](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=112)

Charlie McDonald. 1999. Taxon report for *Puccinellia parishii*, Parish's alkali grass  
[http://nmrareplants.unm.edu/rarelist\\_single.php?SpeciesID=156](http://nmrareplants.unm.edu/rarelist_single.php?SpeciesID=156)

Office of Surface Mining (OSM), U.S. Department of the Interior. 1999. *A Guide to Noxious Weeds of the Navajo Reservation*.

Prall, Dexter. 2016. Navajo Endangered Species List (NESL) Information for: Project: County Road Project on behalf of McKinley County, Old Church Rock Mine Road Right-of-Way Application. Located 4.5 miles northeast of Church Rock, NM, in Legal Description: NE/4, Section 17 T. 16 N, R. 16 W.; NE/4 of Section 20, T. 16 N, R. 16 W and NW/4 of Section 21, T. 16 N, R. 16 W. (Church Rock, NM, USGS quad) McKinley County, New Mexico; Latitude/Longitude Coordinates Start at; 35.620133, -108.5535; End at 35.6046, -108.546468, McKinley County, NM. GIS Supervisor, Natural Heritage Program, Navajo Nation Department of Fish and Wildlife. Letter of March 25, 2016 (File#16perm 104) to Mike Deutsch, Permits West, Inc., Santa Fe, NM.

Sivinski, R. and K. Lightfoot. 1991. Field survey for Zuni fleabane (*Erigeron rhizomatus*), Datil and Sawtooth Mountains, Cibola National Forest. Submitted to The Nature Conservancy, New Mexico Natural Heritage Program, Albuquerque, NM.

Sivinski, R. and P. Tonne. 1999. Section 6 progress report: Zuni fleabane (*Erigeron rhizomatus*). Submitted to U.S. Fish & Wildlife Service, Region 2, Albuquerque, NM.

#### **Appendix 4-7**

Sivinski, R. and P. Tonne. 2004. Section 6 progress report: Zuni fleabane (*Erigeron rhizomatus*). Submitted to U.S. Fish & Wildlife Service, Region 2, Albuquerque, NM.

U.S. Fish and Wildlife Service (USFWS), New Mexico Ecological Services Field Office. 2007. Zuni Fleabane (*Erigeron rhizomatus*) 5-Year Review: Summary and Evaluation. Albuquerque, New Mexico

U.S. Fish and Wildlife Service (USFWS). 2016.

U.S. Department of Agriculture (USDA)

Natural Resources Conservation Service (NRCS). 2016a. The PLANTS Database <http://plants.usda.gov>, accessed April 14, 2016. National Plant Data Team, Greensboro, NC 27401-4901 USA.

Natural Resources Conservation Services (NRCS), U.S. Department of Agriculture. 2016b. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed April 14, 2016.

Weber, W. A. and Ronald C. Wittman. 2012. *Colorado Flora: Western Slope*. 4th edition. University Press of Colorado. Boulder.

BIOLOGICAL RESOURCES COMPLIANCE FORM  
NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE  
P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

PROJECT NAME & NO.: Old Churchrock Mine Road (CR15B) Right-of-Way

DESCRIPTION: McKinley County proposes to obtain ROW on Old Churchrock Mine Road (CR15B) for maintenance and improvements. The road is approximately 6,712.15 ft. in length with a 150-ft. ROW width. Total land use for the ROW would be approximately 23.11 acres.

LOCATION: Sections 17, 20, & 21, T16N, R16W, McKinley County, New Mexico

REPRESENTATIVE: Jeanette Reisenburg/Mike Deutsch, Permits West for McKinley County

ACTION AGENCY: Bureau of Indian Affairs and Navajo Nation

B.R. REPORT TITLE / DATE / PREPARER: EA-McKinley County Right-of-Way Acquisition for Road, Bridge, and Culvert Repair and Ongoing Maintenance Along the Existing Old Churchrock Mine Road (CR15B)/09 MAY 2016/Permits West, Inc.

SIGNIFICANT BIOLOGICAL RESOURCES FOUND: Area 3. Suitable nesting habitat is present for Migratory Birds not listed under the NESL or ESA. Migratory Birds and their habitats are protected under the Migratory Bird Treaty Act (16 USC §703-712).

POTENTIAL IMPACTS

NESL SPECIES POTENTIALLY IMPACTED: NA

FEDERALLY-LISTED SPECIES AFFECTED: NA

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

AVOIDANCE / MITIGATION MEASURES: McKinley County will implement mitigation measures to avoid impacts on species protected under the MBTA that could potentially nest within and adjacent to the proposed action areas.

CONDITIONS OF COMPLIANCE\*: NA

FORM PREPARED BY / DATE: Pamela A. Kyselka/31 MAY 2016; amended on 09 JUN 2016

COPIES TO: (add categories as necessary)

☐☐

**2 NTC § 164 Recommendation:**

Signature

Date

☒ Approval

☐ Conditional Approval (with memo)

☐ Disapproval (with memo)

☐ Categorical Exclusion (with request letter)

☐ None (with memo)

*Gloria M. Tom*  
Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife

6/10/16

**\*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.**

Representative's signature

Date

*[Signature]*  
6/17/16

**Cultural Resource Inventory**  
**McKinley County Road R-O-W Project**  
**Old Church Rock Mine Road (CR 15B)**  
**Church Rock Chapter**  
**McKinley County, New Mexico**

Prepared by

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**CASA 16-20**



Submitted to:

Navajo Nation Historic Preservation Department  
P.O. Box 4950  
Window Rock, Arizona 86515

Permit

NNCRIP B16222

May 10, 2016

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### **Abstract**

A cultural resource inventory of 6712.15 feet of McKinley County Road 15B (Old Church Rock Mine Road) in Church Rock, New Mexico was carried out for McKinley County in order to acquire legal Right-Of-Way (ROW). McKinley County is seeking a 150 foot-wide ROW which includes 75 feet on both sides of the existing road centerline. The fieldwork was performed at the request of Brian Wood of Permits West, agent for McKinley County. The fieldwork was performed by Laurens Hammack and Mary Errickson of Complete Archaeological Service Associates (CASA) on April 7 and 8, 2016. The project areas are located on Navajo Tribal Trust Lands within the Church Rock Chapter of the Eastern Agency. The project was carried out under the provisions of Navajo Nation Cultural Resource Inventory Permit B16222, issued to CASA.

A total of 38.51 acres was inventoried for the project in McKinley County, New Mexico. A 250 foot-wide corridor for a 150 foot-wide ROW (23.11 ac) was inventoried along 6712.15 feet of existing County Road 15B.

Two sites, NM-Q-29-88 and NM-Q-29-200, and one Isolated Occurrence (IO) were identified during the project. Both sites are recommended as eligible for nomination to the NRHP under Criterion D and for protection under ARPA. The sites do not possess any known qualities meriting protection under AIRFA. The research potential of the IO is considered exhausted through recordation and the IO is recommended as not eligible for nomination to the NRHP or for protection under ARPA or AIRFA.

A determination of "No Historic Properties Affected" is recommended with the stipulation that all future ground-disturbing activities within 50 feet of sites NM-Q-29-88 and NM-Q-29-200 be monitored by a qualified archaeologist.

## INTRODUCTION

A cultural resource inventory of 6712.15 feet of McKinley County Road 15B (Old Church Rock Mine Road) in Church Rock, New Mexico was carried out for McKinley County in order to acquire legal Right-Of-Way (ROW). McKinley County is seeking a 150 foot-wide ROW which includes 75 feet on both sides of the existing road centerline. The fieldwork was performed at the request of Brian Wood of Permits West, agent for McKinley County. The fieldwork was performed by Laurens Hammack and Mary Errickson of Complete Archaeological Service Associates (CASA) on April 7 and 8, 2016. The project areas are located on Navajo Tribal Trust Lands within the Church Rock Chapter of the Eastern Agency. The project was carried out under the provisions of Navajo Nation Cultural Resource Inventory Permit D16222, issued to CASA. The project areas are shown in Figures 1-3. Legal locational and ownership information is provided below.

Legal Location: T16N, R 16W, NMPM, McKinley County, NM  
Section 17: E 1/2 of SW 1/4 of NE 1/4; E1/2 of W 1/2 of SE 1/4; SW 1/4 of SE 1/4 of SE 1/4  
Section 20: N1/2 of NE 1/4 of NE 1/4  
Section 21: W 1/2 of NW 1/4 of NW 1/4; NW 1/4 of SW 1/4 of NW 1/4  
UTM Location: BOL: 721592mE mE / 3944553mN EOL: 722251mE / 3942869mN  
Ownership: Tribal Trust

## PROJECT LOCATION AND DESCRIPTION

The project area lies within the southwest corner of the San Juan Basin, on and around the Zuni Uplift, a major structural feature which rings the southwest side of the Basin. Specifically, the project area lies within the Puerco subarea, a zone of broad, gently rolling alluvial plains and valleys with areas of dramatic uplifted sedimentary rocks, such as Red Rocks. The Puerco River is a southwest flowing tributary of the Little Colorado River. It is fed by numerous named and unnamed washes. Local geography within the vicinity of the project area includes mesas, vertical red rock cliffs, ridges, benches, broad valleys, and The Hogback, a rugged northern extension of the Nutria monocline. Pinyon and juniper are found on upper slopes and ridge tops, while shrubs, especially sagebrush and grasses dominate the lower slopes and rolling terrain. Soils are poorly developed in forested, broken, and rocky areas but valleys contain deep alluvium. The principal rock formations are the Wingate Sandstone, Dakota Sandstone, Mancos Shale, and Mesa Verde Group. Extensive information on the environmental setting of the project area can be found in Sullivan (1994).

The CR 15B project area commences on the south side of NM 566, approximately seven miles north of Interstate 40, and ends at its junction with CR 15A. The Old Church Rock Mine lies less than 0.25 mile north from the BOL. From the project BOL, the road proceeds southward as it traverses the dunal and alluvial flats of the Puerco River Valley. After crossing the river, it bends to the southeast following the west side a deeply entrenched tributary wash. The road is a graded, well-maintained and travelled road averaging approximately 25-30 feet in width. The road is graveled and is crossed and paralleled by waterlines and powerlines. Several driveways and bar ditches abut the roadway and culverts are present along the tributary wash. At present, the bridge across the Puerco River is collapsed and a drive-around is present.

Topsoils are primarily thin-deep aeolian sands bearing small gravels and silty, sandy alluvium in the vicinity of the river. The project area is covered with a moderately dense scrubland vegetation including russian thistle, greasewood, snakeweed, prickly pear, saltbush, and various grasses. Elevation drops slightly from approximately 6800 feet at the BOL to 6750 at the Puerco River crossing, rising again to 6800 feet at the EOL.

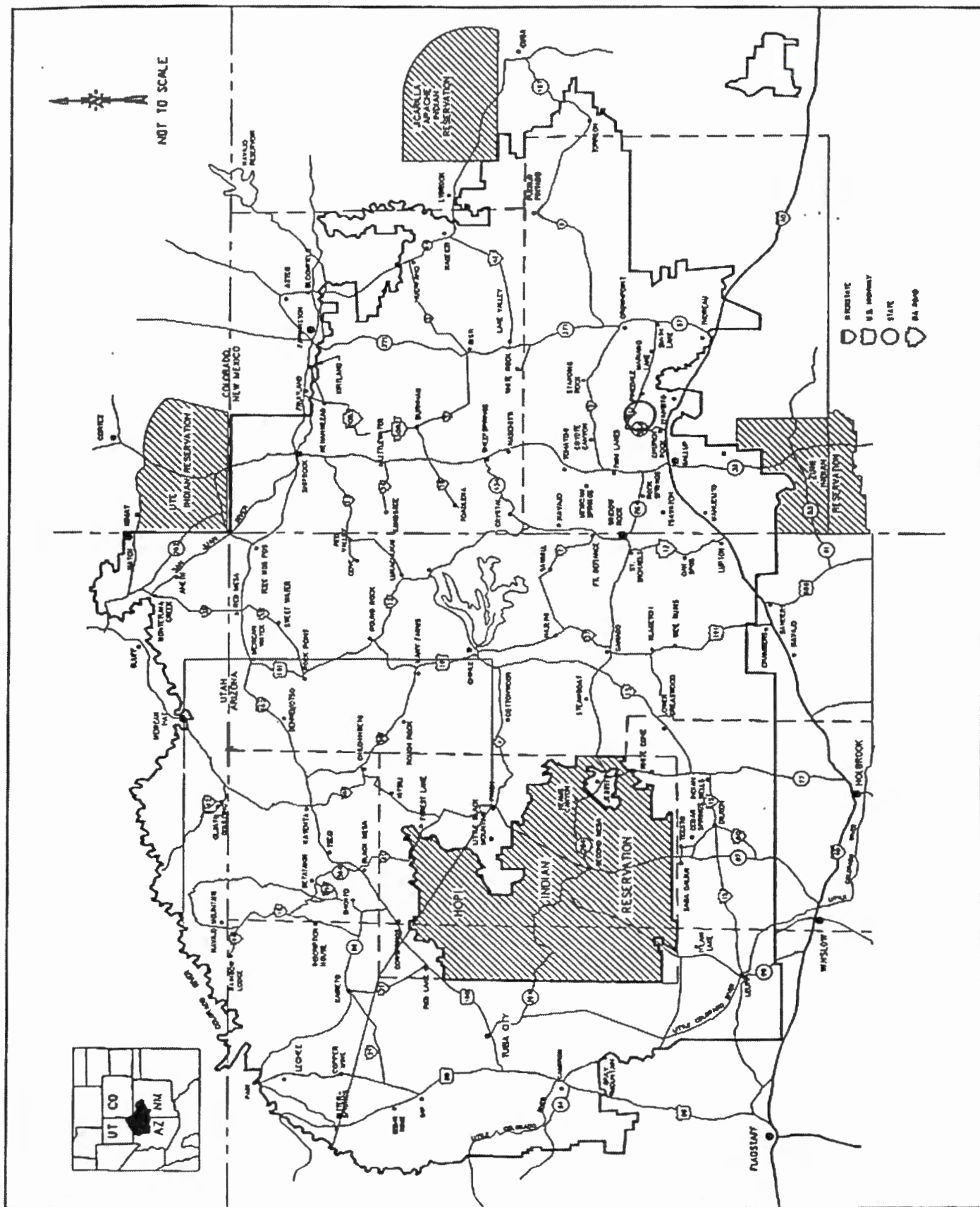


Figure 1. Location map, general project area in northwestern New Mexico.

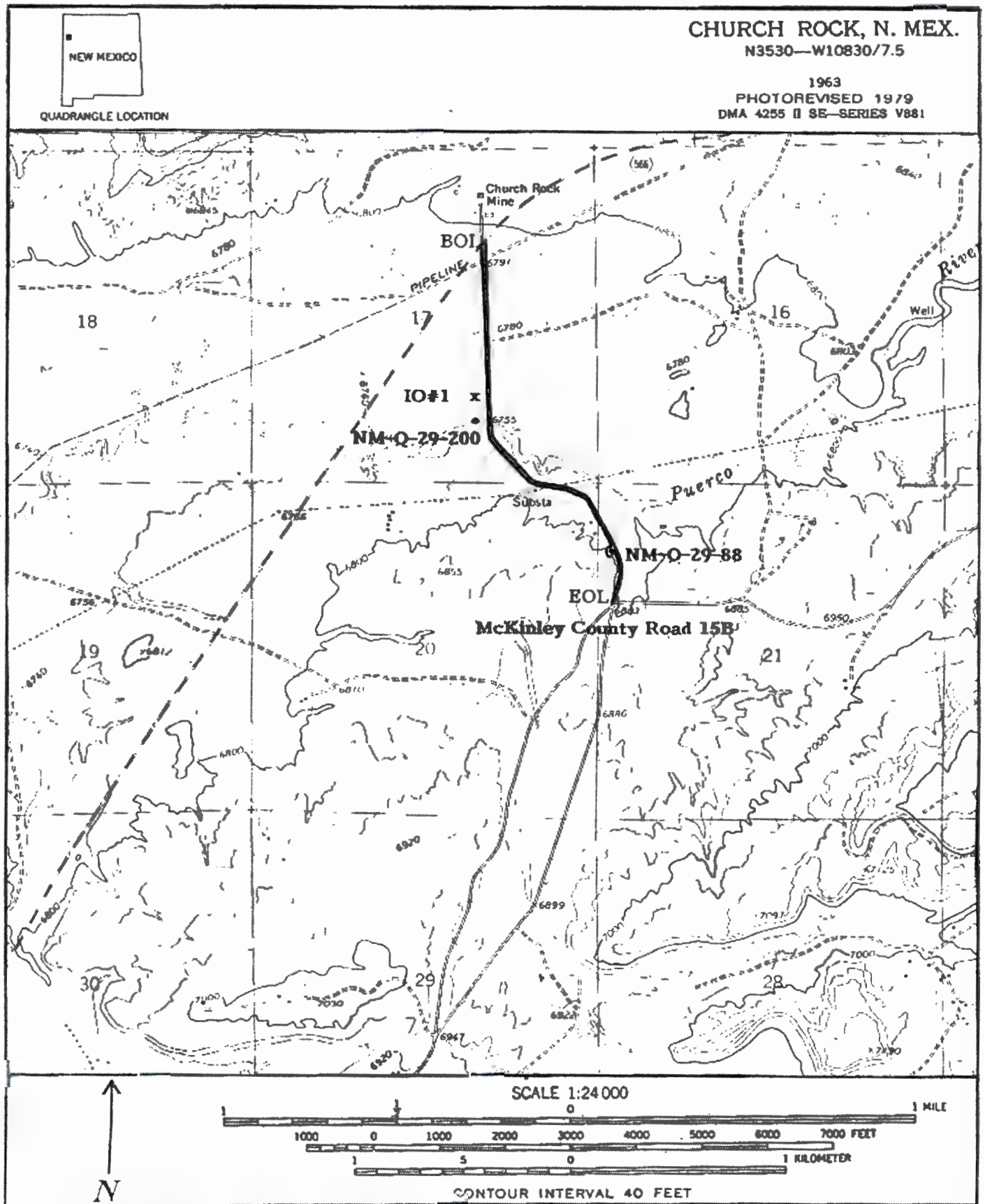


Figure 2. Location map, McKinley County Road 15B project area, sites NM-Q-29-88 and NM-Q-29-200, and IO#1.

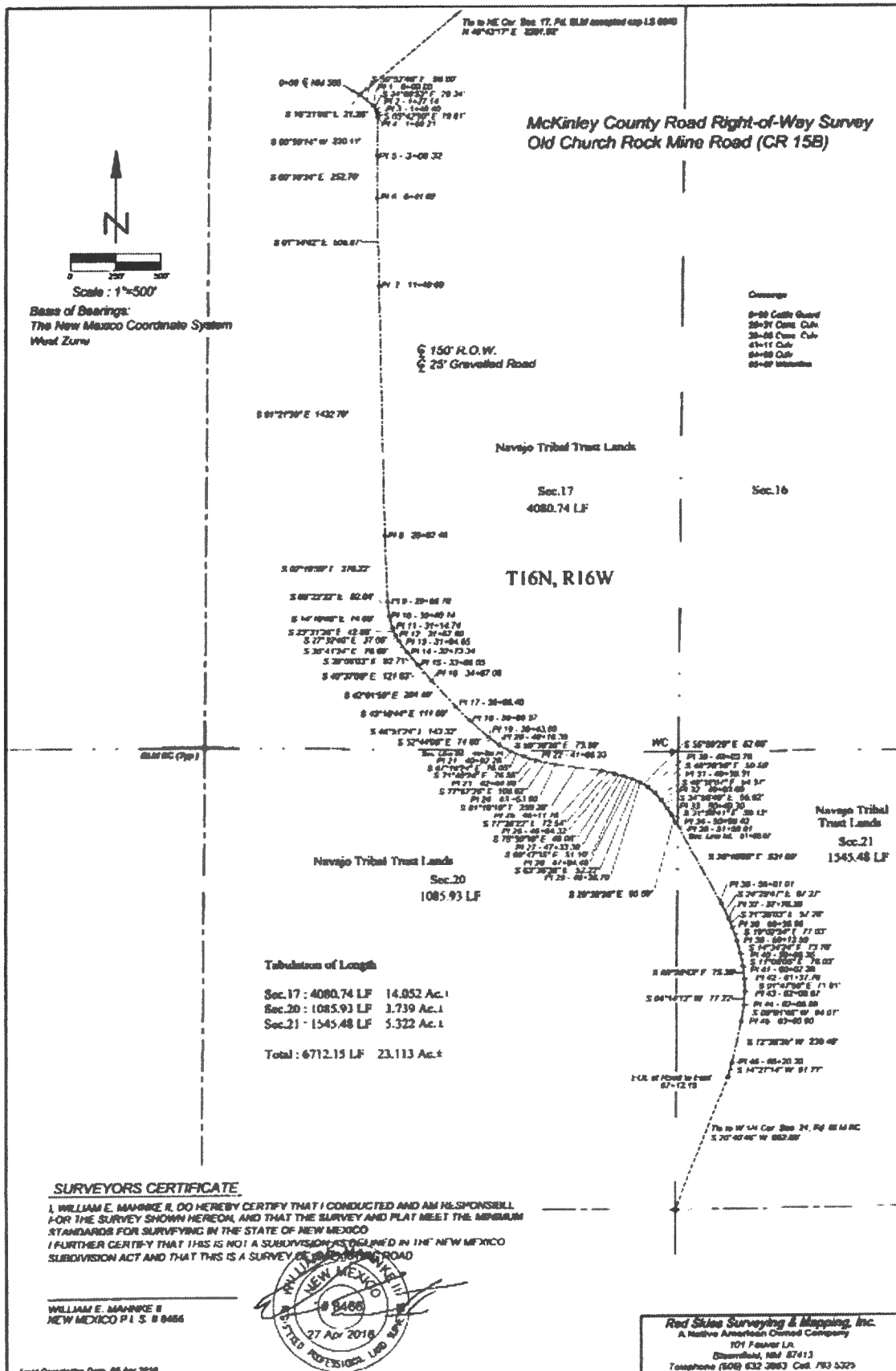


Figure 3. Plat map, McKinley County Road 15B Old Church Rock Mine Road Project Area.

## PREVIOUS RESEARCH AND CULTURE HISTORY

The previously recorded site record search was conducted on April 6, 2016. One previously recorded site is located within 100 m of project areas. NM-Q-29-88 is a Pueblo II habitation (HPD 97-662.1) which was re-recorded for this project.

Hundreds of sites have been recorded within the Church Rock-Puerco River Valley areas. Numerous sites have been identified during previous waterline and powerline projects (Copeland 1988; Nabahe 1992,1993) as well as for energy exploration (Griggs and Powell 1976). A synthesis of the archaeological investigations, culture history, and ethnohistory of the general area can be found in Copeland (1988). No Paleo-Indian and few Archaic components have been identified, although a heavy Anasazi presence may mask earlier occupations. Anasazi sites range from Basketmaker III through Pueblo III, with the main occupation during the Pueblo II and early Pueblo III periods. Archaeological evidence for Navajo occupation prior to A.D. 1880 is present. Copeland (1988) identified several Fort Sumner-era sites near Milk Ranch Canyon, approximately 2 miles west of Fort Wingate. Numerous early 20th century Navajo habitations have been recorded on the higher ridges and mesas north of Red Rocks (Griggs and Powell 1976).

The record search conducted through the Traditional Cultural Property (TCP) Department on April 27, 2016 indicated that one TCP is located in the vicinity of the project area. *Tse Ji'ahi /* Rock Spire / Navajo Church (#504) lies approximately 4.0 miles to the south-southwest. The TCP Department has determined that there will be no adverse effects to the TCP as a result of this undertaking (Attachment A).

Interviews were conducted with Mr. Johnnie Henry, Jr., Church Rock Chapter President, and local residents Glen Hood, Leonard/Helen Jackson, Charlene Gray, Danny Henry, Phyllis Manuelito, Rena Chee (grazing permittee), and Larry King regarding individual TCPs, graves, or other areas of concern along or in the vicinity of CR 15B. No graves, TCPs, or other areas of concern were identified by the interviewees.

## SURVEY METHODOLOGY

The Class III cultural resource inventory occurred on April 7 and 8, 2016. The inventory was performed by Laurens Hammack and Mary Errickson of CASA. The project area was inventoried by means of multiple, parallel, zig-zag, pedestrian transects spaced no more than 15 m apart. A 250 foot-wide corridor was surveyed for a 150 foot-wide ROW encompassing 75 feet to both sides of the present road centerline.

Sites are defined as cultural manifestations containing ten or more artifacts in a 10 square meter area and/or the location of an event or a prehistoric or historic activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historic, archaeological, or traditional cultural value regardless of the value of the existing structure. Only those materials dating prior to 1966 were recorded, with the exception of significant Navajo structures or features. Isolated occurrences (IOs) are any non-architectural feature or assemblage of less than 10 artifacts in an area 10 square meters or less.

## CULTURAL RESOURCE FINDINGS

Two sites, NM-Q-29-88 and NM-Q-29-200, and one Isolated Occurrence (IO) were identified during the project.

### SITE DESCRIPTIONS

<b>Site Number:</b>	<b>NM-Q-29-88 (previously recorded)</b>
<b>Legal Location:</b>	SW, NW, NW, Sec. 21, T 16N, R 16W, NMPM, McKinley County, NM
<b>UTM:</b>	Zone 12, 722220mE / 3943128mN (NAD 83)
<b>Ownership:</b>	Tribal Trust
<b>Site Type:</b>	Habitation
<b>Affiliation:</b>	Pueblo II, A.D. 900-1125
<b>Site Size:</b>	60 m x 35 m = 2,100 m <sup>2</sup>
<b>Setting:</b>	<p>The site is situated on a northern end of a north-south trending, narrow finger ridge overlooking a deep, narrow tributary of the Puerco River. The ridge is covered with aeolian sands and silts supporting snakeweed, prickly pear, and grasses at an elevation of 6800 feet. The eastern and western sides of the ridge have been impacted by road and driveway construction.</p>
<b>Description:</b>	<p>The site was originally recorded during an NAIHS waterline project (HPD 97-662.1) The site (Figure 4) contains a rubble mound with associated kiva depression and a possible surface room. Feature 1, the rubble mound, extends 17 m in length and 12 m in width. Several wall lines are evident indicating the presence of a two-room wide structure oriented to the east. A kiva depression and a linear wall line of sandstone comprise Feature 3. The wall line could indicate the presence of an earlier structure. Feature 2 consists of a scatter of sandstone rubble suggestive of a small surface structure or a large extramural feature. The midden to the east of the features has been heavily disturbed by CR 15B road construction which has cut into the eastern side of the ridge, leaving a moderately steep cutbank. As a result, it is likely that most of the midden deposits have been removed. Although the midden has been disturbed, the presence of multiple, intact architectural features indicates that the site has further research potential.</p> <p>Ceramics (200) associated with the site include Kana'a Gray, Red Mesa B/w, Escavada B/w, Gallup B/w, Wingate B/r, and corrugated grayware. Flaked lithics (50) are primarily secondary and tertiary flakes and shatter of petrified wood and gray siltstone.</p>
<b>Significance:</b>	<p>The site is over 50 years of age and is recommended as eligible for nomination to the NRHP under criterion d. The site is over 100 years of age and is of further archaeological interest and merits protection under ARPA. The site has no known qualities meriting consideration under AIRFA.</p>
<b>Project Effect:</b>	<p>The site is located within the western ROW and buffer zone of CR 15B.</p>
<b>Recommendations:</b>	<p>A determination of "No historic properties Affected" is recommended with the stipulation that all future ground disturbing activities within 50 feet of the site be monitored by a qualified archaeologist.</p>

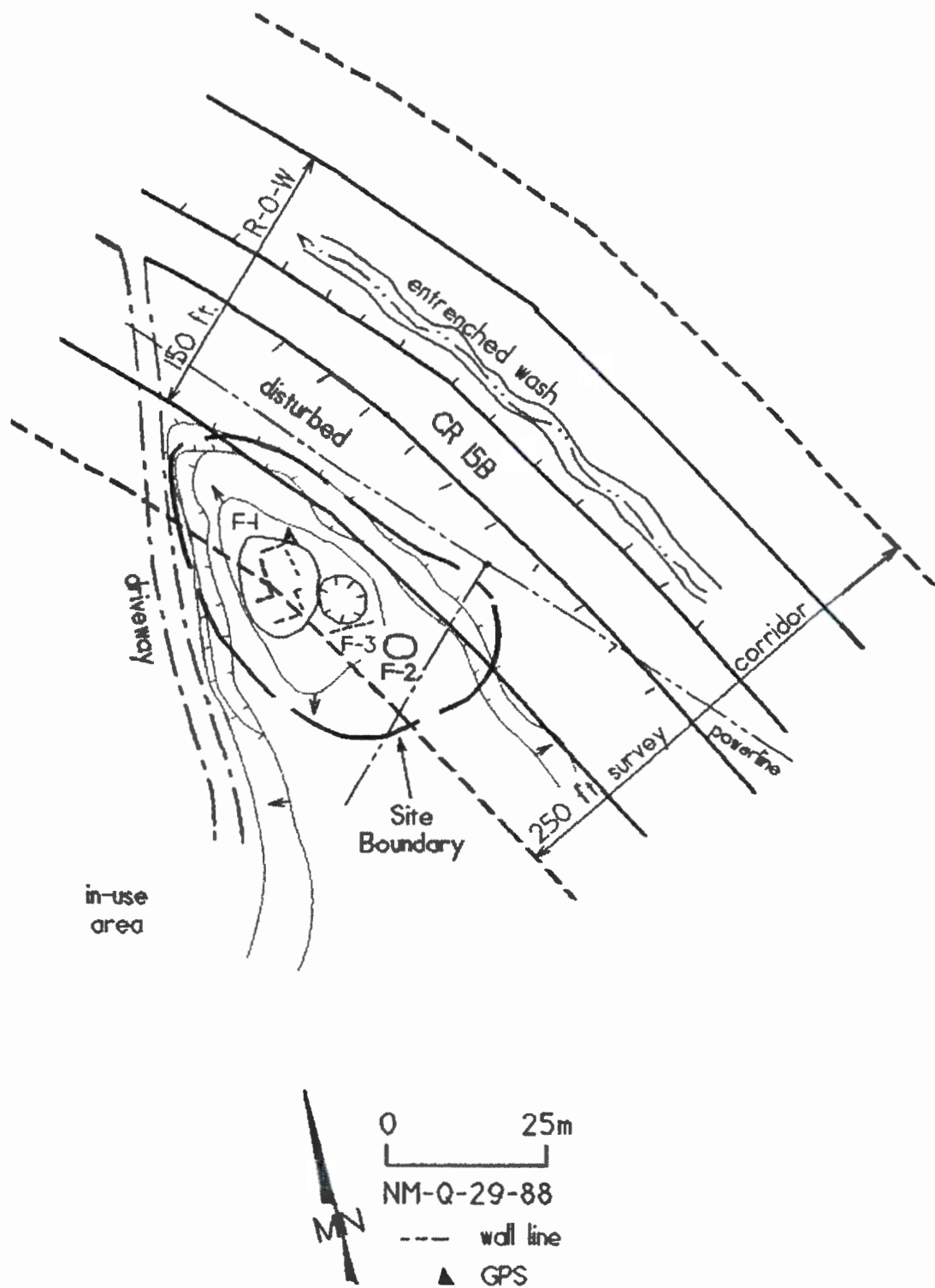


Figure 4. Plan map, site NM-Q-29-88 and CR 15B.

**Site Number:** NM-Q-29-200

**Legal Location:** NE, SW, SE, Sec. 17, T 16N, R 16W, NMPM, McKinley County, NM

**UTM:** Zone 12, 721590mE / 3943754mN (NAD 83)

**Ownership:** Tribal Trust

**Site Type:** Camp or Activity Area

**Affiliation:** Late Pueblo II to middle Pueblo III, A.D. 1050-1200

**Site Size:** 37 m x 22 m = 814 m<sup>2</sup>

**Setting:** The site is situated on the northern bank of the Puerco River. The terrain is generally flat and comprised of alluvial silts and sands. Disturbance vegetation consists of dense russian thistle and lesser amounts of rabbitbrush at an elevation of 6755 feet.

**Description:** The site (Figure 5) appears to be a short-term camp or activity area along the northern bank of the Puerco River. The site is only exposed in slightly eroded areas and on the slopes of the river bank. Feature 1 is a probable deflated hearth indicated by a small cluster of burned sandstone rocks. A light sheet midden is actively eroding down bank and into the river. Elsewhere, a sparse artifact and burned/unburned rock scatter covers the site. Approximately 75 sherds are present, almost exclusively corrugated gray ware. One Wingate B/r and one plain white ware jar sherd were observed. Flaked lithics are limited to 5 red siltstone secondary flakes and 1 leopard chert core. The site may extend further to the north but at the time of recordation, a dense ground cover of russian thistle obscured much of modern ground surface.

**Significance:** The site is over 50 years of age and is recommended as eligible for nomination to the NRHP under criterion d. The site is over 100 years of age and is of further archaeological interest and merits protection under ARPA. The site has no known qualities meriting consideration under AIRFA.

**Project Effect:** The site is located in the western buffer zone of CR 15B.

**Recommendations:** A determination of "No historic properties Affected" is recommended with the stipulation that all future ground disturbing activities within 50 feet of the site be monitored by a qualified archaeologist.

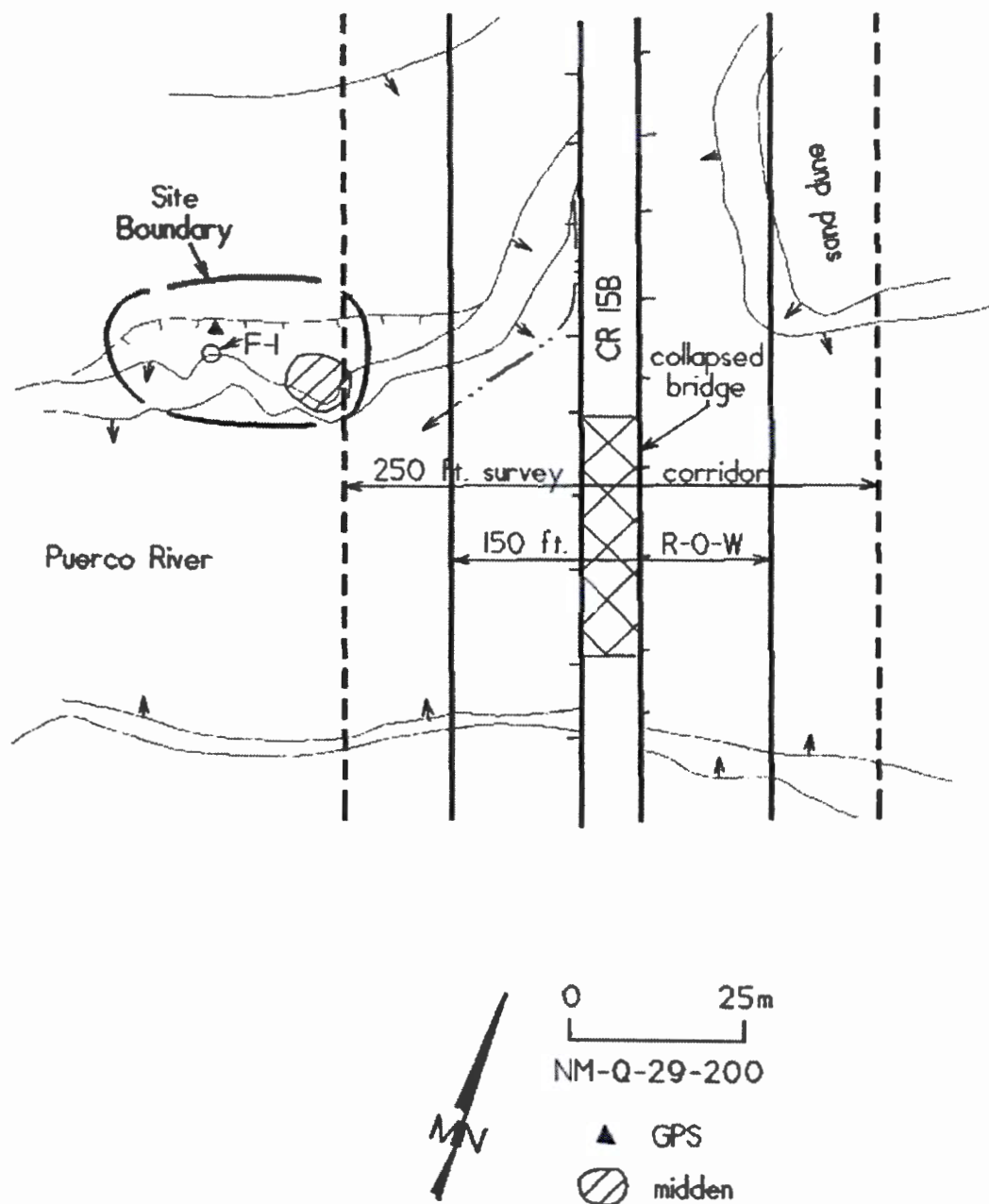


Figure 5. Plan map, site NM-Q-29-200 and CR 15B.

## ISOLATED OCCURRENCE

### IO No. 1:

UTM Location: Zone 12, 721595mE / 3943873mN (NAD 83)  
Description: 2 Red Mesa B/w sherds in western buffer zone

## EVALUATION OF SIGNIFICANCE

The IO is not considered significant or eligible for nomination to the NRHP or for protection under ARPA. The IO does not exhibit qualities meriting consideration under AIRFA. Sites NM-Q-29-88 and NM-Q-29-200 contain components which are recommended as eligible for nomination to the NRHP under Criterion D and for protection under ARPA. The sites do not possess any known qualities which merit protection under AIRFA. Significance and eligibility recommendations for the sites are summarized in Table 1.

**Table 1. Site significance and eligibility.**

NM-Q-29-88 Pueblo II Habitation	36 CFR 60.4:	Site is eligible for nomination to the NRHP because it is over 50 years old
	Integrity:	Site does retain integrity.
	Criteria a-d:	Site does meet Criterion d.
	Exclusions:	None.
	ARPA:	Site is over 100 years old and is of archaeological interest.
	AIRFA:	Site has no known qualities meriting protection.
NM-Q-29-200 PII-III Camp/Activity Area	36 CFR 60.4:	Site is eligible for nomination to the NRHP because it is over 50 years old
	Integrity:	Site does retain integrity.
	Criteria a-d:	Site does meet Criterion d.
	Exclusions:	None.
	ARPA:	Site is over 100 years old and is of archaeological interest.
	AIRFA:	Site has no known qualities meriting protection.

## RECOMMENDATIONS

A determination of "no historic properties affected" is recommended for the McKinley County Road ROW Project, Old Church Rock Mine Road 15B, with the stipulations that all future ground disturbing activities within 50 feet of sites NM-Q-29-88 and NM-Q-29-200 be monitored by a qualified archaeologist.

## REFERENCES

Copeland, James M.

- 1988 Archaeological Survey: Residential Power Line Extensions Along the Puerco River Valley and Adjacent Areas, Church Rock, McKinley County, New Mexico. *NNCRMP* 87-212. Navajo Nation Cultural Resource Management Program, Window Rock.

Griggs, Paul S., and Nena A. Powell

- 1976 A Cultural Resource Investigation of Several Tracts Between Gallup and Grants, New Mexico for Homestake Mining Company. *Laboratory of Anthropology Notes* No. 238, Museum of New Mexico, Santa Fe.

Nabahe, Rolf J.

- 1992 An Archaeological Survey of Church Rock South, McKinley County, New Mexico. *NNAD* 91-003. Navajo Nation Archaeology Department, Window Rock.
- 1993 An Archaeological Survey of Church Rock North, McKinley County, New Mexico. *NNAD* 90-473. Navajo Nation Archaeology Department, Window Rock.

Sullivan, Richard B.

- 1994 *Across the Colorado Plateau: Anthropological Studies for the Transwestern Pipeline Expansion Project Volume X: Excavations at Anasazi Sites in the Upper Puerco River Valley.* Office of Contract Archaeology, University of New Mexico. Albuquerque.

**Cultural Resource Inventory**  
**McKinley County Road R-O-W Project**  
**Old Church Rock Mine Road (CR 15B)**  
**Church Rock Chapter**  
**McKinley County, New Mexico**

Prepared by  
Mary Errickson  
Complete Archaeological Service Associates  
P.O. Box 1777  
Cortez, Colorado 81321

**CASA 16-20**

**ATTACHMENT A**  
**TCP RECORD SEARCH**

Permit  
NNCRIP B16222



THE NAVAJO NATION  
Historic Preservation Department

PO Box 4950, Window Rock, AZ 86515  
TEL: (928) 871-7198 / 7134 FAX: (928) 871-7886

TRADITIONAL CULTURAL PROPERTY (TCP) RECORD  
SEARCH VERIFICATION FORM

**\*\*TCP WILL NOT SIGN/APPROVE IF THIS PORTION IS LEFT BLANK\*\***

Project Information	
DATE	4/27/16
RESEARCHER & COMPANY	Mary Errickson - CASA
PROJECT NAME	MCKinley County Road ROW Project - CR 15B Old Church Rock Mine Rd.
PROJECT/PERMIT NUMBER	CASA 16-20 / B16222
PROJECT LOCATION	Church Rock, NM

**\*\*\*TO BE FILLED OUT & SIGNED BY AUTHORIZED NNHPD STAFF ONLY\*\*\***

A literature search of TCP Records at NNHPD on the above date indicates the following:	
<input type="checkbox"/>	There are <u>no</u> TCP(s) present within the project area and/or buffer zone. The project may proceed as proposed.
<input type="checkbox"/>	TCP(s) <u>are</u> present within the project area and/or buffer zone. Project may have the potential to adversely affect TCP(s). Please document TCP(s) as a summary (with only general location information) in the body of reports submitted for review to HPD/CRCs. Give full detail on the TCP Documentation Forms in a separate, and clearly labeled, confidential appendix.
<input checked="" type="checkbox"/>	Project may proceed with the following stipulations: Note TCP # 504 in report & findings
<input type="checkbox"/>	Further consultation is required. Consult with the following:
<input type="checkbox"/>	There are no mitigative measures. Project may not proceed.

NNHPD/TCP Program Reviewer:		Date: 4/27/16
-----------------------------	--	---------------

**\*\*Return this form along with report to the NNHPD/Compliance Section\*\***

Note: In addition to the TCP Record search, the consultant must demonstrate that a good-faith effort to consult with 1.) Surface user(s): grazing-permit holder(s) (individuals whose consents for right-of-way have been sought by developer); any other residents in or within view of the proposed project area. 2. Chapter(s) within which the proposed project is located: chapter officers and/or delegate(s) of the Navajo Nation Council; at the request of any of these individuals, the developer's consulting anthropologist will also make a presentation at a meeting of general chapter membership. 3. Other knowledgeable people recommended by the present surface user(s), chapter officials, and chapter members.

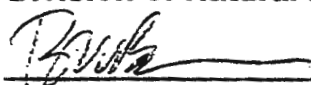
**THE  
NAVAJO  
NATION**

**THE DIVISION OF NATURAL RESOURCES**

*Rec'd*

**MEMORANDUM**

**TO: ALL Department Managers  
Division of Natural Resources**

**FROM:**   
Biddah Becker, Division Director  
Division of Natural Resources

**SUBJECT: Delegation of Authority**

**DATE: January 12, 2016**

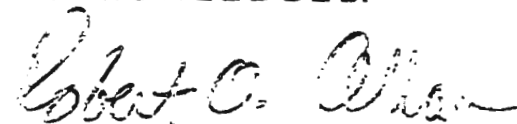
Please be advised that in the event that either I, Division Director of the Division of Natural Resources, or Ms. Evangeline Curley-Thomas, Deputy Director, Division of Natural Resources, are not in the office or otherwise unavailable, Mr. Robert O. Allan, Principal Attorney, Division of Natural Resources, shall be delegated authority as the Acting Division Director of the Division of Natural Resources. This is a standing delegation of authority until further notice.

Please cooperate with Mr. Allan in this standing delegation of authority. Should you have any questions, please contact me.

**ACKNOWLEDGED:**

  
Evangeline Curley-Thomas, Deputy Director  
Division of Natural Resources

**ACKNOWLEDGED:**

  
Mr. Robert O. Allan, Principal Attorney  
Division of Natural Resources

PERMITS WEST INC.  
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SANTA FE, NM 87508-8351

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LOOK FOR FRAUD-DETECTING FEATURES INCLUDING THE SECURITY SQUARE AND HEAT-REACTIVE INK. DETAILS ON BACK.

## Project Fact Sheet



Company: McKinley County  
P.O. Box 70  
Gallup, NM 87305

Project: **County Road 15B (Old Churchrock Mine Road)**

Purpose: To obtain a right-of-way to fix washed-out bridge and make road improvements due to flooding; ongoing operation and maintenance of the road.

Surface: Navajo Tribal Trust

Tribal Location: NE/4 SE/4 Section 17; NE/4 Section 20; NW/4 Section 21, T. 16 N., R. 16 W, McKinley County, NM

Right-of-Way Length: 6,712.15 feet

Right-of-Way Width: 150 feet

Total Project Acreage 23.11 acres

Contact: Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508  
505/466-8120  
Fax: 505/466-9682

16-8392 jmr

**PERMITS WEST, INC.**  
**PROVIDING PERMITS for LAND USERS**  
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

June 20, 2016

Howard Draper  
Project Review Office  
Navajo Nation  
P.O. Box 9000  
Window Rock, AZ 86515

Dear Howard:

On behalf of McKinley County, enclosed is a Right-of-Way application for County Road 15B (Old Churchrock Mine Road) on Tribal Trust land. The right-of-way is for the purpose of conducting immediate road and bridge repairs due to flooding and on-going operation and maintenance of the road.

The application packet includes:

Right of Way Application  
Project Description  
Project Map/Survey  
Field Clearance Request  
Environmental Assessment  
Archeological Report/Clearance

Due to budget constraints, the County is unable to compensate the Navajo Nation for the right-of-way. The County is respectfully requesting any compensation be waived. Please let me know if you have any questions.

Sincerely,

  
Jeanette Reisenburg  
Agent