



NEW MEXICO

Abandoned Mine Lands

Project Manual
Including Plans and Specifications
for Construction of

SWASTIKA MINE AND DUTCHMAN CANYON
MAINTENANCE AND STREAM RESTORATION PROJECT

Raton, New Mexico

PROJECT NO.
EMNRD-MMD-2020-03

AUTHORIZED BY:

ABANDONED MINE LAND PROGRAM
MINING and MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
STATE OF NEW MEXICO

(with reclamation fees paid by the New Mexico Coal Industry)

APRIL 2020



00002 – CERTIFICATE PAGE

PROJECT NAME: Swastika Mine and Dutchman Canyon
Maintenance and Stream Restoration Project

LOCATION: Raton, New Mexico

PROJECT NUMBER: EMNRD-MMD-2020-03

ENGINEERS OF RECORD: George F. Cathey, P.E.
Oxbow Ecological Engineering, LLC
3491 S. Gillenwater Drive
Flagstaff, AZ 86005
Telephone: (928) 266-6192

The technical material and data contained in the specifications were prepared under the supervision and direction of the undersigned, whose seal as a Professional Engineer (P.E.), licensed to practice in the State of New Mexico, is affixed below.

George F. Cathey, P.E.

21540
License No.

Authorized Representative/Title
Energy, Minerals and
Natural Resources Department

Date

Michelle Lujan Grisham, Governor

All questions about the meaning or intent of these documents shall be submitted only to the Engineer of Record, stated above, in writing. Refer to Section 00120 - Supplementary Instructions to Bidders as to interpretations.

00003 – TABLE OF CONTENTS

TITLE PAGE	00001
CERTIFICATION PAGE	00002
TABLE OF CONTENTS	00003
LIST OF FIGURES, STATUTES, AND TABLES	00004
<i>I. Figures</i>	
<i>II. Statutes</i>	
<i>III. Tables</i>	
PRE-BID INFORMATION	00010
INVITATION TO BID	00020
INSTRUCTIONS TO BIDDERS	00100
SUPPLEMENTARY INSTRUCTIONS TO BIDDERS	00120
<i>I. Information</i>	
<i>II. Bid</i>	
<i>III. Security</i>	
<i>IV. References</i>	
<i>V. Supplements</i>	
<i>VI. New Mexico Employees Health Insurance</i>	
<i>VII. Use of Brand Name Specifications</i>	
BID ASSURANCES	00125
<i>I. General</i>	
<i>II. Confidentiality</i>	
<i>III. Inspection</i>	
<i>IV. Samples</i>	
<i>V. Cancellation</i>	
MANDATORY PRE-BID CONFERENCE	00130
BID FORMS	00300
SUPPLEMENTS TO BID FORMS	00400
BID SECURITY FORM	00410
BIDDER'S QUALIFICATION FORMS	00420
<i>I. Experience</i>	
<i>II. References</i>	
SUBCONTRACTORS LIST	00430
EQUIPMENT LIST	00450
AGREEMENT FORMS	00500
BONDS AND CERTIFICATES	00600
PERFORMANCE BONDS	00610
PAYMENT BONDS	00620
CERTIFICATE OF INSURANCE	00650
GENERAL CONDITIONS	00700
DIFFERING SITE CONDITIONS	00704

WARRANTY AND GUARANTEE	00713
DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE PROJECT MANAGER	00720
SUPPLEMENTARY CONDITIONS	00800
CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS, DRUG-FREE WORKPLACE REQUIREMENTS AND LOBBYING	00825
APPLICANT/VIOLATOR SYSTEM INFORMATION	00826
WAGE DETERMINATION SCHEDULE	00830
APPLICATION FOR PAYMENT	00900
SPECIFICATIONS	
DIVISION 1 – GENERAL REQUIREMENTS	
SUMMARY OF WORK	01010
SUMMARY OF PROJECT AND CONSTRUCTION ACCESS	01011
ANTICIPATED CONSTRUCTION SCHEDULE/TARGET DATES	01012
ANTICIPATED CONSTRUCTION EQUIPMENT	01013
AVOIDANCE AREAS FOR PRESERVATION OF CULTURAL AND BIOLOGICAL RESOURCES	01014
CONTRACTOR’S USE OF THE PREMISES	01015
MEASUREMENT AND PAYMENT	01025
APPLICATIONS FOR PAYMENT	01027
PRICES	01028
I. <i>Lump Sum Prices</i>	
II. <i>Unit Bid Prices</i>	
ALTERNATES	01030
MODIFICATION PROCEDURES	01035
CHANGE ORDER PROCEDURES	01036
COORDINATION	01040
PROJECT COORDINATION	01041
MECHANICAL AND ELECTRICAL COORDINATION	01042
JOB SITE ADMINISTRATION	01043
FIELD ENGINEERING	01050
REGULATORY REQUIREMENTS	01060
REFERENCES	01090
ABBREVIATIONS	01092
DEFINITIONS	01094
SPECIAL PROJECT PROCEDURES	01100
WORK SUSPENSION DUE TO PLANNED HUNTING ACTIVITIES	01115
HAZARDOUS AND CONFINED AREA PROCEDURES	01135
INDUSTRIAL WASTES AND TOXIC SUBSTANCES	01170
ENVIRONMENTAL COMPLIANCE	01176

PROJECT MEETINGS	01200
PRE-CONSTRUCTION CONFERENCES	01210
PROGRESS MEETINGS	01220
SUBMITTALS	01300
PROGRESS SCHEDULES	01310
PROGRESS REPORTS	01320
SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES	01340
QUALITY CONTROL	01400
CONTRACT QUALITY CONTROL	01405
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS	01500
MOBILIZATION	01505
TEMPORARY UTILITIES	01510
TEMPORARY SANITARY FACILITIES	01516
BARRIERS AND ENCLOSURES	01530
TREE PLANT AND WILDLIFE PROTECTION	01533
I. <i>Tree and Plant Protection</i>	
II. <i>Wildlife Protection</i>	
PROTECTION OF INSTALLED WORK	01535
SECURITY	01540
ACCESS ROADS AND PARKING AREAS	01550
TEMPORARY CONTROLS	01560
CONSTRUCTION CLEANING	01561
DUST CONTROL	01562
NOISE CONTROL	01564
FIRE PREVENTION AND SAFETY AWARENESS	01565
EQUIPMENT SAFETY & MAINTENANCE SPECIFICATION	01566
TRAFFIC REGULATION	01570
FLAGGERS	01572
HAUL ROUTES	01574
PROJECT IDENTIFICATION AND SIGNS	01580
FIELD OFFICES AND SHEDS	01590
MATERIAL AND EQUIPMENT	01600
CONTRACT CLOSEOUT	01700
CONTRACT CLOSEOUT PROCEDURES	01701
FINAL INSPECTION	01702
FINAL CLEANING	01710
DIVISION 2 – SITEWORK	
SITE PREPARATION	02100
SELECTIVE DEMOLITION & REMOVAL	02110
SITE CLEARING	02120
SALVAGE OF NATIVE PLANTS	01130
EARTHWORK	02200

EXCAVATION & SHAPING OF STREAM CHANNEL	02210
EXCAVATION OF STRUCTURE KEYWAYS	02211
CONSTRUCTION OF FLOODPLAIN BENCHES	02212
COMPACTION	02213
DISPOSAL OF UNSUITABLE/OVERBURDEN MATERIALS	02214
SHAPING OF UPLAND CHANNELS	02215
FINAL GRADING	02220
DECOMPACTION	02230
PERMITTING	02250
STREAM STABILIZATION ELEMENTS	02300
BOULDER STRUCTURES	02310
GRADED ROCK STRUCTURES	02320
COIR LOGS	02330
UPLAND STABILIZATION ELEMENTS	02400
LOW IMPACT GRADED ROCK STRUCTURES	02410
NATIVE PLANTINGS	02500
WETLAND PLUG PLANTINGS	02510
DORMANT RIPARIAN POLE PLANTINGS	02520
SEEDING	02530
MULCHING	02540
SUBMITTALS	02990

← END OF TABLE OF CONTENTS →

00004 – LIST OF FIGURES, STATUTES, AND TABLES

The following sections list the figures, statutes, and tables that are referenced in the Specifications and are incorporated herein by reference as if set out in their entirety.

I. SHEETS AND FIGURES

The following sheets and figures may be found as an attachment; or bound with the project manual:

Sheet Number	Drawing Number	Description
1	CVR01	Cover Sheet
2	GEN01	General Notes: Abbreviations, Quantity Summary, Data Sources, & Control Points
3	GEN02	Site Overview: Access, Staging, Jurisdictional & Avoidance Areas
4	STR01	Stream Stabilization: Improvement Plan Overview
5	STR02	Stream Stabilization: Headcut Migration Area Plan
6	STR03	Stream Stabilization: Meander 1 & 2 Plan & Profile
7	STR04	Stream Stabilization: Meander 3 Plan & Profile
8	STR05	Stream Stabilization: Meander 5 Plan & Profile
9	STR06	Stream Stabilization: Meander 6 Plan & Profile
10	STR07	Stream Stabilization: Meander 7A Plan
11	STR08	Stream Stabilization: Meander 7B & 8 Plan & Profile
12	STR09	Stream Stabilization: Meander 9 Plan & Profile
13	STR10	Stream Stabilization: Meander 10 Plan & Profile
14	STR11	Stream Stabilization: Meander 11 Plan & Profile
15	STR12	Stream Stabilization: Meander 12 Plan & Profile
16	STR13	Stream Stabilization: Meander & Structure Sections & Details
17	STR14	Stream Stabilization: Structure Sections & Details
18	STR15	Stream Stabilization: Native Revegetation Sections & Details
19	UPL01	Upland Stabilization: Improvement Plan Overview
20	UPL02	Upland Stabilization: Area 1 Improvement Plan
21	UPL03	Upland Stabilization: Area 2 Improvement Plan
22	UPL04	Upland Stabilization: Area 3 Improvement Plan
23	UPL05	Upland Stabilization: Area 4 Improvement Plan
24	UPL06	Upland Stabilization: Sections & Details

II. STATUTES

The following statutes may be referenced in the text:

NMSA 1978, §§ 13-1-28 through 199:	Procurement Code
NMSA 1978, §§ 13-4-1 through 30:	Public Works Contracts
NMSA 1978, §§ 13-4-31 through 43:	Subcontractors Fair Practices Act
NMSA 1978, §§ 41-4-1 through 27:	Tort Claims Act
NMSA 1978, §§ 52-1-1 through 70:	Workers' Compensation Act

NMSA 1978, §§ 69-25B-1 through 12: Abandoned Mine Reclamation Act
NMSA 1978, §§ 74-13-1, et seq.: Recycling and Illegal Dumping Act
NMSA 1978, §§ 76-10-11 through 22: New Mexico Seed Law

This page was intentionally left blank.



PURCHASING DIVISION (GSD)

(Due to the COVID-19 pandemic, and pursuant to the State Purchasing Agent's authority granted under Section 13-1-95.1 NMSA 1978 ONLY electronic submissions of Bids will be accepted for this solicitation.

<https://solutions.sciquest.com/apps/Router/RegistrationChecklist?CustOrg=StateOfNewMexico>

PROJECT: SWASTIKA MINE AND
DUTCHMAN CANYON MAINTENANCE
AND STREAM RESTORATION PROJECT
RATON, NEW MEXICO
PROJECT NO.: EMNRD-MMD-2020-03

BID DUE DATE: May 29, 2020
TIME: 2:00 PM

Procurement Officer: Michael Saavedra
Contact Number:
Michael.Saavedra@state.nm.us or
505-827-0610

ARCHITECT/ENGINEER OF RECORD:

George F. Cathey, P.E.
Oxbow Ecological Engineering, LLC
3491 S. Walkup Drive
Flagstaff, AZ 86005
Telephone: (928) 266.6192

IMPORTANT

FOR MAILED-IN BIDS: Due to the current COVID-19 pandemic the State Purchasing Division is not accepting mailed-in or delivered bids. ONLY electronic bids will be accepted. Bidders may submit an electronic copy of the bid bond with the original bid bond followed in the mail. For instructions read the paragraph below.

OWNER/POINT OF CONTACT:

Abandoned Mine Land Program
Mining and Minerals Division
Energy, Minerals and Natural Resources
Dept.
State of New Mexico
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
Telephone: (505) 476.3400

FOR ELECTRONICALLY UPLOADED BIDS: such bids will be time-stamped in the system when Bidder clicks "OK" after "Review and Submit." You will receive a confirmation email of the submission for your records. Such electronic submissions will be considered sealed bids in conformance with statute. To register as a Supplier with the State of New Mexico, or to log in if already registered go to: <https://suppliers.sciquest.com/StateOfNewMexico>

SEALED BIDS WILL BE RECEIVED UNTIL THE ABOVE-SPECIFIED DATE AND LOCAL TIME, THEN PUBLICLY OPENED VIA GOTOMEETING.

THIS ITB IS SUBJECT TO THE REQUIREMENTS OF THE BIDDING DOCUMENTS AS DEFINED IN THE "INSTRUCTIONS TO BIDDERS."

THE BID PROPOSAL FORM MUST BE ACCOMPANIED BY A SURETY BOND, SUBCONTRACTOR LISTING FORM, AND DOCUMENTS SPECIFIED IN THE "INSTRUCTIONS TO BIDDERS."

This mailing contains four pages

INVITATION TO BID page 2

Bidding Documents: Bidding documents, plans, specifications, drawings etc. may be obtained at the office of the Architect / Engineer of Record upon payment of **\$0.00** for each complete set. CHECKS SHOULD BE MADE PAYABLE TO N/A. Incomplete sets will not be issued.

Bidding Documents may be obtained / reviewed at the following locations:

MICHAEL TOMPSON, P.E.
ENGINEER FOR RECORD
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
1220 SOUTH ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3417
MICHAEL.TOMPSON@STATE.NM.US
<http://www.emnrd.state.nm.us/MMD/announcements.html>

The Bidding Documents contain a time for completion of the work and further impose liquidated damages for failure to complete the work within that time period.

Bids shall be presented in the form of a total Base Bid proposal under a Lump Sum Contract plus any additive or deductive alternates that are selected by the Owner. A bid must be submitted on all bid items and alternates; segregated bids will not be accepted.

NOTE: Base Bid price shall not include state gross receipts or local options taxes. Taxes will be included in the Contracted Amount at prevailing rates as a separate item to be paid by Owner.

In submitting this bid, each Bidder must satisfy all terms and conditions of the Bidding Documents. No Bidder may withdraw his bid for **NINETY (90) DAYS** after the actual date of the opening thereof.

Wage Rates & Workforce Solutions Registration: Pursuant to the Public Works Minimum Wage Act, Section 13-4-10 to 13-4-17 NMSA 1978, all work covered by this Invitation to Bid shall be in accordance with applicable state laws and, if the bid amount is sixty thousand dollars (\$60,000) or more, is subject to the minimum wage rate determination issued by the New Mexico Department of Workforce Solutions, Labor Relations Division, Public Works Unit. Section 13-4-13.1 *requires* Contractors when their bid is over sixty thousand dollars (\$60,000) and subcontractors of all tiers when their portion of the work is over sixty thousand dollars (\$60,000), to be registered with the Labor Relations Division of the Department of Workforce Solutions. This registration is available under the “Contractor Registration” section at the following website:

<http://www.dws.state.nm.us/LaborRelations/LaborInformation/PublicWorks>

INVITATION TO BID page 3

There may be some administrative delay in processing your registration. Pursuant to Section 13-4-13.1 NMSA 1978, the State Purchasing Division **cannot accept your bid if you are not registered at the time of bid opening.**

Please direct all questions concerning registration to DWS at (505) 841-4400.

A completed Subcontractor Listing Form must accompany each bid.

Bonds: Bid Security in the form of a surety bond executed by a surety company authorized to do business in the state of New Mexico in the amount of five percent (**5%**) of the total bid, or the equivalent in cash by means of a cashier's check or in a form satisfactory to the Owner, must accompany each bid in accordance with the Instructions to Bidders.

A 100% Performance Bond and a 100% Payment and Materials Bond for the total contract amount, including appropriate New Mexico Gross Receipts Tax, executed by a surety company authorized to do business in the state of New Mexico shall be required from the successful Bidder prior to award of contract. A subcontractor shall provide performance and payment bonds if the subcontractor's contract (to the Contractor) for work to be performed is \$125,000 or more. Failure of a subcontractor to provide the required bonds shall not subject owner to any increase in cost due to approved substitution of subcontractor.

Preferences: Because this project is one hundred percent (100%) federally funded, neither the 5% New Mexico Resident Contractor's Preference nor the New Mexico Resident Veterans preference, apply to this procurement.

The Owner intends to award this Project to the lowest responsible Bidder. The Owner reserves the right to reject any and all bids, to waive technical irregularities, and to award the contract to the Bidder whose bid it deems to be in the best interest of the Owner.

INVITATION TO BID page 4**A Mandatory Pre-Bid Meeting will be held as follows:**

Due to the State of New Mexico's efforts to prevent further exposure/spread of the virus SARS-CoV-2 and to continue to practice social distancing, the New Mexico Abandoned Mine Land (AML) Program will be holding a virtual mandatory pre-bid meeting via Zoom, a web-based video conferencing tool. This meeting is scheduled to take place on:

Time: Tuesday, May 12, 2020 10 A.M. Mountain Time.

Ways to Join:

- By computer or mobile device using this link:

<https://zoom.us/j/95847006932?pwd=NmhqRldqZ2hnbkVVEZESjhGOWFtUT09>

- By phone dialing (888) 788-0099 (toll free) and then entering the meeting ID: 958 4700 6932 and then password 026652

POINT OF CONTACT: Yeny Maestas, New Mexico Abandoned Mine Land Program,
505.476.3476, Yeny.Maestas@state.nm.us

QUESTIONS AND ANSWERS DEADLINES

- Questions Date: May 13, 2020
- Answers Date: May 18, 2020

LAST AMENDMENT DEADLINE

- Date: May 19, 2020

END OF INVITATION TO BID

00010 – PRE-BID INFORMATION

VENDOR INFORMATION FORM

PURSUANT TO INTERNAL REVENUE SERVICE REGULATIONS, VENDORS MUST FURNISH THEIR TAXPAYER IDENTIFICATION NUMBER (TIN) TO THE STATE. IF THIS NUMBER IS NOT PROVIDED, THE VENDOR MAY BE SUBJECT TO A 20% WITHHOLDING ON EACH PAYMENT. TO AVOID THIS 20% WITHHOLDING AND TO ENSURE ACCURATE TAX INFORMATION IS REPORTED TO THE INTERNAL REVENUE SERVICE AND THE STATE, PLEASE USE THIS FORM TO PROVIDE THE REQUESTED INFORMATION.

Legal Business Name: _____

Address: _____

Telephone Number: _____

9 DIGIT TAXPAYER IDENTIFICATION NUMBER

Social Security Number: _____ - _____ - _____

---- or ----

Federal Employer Identification Number _____

- Type of Business (Check One):
- Individual
 - Sole Proprietorship
 - Partnership
 - General Limited
 - Corporation
 - Public Service Corporation
 - Government/Nonprofit
 - Other (please specify) _____

OTHER TAX ACCOUNT NUMBERS

New Mexico CRS Identification Number: _____

State Unemployment Tax Number: _____

Under penalties of perjury, I hereby declare that I have examined this form and to the best of my knowledge and belief, it is true and correct, and complete.

Name (print or type)

Title (print or type)

Signature

Date

Telephone

SPD 9-90**00100 – INSTRUCTIONS TO BIDDERS**

Title IV of the federal Surface Mining Control and Reclamation Act (SMCRA) of 1977, 30 U.S.C. Section 1201, *et seq.* provides for the reclamation of abandoned mine lands. All operators of coal mining operations subject to the provisions of the Act pay to the Secretary of the Interior Department, for deposit in the fund, a reclamation fee of 31.5 cents per ton of coal produced by surface coal mining and 13.5 cents per ton of coal produced by underground mining. Under SMCRA, individual states acquire federal funds from the Office of Surface Mining, Reclamation, and Enforcement (OSMRE) to administer an approved state reclamation program and to implement specific reclamation projects. The New Mexico Energy, Minerals and Natural Resources Department (EMNRD) administers the AML Program within New Mexico pursuant to a state approved plan and the requirements of the New Mexico Abandoned Mine Reclamation Act, NMSA 1978, § 69-25B-1, *et seq.* The supervision and coordination of work done under the AML Program are conducted by the Mining and Minerals Division (MMD) of EMNRD. Wherever the term Owner is used, it shall mean the MMD Director. EMNRD, MMD and Owner may be collectively referred to as “EMNRD.”

MMD has obtained one hundred percent (100%) federal funds for this construction project. MMD is, by this Invitation to Bid (ITB), requesting bids from responsible, qualified Bidders for the construction project in accordance with the terms of this ITB. Bidders are advised that responsive bids are invited from both profit making and nonprofit organizations. EMNRD is an affirmative action and equal opportunity employer.

The deadline date for receipt of bids is no later than as listed in the Invitation to Bid. One each of the required bid documents, with original signature, must be received and stamped in at

eProNM

<https://suppliers.sciquest.com/StateOfNewMexico>

No hard copy bids will be accepted.

Bids in response to this ITB will be opened publicly via
<https://www.gotomeeting.com/meeting/join-meeting>

The name of each Bidder, the lump sum of each bid, and the Bidder’s Contractor License Number will be announced.

The Contract Time for project completion shall be no later than two hundred forty (240) calendar days, including all Sundays, holidays, and non-work days, after the Contractor receives a Notice to Proceed via USPS certified mail.

An abstract of the bids may be available for public inspection from the State Purchasing Division upon request. Those portions of any bid for which a Bidder has made a written request for confidentiality and for which the SPD Director has made a finding which concurs in that confidentiality shall be withheld from public inspection.

00120 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

The following shall be included with each responsive bid:

I. Information

A fully completed Vendor Information Form (see Section 00010, Pre-Bid Information), including the name, address, telephone number, Taxpayer Identification Numbers, and signature of the Bidder, or of an officer or employee who has the authority of the Bidder. Do not leave blanks. This signature shall signify that the matters stated or certified on the form are true and accurate to the best of the Bidder's knowledge.

II. Bid

A fully completed Bid Form (Section 00300), including the name, address, telephone number, New Mexico Contractor's License Number, Contractor and Subcontractor New Mexico Labor Enforcement Fund Registration Numbers for bids and subcontracts greater than \$60,000.00, and signature of the Bidder, or of an officer or employee who has the authority to bind the Bidder. Do not leave blanks. This signature shall signify that the matters stated or certified in the bid are true and accurate to the best of the Bidder's knowledge and that the bid was made without collusion or fraud.

III. Security

Bid security shall be required of Bidders for construction contracts procured by competitive sealed bid. A bid security shall be in the form of a negotiable Surety Bond (see an example in Section 00410, Cashier's Check, Certified Check, or Money Order in the amount of at least 5% of the total bid payable to the Energy, Minerals and Natural Resources Department. A letter of credit is not acceptable.

IV. References

A list of the Bidder's general background including relevant resources, capabilities, experience, and references with telephone numbers (Section 00420). Do not leave blanks. The Bidder must have a minimum of five (5) years of related construction experience to qualify.

V. Supplements

A complete listing of all subcontractors (Section 00430), if applicable, including for each subcontractor: the work to be performed; the subcontractor's name, address, telephone number,

and New Mexico Contractor License Number, if applicable; and a complete listing of pertinent equipment (Section 00450) including for each piece of equipment: the type, manufacturer, model, capacity, and condition. Do not leave blanks.

If for any reason this ITB requires further amendment, such amendments shall be sent via addenda to all parties recorded by the Project Engineer as having received the Bidding Documents. Each Bidder shall be required to acknowledge the receipt of any addenda on the bid form. If such addenda become necessary, they will be distributed within a reasonable time to allow the Bidders to consider the amendment in preparation of their bid.

A responsive bid to the ITB shall be submitted as a sealed bid and shall include project costs for each work task on the Bid Form (Section 00300). Prices quoted in these sealed bids shall be firm fixed prices for both lump sum and/or unit prices as listed on the Bid Form. This ITB shall become a part of the final contract agreement.

The total bid amounts as read at the Bid Opening are tentative only and subject to verification of mathematical accuracy. Such verification may result in a change to the order of the bids. The Bidder with the lowest overall total bid price will be announced as the apparent low Bidder. The apparent low Bidder's bid will be carefully evaluated to insure that it complies with the evaluation criteria listed below and the other requirements of this ITB. The bid will be awarded with reasonable promptness by written Notice of Award via certified mail to the lowest responsible, qualified Bidder. If for any reason the apparent low Bidder does not meet all of the evaluation criteria listed below or comply with all of the requirements of this ITB, the next lowest Bidder will be evaluated and awarded the contract if the evaluation criteria are met.

The evaluation criteria include:

1. Possession of a valid New Mexico Contractor License appropriate for the work;
2. Proof of registration with Labor Relations Division of the New Mexico Department of Workforce Solutions for contractor and all subcontractors when Bidder submits a bid valued at more than \$60,000;
3. Proven records of satisfactory work performance for both Bidder and listed subcontractors.

This evaluation is not conducted to determine whether one Bidder's offering is superior to another Bidder's but only to determine that a Bidder's offering is acceptable as set forth in the ITB.

Each Bidder shall submit information sufficient to evaluate the bid based on documentation of the Bidder's proven ability to perform the required tasks. Failure to provide the information required to evaluate the bid shall result in rejection of the bid without further discussion.

All questions about the meaning or intent of the Bidding Documents shall be submitted to the Project Engineer in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by the Project Engineer as having received the Bidding Documents. Questions received less than ten (10) business days before the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without effect. Bidders or the Contractor shall promptly notify the Project Engineer of any ambiguity, inconsistency, or error which they may perceive upon examination of the Bidding Documents or of the site and local conditions.

Note: Because this project is one hundred percent (100%) federally funded, neither the five percent (5%) New Mexico Resident Contractor's Preference nor the ten percent (10%) New Mexico Resident Veterans preference, apply to this procurement.

VI. New Mexico Employees Health Insurance

A. If Bidder has, or grows to, six or more employees who work, or who are expected to work, an average of at least twenty (20) hours per week over a six-month period during the term of any Agreement which may result from this RFP, Bidder agrees, by submitting a bid, to have in place, and agree to maintain for the Agreement's term, health insurance for those employees and offer that health insurance to those employees if the expected annual value in the aggregate of any and all contracts between Bidder and the state exceed two hundred fifty thousand dollars (\$250,000.00).

B. Bidder agrees to maintain a record of the number of employees who have:

- 1) accepted health insurance;
- 2) declined health insurance due to other health insurance coverage already in place; or
- 3) declined health insurance for other reasons.

These records are subject to review and audit by a representative of the state.

C. Bidder agrees to advise all employees of the availability of state publicly-financed health care coverage programs.

VII. Use of Brand Name Specifications

Use of any brand name herein is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.

00125 – BID ASSURANCES

In addition to the requirements above, the Bidder must make, include, and agree to the

following assurances as a part of the responsive bid submitted in response to this Invitation for Bids (ITB)

I. General

This ITB does not commit EMNRD to pay any costs incurred by any Bidder in the submission of a responsive bid, in making necessary studies and designs for the responsive bid, or in procuring or contracting for services or supplies for the preparation of the responsive bid. Issuance of this ITB does not constitute an award commitment by EMNRD. An ITB may be canceled and any or all bids may be rejected in whole or in part, when it is in the best interest of the State of New Mexico. EMNRD may waive, in its sole discretion, technical irregularities that do not affect the contractual conditions, delivery, price, quality, or quantity of the construction, services, or items of tangible personal property that are bid. EMNRD specifically reserves the right to reject responsible, qualified bids from which EMNRD is not able to determine the true amount of the bid, and bids that exceed EMNRD's budgeted or available funds for the project. Final approval for funding is contingent upon approval from the Department of the Interior: Office of Surface Mining - Albuquerque Field Office.

II. Confidentiality

It is further understood that all bids shall become a part of the official file on this matter without obligation of the State of New Mexico and shall be made available for public inspection, unless the Bidder specifies in writing that specific portions of the bid are confidential and are to be held confidential by the State of New Mexico in accordance with NMSA 1978, § 71-2-8. All matter intended to be confidential shall be submitted in a sealed envelope marked "confidential" and each page of the material shall also be marked clearly with the word "confidential". The State of New Mexico reserves the right to review information submitted as to confidentiality. For this purpose, confidential information includes, but is not limited to, matter that relates to trade secrets or which is privileged commercial or financial information that affects the competitive rights of the person, firm, or corporation that submits it.

III. Inspection

To assure EMNRD that the Bidder has the competence, equipment, facilities, and staff to furnish the services required under this contract, EMNRD shall be allowed to determine the adequacy of the competence, equipment, facilities, and staff of any Bidder considered for the contract award. For this purpose, if EMNRD deems it appropriate, the Bidder shall permit representatives of EMNRD to inspect the Bidder's equipment and facilities.

IV. Samples

Bid samples or descriptive literature should not be submitted unless expressly requested. Regardless of any attempt by a Bidder to condition the bid, unsolicited bid samples or descriptive

literature, which are submitted at the Bidder's risk, will not be examined or tested, and will not be deemed to vary any of the provisions of this ITB.

V. Cancellation

Failure by the successful Bidder to return the signed contract with acceptable contract bond and insurance within ten (10) business days after receipt via certified mail of the Notice of Award shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of EMNRD, not as a penalty, but in liquidation of damages sustained.

00130 – MANDATORY PRE-BID CONFERENCE

Prospective Bidders are required to attend the pre-bid conference, in order to familiarize themselves with the site where the work is to be conducted the existing conditions that may affect the performance of the contract work. Subcontractors and suppliers are not required to attend the pre-bid conference; however, failure to participate in the virtual pre-bid meeting will not relieve subcontractors and suppliers from the responsibility of properly estimating the difficulty and cost of performing their portion of the work.

Due to the State of New Mexico's efforts to prevent further exposure/spread of the virus SARS-CoV-2 and to continue to practice social distancing, the AML Program will be holding a virtual mandatory pre-bid meeting via Zoom, a web-based video conferencing tool. This meeting is scheduled to take place on:

Time: Tuesday, May 12, 2020 10 A.M. Mountain Time.

Ways to Join:

- By computer or mobile device using this link:

<https://zoom.us/j/95847006932?pwd=NmhqRldqZ2hnbkVVEZESjhGOWFtUT09>

- By phone dialing (888) 788-0099 (toll free) and then entering the meeting ID: 958 4700 6932 and then password 026652

POINT OF CONTACT: Yeny Maestas, New Mexico Abandoned Mine Land Program, 505.476.3476, Yeny.Maestas@state.nm.us

AML representatives will present the work site conditions and the scope of work during the virtual meeting, potential Offerors are encouraged to submit questions electronically afterwards to allow for the meeting to go as smoothly as possible. See the Invitation to Bid for date, location, and time. Those wishing to attend are advised to be prompt.

NOTE: NOTHING STATED AT THE PRE-BID CONFERENCE SHALL CHANGE THIS INVITATION FOR BIDS UNLESS SUCH CHANGE IS MADE BY WRITTEN AMENDMENT.

ATTACHMENT CHECKLIST

The following forms and attachments shall be submitted with your bid:

- A. ___ Vendor Information Form
- B. ___ Bid Form
- C. ___ Bid Security Bond Form with Agent's Affidavit
- D. ___ List of Subcontractors and Equipment
- E. ___ Valid NM Contractor's License issued by Construction Industries Division (CID) per NMSA 1978, Section 60-13-12
- F. ___ Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying
- G. ___ Applicant/Violator System Information Form
- H. ___ New Mexico Public Works Contractor Registration Information
- I. ___ New Mexico Employee Health Coverage Form

The following forms and attachments are due at time of award:

- J. ___ Certificate of Insurance with Agency named as additional insured (all subcontractors also insured)
- K. ___ Performance Bond and Labor & Material Payment Bond
- M. ___ Wage Rate Determination if bid amount is \$60,000 or more issued by NM Dept. of Workforce Solutions

The following forms shall be submitted after award:

- N ___ Application for Payment (*submit when invoicing*)

00300 – BID FORMS**BIDDER NAME:** _____**BID MATERIAL OR
ITEM WORK DESCRIPTION****ESTIMATED QUANTITY¹****BID AMOUNT²**

1. Fulfill General Requirements

For the Lump Sum of

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

2. Mobilization and Demobilization
(not to exceed 10% of total base bid)

For the Lump Sum of

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

(Not to exceed 10% of TOTAL BASE BID)

3. Clearing, Grubbing, Stripping, Salvage and Disposal

For the Lump Sum of

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

4. Excavate and Shape Stream Channel and Point Bars

For the Unit Price of

_____ Dollars per Cubic Yard (\$ _____)

(Written Whole Dollars and Zero Cents)

X 1,260 Cubic Yards =

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

<u>BID</u>	<u>MATERIAL OR</u>	<u>ESTIMATED QUANTITY</u> ¹	<u>BID AMOUNT</u> ²
<u>ITEM</u>	<u>WORK DESCRIPTION</u>		

5. Fill and Shape Floodplain Benches

For the Unit Price of

_____ Dollars per Cubic Yard (\$ _____)

(Written Whole Dollars and Zero Cents)

X 960 Cubic Yards =

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

6. Remove and Dispose of Overburden

For the Lump Sum of

_____ Dollars (\$ _____)

(Written Whole Dollars and Zero Cents)

7. Shape Upland Channel

For the Unit Price of

_____ Dollars per Linear Foot (\$ _____)

(Written Whole Dollars and Zero Cents)

X 1,500 Linear Feet =

_____ Dollars per each (\$ _____)

(Written Whole Dollars and Zero Cents)

8. Supply and Construct Boulder Cross Vane

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 17 Each =

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

_____ Dollars (\$ _____)

(Written Dollars and Cents)

BID MATERIAL OR

ITEM WORK DESCRIPTION

ESTIMATED QUANTITY¹

BID AMOUNT²

9. Supply and Construct Boulder Clusters

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 26 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

10. Supply and Construct Boulder Basin

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 1 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

11. Supply and Construct Graded Rock Basin

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 1 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

<u>BID</u>	<u>MATERIAL OR</u>	<u>ESTIMATED QUANTITY</u> ¹	<u>BID AMOUNT</u> ²
<u>ITEM</u>	<u>WORK DESCRIPTION</u>		

12. Supply and Construct Graded Rock Riffles

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 20 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

13. Supply and Construct Graded Rock Sills

For the Unit Price of

_____ Dollars per Linear Foot (\$ _____)

X 380 Linear Feet =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

14. Supply and Construct Graded Rock Stream Barb

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 8 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

<u>BID</u>	<u>MATERIAL OR</u>	<u>ESTIMATED QUANTITY</u> ¹	<u>BID AMOUNT</u> ²
<u>ITEM</u>	<u>WORK DESCRIPTION</u>		

15. Supply and Install Biodegradable Coir Logs
Complete in Place

For the Unit Price of

_____ Dollars per Linear Foot (\$ _____)

X 170 Linear Feet =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

16. Supply and Construct Rock Mulch Rundown
Complete in Place

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 16 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

17. Supply and Construct Media Luna

For the Unit Price of

_____ Dollars per Each (\$ _____)

X 16 Each =

_____ Dollars (\$ _____)

(Written Dollars and Cents)

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

<u>BID MATERIAL OR ITEM WORK DESCRIPTION</u>	<u>ESTIMATED QUANTITY¹</u>	<u>BID AMOUNT²</u>
18. Supply and Construct One Rock Dam		
	For the Unit Price of	
		Dollars per Each (\$ _____)
(Written Whole Dollars and Zero Cents)		
	X 75 Each =	
		Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)		
19. Supply and Construct Zuni Bowl		
	For the Unit Price of	
		Dollars per Each (\$ _____)
(Written Whole Dollars and Zero Cents)		
	X 13 Each =	
		Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)		
20. Supply and Place Wetland Plugs: Common Spikerush		
	For the unite Price of	
		Dollars per Each (\$ _____)
(Written Whole Dollars and Zero Cents)		
	X 1,800 Plugs =	
		Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)		

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

<u>BID MATERIAL OR ITEM WORK DESCRIPTION</u>	<u>ESTIMATED QUANTITY¹</u>	<u>BID AMOUNT²</u>
21. Supply and Place Wetland Plugs: Baltic and Torrey's Rush		
	For the unite Price of	
_____ Dollars per Each (\$ _____)		
(Written Whole Dollars and Zero Cents)	X 1,800 Plugs =	
_____ Dollars (\$ _____)		
(Written Whole Dollars and Zero Cents)		
22. Supply and Place Riparian Pole Plantings: 3-Pole Willow Cluster		
	For the unite Price of	
_____ Dollars per Each (\$ _____)		
(Written Whole Dollars and Zero Cents)	X 1,950 Clusters =	
_____ Dollars (\$ _____)		
(Written Whole Dollars and Zero Cents)		
23. Supply and Place Riparian Pole Cuttings: Shingled Willow Fascine		
	For the unite Price of	
_____ Dollars per Linear Foot (\$ _____)		
(Written Whole Dollars and Zero Cents)	X 170 Linear Feet =	
_____ Dollars (\$ _____)		
(Written Whole Dollars and Zero Cents)		

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

BID MATERIAL OR ITEM WORK DESCRIPTION	<u>ESTIMATED QUANTITY</u>¹	<u>BID AMOUNT</u>²
--	--	--------------------------------------

24. Supply and Place Riparian Pole Cuttings: 3-Pole Cottonwood Cluster
For the unite Price of

_____ Dollars per Each (\$ _____)
(Written Whole Dollars and Zero Cents)

X 90 Clusters =

_____ Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)

25. Supply, Spread, and Mulch Native Seed Mix: Riparian
For the unite Price of

_____ Dollars per Acre (\$ _____)
(Written Whole Dollars and Zero Cents)

X 1 Acre =

_____ Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)

26. Supply, Spread, and Mulch Native Seed Mix: Upland
For the unite Price of

_____ Dollars per Acre (\$ _____)
(Written Whole Dollars and Zero Cents)

X 1 Acre =

_____ Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)

¹ The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

² The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.

TOTAL BASE BID¹

_____ Dollars (\$ _____)
(Written Whole Dollars and Zero Cents)

(Amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.)

¹ *The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.*

¹ *The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.*

I agree to the assurances set out in the Invitation to Bid, all of which are incorporated and included in this Bid Form by reference. I certify that I have the authority to bind the Bidder. The matters stated in this bid are true and accurate to the best of the Bidder's knowledge. This bid is made without collusion or fraud.

SIGNED: _____

TITLE: _____

DATE: _____

BIDDER'S NAME: _____

ADDRESS: _____

TELEPHONE NO.: _____

NEW MEXICO CONTRACTOR'S LICENSE NO: _____

LICENSE CATEGORIES: _____

CONTRACTOR NM LABOR ENFORCEMENT FUND REGISTRATION NO.:¹

FEDERAL TAX ID #: _____

NEW MEXICO TAX ID #: _____

EMAIL ADDRESS: _____

SUBCONTRACTOR LABOR ENFORCEMENT FUND REGISTRATION NO.(S):¹

I (we) do hereby acknowledge receipt of the following addenda to the project documents:

Addendum No. _____ **Dated:** _____

Addendum No. _____ **Dated:** _____

Addendum No.: _____ **Dated:** _____

² Required for bids and subcontracts valued at more than fifty thousand dollars (\$50,000).

00400 – SUPPLEMENTS TO BID FORMS

00410 - BID SECURITY FORM

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS, that we _____

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and _____

(Insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of New Mexico as Surety, hereinafter called the Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Obligee, in the sum of _____ Dollars (\$ _____), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for the Project.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract or give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____, 20__.

PRINCIPAL (Seal)

WITNESS

TITLE

SURETY (Seal)

WITNESS

TITLE

This page was intentionally left blank.

00420 - BIDDER'S QUALIFICATION FORMS

CONTRACTOR'S QUALIFICATION STATEMENT

To be filled out by the Bidder and returned with the responsive Bid.

BIDDER: _____

I. Experience

List the major construction projects that your organization has completed in the past five (5) years, giving the name of the project, project owner, contract amount, date of completion, and percentage of the cost of the work performed with your own forces. Do not leave blanks.

I.Project Name: _____

Owner: _____

Contract Amount: \$ _____

Completion Date: _____ Percentage: _____

II.Project Name: _____

Owner: _____

Contract Amount: \$ _____

Completion Date: _____ Percentage: _____

III.Project Name: _____

Owner: _____

Contract Amount: \$ _____

Completion Date: _____ Percentage: _____

IV. Project Name: _____

Owner: _____

Contract Amount: \$ _____

Completion Date: _____ Percentage: _____

V. Project Name: _____

Owner: _____

Contract Amount: \$ _____

Completion Date: _____ Percentage: _____

II. References

List references for the above projects including work performed, contact person, firm represented, mailing address, and phone number with area code. Do not leave blanks.

1. Work Performed: _____

Contact Name: _____

Firm Represented: _____

Mailing Address: _____

Phone Number: (_____) _____

2. Work Performed: _____

Contact Name: _____

Firm Represented: _____

Mailing Address: _____

Phone Number: (_____) _____

3. Work Performed: _____

Contact Name: _____

Firm Represented: _____

Mailing Address: _____

Phone Number: (_____) _____

4. Work Performed: _____

Contact Name: _____

Firm Represented: _____

Mailing Address: _____

Phone Number: (_____) _____

5. Work Performed: _____

Contact Name: _____

Firm Represented: _____

Mailing Address: _____

Phone Number: (_____) _____

This page was intentionally left blank

LIST OF SUBCONTRACTORS AND EQUIPMENT
To be filled out by the Bidder and returned with the responsive Bid.

BIDDER: _____

00430 – SUBCONTRACTORS LIST

Any person submitting a bid shall in this bid set forth the name and location of the place of business of each subcontractor under subcontract to the Contractor who will perform work or labor or render service to the Contractor in or about the construction of the public works construction project and whose total contract will be in excess of \$5,000.00 and the nature of the work which will be done by each subcontractor under the New Mexico Subcontractors Fair Practices Act, NMSA 1978, § 13-4-34. The Contractor shall list only one subcontractor for each category as defined by the Contractor in this bid. Do not leave blanks. If no subcontractors, indicate such. The statute does not require listings of second tier subcontractors, material suppliers, and subcontractors whose contracts are less than \$5,000.

1. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

2. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

3. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

4. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

5. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

6. Work: _____

Firm Represented: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: (____) _____ License No.: _____

00450 – EQUIPMENT LIST

List all pertinent equipment proposed to be employed on the above Project as required by the bidding documents. Attach a list on a separate piece of paper if more space is needed.

A. Equipment Type: _____
Manufacturer: _____
Model: _____
Capacity: _____
Condition: _____

B. Equipment Type: _____
Manufacturer: _____
Model: _____
Capacity: _____
Condition: _____

C. Equipment Type: _____
Manufacturer: _____
Model: _____
Capacity: _____
Condition: _____

D. Equipment Type: _____
Manufacturer: _____
Model: _____
Capacity: _____
Condition: _____

E. Equipment Type: _____
Manufacturer: _____
Model: _____
Capacity: _____
Condition: _____

This page intentionally left blank

00500 – AGREEMENT FORMS**SHARE Contract No. 00-52100-20-06014****STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT****CONSTRUCTION SERVICES CONTRACT**

THIS AGREEMENT is made and entered into by and between the State of New Mexico Energy, Minerals and Natural Resources Department (EMNRD), and XXXXX (Contractor). EMNRD's Director and staff of the Mining and Minerals Division (MMD) shall supervise and coordinate the work under this Construction Services Contract (Agreement).

IT IS MUTUALLY AGREED BETWEEN THE PARTIES:**I. Scope of Work**

A. The Contractor shall perform the work described in the Specifications for the Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project, Colfax County, New Mexico in the Project Manual which is part of Invitation to Bids (ITB) No. EMNRD-MMD-2020-03. The ITB was solicited by the General Services Department, State Purchasing Division ITB No. 00-52100-20-06014. The Project Manual, Specifications, ITB and Contractor's completed Bid Response (dated: XXXXX) are all incorporated into and made a part of this Agreement by reference. EMNRD shall have the sole authority to approve any changes to the Scope of Work and the Specifications and to approve the Contractor's final work product.

B. Within thirty (30) calendar days of receiving the written Notice to Proceed (NTP) via certified mail, the Contractor shall mobilize to the site and commence work. Prior to commencement of work, the Contractor shall obtain all necessary permits required for this work.

C. **BEFORE ANY WORK IS INITIATED**, the Contractor shall give notice to all utility companies that provide service to the contract site and inform the utility companies of the work to be performed. In the event that work performed in connection with this Agreement may disturb utilities, Contractor shall coordinate with utility companies to ensure that locations of overhead or buried utilities and appurtenances are marked. Prior to work taking place, Contractor shall provide advance notice to consumers who may be affected by service disruption.

II. Compensation

A. EMNRD shall pay the Contractor in current funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract

Documents, the Contract Sum of _____ (\$ _____) including New Mexico Gross Receipts Taxes, if applicable.

The Contract Sum is determined as follows:

Total Base Bid	\$ _____
Gross Receipts Tax @ 8.2500%	\$ _____
Total Contract Sum	\$ _____

If the state gross receipts tax or local option tax increases the Contractor must submit a request for a change order in order to increase the state gross receipts tax or local option tax on this Agreement (1.4.1.24 NMAC).

Agreements solicited by competitive sealed bids shall require that the bid amount exclude the applicable state gross tax or local option tax but that EMNRD shall be required to pay the tax including any increase in the tax becoming effective after this Agreement is entered into. The tax shall be shown as a separate amount on each billing or requires for payment made under this Agreement.

B. Subject to subparagraph II.A. above, and based on Applications for Payment (invoice), a copy of which is included herein at Section 00900 of the Project Manual, submitted to the EMNRD Project Engineer by the Contractor and Certificates for Payment issued by the EMNRD Project Engineer, EMNRD shall make progress payments on account of the Contract Sum, to the Contractor as provided in the Contract Documents for the period ending the last day of the month as follows: no later than twenty one (21) days following receipt by EMNRD of the undisputed Application for Payment, one hundred percent (100%) of the portion of the Contract Sum properly allocable to labor, materials, and equipment incorporated in the Work, and one hundred percent (100%) of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing for the period covered by the Application for Payment, less the aggregate of previous payments made by EMNRD; and upon Substantial Completion of the entire Work, a sum sufficient to increase the total payments to one hundred percent (100%) of the Contract Sum, less such amounts as the EMNRD Project Engineer shall determine for all incomplete Work and unsettled claims as provided in the Contract Documents, which shall be paid in accordance with this Compensation Section.

C. Prompt Payment Act Compliance: Contractor shall comply with the Prompt Payment Act, NMSA 1978, § 57-28-5(C), in making prompt payments to its subcontractors and suppliers for amounts owed for work performed relating to this Agreement within seven days of receipt of payment from EMNRD.

D. Final Payment: Final payment constituting the entire undisputed and unpaid

balance of the Contract Sum shall be paid by EMNRD to the Contractor within ten (10) days after the EMNRD Project Engineer completes a final inspection and the EMNRD Project Manager notifies the Project Engineer that all incomplete and unacceptable work that was noted during the Final Inspection has been corrected.

III. Term and Liquidated Damage for Inconvenience and Increased Administrative Cost

The Work to be performed under this Agreement shall commence no later than ten (10) consecutive calendar days after the date of written "Notice to Proceed." Project completion (see Section 00100 of the Project Manual) shall be no later than two hundred forty (240) days, including all Sundays, holidays, and non-work days, after the Contractor receives a written Notice to Proceed, except as hereafter extended by EMNRD by valid written Change Order.

The parties agree that time for the performance of this Agreement is of the essence. Should the Contractor fail to perform the entire project within the Contract Period of Performance for project completion, the Contractor agrees to the charge of three hundred dollars (\$300.00) per calendar day of liquidated damages representing inconvenience and increased administrative cost. Such damages shall begin to accrue on the calendar day following the last day for performance of work under this Agreement. The Contract stipulates that EMNRD may withhold additional payments under this Agreement or attach the performance bond to cover the liquidated damages set forth above or to cover the cost of any duplicative work that is made necessary by Contractor's failure to perform as required by this Agreement. Liquidated damages shall continue until written notice of satisfactory completion is forwarded by the Project Manager to the Project Engineer. This provision is limited to damages for inconvenience and increased administrative cost, and shall not otherwise affect EMNRD's right to see other remedies including other damages, at law or in equity.

IV. Termination

A. For Reasons Beyond Contractor's Control

1. EMNRD may, by written order, terminate this Agreement or any portion thereof after determining that, for reasons beyond Contractor's control, the Contractor is prevented from proceeding with or completing the work as originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be limited to, executive orders of the President relating to prosecution of war or national defense, acts of God, labor strikes, a national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national, state or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor.

2. If EMNRD orders termination of this Agreement effective on a certain date, payment shall be made for the actual number of units or items of work completed at the contract unit price, or as mutually agreed for items of work partially completed.

3. Acceptable materials Contractor obtains for the work but which have not been incorporated therein, may, at EMNRD's option, be purchased from the Contractor at actual cost, delivered to a prescribed location, or otherwise disposed of as mutually agreed.

4. After receipt of EMNRD's notice of termination issued pursuant to this Section IV.A., the Contractor may submit a claim for costs not covered above or elsewhere in the Specifications. Such claim may include such cost items as reasonable idle equipment time, mobilization efforts, overhead expenses attributable to the project terminated, legal and accounting charges involved solely in preparing the claim for costs, subcontractor costs not otherwise paid for, actual idle labor costs if work is stopped in advance of termination date, and guaranteed payments for private land usage as part of the original contract. In no event, however, shall loss of anticipated profits be considered as part of any settlement.

5. The Contractor agrees to make all cost records available upon EMNRD's request.

6. Termination of a contract or portion thereof shall not relieve the Contractor of any contractual responsibilities for the work completed, nor shall it relieve the surety of its obligation for and concerning any just claim arising out of the work performed.

B. For Reasons Within Contractor's Control:

1. If the Contractor:

- a. fails to begin the work under this Agreement within the time specified in the Notice to Proceed;
- b. fails to perform the work with sufficient skilled workers and equipment or with sufficient proper materials to assure the prompt completion of said work;
- c. fails to comply with laws, ordinances, rules, regulations or orders of public authority having jurisdiction;
- d. performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable;
- e. discontinues the prosecution of the work, without EMNRD's prior written approval;
- f. fails to resume work which has been discontinued without EMNRD's prior written approval within a reasonable time after notice to do so;
- g. becomes insolvent or files for bankruptcy or is placed into bankruptcy by creditors, or commits any acts of bankruptcy or

- insolvency;
- h. allows a final judgment, in a suit filed in connection with this Agreement, to stand against the Contractor unsatisfied for a period of thirty (30) business days;
- i. makes an assignment, in connection with this Agreement, for the benefit of creditors;
- j. fails to carry on the work in an acceptable manner; or
- k. otherwise has committed a material breach of this Agreement.

If EMNRD wishes to terminate this Agreement for any of the above reasons, EMNRD shall give notice in writing to Contractor and the surety of the occurrence(s) upon which EMNRD bases the termination, and the corrective measures to be taken (Default Notice), if any. Failure of EMNRD to provide a default notice or terminate this Agreement shall not operate as a waiver by EMNRD either at the time of such failure or in the future.

If the Contractor or surety, within a period of ten (10) business days after such notice, does not proceed in accordance therewith, then EMNRD shall have full power and authority without violating this Agreement to take possession of the premises and of all materials thereon and finish the work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment for the work that Contractor performed after the date of the Default Notice until the work is finished. EMNRD shall also have all remedies available to it at law and in equity.

V. Status of the Contractor

The Contractor and its agents and employees are independent Contractors performing construction services for EMNRD and are not employees of the State of New Mexico. The Contractor and its agents and employees shall not accrue leave, retirement, insurance, bonding, use of state vehicles, or any other benefits afforded to employees of the State of New Mexico as a result of this Agreement.

VI. Assignment

The Contractor shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the prior written approval of EMNRD.

VII. Subcontracting

The Contractor shall comply fully with the provisions of the New Mexico Subcontractors Fair Practices Act, NMSA 1978, § 13-4-31 through 13-4-42. The Contractor shall not subcontract any portion of the services to be performed under this Agreement or obligate itself in any manner to any third party, with respect to any rights or responsibilities under this Agreement, without the prior written approval of EMNRD.

VIII. Records and Audit

The Contractor shall maintain detailed time and expenditure records that show the date, time, nature and cost of services rendered under this Agreement and retain them for six years from the date of final payment under this Agreement. These records shall be maintained and available within the State of New Mexico if the Contractor has an office within the state; otherwise, Contractor shall make such records available to EMNRD within New Mexico within five business days upon EMNRD's request. The records shall be subject to inspection by EMNRD, DFA, the State Auditor and the U.S. Department of the Interior (DOI). Contractor further agrees to include in all subcontracts hereunder the same right of inspection and audit against all subcontractors. EMNRD shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose EMNRD's right to recover excessive or illegal payments. The periods of inspection and audit may be extended for records, which relate to litigation or settlement of claims arising out of performance of this Agreement and costs and expenses of this Agreement for which exception is under consideration by DOI or any authorized representative and shall continue until all potential litigation, appeals, claims or exceptions have expired or been resolved.

IX. Appropriations

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Legislature of New Mexico, the federal Congress, and DOI for the performance of this Agreement. If sufficient appropriations and authorization are not made, this Agreement shall terminate upon written notice being given by EMNRD to the Contractor. EMNRD's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final.

X. Release

The Contractor, upon final payment of the amount due under this Agreement, releases EMNRD, its officers and employees, and the State of New Mexico from all liabilities, claims, and obligations whatsoever arising from or under this Agreement. This release is self-executing upon such final payment. The Contractor agrees not to purport to bind the State of New Mexico to any obligation unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.

XI. Confidentiality

Any confidential information provided to or developed by the Contractor in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by the Contractor without the prior written approval of EMNRD.

XII. Amendment or Change Order

This Agreement shall not be altered, changed, or amended except by instrument in writing executed by the parties hereto.

XIII. Scope of Agreement

This Agreement incorporates all the agreements, covenants, and understandings between the parties hereto concerning the subject matter hereof, and all such agreements, covenants, and understandings have been merged into this written Agreement. No prior agreements or understandings, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless expressly incorporated into this Agreement.

XIV. Civil and Criminal Liability Notice

The Procurement Code, NMSA 1978, §§ 13-1-28 through 13-1-199, imposes civil and misdemeanor criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities, and kick-backs.

XV. Equal Opportunity Compliance

Contractor agrees to abide by all federal and state laws and rules and regulations, and executive orders of the Governor of the State of New Mexico, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, Contractor assures that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If Contractor is found not to be in compliance with these requirements during the life of this Agreement, Contractor agrees to take appropriate steps to correct these deficiencies.

XVI. Applicable Law

This Agreement shall be governed by the laws of the State of New Mexico, without giving effect to its choice of law provisions. In any lawsuit filed that relates to or arises from this Agreement or any obligations hereunder, venue shall be only in the New Mexico State District Court in Santa Fe, New Mexico. By executing this Agreement, Contractor agrees and consents to the personal jurisdiction of the State Court of New Mexico over any and all lawsuits relating to or arising from this Agreement or any obligation hereunder.

XVII. Waiver

No waiver of any of the terms or conditions of this Agreement shall be valid or binding unless the waiver request is submitted in writing by the party making the request and then approved and signed by the party granting the waiver.

XVIII. Notices

A. Unless EMNRD specifies otherwise in a writing that is delivered pursuant to this Paragraph, notices and all other matters concerning the work to be performed hereunder shall be addressed to EMNRD as follows:

Project Engineer:
Mike Tompson, P.E.
Mining and Minerals Division
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3427

B. Unless the Contractor shall specify otherwise in a writing that is delivered pursuant to this Paragraph, notices and all other matters concerning the work to be performed hereunder shall be addressed to the Contractor as follows:

NAME OF CONTRACTOR
ADDRESS
ADDITIONAL ADDRESS
CITY, ST, ZIP
(XXX) XXX-XXXX

C. Any and all notices or other communications required or permitted by this Agreement or by law to be served or given to either party hereto by the other party hereto shall be in writing and shall be deemed duly served and given upon actual receipt by or three business days subsequent to certified mailing to the party to whom it is directed, whichever is earlier.

XIX. Indemnification

The Contractor shall defend, indemnify, and hold harmless EMNRD, and its officers, employees, agents and representatives, and the State of New Mexico from all actions, proceedings, claims, demands, costs, damages, attorneys' fees, and all other liabilities and expenses of any kind from any source that may arise out of this Agreement's performance, caused by the negligent or intentional act or failure to act of Contractor, its officers, employees, servants, subcontractors, consultants, clients, or agents, resulting in injury or damage to persons

or property during the time when Contractor, its officers, agents, employees, servants, subcontractors, or consultants has or is performing services pursuant to this Agreement. In the event that any action, suit, or proceeding related to the services performed by Contractor, its officers, agents, employees, servants, subcontractors, clients, consultants under this Agreement is brought against Contractor, or any of its officers, agents, employees, servants, subcontractors or consultants, Contractor shall, as soon as practicable but no later than two days after it receives notice thereof, notify EMNRD's legal counsel and the Risk Management Division of the New Mexico General Services Department by certified mail. Nothing in this Agreement shall be deemed to be a waiver by the State of New Mexico of the provisions of the Tort Claims Act, NMSA 1978, §§ 41-4-1 *et seq.*

XX. Duty to Insure

A. In respect solely to the work occasioned by this Agreement, the Contractor shall obtain and maintain at all times during the term of this Agreement, and any extension thereof, insurance of the kind and in the amounts herein specified. Such insurance shall be provided by insurance companies authorized to do business in New Mexico and shall name the "State of New Mexico, EMNRD, MMD, and its agents and employees thereof" as either additional insured, co-insured, or third-party beneficiaries and shall specifically state the coverage provide under the policy is primary over any other valid and collectible insurance and provide a waiver of subrogation.

1. General Liability. Bodily injury liability and property damage liability insurance in the following minimum amounts: five hundred thousand (\$500,000.00) for damages to or destruction of property arising out of a single occurrence; one million dollars (\$1,000,000.00) to any person for any number of claims arising out of a single occurrence for all damages other than property damages, and one million dollars (\$1,000,000.00) for all claims arising out of a single occurrence.

2. Automobile Liability. Automobile liability insurance covering the ownership, operation, and maintenance of owned, non-owned, and hired vehicles, in the following amounts:

Bodily injury liability –

Seven hundred dollars (\$700,000.00) each person

One million dollars (\$1,000,000.00) each occurrence;

Property damage liability--

One million dollars (\$1,000,000.00) each occurrence.

3. Workers' Compensation. The Contractor shall comply fully with the provisions of the New Mexico Workers' Compensation Act, NMSA 1978, §§ 52-1-1 through 52-1-70.

B. The Contractor shall furnish EMNRD with certificates of insurance and such other proof of insurance as EMNRD may require, prior to commencing work under this

Agreement, and shall not commence any work under this Agreement until the required insurance coverage is obtained. The insurance coverage shall not be changed, canceled, or allowed to lapse without giving EMNRD 30 business days' prior written notice.

XXI. New Mexico Employees Health Insurance

A. If Contractor has, or grows to, six (6) or more employees who work, or who are expected to work, an average of at least twenty (20) hours per week over a six-month period during the term of this Agreement, Contractor certifies, by signing this Agreement, to have in place, and agree to maintain for this Agreement's term, health insurance for those employees and offer that health insurance to those employees if the expected annual value in the aggregate of any and all contracts between Contractor and the state exceed two hundred fifty thousand (\$250,000.00).

- B. Contractor agrees to maintain a record of the number of employees who have:
- 1) accepted health insurance;
 - 2) declined health insurance due to other health insurance coverage already in place; or
 - 3) declined health insurance for other reasons.

These records are subject to review and audit by a representative of the state.

C. Contractor agrees to advise all employees of the availability of state publicly-financed health care coverage programs.

XXIII. Disputes

Any dispute, other than the Contractor's acts set forth in Section IV, Termination, B., For Reasons Within Contractor's Control, concerning a question of fact arising under this Agreement, not disposed of by agreement, shall, first, be decided by the MMD Director, who shall reduce a decision to writing and furnish a signed copy to the Contractor. Such decision shall be final and conclusive unless, within thirty (30) calendar days from the date of notification of the decision by certified mail, the Contractor mails or otherwise furnishes to the MMD Director, a written appeal, addressed to the EMNRD Secretary, to which MMD may respond in 10 business days. The Contractor shall be afforded an opportunity to be heard. The decision of the EMNRD Secretary or the authorized representative thereof, shall be final and conclusive.

XXIV. Suspension of Work

A Suspension of Work Notice may be issued by the Project Engineer if the Project Engineer believes that any action of the Contractor is contrary to the intent of this Agreement or that any health or safety standard is violated or that a threat to public health or safety exists. No

work performed after issuance of a Suspension of Work Notice shall be eligible for payment while such notice is in effect. No work shall proceed until such notice is vacated, in writing, by the MMD Director.

XXV. Compliance with the Public Works Minimum Wage Act and Minimum Wage Rate Decision

A. If the Work to be performed under this Agreement is subject to the provisions of the Public Works Minimum Wage Act, NMSA 1978, Section 13-4-11 *et seq.*, Contractor shall comply with such act and applicable state rules. Each Application for Payment submitted to EMMNRD shall include a certification by Contractor that it has complied with the provisions of NMSA 1978, Section 13-4-11 and applicable state rules when making wage payments for work performed pursuant to this Agreement.

B. This Agreement is within the scope of the Public Works Minimum Wage Act, NMSA 1978, §§ 13-4-10, *et seq.* The Minimum Wage Rate Decision No. LU-18-1230-H of the New Mexico Labor and Industrial Division (1.505.841.4408) shall be complied with by the Contractor and any subcontractors. A copy of the Decision is included at Section 00830 of the Project Manual.

C. If compensation to be paid under this Agreement is in excess of sixty thousand dollars (\$60,000.00), the minimum wages and fringe benefits to be paid to various classes of laborers and mechanics, shall be based upon the wages and benefits that will be determined by the Director (Director) of the Labor Relations Division (LRD) of the New Mexico Workforce Solutions Department, to be prevailing for the corresponding classes of laborers and mechanics employed on contract work of a similar nature in the state or locality.

D. The Contractor, subcontractor, employer or a person acting as a contractor shall pay all mechanics and laborers employed on the site of the project, unconditionally and not less often than once a week and without subsequent unlawful deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates and fringe benefit rates not less than those determined pursuant to NMSA 1978, Section 13-4-11.B to be the prevailing wage rates and prevailing fringe benefit rates issued for this project.

E. Pursuant to 11.1.2.9.B(6) through (10) NMAC, Public Works Minimum Wage Act Policy Manual, Contractor and all tiers of subcontractors shall submit certified weekly payroll records to EMNRD on a bi-weekly basis, and, to the LRD Director when requested by the Director or an interested party such as contractors, contracting agencies, labor organizations and contractor associations.

1. All payroll records provided to EMNRD must contain the following information in the specified format:

- (a) the employee’s full name and address need only appear on the first payroll on which the employee’s name appears, unless a change of address necessitates an additional submittal to reflect the new address;
- (b) the employee’s classification (or classifications);
- (c) the employee’s hourly wage rate (or rates); the employee’s hourly fringe benefits; and where applicable, the employee’s overtime hourly wage rate (or rates);
- (d) the daily and weekly hours worked in each classification, including actual overtime hours worked (not adjusted);
- (e) the itemized deductions made;
- (f) the net wages paid; and
- (g) the number of the wage rate decision issued on the project by the Director.

2. All payrolls shall be numbered, starting with number one for the first payroll at the beginning of the job and continuing in numerical order until the job is completed.

3. Contractor and each of his or her subcontractors shall submit a bi-weekly statement of compliance in the following form:

Date _____

I, _____, (Name of Signatory Party)

(Title)

do hereby state:

That I pay or supervise the payment of the persons employed by _____ (contractor or subcontractor) on the _____; that (building or work)

During the payroll period commencing on the _____ day of _____, 20_____, and ending the _____ day of _____, 20_____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____(Contractor or subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than deductions permitted by law.

That any payrolls under this Agreement required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates incorporated into the Agreement; that the classifications set forth therein for each laborer or mechanic conform with the work he performed. That any apprentices or trainees employed in the above period are duly registered in a bona fide apprenticeship program registered with a state apprenticeship agency recognized by the office of apprenticeship United States department of labor, or properly enrolled in a bona fide training program approved for application on public works construction projects by the appropriate state or federal agency(ies) if and as required by law and applicable federal regulation.

I, _____, being first duly sworn on oath under penalty of perjury, swear that the foregoing information is true and correct.

Notary: Subscribed and sworn to before me at _____ this _____ day of _____, 20 _____.

Notary public

(SIGNATURE)

(DATE)

My commission expires: _____

4. The Contractor and all subcontractors and their tiers shall deliver or mail to EMNRD legible copies of the certified weekly payrolls prepared in accordance with these regulations to the prime contractor and the contracting agency no more than five (5) working days following the close of the second payroll period. Weekly payrolls shall be submitted bi-weekly.

5. The affidavit form must be filed prior to the final payment to a Contractor. Bond monies and retainage will be released only to Contractors who have filed affidavits pursuant to the provisions of 11.1.2. NMAC. Any Contractor or subcontractor who files a false statement or refuses to file any statement or record required to be filed under the provisions of 11.1.2 NMAC shall be considered as non-compliant and shall be subject to debarment proceedings. EMNRD and Contractor shall keep all certified payroll records for four (4) years after the completion of this Agreement.

F. EMNRD shall require wage rate inspections during the period of construction.

G. Contractors and all contracting tiers on projects must file a statement of intent to pay prevailing wages (intent), and an affidavit of wages paid (affidavit). The intent form must be filed with EMNRD within three business days of the award of each respective contract. EMNRD will make no payments to a non-compliant contractor until an intent form is filed.

H. Contractor or subcontractor shall post minimum wage rates in a prominent, easily accessible place at the site of each particular project.

I. The LRD Director shall furnish EMNRD with a poster containing the minimum wage rates. EMNRD shall forward said poster to Contractor for posting at each particular project site.

J. Contractor and subcontractor shall comply with all requirements imposed by the Public Works Minimum Wage Act and 11.1.2 NMAC.

K. Contractor's records shall be subject to inspection by state and federal agencies that have jurisdiction over such matters to determine compliance with the provisions of NMSA 1978, Section 13-4-11 *et seq.*, as provided above or by an applicable federal or state law. If Contractor fails to comply with the provisions of this Section XXVII, EMNRD may terminate this Agreement by giving notice in the manner provided herein.

XXVI. Required Bond for Public Works Contractor

This Agreement is within the scope of NMSA 1978, §§ 13-4-18 through 13-4-20. BEFORE BEGINNING ANY WORK UNDER THIS AGREEMENT, the Contractor shall furnish a performance bond (see example in Section 00610 of the Project Manual) and a payment bond (see example in Section 00620 of the Project Manual) both executed by the Contractor and issued by a surety authorized to do business in the State of New Mexico in an amount equal to one hundred percent (100%) of the total Agreement price. Agreement price equals bid total plus gross receipts tax. A letter of credit is not acceptable.

The performance bond shall be conditioned upon the Contractor's performance and faithful completion of this Agreement, according to the terms, in compliance with all requirements of law. The payment bond shall guarantee payments of all just claims for the labor performed and for materials and supplies furnished, whether the labor and supplies are furnished to the prime Contractor or any subcontractors. These bonds shall be in the form approved by EMNRD. The surety shall be subject to the approval of EMNRD. The decision of EMNRD shall be accepted by the Contractor as final.

XXVII. Compliance with Trafficking Victims Protection Act of 2000

A. Pursuant to 2 C.F.R, Chapter 1, Part 175, § 175, EMNRD may immediately and unilaterally terminate this Agreement without penalty if the Contractor or subcontractor:

- 1) engages in severe forms of trafficking in persons during this Agreement's term;
- 2) procures a commercial sex act during this Agreement's term; or
- 3) uses forced labor in the performance of this Agreement.

B. Contractor shall immediately inform EMNRD of any information Contractor receives from any source alleging a violation of a prohibition in Paragraph A. of this Section 13.28.

C. Contractor shall include the requirements of this Section XXIII in any subcontract which may result from this Agreement.

XXVIII. Compliance with use of Minority Business Enterprises (MBEs) and Women's Business Enterprises (WBEs)

Contractor shall take affirmative steps to assure that MBEs and WBEs are used when possible as sources of supplies, equipment, construction, and services. The affirmative steps shall include the following:

- a) including qualified MBEs/WBEs on solicitation lists;
- b) assuring that MBEs/WBEs are solicited once they are identified;
- c) when economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum MBE/WBE participation;
- d) where feasible, establishing delivery schedules which will encourage MBE/WBE participation;
- e) encouraging use of the services of the U.S. Department of Commerce's Minority Business Development Agency and the U. S. Small Business Administration to identify MBEs/WBEs, as required; and
- e) if any subcontracts are to be let, requiring the subcontractor to take the affirmative steps listed above.

XXIX. Compliance with Federal Laws

A. Contractor shall comply with 2 C.F.R. Sections 200.318 through 200.326 for procurement conducted pursuant to this Agreement.

B. If this Agreement is valued at more than one hundred thousand dollars (\$100,000), Contractor shall comply with all applicable standards orders or requirements issued under the federal Clean Air Act (42 U.S.C. §7401 et seq.); Clean Water Act (33 U.S.C. §1251 et seq.); Executive Order 11738 (Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans); and U.S. Environmental Protection Agency regulations.

C. If this Agreement is valued at more than one hundred thousand dollars (\$100,000), Contractor shall comply with 40 U.S.C §§ 3702 and 3704 of the Contract Work Hours and Safety Standards Act (Act), as supplemented by U.S. Department of Labor regulations (29 C.F.R. Part 5). Under 40 U.S.C. 3702 of the Act, Contractor must compute the wages of every mechanic and laborer on the basis of a standard work week of forty (40) hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and one-half (1 ½) times the basic rate of pay for all hours worked in excess of forty (40) hours in the work week. The requirements of 40 U.S.C § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements to not apply to the purchases of supplies or materials or articles ordinarily available on the open market.

D. Contractor shall comply with Section 6002 of the Solid Waste Disposal Act, as amendment by the Resource Conservation and Recovery Act. The requirements of Section 6002

include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the items exceeds ten thousand dollars (\$10,000) or the value of the quantity acquired during the preceding fiscal year exceeded ten thousand dollars (\$10,000); procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

E. If the value of this Agreement exceeds one hundred thousand dollars (\$100,000), Contractor shall comply with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) regarding the limitations of use of appropriated funds to influence certain federal contracting and financial transactions.

F. Contractor shall comply with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by U.S. Department of Labor regulations (29 C.F.R. Part 3, Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). Contractor and subcontractors are prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. EMNRD shall report all suspected or reported violations to the Office of Surface Mining Reclamation and Enforcement.

G. Contractor shall not award subcontracts to parties listed on the governmentwide exclusions in the System for Award Management (SAM) in accordance with the OMG guidelines at 2 C.F.R. 180 that implement Executive Orders 12549 (3 C.F.R. part 1986 Comp., p. 189) and 12689 (3 C.F.R. part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written below.

STATE OF NEW MEXICO, ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

By: _____ Date: _____
Cabinet Secretary or Designee

CONTRACTOR

By: _____ Date: _____
Authorized Representative

Printed Name and Title

STATE OF NEW MEXICO, GENERAL SERVICES DEPARTMENT, STATE PURCHASING DIVISION

By: _____ Date: _____
State Purchasing Agent

The records of the Taxation and Revenue Department reflect that the Contractor is registered with the Taxation and Revenue Department of the State of New Mexico to pay gross receipts and compensating taxes.

**STATE OF NEW MEXICO
TAXATION AND REVENUE
DEPARTMENT**

Contractor Name: _____

NM I.D. No.: _____

By: _____

Date: _____

This page intentionally left blank.

00600 – BONDS AND CERTIFICATES

00610 - PERFORMANCE BONDS

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS: that _____

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and, _____

(Insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Owner, in the amount of _____ Dollars (\$_____), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____, 20__, entered into a contract with Owner for the Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project, Project No. EMNRD-MMD-2020-03, Raton, New Mexico, in accordance with the enclosed Drawings and Specifications, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

Performance Bond

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner’s obligations thereunder, the Surety may promptly remedy the default, or shall promptly

- 1) Complete the Contract in accordance with its terms and conditions, or
- 2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or

contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “balance of the contract price,” as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators, or successors of the Owner.

Signed and sealed this _____ day of _____, 20__.

WITNESS

WITNESS

PRINCIPAL (Seal)

TITLE

SURETY (Seal)

TITLE

00620 - PAYMENT BONDS

Bond No. _____

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT.

KNOW ALL MEN BY THESE PRESENTS: that _____

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and,

(Insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Owner, in the amount of Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20____, entered into a contract with Owner for the Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project, Project No. EMNRD-MMD-2020-03, Raton, New Mexico, in accordance with the enclosed Drawings and Specifications, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

Labor and Material Payment Bond

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Contract.
2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
 - a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two (2) of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name

- of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
- b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
- c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this _____ day of _____, 20__.

PRINCIPAL (Seal)

WITNESS

TITLE

SURETY (Seal)

WITNESS

TITLE

00650 – CERTIFICATE OF INSURANCE

This certificate is issued as a matter of information only and confers no rights upon the addressee. It does not amend, extend, or alter the coverage afforded by the policies listed below.

Name and Address of Insured Covering (Project Name and Location) Address: <input type="checkbox"/> Mining and Minerals Division Energy, Minerals and Natural Resources Department State of New Mexico 1220 South St. Francis Drive Santa Fe, New Mexico 87505	COMPANIES AFFORDING COVERAGE A B C D E F
---	---

This is to certify that the following described policies, subject to their terms, conditions, and exclusions, have been issued to the above named insured and are in force at this time.

TYPE OF INSURANCE	CO. CODE	POLICY NUMBER	EXPIRATION DATE	LIMITS OF LIABILITY IN THOUSANDS		
					EACH OCCURRENCE	AGGREGATE
(a) Worker's Compensation (b) Employer's Liability				Statutory	\$	Each Accident
Comprehensive General Liability including: <input type="checkbox"/> Premises – Operations <input type="checkbox"/> Independent Contractors <input type="checkbox"/> Products and Completed Operations <input type="checkbox"/> Broad Form Property Damage <input type="checkbox"/> Contractual Liability <input type="checkbox"/> Explosion and Collapse Hazard <input type="checkbox"/> Underground Hazard <input type="checkbox"/> Personal Injury with Employment Exclusion Deleted				Bodily Injury Property Damage Bodily Injury and Property Damage Combined *Applies to Products and Completed Operations Hazard	\$ \$ \$ \$	\$ \$ \$ \$ (Personal Injury)
Comprehensive Automobile Liability <input type="checkbox"/> Owned <input type="checkbox"/> Hired <input type="checkbox"/> Non-Owned				Bodily Injury (Each Person) Bodily Injury (Each Accident) Property Damage Bodily Injury and Property Damage Combined	\$ \$ \$ \$	
Excess Liability <input type="checkbox"/> Umbrella Form <input type="checkbox"/> Other than Umbrella				Bodily Injury and Property Damage Combined	\$	\$
Other (Specify)				The State of New Mexico, EMNRD, MMD, and its agents and employees thereof are either additional insured, co-insured, or principal beneficiary.		

- Products and completed Operations coverage will be maintained for a minimum period of 1 2 year(s) after final payment
- Has each of the above listed policies been endorsed to reflect the company's obligation to notify the addressee in the event of cancellation or non-renewal?
 Yes No

CERTIFICATION

I hereby certify that I am an authorized representative of each of the insurance companies listed above, and that the coverage's afforded under the policies listed above will not be canceled or allowed to expire unless thirty (30) days written notice has been given to the addressee of this certificate.

Name of Issuing Agency

Signature of Authorized Representative

Address

Date of Issue

This page was intentionally left blank.

00700 – GENERAL CONDITIONS**00704 - DIFFERING SITE CONDITIONS**

During the progress of work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Project Engineer will investigate the conditions, and if the Project Engineer determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The Project Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

No contract adjustment will be allowed under this clause for any effects caused by unchanged work.

00713 – WARRANTY AND GUARANTEE

The Contractor shall obtain and assign to EMNRD all manufacturers' and producers' guarantees or warranties which are normally provided as customary trade practice for items and materials incorporated into the work. In the absence of a manufacturer's or producer's guarantee, the Contractor warrants that equipment and material incorporated into the work is free from any defects or imperfections in workmanship and material for a period of one year after acceptance by EMNRD. The Contractor shall promptly, without cost to EMNRD, and in accordance with EMNRD's written instructions, either correct such defective work, or, if it has been rejected by EMNRD, remove it from the site and replace it with nondefective work. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, EMNRD may have the defective work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by the Contractor.

00720 - DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE PROJECT MANAGER

A. General

The Construction Observer may at times be referred to as the Project Manager. The Construction Observer is the individual who monitors construction, who acts as directed by and under the supervision of the Project Engineer, and who will confer with the Project Engineer regarding his actions. The Construction Observer's dealings in matters pertaining to the on-site work shall in general be only with EMNRD, the Project Engineer and the Contractor, and dealings with subcontractors shall only be through or with the full knowledge of the Contractor. Written communication with EMNRD will be through or as directed by the Project Engineer.

1. EMNRD Project Managers:
Joe Vinson and Laurence D'Alessandro
2. EMNRD Project Engineers:
Mike Tompson, PE and Yeny Maestas

The Project Engineer shall be responsible for the following duties and responsibilities:

- a. Review, for compliance with design concepts, shop drawings submitted by the construction contractor.
- b. Review laboratory, shop and mill test reports on materials and provide inspection at the manufacturing facilities during the production of materials specific to the project.
- c. Visit the project site at appropriate intervals as construction proceeds to observe and report on the progress and the quality of the executed work. Access to the project site is governed by the Consent-to-Entry for Reclamation between Vermejo Park Ranch (the Ranch) and the AML Program.
- d. Attend preconstruction conferences, progress meetings, and job conferences as required and other project related meetings.
- e. Issue instructions from the AML Program to the construction contractor, issue necessary interpretations and clarifications of contract documents, prepare change orders requiring special inspections and testing of the work, and make recommendations as to acceptability of the work.
- f. Make recommendations to the AML Program on corrective actions or contractual measures that the AML Program may exercise.
- g. Prepare sketches and, where required, designs and design drawings and specifications, required to resolve problems due to actual field conditions encountered, including cost estimates for alternatives where required, and provide to EMNRD.
- h. Determine amounts of progress payments due, based on degree of completion of the work, and recommend issuance of such payments by EMNRD.

- i. Prepare record drawings from information submitted by the contractor and Construction Observer and provide to EMNRD.
- j. Make a final inspection and written report on completion of the project, including recommendations concerning final payment to the construction contractor, to EMNRD.
- k. Provide copies of construction records, including approved submittals and shop drawings, laboratory and test reports, reports on job-related conferences and meetings, construction progress reports, Construction Observer's diary or log book, Storm Water Pollution Prevention Plan, etc. to EMNRD within one month of preparation or completion.

The Construction Observer/Project Manager shall be responsible for the following duties and responsibilities:

a. Schedules:

Review the progress schedule prepared by the construction contractor and consult with the Project Engineer concerning acceptability.

b. Conferences:

Attend preconstruction conferences, progress meetings, job conferences as required in consultation with Project Engineer, and other project related meetings.

c. Liaison:

Serve as the Project Engineer's liaison with the construction contractor, working principally through the construction contractor's superintendent, and assist him or her in understanding the intent of Contract Documents.

d. Access:

Conduct meetings as necessary with the Ranch staff to discuss access issues such as appropriate work hours, possible avoidance areas, additional requirements staff members may have of the construction contractor, and work delays due to possible hunting restrictions. Inform Project Engineer of any issues that may arise. Access to the project site is governed by the Consent-to-Entry for Reclamation between the Ranch and the AML Program.

In conjunction with the AML archeologist (or the AML Program's archeological contractor) flag or mark avoidance areas specified in the approved archaeological report for the project to ensure that avoidance areas are avoided at all times by the construction contractor, subcontractors and suppliers.

e. Shop Drawings and Samples:

- a. Receive and record date of receipt of shop drawings and samples, receive samples that are furnished at the site by the Contractor, and notify the Project Engineer of their availability for examination.
- b. Advise the Project Engineer and the Contractor or its superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the Project Engineer has not accepted the submission.

f. Review of Work, Rejection of Defective Work, Inspections and Tests:

- a. Conduct on-site observations of the work in progress to assist the Project Engineer in determining if the work is proceeding in accordance with the Contract Documents, and that completed work will conform to the Contract Documents.
- b. Report to the Project Engineer whenever the Project Manager believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, tests or approvals required to be made, or has been damaged prior to final payment; and advise the Project Engineer when the Project Manager believes work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- c. Verify that tests, equipment and systems startups and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that the Contractor maintains adequate records thereof; observe, record and report to the Project Engineer appropriate details relative to the test procedures and startups.
- d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections and report to the Project Engineer.

g. Interpretation of Contract Documents:

Transmit to Contractor the Project Engineer's clarifications and interpretations of the Contract Documents.

h. Modifications:

Consider and evaluate the Contractor's suggestions for modifications in drawings or

Specifications and report them with recommendations to the Project Engineer.

i. Records:

- a. Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and samples submissions, reproductions of original Contract Documents including all addenda, change orders, field orders, additional drawings issued after the execution of the Contract, the Project Engineer's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
- b. Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to the Project Engineer.
- c. Record names, addresses and telephone numbers of all the Contractors, subcontractors and major suppliers of materials and equipment.
- d. Provide EMNRD with copies of all records by contract termination date.

j. Reports:

- a. Furnish the Project Engineer periodic reports as required of progress of the work and the Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions.
- b. Consult with the Project Engineer in advance of scheduled major tests, inspections or start of important phases of the work.
- c. Report immediately to the Project Engineer upon the occurrence of any accident, personal injury, or property damage incidents.

k. Payment Requisitions: Review Applications for Payment with the Contractor for compliance with the established procedure for their submission and forward them with recommendations to the Project Engineer, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.

l. Certificates, Maintenance and Operation Manuals: During the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by the Contractor are applicable to the items installed; and deliver this

material to the Project Engineer for review prior to final acceptance of the work.

m. Completion:

- a. Before the Contractor issues written certification to the Project Engineer that the project is complete, submit to the Contractor a pre-final list of observed items requiring completion or correction.
- b. Conduct final inspection in the company of the Project Engineer and the Contractor and prepare a final list of items to be completed or corrected.
- c. Verify that all items on final list have been completed or corrected and make recommendations to the Project Engineer concerning acceptance.

B. Limitations of Authority.

Except upon written instructions of the Project Engineer and notification to the Contractor, the Project Manager:

- a) Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment.
- b) Shall not exceed limitations on the Project Engineer's authority as set forth in the Contract Documents.
- c) Shall not undertake any of the responsibilities of the Contractor, subcontractors or the Contractor's superintendent, or expedite the work.
- d) Shall not issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.
- e) Shall not issue directions as to safety precautions and programs regarding the work.
- f) Shall not participate in specialized field or laboratory test, unless such is specifically called for in the Contract Documents.
- g) Shall not receive any materials, supplies, equipment, etc. on behalf of the Contractor.

This page intentionally left blank.

00800 – SUPPLEMENTARY CONDITIONS

00825 – CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS, DRUG-FREE WORKPLACE REQUIREMENTS AND LOBBYING

**U.S. DEPARTMENT OF THE INTERIOR
Office of Surface Mining Reclamation and Enforcement**

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions (See Appendix B of Subpart D of 43 CFR 12).

Certification Regarding Drug-Free Workplace Requirements (Grantees Other Than Individuals) (See Appendix C of Subpart D of 43 CFR 12).

Certification Regarding Lobbying (See 43 CFR 18).

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Office of Surface Mining determines to award the covered transaction, grant or cooperative agreement.

PART A: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions

___ *CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.*

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Drug Free Workplace Requirements

___ *CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.*

1. The grantee certifies that it will or continue to provide a drug-free workplace by:
 - (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee’s workplace and

specifying the actions that will be taken against employees for violation of such prohibition;

- (b) Establishing an ongoing drug-free awareness program to inform employees about
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee’s policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

I Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
 - (1) Abide by the terms of the statement and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;

- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted –
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

2. The grantee shall provide below the site(s) of the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Check if there are workplaces on file that are not identified here.

PART C: Certification Regarding Lobbying

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

NAME

DATE

TITLE

This form consolidates DI-1953, DI-1954, DI-1955, DI-1956 and DI-1963.

DI-2010 (March 1995)
Modified for AML Use

00826 – APPLICANT/VIOLATOR SYSTEM INFORMATION**Instructions for Completing AML Contractor Form OMB #1029-01191**

Part A: General Information. Part A should be completed by the AML Contractor.

Part B: Legal Structure. Part B should be completed by the AML Contractor.

Part C: Certifying and updating information in the Applicant/Violator System (AVS). Part C should be completed by the AML Contractor, selecting the statement that best describes their situation.

If information is accurate, complete and up-to-date, then check the first statement and sign and date. Attach the Entity OFT printout to the OMB #1029-0119 form and submit the form and attachment to the AML Contracting Officer your business is working with.²

Upon reviewing an Entity OFT printout, if you discover the information contained in AVS is not accurate, complete and up-to-date, then check the second statement and complete Part D to provide missing or corrected information that needs reflected in AVS. Attach the Entity OFT printout to the OMB #1029-0119 form and submit the form and attachment to the AML Contracting Officer your business is working with.

If your business does not appear to have any information in AVS, then check the third statement and complete Part D. Submit the OMB #1029-0119 form to the AML Contracting Officer your business is working with.

Part D:

If current Entity OFT information for your business is incomplete, incorrect, or if you believe there is no information currently in the AVS for your business, you must complete Part D. Submit the OMB #1029-0119 form to the AML Contracting Officer your business is working with.

¹If you need any assistance completing OMB #1029-0119, please contact the AVS Office at 800.643.9748.

² You may obtain your business' Entity OFT for certification purposes two ways. One way is to contact the AVS Office at 800.643.9748 and request the information. The second way is to access the AVS from your personal computer by visiting <https://avss.osmre.gov>. Click "Access AVS", and then Login as Guest. Place your cursor on the "Entity" Module and "Click". Type your business name in search box and press enter key. If more than one entity record appears, select your company and then "Click" on the "relationship" tab to display your Entity OFT information. Print the Entity OFT from AVS.

**REQUEST FOR AN APPLICANT/VIOLATOR SYSTEM (AVS)
AML CONTRACTOR DATA EVALUATION**

An AVS data evaluation for AML contractors is required under the Federal rules at 30 C.F.R. 874.16. Please provide the information requested below and send your request via postal mail, e-mail or FAX to:

Liz Cox
Office of Surface Mining
Applicant/Violator System Office
2679 Regency Road
Lexington, Kentucky 40503
Telephone: 800.643.9748 ext.472
FAX: 859.260.8418
E-mail: lcox@osmre.gov

Date _____

Requesting Office _____

Contact _____

Contact's Telephone _____

Preferred response method:

E-MAIL: _____

or

FAX: (_____) _____

Level of your request: Emergency _____
(Expect your response within 4 hrs if received before 3 PM Eastern)

Non-Emergency _____
(Expect your response with two business days)

Note to Evaluator:

AML CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining to determine if you are eligible to receive an AML contract. This requirement applies to contractors and their sub-contractors and is found under OSM's regulations at 30 CFR 874.16.

Part A: General Information

Business Name: _____ Tax Payer ID No.: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____ Phone: _____
 Fax No.: _____ E-mail address: _____

Part B: Legal Structure

Corporation Sole Proprietorship Partnership LLC
 Other (please specify) _____

Part C: Certifying and updating information in the Applicant/Violator System (AVS). Select only one of the following options, follow the instructions for that option, and sign below.

I, _____, have the express authority to certify that:
 (print name)

1. _____ Information on the **attached** Entity Organizational Family Tree (OFT) from AVS is accurate, complete, and up-to-date. If you select this option, you **must** attach an Entity OFT from AVS to this form. Sign and date below and do not complete Part D.
2. _____ Part of the information on the **attached** Entity OFT from AVS is missing or incorrect and must be updated. If you select this option, you **must** attach an Entity OFT from AVS to this form. Use Part D to provide the missing or corrected information. Sign and date below and complete Part D.
3. _____ Our business currently has no information in AVS. If you select this option, you must provide all information required in Part D. Sign and date below and complete Part D.

 Date Signature Title

IMPORTANT! In order to certify in Part C to the accuracy of existing information in AVS, you must obtain a copy of your business' Entity OFT. To obtain an Entity OFT, contact the AVS Office, toll-free, at 800-643-9748 or from the AVS website at <https://avss.osmre.gov>.

Part D.

Contractor Name: _____

If the current entity and Entity OFT information for your business is incomplete or incorrect in AVS, or if there is no information in AVS for your business, you must provide all of the following information as it applies to your business affiliations. Please make as many copies of this page as you require.

- Every officer (President, Vice President, Secretary, Treasurer, etc.);
- All Directors;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Every partner, if your business is a partnership;
- Every member and manager, if your business is a limited liability company; and
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.

Name _____	Position/Title _____
Address _____	Telephone # _____
_____	% of Ownership _____
Begin Date: _____	Ending Date: _____

Name _____	Position/Title _____
Address _____	Telephone # _____
_____	% of Ownership _____
Begin Date: _____	Ending Date: _____

Name _____	Position/Title _____
Address _____	Telephone # _____
_____	% of Ownership _____
Begin Date: _____	Ending Date: _____

Name _____	Position/Title _____
Address _____	Telephone # _____
_____	% of Ownership _____
Begin Date: _____	Ending Date: _____

PAPERWORK REDUCTION STATEMENT

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501) requires us to inform you that: federal Agencies may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. This information is necessary for all successful bidders prior to the distribution of AML funds, and is required to obtain a benefit.

Public reporting burden for this form is estimated to average 45 minutes per response, including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, Room 210 SIB, Constitution Ave., NW, Washington, D.C. 20240.

This page was intentionally left blank

**MICHELLE LUJAN
GRISHAM
GOVERNOR**



**BILL MCCAMLEY
SECRETARY**

**HOWIE MORALES
LT. GOVERNOR**

**STATE OF NEW MEXICO
DEPARTMENT OF WORKFORCE SOLUTIONS
625 Silver Ave SW Suite 410
Albuquerque, NM 87102
Telephone (505) 841-4405
Fax (505) 841-4420**

PUBLIC WORKS PROJECT REQUIREMENTS

As a participant in a Public Works project valued at more than \$60,000 in the State of New Mexico, the following list addresses many of the responsibilities that are assigned by statute to each project stakeholder.

Contracting Agency

- Ensure that all contractors/prime contractors wishing to bid on a Public Works project when the project is \$60,000 or more are actively registered with the Labor Relations Division, Labor Enforcement Fund (LEF) prior to bidding.
- Provide completed Notice of Award (NOA) and Sub-Contractor list to Labor Relations Division promptly after the project is awarded.
- Provide updates to the Sub-Contractor list to the Labor Relations Division

General Contractor

- Provide to the Contracting Agency within 3 (Three) days of award a complete sub-contractor list and Statements of Intent (SOI) to pay Prevailing Wages for each contractor.
- Ensure that all sub-contractors wishing to bid on a Public Works project when their portion is over \$60,000 are actively registered with the Labor Relations Division prior to bidding.
- Submit bi-weekly certified payrolls to the owner/contracting agency.
- Make certain NM Apprenticeship and Training Fund payments are to be paid either to an approved Apprenticeship program or to the Labor Relations Division.
- Confirm the Wage Rate poster, provided by the Labor Relations Division, is displayed at the job site in an easily accessible place.
- Make sure, when a project has been completed, the Affidavits of Wages Paid (AWP) is sent to the Contracting Agency.

Sub-Contractor

- Ensure that all sub-contractors wishing to bid on a Public Works project when their portion is over \$60,000 are actively registered with the Labor Relations Division prior to bidding.

- Submit bi-weekly certified payrolls to the General Contractor(s).
- Make certain NM Apprenticeship and Training Fund payments are to be paid either to an approved Apprenticeship program or to the Labor Relations Division.

Additional Information

Reference material and forms for these requirements are available through the following New Mexico Workforce Solutions Web Link.

www.dws.state.nm.us/new/Labor_Relations/publicworks.html.

Additional Information

Additional information, requirements, and documents on these topics can be found through the Public Works web pages.

- Labor Enforcement Fund (LEF)
- Weekly Certified Payroll
- Public Works Apprenticeship and Training Fund (PWAT)
- Forms: Statement of Intent (SOI), Affidavit of Wages Paid (AWP)
- Prevailing Wage Rates (Base Rates, Fringe, and Apprenticeship Contributions)

CONTACT INFORMATION

Contact us for any questions relating to Public Works Projects.

Kim Kew at kim.kew@state.nm.us or 505-841-4405
Otis Caddy LynnO.Caddy@state.nm.us 505-841-4406
Stacey Lowrey Stacey.Lowrey@state.nm.us 505-841-4412

**Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project:
WAGE DECISION #:**

DIVISION 1 - GENERAL REQUIREMENTS

The following sections describe the general requirements of this project.

00900 – APPLICATION FOR PAYMENT

APPLICATION FOR PAYMENT
Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project
 Raton, New Mexico
 EMNRD-MMD-2020-03

Contract No. _____ Contractor: _____ Billing No. _____ Billing Date _____ Terminate _____

Mailing Address: _____ Billing represents work completed through (date)

<u>ITEM NO.</u>	<u>MATERIAL OR WORK DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>CONTRACT AMOUNT</u>	<u>UNITS THIS BILLING</u>	<u>AMOUNTS THIS BILLING</u>	<u>UNITS PREVIOUS BILLINGS</u>	<u>AMOUNTS PREVIOUS BILLINGS</u>	<u>UNITS REMAINING</u>	<u>AMOUNTS REMAINING</u>
1.	FULFILL GENERAL REQUIREMENTS	For the Lump Sum Of	\$ _____						
2.	MOBILIZE AND DEMOBILIZE EQUIPMENT	For the Lump Sum Of	\$ _____						
3.	CLEARING, GRUBBING, STRIPPING, SALVAGE AND DISPOSAL	For the Lump Sum Of	\$ _____						
4.	EXCAVATE AND SHAPE STREAM CHANNEL AND POINT BARS	\$ _____ X 1,260 Cubic Yards	\$ _____						
5.	FILL AND SHAPE FLOODPLAIN BENCHES	\$ _____ X 960 Cubic Yards	\$ _____						
6.	REMOVE AND DISPOSE OF OVERBURDEN	For the Lump Sum Of	\$ _____						
7.	SHAPE UPLAND CHANNEL	\$ _____ X 1,500 Linear Feet	\$ _____						

8.	SUPPLY AND CONSTRUCT BOULDER CROSS VANE	\$ _____ X 17 Each	\$ _____
9.	SUPPLY AND CONSTRUCT BOULDER CLUSTERS	\$ _____ X 26 Each	\$ _____
10.	SUPPLY AND CONSTRUCT BOULDER BASIN	\$ _____ X 1 Each	\$ _____
11.	SUPPLY AND CONSTRUCT GRADED ROCK BASIN	\$ _____ X 1 Each	\$ _____
12.	SUPPLY AND CONSTRUCT GRADED ROCK RIFFLES	\$ _____ X 20 Each	\$ _____
13.	SUPPLY AND CONSTRUCT GRADED ROCK SILLS	\$ _____ X 380 Linear Feet	\$ _____
14.	SUPPLY AND CONSTRUCT GRADED ROCK STREAM BARBS	\$ _____ X 8 Each	\$ _____
15.	SUPPLY AND INSTALL BIODEGRADABLE COIR LOGS	\$ _____ X 170 Linear Feet	\$ _____
16.	SUPPLY AND CONSTRUCT ROCK MULCH RUNDOWN	\$ _____ X 16 Each	\$ _____
17.	SUPPLY AND CONSTRUCT MEDIA LUNA	\$ _____ X 16 Each	\$ _____
18.	SUPPLY AND CONSTRUCT ONE ROCK DAM	\$ _____ X 75 Each	\$ _____
19.	SUPPLY AND CONSTRUCT ZUNI BOWL	\$ _____ X 13 Each	\$ _____
20.	SUPPLY AND PLACE WETLAND PLUGS: COMMON SPIKERUSH	\$ _____ X 1,800 Plugs	\$ _____
21.	SUPPLY AND PLACE WETLAND PLUGS: BALTIC AND TORREY'S RUSH	\$ _____ X 1,800 Plugs	\$ _____
22.	SUPPLY AND PLACE RIPARIAN POLE PLANTINGS: 3-POLE WILLOW CLUSTER	\$ _____ X 1,950 Cluster	\$ _____

23	SUPPLY AND PLACE RIPARIAN POLE CUTTINGS: SHINGLED WILLOW FASCINE	\$ _____ X 170 Linear Feet	\$ _____
24	SUPPLY AND PLACE RIPARIAN POLE CUTTINGS: 3-POLE COTTONWOOD CLUSTER	\$ _____ X 90 Cluster	\$ _____
25	SUPPLY, SPREAD, AND MULCH NATIVE SEED MIX: RIPARIAN	\$ _____ X 1 Acre	\$ _____
26	SUPPLY, SPREAD, AND MULCH NATIVE SEED MIX: UPLAND	\$ _____ X 1 Acre	\$ _____

Subtotal \$ _____

GROSS RECEIPTS TAX = LOCAL RATE (6.7500% through 6/30/15 x Subtotal \$ _____

TOTAL CONTRACT \$ _____

CERTIFICATION

I do hereby certify that the work described herein has been performed and that no previous payment for the Total Amount Due this Statement, as shown above, has been received.

By: _____ Mining and Minerals Division Director By: _____ Contractor By: _____ AML Project Engineer

DATE: _____ DATE: _____ DATE: _____

SPECIFICATIONS

Please Note – Use of Brand Name Specifications: Use of any brand name herein is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.

01010 – SUMMARY OF WORK

The Swastika Mine and Dutchman Canyon Maintenance and Stream Restoration Project is located about 4.5 miles northwest of Raton in Colfax County, New Mexico. The project area is on private land within the Maxwell Land Grant (LATITUDE: 36°55'13.8"N LONGITUDE: 104°29'30.2"W).

The AML Program, in partnership with Vermejo Park Ranch (Ranch), has completed efforts and is continuing work to mitigate the effects of legacy coal mining on land and water resources at the Swastika Mine Reclamation site. As part of this effort, AML completed work in 2012 to:

- Stabilize and reclaim an extensive series of steep and actively eroding coal gob piles within Dillon Canyon using geomorphic approaches to create a restored landform
- Restore a straightened and deeply incised section of stream channel adjacent to the gob piles Recent flooding in the canyon has caused project wide erosion to restored elements including gullying of swales and channels constructed as part of the upland landform restoration and down-cutting, scour, and lateral migration of the constructed stream channel.

Based on the inventory and post-flood analysis completed for the project, a set of site-specific practices were developed that could be used to mitigate flood damage that occurred in the canyon after the completion of the 2012 project. This "restoration toolbox" includes measures that, implemented holistically, could help to enhance water quality, improve stream stability and function, and expand wetland and riparian habitat.

01011 – SUMMARY OF PROJECT AND CONSTRUCTION ACCESS

Access to the site is strictly controlled by the Ranch. A locked gate at the entrance to the Ranch must remain closed and attended during deliveries of equipment, supplies and work crews. Permission to access the site may be rescinded with little notice by the Ranch during periods when roads are wet and muddy or may be restricted during hunting seasons. AML Program personnel will coordinate access with the Ranch manager and relay this information to the Contractor.

The hours for a typical work schedule, taken as the time Contractor personnel enter the Ranch gate or leave it, will be limited to noon on Monday until noon on Friday. This will allow AML Program Personnel to oversee activities and approve of any required field-

fitting of constructed features. There may be times when problems or required changes may delay a task waiting clarification or permission from the Project Engineer.

The AML Program has negotiated a Consent-to-Entry with the Vermejo Park Ranch for the purpose of conducting reclamation on the property. A copy of the entire Consent-to-Entry will be provided to the Contractor, which included provisions of this agreement before any work begins which will apply to the Contractor, his agents and employees and any subcontractors

Construction access is limited to existing roads. For more information, see Drawing Set, Sheet 3 of 24. The Contractor shall be responsible for thoroughly investigating site conditions and scheduling equipment, equipment operations, personnel, and safety procedures to prevent accidents and injuries.

01012 – ANTICIPATED CONSTRUCTION SCHEDULE/TARGET DATES

The following are tentative benchmark/target dates to aide with project planning. The AML Program will communicate date changes to the Contractor ahead of schedule.

- Anticipated Notice to Proceed/Mobilization: July 2020
- Complete All Earthwork and Stream/Upland Stabilization Element Work: October 2020
- Dormant Riparian Poles/Wetland Plugs Delivered to the Site: November 2020
- Complete All Native Planting Work: February 2020
- Anticipated End of Construction: 240 days from NTP

The Contractor shall supply a critical path construction schedule two weeks prior to construction that outlines how these benchmarks will be met, once they are verified/finalized by the AML Program (See Section 01310 Progress Schedules).

01013 – ANTICIPATED CONSTRUCTION EQUIPMENT

The Contractor shall provide earthworks and reclamation equipment adequate to perform the work required. Conditions on the site may be challenging due to prevalence of archeologically and biologically sensitive resources, steep upland terrain, wet conditions within the stream corridor, and bedrock substrate within designated excavation areas. Limiting additional construction disturbance to the site will be a top priority. An equipment list shall be provided in the submitted proposal along with justification for any equipment selected (Section 00450). The following is a provisional list that may be helpful when evaluating equipment needs for the project:

Stream Corridor Work

- Stream Corridor Excavation, Re-contouring, and Rock Work: Medium to large size excavator with "thumb" attachment for medium/large boulder placement and hydraulic

rock hammer attachment for excavating through bedrock substrate prevalent throughout the site.

- Bulk Material Handling (i.e. shuttling rock, soil, and other materials from staging areas to improvements areas within stream corridor): Large 4WD backhoe or small front-end loader.
- Revegetation: For pole cluster plantings a small backhoe, mini-excavator, and/or skid-steer fitted with an auger would be helpful, although hand planting would also be feasible for pole and wetland plug plantings if personnel are available.
- “Handwork Only” Area - The work area at the upstream portion of the corridor has an actively migrating headcut moving upstream. Mitigation measures are required to prevent this, but currently this area has not been cleared for historic objects so only handwork can be completed in this area.

Upland Work

- Upland Disturbance Corridor - Small Gully/Headcut Areas: These areas will be accessed by foot and work will be completed by hand crews where possible. Materials and supplies may be delivered within the corridor by ATV with a trailer or other similar equipment.
- Upland Disturbance Corridor - Large Gully/Headcut Mitigation Areas: If required, smaller/nimble equipment (mini-excavator, skid-steer, 4wd backhoe) may operate within this area to reshape the channel and shuttle materials. Equipment Shall Operate Only Within the Delineated Disturbance Corridor without Deviation to Minimize Disturbances to Existing Vegetation.

01014 – AVOIDANCE AREAS FOR PRESERVATION OF CULTURAL AND BIOLOGICAL RESOURCES

The Contractor shall avoid all designated cultural and biological resources including those shown as Avoidance Areas in the Drawings and those discovered during construction. The Contractor shall avoid these areas with all equipment, vehicles, foot traffic, and any other ground surface disturbing activities.

Avoidance areas extend up to 50 feet (15 meters) from the designated cultural and biological resources, unless otherwise indicated by AML staff. Where it is infeasible to complete construction activities without disturbing the designated avoidance areas, avoidance area distances and access may be adjusted, in coordination with AML staff, to accommodate construction activities and ensure resources are not impacted. The Contractor shall also coordinate with the Project Engineer for access routes to be taken around designated avoidance areas to construction work sites. Disturbance adjacent to designated avoidance areas shall be minimized as practicable.

The Project Engineer may designate additional avoidance areas as deemed necessary. No construction disturbances including excavation, fill, stockpiling of construction materials, staging, etc. shall take place within designated avoidance areas.

The Contractor shall bear all direct, indirect, and consequential costs of mitigation or repairs due to unauthorized damage caused by the Contractor's operations to cultural or biological resources within designated avoidance areas. These costs shall include but are not limited to fees and charges of engineers, attorneys, and other professionals, made necessary thereby.

The Contractor shall cooperate fully to preserve archaeological and historic artifacts and any threatened or endangered species found within the project area. Moving, removal or collecting of archaeological or historic materials or biological specimens from the project area or vicinity is prohibited. If the Contractor encounters a previously unidentified archaeological site, historic site, artifacts, or species listed as or proposed to be listed as threatened or endangered, the Contractor shall terminate all operation in that immediate area (100 foot radius, 30 meters) until the archaeological or biological preservation agencies have been notified and had the opportunity to assess the discovery site. This termination shall not preclude continuation of work in other areas nor shall it entitle the Contractor to additional payment in any form, other than an extension of time, unless the Contractor is substantially precluded from working on the entire project.

Because construction is expected to commence during the migratory bird season (March 15 to September 15), a preconstruction nesting bird survey is required. The AML Program will contract an outside consulting firm to perform the bird survey. The Contractor shall contact the AML Program Project Engineer at least one month prior to commencement of construction to coordinate this survey. The Contractor shall comply with the requirements of the Migratory Bird Treaty Act, the U.S. Fish and Wildlife Service (USFWS), and shall not cause harm or harassment to migratory birds.

If occupied nests are found, they must be avoided until the young have fledged. If nest avoidance is not feasible and relocation must occur, the project shall be placed on suspension while the AML Program coordinates with USFWS for a permit. If the USFWS denies the relocation permit request, the project suspension shall continue until after the migratory bird nesting seasons ends, or after all young have left nest.

01015 – CONTRACTOR'S USE OF THE PREMISES

The Contractor shall take reasonable measures to avoid traffic conflicts between vehicles of the Contractor's employees and private citizens and to avoid overloading of any driveways, roads and streets. The Contractor shall limit the access of equipment and trucks to the project site and provide protection for any improvements over which trucks and equipment must pass to reach the job site. For more information, see Drawing Set, Sheet 3 of 24.

01025 – MEASUREMENT AND PAYMENT

The measurement for payment is as defined below. Payment shall be made based on the applicable unit or lump sum price bid therefor in the Bid Form (Section 00300). The estimated

quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined. All estimated quantities could vary considerably and will depend on the actual conditions encountered at the time the work is performed. AML reserves the right to decrease or increase any or all of the quantities of materials or work as may be deemed necessary during the project.

01027 – APPLICATIONS FOR PAYMENT

All Applications for Payment for work performed under this contract shall whenever practicable, first be reviewed by the Project Manager before being submitted to:

Yeny Maestas, Staff Engineer
Mining and Minerals Division
Energy, Minerals, and Natural Resources Department
State of New Mexico
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

All Applications for Payment shall include appropriate backup, such as daily reports, load counts, etc. Contract amount equals total base bid plus gross receipts tax.

01028 – PRICES

The following subsections describe the lump sum and unit prices to be paid under this contract.

- I. Lump Sum Prices - The basis of payment of lump sum prices as outlined in the Bid Form is as follows:
 1. **Fulfill General Requirements** – Fulfilling General Requirements outlined in Division 1 General Requirements and related activities outlined in this specification shall be measured and paid on a lump sum basis for the entire project. Compensation for any item of work described in the contract, but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in the plans and these specifications.
 2. **Mobilize and Demobilize Equipment** - Payment for Mobilization will be made at the lump sum prices bid therefor in the Bid Form but shall not exceed 10% of the total base bid. It is the intent of this specification to provide for the Contractor to receive 100% of the mobilization bid item by the time the Contractor has completed ten percent of the total original contract amount less mobilization. Total original contract amount less mobilization shall mean the total amount bid as compensation for the contract, excluding gross receipts tax, less the amount bid for mobilization.

For lesser amounts of work completed (less than 10%), the Contractor shall receive a prorated portion of the mobilization.

In addition, payment for Mobilization will not be made until the Project Engineer's approval of an adequate performance. An "adequate performance" will be satisfied when the Contractor has shown the ability to successfully perform the required tasks of this project as outlined in these Specifications to the satisfaction of the Project Engineer. In case of any weather delays, compensation for additional Mobilization will not be made.

Payment for Mobilization shall include all equipment, fees, fuel, insurance, labor, permits, personnel, supervision and transportation to assemble, drive, operate, place, position, provide security measures for, and transport equipment, field offices, fuel, implements, machinery, materials, and support facilities to and at the job site in conformance with the Project Manager's directives and these Specifications. This amount shall include complete Mobilization no matter how often equipment is transported to individual sites within the project area.

- 3. Clearing, Grubbing, Stripping, Salvage and Disposal**– Payment for completing site preparation and related activities outlined in this specification shall be measured and paid on a lump sum basis for the entire project. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the clearing, grubbing, stripping work, and native plant salvage operations including, but not limited to, transporting the cleared, grubbed, or salvaged vegetation into designated areas, transporting other cleared/grubbed material to the final disposal area/facility and any earth operations associated with that disposal, and re-planting of salvaged plants in designated areas. It also includes the removal and disposal of exposed erosion control fabric, as noted in the drawings.
- II. Unit Prices - The methods of measurement and the basis of payment of unit prices as outlined in the Bid Form are as follows:
- 4. Excavate and Shape Stream Channel and Point Bars** - shall be measured and paid on a cubic yard basis as determined from the plans. The excavation quantity is considered to be the bank-run/natural in-place volume of soil determined by the design plan and cross sections, and therefore includes no shrink or swell factors. The unit price bid for excavation shall include supplying all materials, equipment, labor and any incidental items necessary for performing all excavation operations and associated disposal of unsuitable or surplus/overburden materials described in this specification. Building, maintaining, and removal of temporary roads and haul routes shall be considered incidental to those operations and no separate payment will be made.

- 5. Fill and Shape Floodplain Bench** - shall be measured and paid on a cubic yard basis as determined from the plans. The fill quantity is considered to be the in-place, neat-line, post-compacted volume of soil determined by the design plan and cross sections. Hauling, dumping, & compacting fill as required, smoothing and grading fill, and disposing of waste material shall be incidental to fill operations. No adjustment in quantities will be made for waste material from finish grading, shrinkage of excavated material resulting from compaction operations, or wasting surplus. Building, maintaining, and removal of temporary roads and haul routes shall be considered incidental to those operations and no separate payment will be made.
- 6. Remove and Dispose of Overburden** - and related activities outlined in this specification shall be measured and paid on a lump sum basis for the entire project. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work, including, but not limited to, transporting material to the final disposal area/facility and any earth operations associated with that disposal.
- 7. Shape Upland Channel** - shall be measured and paid on a linear foot basis as determined from the plans. The unit price bid for excavation/fill shall include supplying all materials, equipment, labor and any incidental items necessary for performing all excavation operations and associated disposal of unsuitable materials described in this specification. Building, maintaining, and removal of temporary roads and haul routes shall be considered incidental to those operations and no separate payment will be made.
- 8. Supply and Construct Boulder Cross Vane** - shall be measured and paid on an individual (EA) basis for a complete structure as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of spoils from these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, tools, transportation, materials, and all other items necessary and incidental to the work.
- 9. Supply and Construct Boulder Clusters** - shall be measured and paid on an individual basis for a complete structure composed of 3 boulders, as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of spoils from these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, tools, transportation, materials, and all other items necessary and incidental to the work.
- 10. Supply and Construct Boulder Basin** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of spoils from

- these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, tools, transportation, materials, and all other items necessary and incidental to the work.
- 11. Supply and Construct Graded Rock Basin** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 12. Supply and Construct Graded Rock Riffles** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 13. Supply and Construct Graded Rock Sills** - shall be measured and paid on linear foot basis for boulders as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of spoils from these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, tools, transportation, materials, and all other items necessary and incidental to the work.
- 14. Supply and Construct Graded Rock Stream Barbs** – shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 15. Supply and Install Biodegradable Coir Logs** - shall be measured and paid on linear feet basis as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of spoils from these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, transportation, materials, tools, and all other items necessary and incidental to the installation of the rolls in place including, but not limited to, procurement and placement of rolls, hardware and accessories, dead stout/pine wedge stakes supply and installation, excavation and filling, and disposal of soil surplus.
- 16. Supply and Construct Rock Mulch Rundown** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items

- necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 17. Supply and Construct Media Luna** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 18. Supply and Construct One Rock Dam** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 19. Supply and Construct Zuni Bowl** - shall be measured and paid on an individual basis for a complete structure as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, excavation of rock key-ways, and disposal of soil overburden.
- 20. Supply and Place Wetland Plugs: Common Spikerush**- shall be measured and paid on an individual basis for each plug as determined from the plans. Site preparation shall be incidental to those operations, and no separate payment will be made. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work.
- 21. Supply and Place Wetland Plugs: Baltic and Torrey's Rush** - shall be measured and paid on an individual basis for each plug as determined from the plans. Site preparation shall be incidental to those operations, and no separate payment will be made. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work.
- 22. Supply and Place Riparian Pole Cuttings: 3-Pole Willow Cluster** - Measurement and payment shall be conducted on an individual basis for each 3-pole cluster. Measurement will be made on the basis of field surveys of the actual number of plantings. Payment will be made at the contract unit bid price as shown on the bid schedule. This price and payment shall constitute full compensation for furnishing all materials, labor, tools and equipment and for performing all operations required to complete the work as shown on the drawings and specified herein.
- 23. Supply and Place Riparian Pole Cuttings: Shingled Willow Fascine** - shall be measured and paid on linear feet basis as determined from the plans. Excavation and filling operations are considered incidental to the work for this item. Disposal of

spoils from these operations (if required) are considered incidental to the work for this item. Such payment will constitute full compensation for all labor, equipment, transportation, materials, tools, and all other items necessary and incidental to the installation of the revetment in place including, but not limited to, procurement and placement of revetment, hardware and accessories, anchor supply and installation, excavation and filling, and disposal of soil surplus.

24. Supply and Place Riparian Pole Cuttings: 3-Pole Cottonwood Cluster -

Measurement and payment shall be conducted on an individual basis for each 3-pole cluster. Measurement will be made on the basis of field surveys of the actual number of plantings. Payment will be made at the contract unit bid price as shown on the bid schedule. This price and payment shall constitute full compensation for furnishing all materials, labor, tools and equipment and for performing all operations required to complete the work as shown on the drawings and specified herein.

25. Supply, Spread, and Mulch Native Seed Mix: Riparian - shall be measured and paid on a per acre basis as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, site preparation, broadcasting of seed, and application of fabric and mulch as needed. No payment will be made for areas seeded with unapproved seed. No adjustment in payment will be made for the number of seeding mobilization activities.

26. Supply, Spread, and Mulch Native Seed Mix: Upland - shall be measured and paid on a per acre basis as determined from the plans. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the work, including, but not limited to, site preparation, broadcasting of seed, and application of fabric and mulch as needed. No payment will be made for areas seeded with unapproved seed. No adjustment in payment will be made for the number of seeding mobilization activities.

01030 – ALTERNATES

Whenever equipment or materials are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, the Project Engineer may accept equipment or materials of other suppliers if the Contractor submits sufficient information to allow for adequate determination that the equipment or materials proposed are equivalent or equal to that named.

01035 – MODIFICATION PROCEDURES

The following section describes procedures for making modifications to the contract by change orders. Modifications may involve changes in contract sum, contract time, and scope.

01036 – CHANGE ORDER PROCEDURES

The Contractor shall submit a request for any changes in the work under this contract, in writing, to the Project Engineer. No changes in work or quantities shown shall be authorized until a properly executed Change Order has been issued by MMD. Any work performed outside the original quantities or scope of work, before the issuance of a properly executed Change Order, shall be at the Contractor's risk.

The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Project Engineer within fifteen working days of the occurrence of the event causing the claim. The extent of the claim with supporting data shall be included unless the Project Engineer allows additional time to ascertain more accurate data. The Project Engineer shall determine all claims for adjustment in the Contract Time. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made therefore as provided above. Such delays shall include, but may not be restricted to, acts or neglect beyond the Contractor's control, epidemics, fires, floods, labor disputes, abnormal weather conditions, or acts of nature. In the event delays in construction occur due to weather, the conditions as outlined above will be in effect. If the Contractor leaves the project area due to a weather delay, the Contractor shall be responsible for assuring that all areas are left in a clean and safe condition as approved and directed by the Project Manager. In case of any weather delays, compensation for additional Mobilization or Demobilization will not be made.

01040 – COORDINATION

The following sections define the parties responsible for coordination of the contract work at the project and job site levels.

01041 - PROJECT COORDINATION

The Project Engineer will send the Contractor Notices to Proceed, Change Orders, other contract documents, and approvals on Applications for Payment. The Project Manager or Project Engineer may issue a Suspension of Work Notice if he has any reasonable basis to believe that the Contractor is violating any condition or term of the contract or specifications, or that violations of health and safety standards will occur unless such notice is issued. No work shall proceed until the Suspension of Work Notice has been vacated.

01042 – MECHANICAL AND ELECTRICAL COORDINATION

The Contractor shall be responsible for the coordination of all mechanical and electrical aspects of the contract work. This includes overseeing of the general operation and maintenance of that equipment.

01043 – JOB SITE ADMINISTRATION

The Contractor shall be responsible for the administration of the contract work at the job site. This includes assuring that all equipment and materials used for the contract work meet the required specifications set forth and that all work is performed in a timely and orderly manner. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs concerning the work. The Contractor shall designate a competent, suitable and qualified full-time on-site superintendent or authorized representative who shall be present or can be contacted readily during project working hours. This person shall be solely dedicated to the supervision of the project and shall not operate equipment. This person shall represent the Contractor in dealing with the AML Program Project Engineer and shall ensure adherence to these specifications and any other directives. If during the performance of the work the AML Program determines that the Contractor has provided an incompetent, unsuitable or unqualified superintendent, the AML Program will notify the Contractor in writing. If correctable, the Contractor shall remedy deficiencies in ten (10) calendar days or less. Otherwise, the Contractor shall replace the resident superintendent within seven (7) calendar days with a competent, suitable and qualified superintendent.

The Contractor shall be solely responsible for the means, methods, and sequences of construction, and shall see that the finished work complies accurately with the Contract Documents. The Contractor shall provide competent, suitable and qualified personnel to lay out the work and perform construction as required by the Contract Documents. If during the performance of the work the AML Program determines that the Contractor has provided incompetent, unsuitable or unqualified personnel, the AML Program will notify the Contractor in writing. If correctable, the Contractor shall remedy deficiencies in ten (10) calendar days or less. Otherwise, the Contractor shall replace the personnel within seven (7) calendar days with competent, suitable and qualified personnel.

The Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuels, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidental necessary for the execution, testing, initial operation and completion of the work. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, calibrated, maintained and conditioned as specified in the instructions provided by the applicable manufacturer, fabricator or processor, except as otherwise provided in the Contract Documents.

The Contractor shall keep one (1) copy of the Contract Documents available on the work site at all times, in good order and annotated to show all changes made during the construction

process. Before undertaking each part of the work, the Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. The Contractor shall report in writing at once to the AML Program any conflict, error or discrepancy which the Contractor may discover; however, the Contractor shall not be liable for the Contractor's failure to discover any conflict, error or discrepancy in the Plans or Specifications.

01050 – FIELD ENGINEERING

The Contractor shall be responsible for locating and avoiding all underground utilities at the contract work site. If damage to the utilities occurs during the contract work, the damage shall be repaired at the Contractor's expense.

The Contractor shall also be responsible for the proper setting of all construction staking. The Contractor shall provide engineering surveys for construction to establish reference points that are necessary to enable the Work to proceed. The Contractor shall be responsible for surveying and laying out the Work, shall protect and preserve any established reference points, and shall make no changes or relocations without the prior written approval of the Project Engineer. The Contractor shall report to the Project Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations. The Contractor shall replace and accurately relocate all reference points so destroyed, lost, or moved. When it becomes necessary in the construction of public works, to remove or obliterate any triangulation station, bench mark, corner monument, stake, witness mark, or other reference mark, it shall be the duty of the Contractor in charge of the work to cause to be established by a New Mexico registered land surveyor one or more permanent reference marks which shall be plainly marked as witness corners or reference marks, as near as practicable to the original mark, and to record a map, field notes, or both, with the county clerk and county surveyor of the county wherein located, showing clearly the position of the marks established with reference to the position of the original work. The surveys or measurements made to connect the reference marks with the original mark shall be of at least the same order of precision as the original survey.

01060 – REGULATORY REQUIREMENTS

The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed on the work or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees and shall protect and indemnify the State of New Mexico and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or any employees. The Contractor shall procure all permits and licenses, pay all charges, fees, royalties, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work.

01090 – REFERENCES

Reference to standard specifications, manuals, or codes of any technical association, organization, or society, or to laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws, or regulation in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the Contractor.

01092 - ABBREVIATIONS

The following is an explanation of the abbreviations that may be used in the contract documents:

1. AASHTO American Association of State Highway and Transportation Officials
2. ACI American Concrete Institute
3. AML Abandoned Mine Land Program of MMD
4. ANSI American National Standards Institute
5. ASTM American Society for Testing and Materials
6. AWS American Welding Society
7. CRSI Concrete Reinforcing Steel Institute
8. EMNRD Energy, Minerals, and Natural Resources Department (state)
9. MMD Mining and Minerals Division of EMNRD
10. OSMRE Office of Surface Mining, Reclamation, and Enforcement (federal)
11. SAE Society of Automotive Engineers

01094 – DEFINITIONS

The following is a definition of the terms that may be used in the contract documents (source: A Dictionary of Mining, Mineral, and Related Terms, Paul W. Thrush, Bureau of Mines, Department of the Interior, Washington, D.C., 1968):

1. adit A horizontal or nearly horizontal passage driven from the surface for the working or dewatering of a mine.
2. back The roof or upper part in any underground mining cavity.
3. cribbing The close setting of timber supports when shaft sinking through loose ground.
4. collar Timbering or concrete around the mouth or top of a shaft; the junction of a mine shaft and the surface.

-
5. drift A horizontal passage underground.
 6. entry A haulage road, gangway, or airway to the surface.
 7. gob pile A pile of heap mine refuse on the surface.
 8. incline A shaft not vertical; usually on the dip of a vein.
 9. lagging Planks, slabs, or small timbers placed over the caps or behind the posts of the timbering, not to carry the main weight, but to form a ceiling or a wall, preventing fragments or rock from falling through.
 10. lining The brick, concrete, cast iron, or steel casing placed around a tunnel or shaft as a support.
 11. loading chute A three-sided tray for loading or for transfer of material from one transport unit to another.
 12. portal Any entrance to a mine.
 13. red dog Material of a reddish color resulting from the combustion of shale and other mine waste dumps on the surface.
 14. shaft An excavation of limited area compared with its depth, made for finding or mining ore or coal, raising water, ore, rock, or coal, hoisting and lowering personnel and material, or ventilating underground workings.
 15. spoil The overburden or on-ore material removed in gaining access to the ore or mineral material in surface mining.
 16. stope An excavation in which ore has been excavated in a series of steps.
 17. stull A timber prop set between the walls of a stope, or supporting the mine roof.
 18. subsidence A sinking down of a part of the earth's crust.
 19. talus A heap of coarse rock waste at the foot of a cliff.
 20. tipple Originally the place where the mine cars were tipped and emptied of their coal, and still used in that sense, although now more generally applied to the surface structures of a mine, including the preparation plant and loading tracks.
 21. winze Interior mine shaft.

01100 – SPECIAL PROJECT PROCEDURES

The following section describes special procedures for alteration, preservation, security, hazardous materials, and other types of projects demanding unique procedures.

01115 – WORK SUSPENSION DUE TO PLANNED HUNTING ACTIVITIES

Construction for this project may take place during the Ranch's hunting season. All work on site may be suspended due to planned hunting activities in The Ranch, at no fault to the AML Program. During this time, there shall be no Contractor personnel on site and no equipment operated on site. Equipment and materials may remain on site during this period, however, if equipment or materials are removed and returned to the site, this will not be considered an additional mobilization/demobilization. Compensation will not be made to the Contractor for standby time associated with hunting activities. Contractor may resume work as soon as the Ranch notifies the AML Program that hunting activities have ceased.

01135 - HAZARDOUS AND CONFINED AREA PROCEDURES

This project requires construction work in, around, and over hazardous and unprotected mine shafts, stopes, adits, and other openings which may be open to the surface or hidden from view by vegetation, trash, debris, or thin and unstable layers of surface materials or rock. The Contractor shall be responsible for thoroughly investigating the site conditions and scheduling equipment, equipment operations, personnel, and safety procedures to prevent accidents and injuries.

Before entry, the Contractor shall review safety procedures with all persons entering the mine. At least one standby person, whenever possible someone who is trained in CPR and mine rescue procedures, shall remain outside the mine during entry by others. The standby person(s) shall have access to first aid, appropriate rescue equipment, and a vehicle and shall know where the nearest telephone for emergency calls is found. A communication system shall be established between the person(s) working inside the mine and the standby person(s) outside.

All persons entering the mine opening shall wear appropriate clothing and carry appropriate gear, including, as required for the conditions present, harnesses, head, hand and foot protection, life lines, respirators or self-contained breathing apparatuses, and other special equipment. Proper ventilation and adequate lighting at the workplace inside the mine entry shall be provided. The Contractor shall review with all workers and personnel the use of hazardous chemicals or materials, electrical power, or internal combustion engines inside mine entries for safety precautions and procedures.

The Contractor is fully responsible for construction safety and shall keep the Project Manager informed of hazardous area safety procedures. Following is a discussion of some common abandoned mine hazards and appropriate procedures to be followed.

I. Bad Air

Miners use the term "bad air" to describe an atmosphere that will not support life. The poor air circulation in some mine openings can allow carbon dioxide (CO₂), carbon monoxide (CO), methane, hydrogen sulfide (H₂S), or radon gas to accumulate. These gases are treacherous inside mine openings and even experienced miners have been killed or harmed by entering areas containing them. Carbon monoxide cannot be readily detected and is lethal in very small amounts. The Contractor shall follow the following and other appropriate hazardous bad air procedures.

An oxygen meter shall be used to test air before and while any personnel work inside a mine opening. The oxygen meter shall be a National Mine Service (NMS) OX231 oxygen meter or equivalent. The oxygen meter shall continuously monitor oxygen levels and have an audible warning signal. If the oxygen level falls below 19 percent, all personnel shall withdraw from the working area in the mine until the oxygen content increases to safe levels.

Any remedy for increasing oxygen content of the working area or providing ventilation from the surface shall be determined in consultation with the Project Manager.

II. Adit Cave-ins

Cave-ins are a danger in any abandoned mine. Disturbances such as vibrations caused by walking, speaking, blasting, hammering, percussion drilling, or construction equipment may cause a cave-in inside an inactive mine. The Contractor shall follow appropriate adit cave-in protection procedures, including scaling and barring of loose rock before beginning work in an area, shoring of decayed or weak timber framing, and shoring, jacking, or rock bolting of materials in the back (roof) and sides of the adits.

III. Collar Cave-ins

The collar or top of a shaft, stope, or subsidence often contains decomposed rock, decayed timbers, and other conditions that allow for rapid disintegration at the opening. With the additional weight and vibration of construction machinery, workers, and backfilling operations near the mine opening, the area around the collar can slide into the opening, along with nearby machinery and men. Backfilling operations can tear loose cribbing or lining in a shaft leading to collapse at the collar. The Contractor shall follow appropriate collar cave-in protection procedures.

IV. Falling

Because a shaft or stope has little light, the feeling of height and normal reaction to "pull back" is not evident to most persons. Many abandoned mine shafts, stopes, and winzes are deep enough to insure that anyone that falls down them is badly injured or killed. Rescue operations of a fallen person can also be extremely hazardous.

The Contractor shall follow appropriate hazardous fall protection procedures. This includes proper lighting, barricades, fences, personal fall arrest systems, guardrails, covers, safety net systems, safety monitoring systems, and other protection as suitable for the conditions. Fall protection shall be in accordance with OSHA regulations regarding construction fall protection (OSHA 29 C.F.R. Subpart M). These regulations establish a six-foot threshold for the height at which fall protection is required, require employers to provide training for each employee who might be exposed to a fall hazard, and prohibit the use of body belts for fall protection and the use of non-locking snap hooks.

V. Loose Rock

A mineshaft or open stope will weather in much the same way as a cliff. Loose rocks are always found on timbers or on the walls. A small rock that falls a sufficient distance can penetrate a person's skull. The Contractor shall follow appropriate hazardous loose rock protection procedures, including scaling of loose rock, construction of shields, and wearing of head protection.

01170 - INDUSTRIAL WASTES AND TOXIC SUBSTANCES

The Contractor shall comply with all applicable laws and regulations existing or hereafter enacted or promulgated regarding industrial wastes and toxic substances. In any event, the Contractor shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) regarding any toxic substances that are used, generated by or stored at the project site. See 40 C.F.R., Part 702799. Additionally, any release of toxic substances (leaks, spills, etc.) greater than the reportable quantity established by 40 C.F.R., Part 117, shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any federal agency or state government because of a reportable release or spill of any toxic substances shall be furnished to the Project Engineer concurrent with the filing of the reports to the involved federal agency or state government.

01176 – ENVIRONMENTAL COMPLIANCE

Vermejo Park Ranch has a Consent-to-Entry agreement to which all employees, Contractors, and visitors must subscribe. When the Contractor is on the property, the Contractor is expected to read, understand, and accept the terms of this agreement; a copy of which is attached in Appendix 1. Vermejo Park Ranch and the AML program are committed to the stewardship of the environment and to maintaining a compliant facility with all activities conducted on site. Contractor is required to exercise care over the management of materials, disposal of wastes, control of emissions and the minimization of disturbances. Due to the detailed nature of the regulatory structures upon which State operates, special circumstances may apply to the contracted activity that warrant interface with the New Mexico Environmental Department. At a minimum, Contractor is expected to meet the following requirements:

1. Contractor will obtain approval from the AML Program Project Engineer before bringing any toxic, flammable, corrosive, or otherwise regulated materials onto VPR property. Contractor will provide and have available at the job site a MSDS on all such materials at all times.
2. Contractor will store all regulated materials in a secure area.
3. Should environmental concerns become an issue during the execution of this contract, Contractor will immediately contact the AML Program Project Engineer.
4. Contractor will learn and follow all State rules regarding the disposal of hazardous waste. This includes, but is not be limited to: waste oil, batteries, solvents, aerosol cans, fluorescent and mercury vapor lamps, and bound-up asbestos products. The State has established procedures and mechanisms for disposal of this waste.
5. All surface tanks and storage vessels will be placed in impervious containment structures, the volume of which will be 110% of the volume of the largest vessel contained therein.
6. Contractor will be required to minimize emissions from mobile equipment using industry standard practices. Stationary sources mobilized to the site will require contractor permits appropriate to the control of emissions from the source.
7. The New Mexico Environmental Department or AML Program will require a Spill Prevention, Control and Countermeasure Plan (SPCC) describing regulated materials spill controls for the project. Contractor will establish best management practices for the control and cleanup of spills prior to the disturbance of soils.
8. The Contractor will notify the AML Program Project Engineer immediately upon the event of a spill of any amount of regulated materials. This will include, but is not be limited to: oils, gasoline, diesel, fuel, glycol and solvents.
9. Contractor will establish best management practices for the control and mitigation of stormwater impacts prior to the disturbance of soils. New Mexico Environmental Department or AML Program will require a Stormwater Pollution Prevention Plan (SWPPP) or specific plan from the Contractor describing stormwater controls for the project.
10. All waste removed (hazardous and non-hazardous must be properly manifested and must include a Land Disposal Restriction (LDR) notification per 40 C.F.R. 268.7(a)(2)-(3) with the shipment to a treatment, storage, and Disposal facility.

01200 – PROJECT MEETINGS

The following sections describe the required project meetings that the Contractor is expected to attend.

01210 - PRECONSTRUCTION CONFERENCES

Before starting work at the site, a conference will be held to review the construction schedules; to establish procedures for handling documents, drawings, other submissions, and for processing Applications for Payment; and to establish a working understanding between the parties as to the nature of the project. Present at the conference will be the Project Manager, the Project Engineer, the Contractor, the Contractor's superintendent, and other persons as appropriate. The Contractor shall present the progress schedule at the preconstruction conference as specified in Section 01310 below and the fire prevention and awareness plan as specified in Section 01565 below.

01220 - PROGRESS MEETINGS

The Contractor will lead progress meetings at the beginning of each work week on Mondays at 12:00 P.M.- unless otherwise specified by the AML Program- during construction for purposes of scheduling and coordination of work. These meetings shall be attended by the Staff Engineer and/or the Project Manager, the Contractor Superintendent and/or the Contractor Owner/ Chief Officer. These meetings will also provide an opportunity to discuss safety issues, weather issues, and any other issues with the project work. Throughout the life of the project, the Contractor shall keep the Project Manager and Project Engineer well informed of the schedule of work.

01300 – SUBMITTALS

The following sections describe the required documents and reports to be submitted by the Contractor during the contract work.

01310 - PROGRESS SCHEDULES

The Contractor shall provide a detailed progress schedule to be followed in completing the work. This schedule shall be submitted in writing at the preconstruction conference and shall show the anticipated time required by the Contractor to complete each item of work in the Bid Form. Schedules may be prepared as a horizontal bar chart with a separate bar for each major portion of work or operation, identifying the first workday of each week. The Project Schedule shall be updated as required and upon the request of the Project Engineer.

01320 - PROGRESS REPORTS

The Contractor shall submit written accurate daily progress reports to the AML Program Project Engineer. The reports shall include but are not limited to work accomplished, time and materials tallies, including load tickets as appropriate, records of any complaints including corrective actions taken, records of visitors to the site, and records of any personal injury or property damage incidents. The Contractor's authorized representative shall meet the AML

Program Project Engineer a minimum of once each week to verify and sign-off on all payable units of work performed during that week. The authorized representatives from both parties shall be designated at the start of the project during the preconstruction conference.

01340 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

The Contractor shall submit product data and samples as required in the specifications. Submittals shall be organized such that each submittal covers items in no more than one specification section. The Contractor shall allow a minimum of 21 calendar days for the AML Program Project Engineer review; shorter periods for AML Program Project Engineer review will not be acceptable. The Contractor shall allow acceptable time for the entire review process including transmittal, initial AML Program Project Engineer review, correction and resubmission, final review, and distribution.

Engineering data covering all fabricated materials shall be submitted to the AML Program review and comments. These data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices; the external connections, anchorages, and supports required; and performance characteristics and dimensions needed for installation and correlation with other materials and equipment. Data submitted shall include drawings showing essential details of any changes proposed by the Contractor.

It shall be the duty of the Contractor to check all data for completeness before submittal for AML Program Project Engineer's review. Each data sheet shall have indicated thereon the proposed use of the item as it pertains to the Work. Catalog cuts, pages, or copies submitted for review shall have items proposed for use in the Work clearly marked and identified. The current catalog number, date, and revision and drawing number (if applicable) shall be included.

Deviations from the specifications shall be identified on each submittal and shall be referenced in the Contractor's transmittal letter. The submittal for such deviations shall also include details of changes proposed and modifications required for all affected portions of the Work.

Review data shall be submitted to the AML Program Project Engineer only from the Contractor.

The Contractor's submittal of review material shall represent that he has reviewed the details and requirements of the Contract Documents, that he has coordinated the subject of the submittal with other portions of the Work, and that he has verified dimensions, quantities, construction details, materials, and installation criteria, as applicable for the Work. The Contractor shall accept full responsibility for the completeness of each submittal and, for resubmittals, verify that exceptions noted on the previous submittal have been accounted for.

Any requirement for more than one resubmission or delay in obtaining AML Program Project Engineer review of submittals will not entitle the Contractor to an extension of Contract Time unless authorized by Change Order.

The AML Program Project Engineer review of data submitted by the Contractor will cover only general conformity to the drawings and specifications, external connections, and dimensions that affect the plans and layout. The AML Program Project Engineer) disposition of submittals will not constitute a blanket approval of all dimensions, quantities, and details of the material, equipment, or item shown. Regardless of the corrections made in, or disposition given to, such drawings and data by the AML Program Project Engineer, the Contractor shall be responsible for the accuracy of such data and for their conformity and compliance with the contract documents.

No work shall be performed in connection with the fabrication or manufacture of materials and equipment, nor shall any material, accessory, or appurtenance be purchased until the drawings and data therefor have been reviewed.

Four copies of each drawing and necessary data shall be submitted to the Project Engineer. Each drawing or data sheet shall be clearly marked as instructed above. Submittals will be accepted only from the Contractor.

When the drawings and data are returned NOT APPROVED or RETURNED FOR CORRECTION, corrections shall be made as noted by the Project Engineer and four corrected copies resubmitted as instructed above.

When drawings and data are returned marked NO EXCEPTIONS NOTED, EXCEPTIONS NOTED, or RECORD COPY, no additional copies need be submitted.

All data, after final processing by the AML Program Project Engineer shall become a part of the contract documents and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the AML Program Project Engineer.

01400 – QUALITY CONTROL

The following sections outline the duties, responsibilities, and qualifications of inspectors, testing laboratories, and the Contractor's quality control requirements required to perform the contract work.

01405 - CONTRACT QUALITY CONTROL

The Contractor shall be responsible for the maintenance of quality control throughout the period of the contract work. This includes making periodic spot checks to assure that equipment, materials, and construction quality, meet the contract specifications.

01500 – CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

The following sections specify the types of construction facilities and temporary controls the Contractor shall provide for completion of the contract work.

01505 - MOBILIZATION

The Project Engineer will issue the Notice to Proceed in two stages. The first “Pre-construction” Notice to Proceed will authorize payment for necessary pre-construction items that will not involve ground disturbance or mobilization to the project site. The second “Construction” Notice to Proceed will authorize all remaining construction remaining items.

The Contractor shall begin work to acquire all required permits within ten working days following receipt of the Notice to Proceed. The Contractor shall furnish and mobilize all specified construction facilities, temporary controls, equipment, labor, materials, power, supervision, and supplies to the site and commence work within ten working days after the receipt of permit approval. The Contractor shall inform the AML Program Project Engineer of plans and schedules to move all equipment, machinery, and supplies to the job site. The Contractor shall locate and position the staging area including field offices, parking, storage, and support facilities as directed and approved by the AML Program Project Engineer. All equipment and machinery shall be moved onto the job site in conformance with previously approved plans and schedules. It is the Contractor's responsibility to arrange for storage facilities for equipment and materials. City, state, federal, or other public or private property shall not be used as temporary storage or parking areas for any equipment or materials unless written clearance is obtained by the Contractor from the appropriate public officials or private individuals. The Contractor must be prepared to move all necessary equipment to each construction site within the project area. This movement of equipment shall be at the Contractor's expense and should be covered under Bid Item No. 2, Mobilization, on the Bid Form.

Demobilization shall be conducted in such a manner to ensure that the Contractor leaves all project areas in as good or better condition than before disturbance.

01510 - TEMPORARY UTILITIES

The following sections describe temporary utilities, controls, facilities, and construction aids required during construction. They include requirements for installation, maintenance, and removal.

01516 - TEMPORARY SANITARY FACILITIES

The Contractor shall provide temporary sanitation facilities during the contract work. The facility shall be installed on the project site in a location removed from the immediate contract work area. The facility shall be locked to prevent unauthorized access during the times work is

not conducted. The Contractor shall remove the facility upon completion of the contract work and restore the area.

01530 – BARRIERS AND ENCLOSURES

The Contractor shall provide barricades with blinking markers for all equipment on roadways and pedestrian walkways. The barricades shall be no less than twenty feet from the front and rear of any equipment in the described rights-of-way. Traffic control devices shall be in substantial conformance with the American Traffic Services Association (ATSA) Guide for Work Area Traffic Control. The Contractor shall remove the barricades upon completion of the contract work.

01533 - TREE, PLANT AND WILDLIFE PROTECTION

I. Tree and Plant Protection

- Environmental disturbance shall be kept to a practical minimum. Construction damage to existing vegetation shall be kept to a practicable minimum.
- In steep areas and around vegetation, the Contractor shall, before beginning work, discuss the planned extent and nature of disturbance with the AML Program Project Engineer. Existing plants and trees shall be protected from damage or injury resulting from the Contractor's operations. Damaged trees and shrubs shall be trimmed to remove broken limbs where minor damage has occurred.

II. Wildlife Protection

- All area wildlife, including bats and owls, that may use the mine features are protected, and this hazard abatement effort shall not adversely affect them. Shooting at and chasing wildlife is prohibited.
- During construction of bat-accessible closures, the Contractor shall schedule their activities so the bats can readily pass through the partially completed closures from one hour before sunset until sunrise.
- Internal combustion engines, including those used on air compressors, shall be placed such that exhaust from the engine is not drawn into the mine openings.

01535 - PROTECTION OF INSTALLED WORK

The Contractor shall protect installed work and control traffic in the immediate area to prevent damage from subsequent operations.

01540 – SECURITY

The Contractor shall act to assure the protection of the contract work and equipment at the contract work site. The Contractor shall furnish, install, and maintain safety fences around any hazardous or high-voltage equipment at the site for the duration of the project. Where

appropriate, the Contractor shall restrict access to the project site by barricading access roads during off-hours and by posting "No Admittance" and "Hard Hat Area" signs.

01550 – ACCESS ROADS AND PARKING AREAS

All Contractor personnel and equipment shall enter and leave the project site via existing roads and trails. Upon the regrading, recontouring, or reclamation of any part of the site, further vehicular use shall be limited to that necessary to complete operations. Any access routes that are determined by the AML Program Project Engineer to be maintained throughout the project duration shall be left in as good or better condition than the condition before the start of the project. Existing roads and trails shall be used whenever possible.

Equipment shall be "walked" or operated cross-country to travel to work sites where roads do not exist. The Contractor shall advise the AML Program Cultural Resources Staff and obtain prior approval every time any road blading, clearing, or dozing is required for access. Topdressing shall be stripped and stockpiled before blading as directed by the AML Program. All unspecified roads, trails, or travel routes shall be regraded to approximate original contours, reclaimed, and revegetated, as necessary, in conformance with the specifications at no additional cost to EMNRD. Where directed by the AML Program Project Engineer, the Contractor shall build earthen berms to discourage vehicular traffic and to control erosion on closed temporary construction access roads.

01560 – TEMPORARY CONTROLS

The Contractor shall take all reasonable steps to reduce any inconvenience and disruption to the public because of this project. The Contractor shall provide the following temporary controls for the duration of the contract work.

01561 - CONSTRUCTION CLEANING

The Contractor shall keep the contract work area, equipment, and adjacent areas free from spillages of construction and maintenance materials during the contract work. The Contractor shall also provide for the containment of solid debris created by unpackaging construction materials and waste from meals consumed at the contract work site. The Contractor shall assure the cleanup and removal of all spillages and solid debris to an approved disposal site at the end of each contract workday.

01562 - DUST CONTROL

The Contractor shall take all necessary measures to control dust emanations from the construction equipment. The Contractor shall assure that the equipment used in the contract work is fitted with all standard dust control devices. To maintain the health and safety of project personnel, dust control measures at this site shall comply with all local, state, and federal health

and safety regulations. The Contractor shall be prepared to begin dust control measures anytime at the request of the AML Program. Water for dust control shall be distributed in sufficient quantity and at proper times by water trucks equipped with spray bars approved by the AML Program Project Engineer. The quantity of water required, and the frequency of watering shall be dependent upon the weather and the site's surface conditions and may vary throughout the project duration.

01563 - CONSTRUCTION AND IRRIGATION WATER

A water truck and operator shall be required for the duration of the project for dust control, compaction activities and reclamation irrigation. The Contractor shall provide a 10,000 gallon water tank on site for the duration of the project. The Contractor shall be responsible for all aspects of procuring and purchasing the necessary water and conveying it to where it is needed on the project. One possible source of water is from the City of Raton. More information about water sources and costs will be discussed at the pre-proposal site meeting.

01564 - NOISE CONTROL

The Contractor shall assure that all equipment used in the contract work is fitted with standard noise suppression devices.

01565 - FIRE PREVENTION AND SAFETY AWARENESS

The Contractor shall develop an emergency plan that will outline precautionary measures and identify initial attack resources and procedures in case of a fire incident. This plan will be submitted to the AML Program Project Engineer at the Pre-Construction meeting. The AML Program Project Engineer will then provide feedback about the plan. The Contractor shall provide the fire emergency plan to all individuals working on this project.

Examples of precautionary measures might be:

1. Inspect all motorized and mechanized equipment to insure mufflers and spark arresters are operating properly.
2. Insure personnel are properly trained on the safe use of welding torches, arc welders, generators, saws, power grinders, chainsaws, and other tools and are also familiar with the potential of this equipment to create hot sparks and ignite fires.
3. Avoid welding or cutting in areas next to and above flammable materials or during windy conditions. This would pertain to materials inside the mine as well as outside the mine. Welding shall not take place within 25 feet of polyurethane foam during application. After its application, welding shall not take place above it without first covering the surface with at least 6" of fill material.

Examples of resources and procedures might be:

1. Maintain adequate fire extinguishers, water tanks, sprayers, and other equipment at the work site that would enable personnel to immediately extinguish any accidental ignition.
2. Have personnel observe the work area while welders are operating (welders cannot see where the sparks are falling when he is under the welding hood).
3. Assign an individual to be responsible for the area being "safe" (no hot sparks, iron is cold) before leaving the work site.
4. Develop an emergency notification procedure in case the fire incident is or appears to be reaching an out-of-control status.

The Contractor shall obey all fire restrictions declared by the landowner(s) and shall take reasonable care to prevent fires

01566 - EQUIPMENT SAFETY & MAINTENANCE SPECIFICATION

I. Cleaning

All mobile equipment will be thoroughly washed to remove dirt, mud and weed seeds prior to bringing onto the site. The AML Program Project Engineer will inspect the condition of each piece of equipment prior to entry onto the site.

II. Maintenance

All mobile equipment will be thoroughly inspected for oil, hydraulic and fluid leaks prior to bringing onto the site. The AML Program Project Engineer will inspect the condition of each piece of equipment prior to entry onto the site.

III. Safety

All mobile equipment will be thoroughly inspected for safety and mechanical function (i.e., backup alarms, horn, lights, fire extinguishers, brakes and etc.) prior to bringing onto the site. The AML Program Project Engineer will inspect the condition of each piece of equipment prior to entry onto the site.

01570 – TRAFFIC REGULATION

The Contractor shall take the following measures for regulation of traffic at the contract work site.

01572 - FLAGGERS

The Contractor shall post flaggers during the off-loading and on-loading of equipment or materials in roadways at the contract work site. The flaggers shall halt traffic during the off-loading or on-loading process or direct traffic to an alternate route.

01574 - HAUL ROUTES

The Contractor shall consult with the authority having jurisdiction in establishing public thoroughfares to be used for haul routes and site access.

01580 – PROJECT IDENTIFICATION AND SIGNS

At least one temporary project sign shall be furnished and erected by the Contractor at the most convenient point of public access to the project site. The project identification sign shall be installed within ten working days after the receipt via certified mail of the Notice to Proceed or within five days after the Contractor initially mobilizes to the project site, whichever comes first. The sign is to be a minimum of four feet by eight feet by three quarter inch (4' x 8' x 3/4") exterior grade plywood and is to give the project title, project number, and other data within the box on the Title Page (Section 00001). Exterior quality paint in contrasting colors shall be used. The Contractor shall remove sign, framing, supports, and foundations at completion of Project and restore the area. The costs connected to the construction, painting, erection, and later removal of the sign should be covered under Bid Item No. 2, Mobilization, on the Bid Form.

01590 – FIELD OFFICES AND SHEDS

Portable or mobile buildings, or buildings constructed with floors raised above ground, may be provided by the Contractor in locations approved by the Project Manager and the landowner. At completion of work, the Contractor shall remove all buildings, foundations, utility services, and debris and restore areas.

01600 – MATERIALS AND EQUIPMENT

All materials and equipment required to complete the work shall be as specified. Any substitution to the specified products requires prior approval by the AML Program Project Engineer.

01700 – CONTRACT CLOSEOUT

The following sections specify the duties and responsibilities of the Contractor to close out the contract.

01701 - CONTRACT CLOSEOUT PROCEDURES

When work is completed, the Contractor shall submit project record documents to the AML Program Project Engineer.

01702 - FINAL INSPECTION

Upon written notice from the Contractor that the entire Work or an agreed portion thereof is complete, the AML Program Project Engineer will make a final inspection with the AML Program Project Manager and Contractor and will notify the Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. The Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

01710 - FINAL CLEANING

After completion of all work, the Contractor shall demobilize and remove all equipment, materials, spills, supplies, and trash from the project site and shall reclaim all areas disturbed by the Contractor's activities. Unless otherwise specified, developed, maintained roads that existed before commencement of the Contractor's activities need not be reclaimed, but must be left in a condition equal to or better than what existed before the Contractor's activities began. Fences, gates, plants, sod, and other surface materials disrupted by these operations shall be replaced or restored to original or better conditions immediately upon completion of work at the site. Other damage to private or public property shall be immediately repaired. All such cleanup, repair, or replacement work shall be done at the Contractor's expense and to the satisfaction of the AML Program Project Engineer pending approval of the appropriate public officials and property owners. Payment for Demobilization should be covered under Bid Item No. 2, Mobilization, on the Bid Form.

01720 – PROJECT RECORD DOCUMENTS

The Contractor shall prepare final Project Record Documents providing information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination. At Contract closeout, the Contractor shall deliver Project Record Documents and samples under provisions of Section 01701.

END OF DIVISION 1

DIVISION 2 – SITEWORK

The following sections describe the sitework to be performed under this contract.

02100 – SITE PREPARATION

02110 – SELECTIVE DEMOLITION & REMOVAL

Sections of damaged green turf reinforcement (TRM) designated in the plans shall be cut away and removed from the streambank. Care shall be taken to not damage sections of TRM where vegetation has been established. TRM and other trash and debris encountered during the project shall be properly disposed of at the Contractor's expense at an appropriate licensed landfill. All specified or established avoidance areas shall be avoided and the recommendations of the archaeological report and the State Historic Preservation Office (SHPO) will be followed.

02120 - SITE CLEARING

This work shall consist of clearing, grubbing, stripping, trimming, removing and disposing of vegetation and debris in accordance with these specifications, except those items designated to remain. This work shall also include the preservation from damage or defacement of all vegetation and items designated to remain.

The Contractor shall mark the limits of site clearing areas by means of stakes, flags, tree markings or other suitable methods. The Contractor shall notify the AML Program Project Engineer at least 5 days prior to any clearing and grubbing operations within such limits. No clearing and grubbing shall begin without the authorization of the AML Program Project Engineer. Trees to be left standing and uninjured shall be marked accordingly by placing a special mark on the trunk at a height of about six feet above the ground. Trees located partially in the path of construction shall be trimmed. Damaged trees shall be trimmed to remove broken limbs where minor damage has occurred.

Within construction limits for excavating the stream channel and placement of this material into floodplain benches, as well of footprints of stabilization structure placement, the following operations shall be completed, as required, and with the AML Program Project Engineer concurrence:

- **Clearing:** Clearing shall consist of the cutting, removing, disposing, and cleaning up of all brush, trees, logs, stumps, roots, heavy sod, vegetation, and rubbish above natural ground within designated work areas. Existing trees and other native vegetation designated for preservation shall be protected from damage and left undisturbed per this specification.
- **Grubbing:** Grubbing shall consist of the removal and disposal of all roots, stumps, or imbedded logs or objectionable debris/trash below natural ground within designated work

areas. Tree stumps and roots, not designated for preservation, shall be grubbed to a depth of 3 feet below natural ground. Brush and similar materials shall be grubbed to a minimum depth of 1 foot below natural ground.

- **Stripping:** Stripping shall consist of the complete removal of grass, weeds and all earth materials contaminated by organics within designated work areas. The Contractor shall strip all such materials regardless of the depth of material encountered to the AML Program Project Engineer.

All cleared materials shall be stockpiled in areas as designated by the AML Program). The Contractor shall coordinate stockpiling activities on nearby and more distant areas of the site as directed by the AML Program). Suitable cleared materials may be integrated into the stream and upland stabilization work to add roughness and/or habitat elements, as deemed appropriate by the AML Program Project Engineer. All other cleared materials not integrated into the stabilization projects shall be properly disposed of at the Contractor's expense at an appropriate licensed landfill.

02130 – SALVAGE OF NATIVE PLANTS

Before any area is disturbed for access, borrow, fill or other construction activities, the Contractor shall thoroughly scout the area for native plant species. All significant plants shall be avoided wherever practicable. Of those that need to be disturbed, the Contractor shall salvage those that can be replanted, as directed by the AML Program Project Engineer and as specified below.

Wherever existing native riparian vegetation (willows and grass-like wetland vegetation, sedges and rushes primarily) will be removed or destroyed during the course of construction, they must be removed, replanted or stored immediately in a safe location prior to construction. Plants will be replanted into appropriate planting areas noted on the plans. Salvage planting is to be utilized to augment primary forms of pole and container planting.

Salvage areas will be limited to areas that have an existing, relatively dense population of live stems in an area greater than 2 foot by 2 foot (approximate excavator bucket area), specifically:

- Areas greater than 2 foot by 2 foot with a relatively dense population of live wetland vegetation that are subject to future earthwork will be utilized for material salvage.
- Areas greater than 2 foot by 2 foot with shoots higher than 18 inches, and relatively dense population of live willow stems that are subject to future earthwork will be utilized for material salvage.

The salvaged plants shall be clump harvested and planted with the following guidance:

- Use an excavator to dig straight down and under to the willow or wetland vegetation clump root mass. Start the hole about 10 inches away from the stems and dig down about the depth of the bucket (approximately 2 feet). Try to get as much of the root mass as possible.

- If the planting site is close to the source, dig the clump and travel to the planting site with the clump in the bucket. Try to keep as much soil as possible around the root mass.
- If the planting site is a long distance from the harvest site, dig as many clumps as you can fit on a flatbed trailer and replant as quickly as possible. Do not allow clumps to dry out significantly. Transport the clumps to the planting site on the trailer. If it is sunny and hot, consider temporarily tarping the clumps to reduce sun exposure and potential drying during transport. Water the willow clumps when they arrived at the planting site if it will be some time before clumps can be planted. Avoid leaving the clumps in the sun for long periods.
- Soil conditions will vary from site to site. In some situations, you will be able to plant the clumps without pre-digging the planting hole by pushing the soil out of the hole with the bottom of the backhoe bucket and then dropping the clump into this hole. Under more difficult soil conditions or where the water table is deep, you will need to pre-dig the holes to put the willow clumps in. Dig the holes deep enough so you are just at the standing water table. You want to have at least 18 inches of the willow stems sticking out of the ground when you are finished planting the clump.
- Pull the clumps off the trailer with a thumb on the backhoe or with the front-end bucket and drop them in the holes. Fill in the hole with soil and water. Mud-in the willow clumps so there are no air pockets around the root mass.
- The last step is to take a set of loppers and cut off about one third to one half of the willow tops straight across. This decreases the amount of stem that the reduced root mass will have to support. It also stimulates a dense regrowth of stems and leaves that will speed up the photosynthesis process to grow additional roots, stems, and leaves and store energy in the root mass. Wetland plugs do not require trimming.
- Spacing between the willow clumps should be about 6-12 feet, depending on clump size and desired planting density. Spacing of wetland clumps is 2-4 feet.

02200 – EARTHWORK

The following sections describe the earthwork to be performed under this contract. This work shall include the supply of all labor, materials, and equipment required to complete site excavation and shaping, and hauling and spreading as shown on the plans and to the requirements of this construction specification.

02210 – EXCAVATION & SHAPING OF STREAM CHANNEL & POINT BARS

Prior to excavation activities, the work area shall be prepared under provisions of Section 02100. The stream channel shall be excavated and shaped to the lines and grades shown on the plans, regardless of bed material encountered (i.e. bedrock, rock, cobble, soil, etc.). When bedrock is encountered during excavation operations, the contractor shall immediately inform the AML Program Project Engineer to determine any ramifications to the overall channel design and structure placement (See Section 02300). Materials excavated as part of stream channel excavation and shaping that conform to the material requirements for fill, shall be used to the

construct floodplain benches as shown in the plans (See Section 02212). Surplus/overburden or unsuitable material shall be disposed of in accordance with Section 02214. Areas that have been over-excavated shall be replaced with suitable materials compacted to a density at least equal to that of the in-situ material or to the satisfaction of the AML Program Project Engineer.

02211 – EXCAVATION OF STRUCTURE KEYWAYS

Prior to excavation activities, the work area shall be prepared under provisions of Section 02100. Key-ways for placement of stabilization structure boulders, graded rock, and associated crushed rock filter/bedding shall be excavated and shaped such that finished structure surfaces conform to the lines and grades shown on the plans, regardless of bed material encountered (i.e. bedrock, rock, cobble, soil, etc.). When bedrock is encountered during excavation operations, the contractor shall immediately inform the AML Program Project Engineer to determine any ramifications to the overall channel design and structure placement (See Section 02300). Materials excavated as part of key-way excavation that conform to the material requirements for fill, shall be used to construct floodplain benches as shown in the plans (See Section 02212). Surplus/overburden or unsuitable material shall be disposed of in accordance with Section 02214. Areas that have been over-excavated shall be replaced with suitable materials compacted to a density at least equal to that of the in-situ material or to the satisfaction of the AML Program Project Engineer.

02212 – CONSTRUCTION OF FLOODPLAIN BENCHES

Prior to placing fill material in designated bench areas, the work area shall be prepared under provisions of Section 02100. Bedrock, rock, cobble, and soil excavated as part of stream channel and keyway construction shall be used to construct floodplain benches on channel meanders as shown in the plans. Fill material shall be placed in approximately horizontal layers beginning at the lowest elevation of the foundation. The thickness of each layer before compaction shall not exceed 12-inches. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified thickness before being compacted. Benches shall be compacted per Section 02213. The distribution of materials throughout each zone shall be essentially uniform, and the earthfill shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material. Large pieces of excavated bedrock and/or boulders/rocks larger than 24” shall be strategically integrated into the benches to enhance/augment stream stabilization elements, as directed by AML Program Project Engineer.

02213 – COMPACTION

Material used for fill shall be compacted whenever possible using multiple passes with available heavy equipment and additional water if necessary, to attain soil densification. The fill shall obtain a compaction density not less than what the equipment can reasonably obtain to the satisfaction of the AML Program Project Engineer.

Hand compacted backfill shall be placed in layers whose thickness before compaction does not exceed the maximum thickness specified for layers of earth backfill compacted by manually directed power tampers. Unless otherwise specified, heavy equipment, including backhoe mounted power tampers or vibrating compactors and manually directed vibrating rollers, shall not be operated within 2 feet of any structure. Compaction within 2 feet of any structure will be by hand tamping, hand operated mechanical tamper, or other methods approved by the AML Program Project Engineer

02214 – DISPOSAL OF UNSUITABLE OR SURPLUS/OVERBURDEN MATERIALS

Surplus/overburden or unsuitable excavated material shall be transported the final disposal area/facility. All haul roads, access roads and temporary crossings are to be removed.

02215 – SHAPING OF UPLAND CHANNELS

Prior to channel shaping activities, the work area shall be prepared under provisions of Section 02100. Material excavated from cutbanks shall be placed into the flowline of the associate channel and compacted per Section 02213. Where possible, vegetation on the cutbanks shall be salvaged, placed in the flowline after grades have been achieved, “muddied” with water, and compacted to remove air pockets/voids. Fill shall be placed in approximately horizontal layers beginning at the lowest elevation of the foundation. The thickness of each layer before compaction shall not exceed 12-inches. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified thickness before being compacted. The distribution of materials throughout each zone shall be essentially uniform, and the earthfill shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material.

02220 - FINAL GRADING

The final surface provided in the drawing sets correspond to the final graded plan. Geomorphic grading/re-contouring requires that specified tolerances be met. In final shaping of the surface of earthwork, maintain a tolerance of 0.25 foot (3 inches) above or below the plan grades.

All finished surfaces shall be generally smooth and blend into surrounding terrain. All areas disturbed by the Contractor during construction operations shall be bladed smooth, shaped, and compacted. The construction, maintenance, and removal of all haul roads from the borrow areas shall be the responsibility of the Contractor and be considered incidental to the work.

Should fill settlement occur during the construction of the fill and within seven days of substantial completion, and prior to acceptance of the work, additional material shall be placed and trimmed to achieve final grade by the Contractor at his or her own expense.

The final digital files for the graded design surface and the existing surface are available to the Contractor from the AML Program Project Engineer.

02230 - DECOMPACTION

Before construction demobilization and following the need for any construction access to each abandoned mine site, the Contractor shall decompact areas compacted by construction activity, including temporary work areas and access trails, and staging, storage and parking areas. After final grading, all cut and fill areas shall also be decompact.

Where bedrock is exposed at the surface, such decompaction will not be required. Decompaction methods shall be effective at reducing soil density to a minimum depth of twelve inches (except where bedrock is closer to the surface) and shall be accomplished without inverting the soil layers. Wherever practicable, ripping shall be done along the contour.

02250 – PERMITTING

The Contractor is responsible for acquiring the permits specified in the General Notes in the last page of each of the drawing sets. A summary of these include: Storm Water Pollution Prevention Plan (SWPPP); Materials and Waste Management Plan; and a Spill Prevention, Control and Countermeasures (SPCC) Plan or Spill Prevention and Control Plan (SPC).

02300 – STREAM STABILIZATION ELEMENTS

The following sections describe the construction of elements used to stabilize the stream corridor to be performed under this contract.

02310 – BOULDER STRUCTURES

The work shall include the supply and transport of all labor, material, and equipment to successfully construct boulders in the stream corridor, as shown on the plans and to the requirements of this construction specification. Boulder structures include Cross Vanes, Clusters, and Basins.

Boulder Structures shall be constructed of the following materials:

- **Crushed Bedding/Filter Rock** - The Contractor shall supply all crushed rock required for constructing filters, bedding, and aprons for boulder structures. Rock shall be approximately 3-inch minus consisting of clean crushed rock, sand and fines as is available from local sources.
- **Boulders** - Boulders shall be obtained from local sources, as approved by the AML Program Project Engineer. Individual boulders shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. Except as otherwise specified, the boulders shall be angular to sub-rounded. The least dimension of an individual boulder shall be not less than one-third the

greatest dimension of the boulder. Boulders shall be selected and processed to meet the specified quality and grading requirements at the time the rock is installed. Boulder materials shall be 48-inch nominal diameter, unless otherwise noted in the plans.

At least 30 days before rock materials are delivered, the contractor shall designate, in writing, the source from which rock material will be obtained and provide information satisfactory to the AML Program Project Engineer that the material meets contract requirements. The Contractor shall provide the AML Program Project Engineer free access to the source for the purpose of obtaining samples for testing.

Boulders shall be keyed-in per Section 02211, placed, and oriented such that finished rock surfaces conform to the lines and grades as specified on the plans. Boulders shall be placed on a compacted soil or crushed rock bedding, as shown on the plans, to the depth specified to provide maximum stability, foundation competence, and geometry as shown on the construction plans. The rock should be placed with the proper equipment to ensure that the rocks are interlocked and stable. Fill gaps and voids of the boulder structures with crushed rock to minimize piping of water through the structures. Smaller rocks and spalls shall fill the voids between the larger rocks. Some hand placing may be required to provide a neat and uniform surface.

02320 – GRADED ROCK STRUCTURES

The work shall include the supply and transport of all labor, material, and equipment to successfully construct graded rock structures in the stream corridor, as shown on the plans and to the requirements of this construction specification. Graded Rock Structures include Basins, Riffles, Sills, and Stream Barbs.

Graded Rock Structures shall be constructed of materials fulfilling the following requirements. Individual rock fragments shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. Except as otherwise specified, the rock fragments shall be angular to sub-rounded. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment. ASTM D 4992 provides guidance on selecting rock from a source. Except as otherwise provided, the rock shall be tested and shall have the following properties:

- Bulk specific gravity (saturated surface-dry basis)—Not less than 2.5 when tested in accordance with ASTM C 127 on samples prepared as described for soundness testing.
- Absorption—Not more than 2 percent when tested in accordance with ASTM C 127 on samples prepared as described for soundness testing.
- Soundness—The weight loss in 5 cycles shall not be more than 10 percent when sodium sulfate is used or more than 15 percent when magnesium sulfate is used.

It shall be free from dirt, clay, sand, rock fines, and other material not meeting the required gradation limits. Rock from approved sources shall be excavated, selected, and processed to

meet the specified quality and grading requirements at the time the rock is installed.

At least 30 days before rock materials are delivered, the contractor shall designate, in writing, the source from which rock material will be obtained and provide information satisfactory to the AML Program Project Engineer that the material meets contract requirements. The Contractor shall provide the AML Program Project Engineer free access to the source for the purpose of obtaining samples for testing. Graded rock in areas where hand placement is required shall have a D₅₀ of 18-inches. All other graded rock shall have a D₅₀ of 24-inches.

Graded rock shall be installed to the full course thickness in one operation and in such a manner as to avoid serious displacement of the underlying material. The rock shall be delivered and placed in a manner that ensures a reasonably homogeneous surface with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between the larger rocks. All rock shall be keyed-in such that finished rock surfaces conform to the plan sections.

02330 – COIR LOGS

The work shall include the supply and transport of all labor, material, and equipment to successfully complete the placement erosion protection coir logs. Coir logs shall be biodegradable 12-inch diameter cylindrically shaped rolls with 100% coconut fiber (mattress coir) inner core fill and brown bristle coir twine outer netting (Rolanka BioD-Roll™ 30H or approved equal). Logs shall be machine manufactured to conform to the following properties:

Property	Value	Unit
Unit Weight	7	lb./ft
Density	9	lb./ft ³
Length	10	ft
Diameter	12	in.
Outer Net Opening	2 x 2	in. x in.
Outer Net Tensile Strength	90	lb.

Stake/Dead-Stout fasteners used to secure the coir logs shall be untreated 2 x 4-inch untreated lumber cut to a minimum length of 24 inches for Coir Logs. Each length shall be cut diagonally across the 4-inch face, to produce two dead stout stakes. The diagonal cut shall begin and end 1/8 to 1/4 inch from the edge of the piece, so the finished stake has a 1/8 to 1/4-inch tip. Only new, sound lumber should be used, and any stakes that shatter upon installation should be discarded.

Twine used to connect coir log sections shall be biodegradable machine twisted bristle coir fiber (Rolanka BioD-Twine™ or approved equal). The diameter of coir twine shall be 6 mm (0.24 in) and the twine tensile strength is 90 lbs.

The manufacturer's special handling requirements for all materials shall be strictly observed. Coir logs shall be embedded and integrated into the bank toe at key locations, as shown in the plans, to provide additional long-term erosion protection and water harvesting functions as the native vegetation establishes. Coir logs shall be embedded/keyed into the streambank such that 2/3 of the roll diameter is buried and 1/3 is exposed. The rolls shall be tied together, end-to-end, using coir twine to form a continuous unit. Rolls shall be anchored using dead stout stakes placed in pairs, spaced 2-ft on center for logs. The log shall be seated securely between the stake pairs by tightly “sandwiching”. Stakes shall not pierce the log, but instead be placed between the log and associated netting.

02400 – UPLAND STABILIZATION ELEMENTS

The following sections describe the construction of elements used to stabilize upland landforms to be performed under this contract.

02410 – LOW IMPACT GRADED ROCK STRUCTURES

The work shall include the supply of all labor, material and equipment required to complete the construction of low impact grade rock structures. Low Impact Graded Rock Structures include Rock Mulch Rundowns, Media Lunas, One Rock Dams, and Zuni Bowls.

Low Impact Graded Rock Structures shall be constructed of materials fulfilling the following requirements. Individual rock fragments shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. Except as otherwise specified, the rock fragments shall be angular to sub-rounded. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment. ASTM D 4992 provides guidance on selecting rock from a source. Except as otherwise provided, the rock shall be tested and shall have the following properties:

- Bulk specific gravity (saturated surface-dry basis)—Not less than 2.5 when tested in accordance with ASTM C 127 on samples prepared as described for soundness testing.
- Absorption—Not more than 2 percent when tested in accordance with ASTM C 127 on samples prepared as described for soundness testing.
- Soundness—The weight loss in 5 cycles shall not be more than 10 percent when sodium sulfate is used or more than 15 percent when magnesium sulfate is used.

It shall be free from dirt, clay, sand, rock fines, and other material not meeting the required gradation limits. Rock from approved sources shall be excavated, selected, and processed to meet the specified quality and grading requirements at the time the rock is installed.

At least 30 days before rock materials are delivered, the contractor shall designate, in writing, the source from which rock material will be obtained and provide information satisfactory to the AML Program Project Engineer that the material meets contract requirements. The Contractor shall provide the AML Program Project Engineer free access to the source for the purpose of obtaining samples for testing. Graded rock for low impact structures shall have a D₅₀ of 10-inches.

Graded rock shall be installed to the full course thickness in one operation and in such a manner as to avoid serious displacement of the underlying material. The rock shall be delivered and placed in a manner that ensures a reasonably homogeneous surface with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between the larger rocks. All rock shall be keyed-in such that finished rock surfaces conform to the plan sections.

02500 – NATIVE PLANTINGS

The work shall include the supply and transport of all labor, material, and equipment required for planting native vegetation and native seeds as shown on the plans and to the requirements of this construction specification.

02510 – WETLAND PLUG PLANTINGS

The work shall include the supply and transport of all labor, material, and equipment required for placing wetland vegetation plugs, as shown on the plans and to the requirements of this construction specification.

The AML Program will be ordering all wetland plugs for the project and the Contractor shall be responsible for purchasing and picking up the plugs from the Santa Ana Native Plant and Tree Nursery and delivering the ordered plugs to the site. Plugs will be from native species adapted to the region, and will include:

Species	Common Name	Planting Notes
<i>Eleocharis palustris</i>	common spikerush	4" plugs; planted 2' o.c.; must plant in saturated soil; 4" of live plant material must be left above water surface; 2" max water depth for planting;
<i>Juncus balticus</i>	Baltic rush	4" plugs; planted 2' o.c.; must plant in saturated soil not below water surface;
<i>Juncus torreyii</i>	Torrey's rush	4" plugs; planted 2' o.c.; must plant in saturated soil not below water surface;

All wetland plugs must stay wet until planting. Individual plugs shall be stored in the shade in

lined containers standing in 2-3 inches of water. All plugs shall be checked daily to ensure proper moisture requirements. All wetland plugs must stay wet until planting. Individual plugs shall be stored in the shade in lined containers standing in 2-3 inches of water. All plugs shall be checked daily to ensure proper moisture requirements.

Plugs shall be planted in wetland planting areas designated on the plans using spacing dimensions and planting directions supplied in the table above and on the plans.

Plugs shall be installed by creating a hole with a spade or dibble, placing the plants in the hole and firmly packing the soil around them. Plants allowed to float to the surface following installation shall result in rejection of the installation. The bottom of the plug shall be in contact with the saturation zone. Plugs need to be planted in permanently saturated soil.

Plugs shall be planted 2 feet on center in two offset (staggered) rows. The first row (closest to or in the water) shall be common spikerush. It may be planted at the water's edge or in standing water up to 2" deep up as long as 4-inches of live plant material is left above the water surface. The second row shall consist of the two rush (*Juncus*) species which shall be planted at the water's edge or higher so long as they are in saturated soil. The rush species shall be planted in groups or patches that consist of a single species which mimics native plant communities. The minimum patch size for any one species shall be 10-feet in length.

02520 – DORMANT RIPARIAN POLE PLANTINGS

The work shall include the supply and transport of all labor, material, and equipment required for placing dormant riparian cuttings, as shown on the plans and to the requirements of this construction specification.

The AML Program will be ordering all dormant cuttings for the project and the Contractor shall be responsible for purchasing and picking up the cuttings from the Santa Ana Native Plant and Tree Nursery and delivering the ordered cuttings to the site. The live cuttings ordered by the AML Program will be from native woody plant materials or woody plant materials adapted to the site. Shrub willow species will include sandbar willow (*Salix exigua*) and Bebb willow (*Salix bebbiana*). Tree species will include narrowleaf cottonwood (*Populus angustifolia*), Rio Grande cottonwood (*Populus deltoides*) and peachleaf willow (*Salix amygdaloides*).

Placement shall not begin until approval is given by the AML Program Project Engineer. Plantings shall be placed within the limits as indicated on the drawings or as staked in the field by the AML Program Project Engineer. Planting of cuttings shall occur during the dormant season after leaf fall and before bud burst in the spring. Container plantings shall occur in the fall.

Method 1 – Shrub Willow Pole Clusters

Willow pole clusters shall use dormant cuttings from sandbar (*Salix exigua*) or Bebb willow (*Salix bebbiana*) and shall be planted in planting zone as shown on the plans. Willow pole

clusters shall consist of 3 poles per cluster that are planted into larger holes excavated by either a mini excavator with a 4" wide 6' long auger, a mechanized two-man auger, or water jet augers. After the holes are augured, clusters of three poles will be placed down to the lowest water table of the year, a step that is critical to pole survival. The lowest water table of the year will be considered the level of groundwater during the driest time of year, typically November through February for the project area. While the lowest portion of the pole remains in saturated soil, the remainder of the pole needs to be in soil that is not fully saturated for most of the year. After the placement of pole clusters, holes shall be filled with soil-water slurry resulting in full soil to stem contact; root primordia develops when good soil-to-stem contact is made. The exposed pole will then be cut to a height of approximately 18 inches, ensuring there are at least three to four exposed budding nodes. When planting is complete, all willow poles will be thoroughly hand watered. This will increase soil to stem contact and reduce the amount of air pockets in the planting hole, improving planting success.

Method 2 – Shingled Shrub Willow Fascine

A shingled fascine is a long bundle of live willow poles bound together into a 6 to 8 ft bundle. The structure provides immediate protection against surface erosion. The structures break up flows and collect sediments when placed along the toe of a bank. The live cuttings eventually root and provide permanent reinforcement. This bio engineering practice is intended to be utilized in combination with coir logs placed along the toe of an eroding bank. Coir logs should be used in combination with boulders and cobble placed in front of and on top of the log to reduce flow velocity.

Willow poles shall be dormant cuttings from sandbar (*Salix exigua*) and Bebb willow (*Salix bebbiana*). Bundles consist of 6-8 willow poles bundled together and buried in a shallow trench on a sloped bank. Bundles are tied approximately every 2 feet with a natural, untreated material like twine, coir or jute.

- Collect and soak cuttings.
- Tie bundles of 6 or more poles with string or wire at approximate 1.5 to 2-foot increments. The bundle should be 6 + inches in diameter.
- Start installation along the toe of the slope at the bottom of the reach.
- Align the fascine along the toe contour behind the coir wattle.
- Excavate a hole into permanently wetted soil to place the upstream butt end of the bundle.
- Place bundle in hole and stake (use wedge shaped dead stakes) through the bundle at approximately 2 to 4-foot centers. Allow stake to protrude 3 inches above top of bundle. Downstream end of the bundle should rise above the bankfull elevation at a shallow angle.
- Repeat the process with the next bundle upstream. Overlap the downstream end of the bundle over the butt end of the downstream bundle by 1.5 to 2 feet. Continue to upstream end of reach.
- Cover the brush with soil, then wash in to assure good soil to stem contact. Some of the

- stems should remain exposed to sunlight to promote sprouting. Use material from next, upslope trench.
- Since this is a surface treatment, it is important to avoid sites that will be too wet or too dry. Butt ends of the bundle should be in permanently wet soil and downstream end should extend above bankfull elevation.

Method 3 – Cottonwood and Tree Willow Post Plantings

Post Plantings shall use dormant cuttings from narrowleaf cottonwood (*Populus angustifolia*), Rio Grande cottonwood (*Populus deltoides*) or peachleaf willow (*Salix amygdaloides*) and shall be planted in planting zones shown on plans using the spacing shown on the plans. Post plantings utilize larger diameter cuttings that are planted into holes excavated by a post-hole digger, power auger or backhoe. Place 3 posts into each hole. If posts are planted on a steep bank, rather than a flat point bar, posts shall be driven into the bank at a 45 degree angle to the water surface; ensuring eroding bank material does not damage stems or cause the post to become exposed and erode out of the bank. Post plantings will be placed down to the lowest water table of the year. The top of cottonwood posts shall be extended 1-3 feet above the level of high water. Backfill posts with a water and soil slurry. For fine-grained clayey soils, it is necessary to add 50% small gravels (d50=50mm) and sand to amend and loosen the soil.

02530 – SEEDING

The work shall include all labor, material, and equipment required for placing seed as shown on the plans and to the requirements of this construction specification. Additionally, upland seed will be applied to all disturbed areas in the vicinity of the work, staging and stockpile areas, disposal areas, borrow areas, haul roads and other areas which have been disturbed during construction.

The seed mixtures in the following tables shall be used and applied as designated on the plans. Seed shall be ordered by the AML Program. The Contractor shall be responsible for purchasing and coordinating delivery of the native seed ordered by the AML program.

Seed shall be stored in a cool, dry location that is secure from pests until the day of application. Seed to be applied on a particular day shall be stored in the shade. Seed mix species, composition and rates are shown in the tables below. Due to the relatively low seeding rates, it may be necessary to use a seed extender such as rice hulls, natural corn cobs, or medium-grade vermiculite to meet PLS lbs/acre rates described in the tables below.

Riparian Seeding Mix and Rates

Species	Common Name	PLS lbs/acre
Graminoids		
<i>Bromus ciliatus</i>	Fringed brome	6
<i>Elymus glaucus</i>	Blue wildrye	4
<i>Muhlenbergia asperifolia</i>	Scratchgrass	0.8

<i>Distichlis spicata</i>	Inland Saltgrass	1.5
<i>Juncus arcticus (balticus)</i>	Baltic Rush	0.3
<i>Eleocharis palustris</i>	Common spikerush	0.6

Upland Seeding Mix and Rates

Species	Common Name	PLS lbs./acre
Graminoids		
<i>Achnatherum hymenoides</i>	Indian ricegrass	2
<i>Bouteloua curtipendula</i>	Sideoats grama	0.7
<i>Bouteloua gracilis</i>	Blue grama	0.5
<i>Bromus ciliates</i>	Fringed brome	1.5
<i>Elymus trachycaulus ssp. trachycaulus</i>	Slender wheatgrass	1.5
<i>Nassella viridula</i>	Green needlegrass	1.5
<i>Pascopyrum smithii</i>	Western wheatgrass	2.5
<i>Pleuraphis jamesii</i>	James galleta	1
<i>Schizachyrium scoparium</i>	Little bluestem	0.6
<i>Sporobolus cryptandrus</i>	Sand dropseed	0.3
Forbs		
<i>Artemisia frigida</i>	Fringed sagebrush	0.02
<i>Artemisia ludoviciana</i>	Prairie sage	0.03
<i>Achillea millefolium var. occidentalis</i>	Western yarrow	0.05
<i>Heliomeris multiflora</i>	Showy goldeneye	0.03
<i>Dalea purpurea var. purpurea</i>	Purple prairie clover	0.1
<i>Cleome serrulata</i>	Rocky Mountain beeplant	0.2
<i>Ratibida columnifera</i>	Prairie coneflower	0.1
<i>Ipomopsis aggregata</i>	Scarlet gilia	0.5
Shrubs		
<i>Ericameria nauseosa</i>	Rubber rabbitbrush	0.1
<i>Krascheninnikovia lanata</i>	Winterfat	0.2
<i>Robinia neomexicana</i>	New Mexico locust	3.0
<i>Rosa woodsii</i>	Wood's rose	1.0
<i>Rhus trilobata</i>	Fragrant sumac	0.8

Final grade all disturbed areas with a rough surface to facilitate seed entrapment, moisture retention and erosion control with approved equipment. A rough seed bed is the goal with the ripped furrows approximately 6-inches deep. In areas where equipment cannot be operated, the seedbed shall be prepared by hand. Seeding shall be conducted immediately after ripping and final seed bed preparation to prevent the formation of a soil crust that may develop after a precipitation event. The AML Program Project Engineer will inspect and approve the seed bed immediately prior to seeding activities. Seed bed preparation shall be completed only on those acreages that can be reasonably seeded the following day. Note: wetland planting areas will not be ripped to 6-inches, rather these areas shall be hand raked or mechanically raked using an ATV pulling a harrow to provide soil surface texture. Seeding shall occur prior to planting plugs or live plant materials.

All seeding operations shall be performed in such a manner that the seed is applied in the specified quantities uniformly in the designated areas at an application rates described in section 2.1 above. Seed bed shall be adequately prepared as described in section 3.1 above. Seed shall be incorporated into the soil, but not more than 0.5 to 1-inch deep. The time period for seeding shall be during fall/winter dormancy, immediately prior to onset of monsoon rains, or other dates as approved by the AML Program Project Engineer. Seeding will primarily be accomplished with a broadcast seeder on a tractor, ATV or by hand. Seed shall be broadcast on all disturbed areas. Selection of appropriate seed application measures will depend on site-specific conditions and will be determined in consultation with the AML Program Project Engineer. Seeding methods and calibration of application rates shall be approved by the AML Program Project Engineer to application. If seed establishment does not meet AML standards, additional seed applications may be requested by the AML Program Project Engineer.

02540 – MULCHING

Mulch shall be placed over all seed to reduce soil erosion and provide a good environment for vegetative regrowth. There are three options for mulch placement:

- i. A biodegradable erosion control blanket (ECB) made of jute, coir, straw, coconut or other natural material with all-natural netting may be placed over the **upland** seed as specified below in the designated seeding areas. ECB may **not** be placed over riparian seed.
- ii. Hydromulch (a slurry of mulch and other admixtures sprayed over the seed) may be placed over both the upland and riparian seed as specified below in the designated seeding areas. However, some areas may not be accessible to the hydromulching equipment.
- iii. Hand placement of straw mulch which is then covered with M-binder tackifying agent may be placed over both the upland and riparian seed as specified below in the designated seeding areas.

Double Net Straw ECB

Biodegradable erosion control fabric made of jute, coir, straw, coconut or other natural material with all-natural netting shall be placed over the upland seed in the designated planting

areas for protection and to provide a good environment for vegetative regrowth. Areas of revegetation requiring coverage with erosion control fabric will be marked on the plans.

Erosion Control Blanket (ECB) containing 100% certified weed free straw with double net biodegradable netting and thread (Western Excelsior SS-2 Straw Erosion Blankets - All-Natural Netting or comparable) for short-term erosion control shall be used. ECB shall meet the following properties:

Property	Test Method	Value	Unit
Tensile Strength	ASTM D6818	16 (MD), 11 (TD)	lb/in
Elongation	ASTM D6818	20 x 20	%
Mass per Unit Area	ASTM D6475	8	oz/yd ²
Thickness	ASTM D6525	7	mm
Light Penetration	ASTM D6567	22	% open
Water Absorption	ASTM D1117	450	%

Double Net Fabric shall be laid and anchored over the upland seed mix to reduce soil erosion and provide a good environment for vegetative regrowth. The Contractor shall install the fabric, including fasteners, anchors, overlaps, etc., in strict accordance with the manufacturer's instructions and plans.

Hydromulch

Hydromulch shall consist of a Flexible Growth Medium such as Flexterra HP-FGM or a similar product meeting the standards in the table below. Product substitutions shall be approved by the AML Program or its agent.

Property	Test Method	Tested Value (English)
Physical		
Mass Per Unit Area	ASTM D6566 ¹	≥ 11.6 oz/yd ²
Thickness	ASTM D6525 ¹	≥ 0.22 inch
Ground Cover	ASTM D6567 ¹	≥ 99%
Water Holding	ASTM D7367	≥ 1,700%
Material Color	Observed	Green
Performance		
Cover Factor ²	Large Scale	≤ 0.01
% Effectiveness ³	Large Scale	≥ 99%
Cure time	Observed	0 - 2 hours
Vegetation	ASTM D7322 ¹	≥ 800%
Functional Longevity ⁵	ASTM D5338	≤ 18 months
Environmental		
Ecotoxicity	EPA 2021.0	48-hr LC ₅₀ > 100%

Effluent Turbidity	Large Scale	≤ 250 NTU
Biodegradability	ASTM D5338	Yes

Hydromulch may be applied over both seed mixes. Hydromulch shall be applied by experienced personnel and will meet the following requirements:

- Hydraulic equipment used for application shall have built-in agitators that will keep mixture homogeneously mixed until pumped from the tank. Pump pressure shall be such as to maintain a continuous, non-fluctuating stream of the slurry.
- A Flexible Growth Medium (FGM) will be applied to the specified seed mix as specified below. The FGM shall meet the standards in the table above or be approved by the AML Program or its agent.
- Calibration of application rates shall be approved by the AML Program or its agent prior to application.
- The Flexible Growth Medium (FGM) described above will be applied to the seed mixture as described below. FGM will be applied at a rate of 3,500 lbs/acre for slopes ranging from 3:1 to 2:1. FGM will be applied at a rate of 4,000 lbs/acre for slopes ranging from 2:1 to 1:1. Slopes greater than 1:1 will receive FGM at a rate of 4,500 lbs/acre. Application and loading procedures are specified below for Flexterra HP-FGM.
- Strictly comply with equipment manufacturer's installation instructions and recommendations. Use approved hydro-spraying machines with fan-type nozzle (50-degree tip) whenever possible to achieve best soil coverage. Apply from opposing directions to assure 100% soil surface coverage. Slope interruption devices may be needed for slopes over 3:1. Consult manufacture's recommendations.
- To ensure proper application rates, measure and stake area.
- Apply FGM at a rate of 50 pounds per 125 gallons. Consult manufacturer's loading rates.
- Fill 1/3 of mechanically agitated hydroseeder with water. Turn pump on for 15 seconds and purge and pre-wet lines. Turn pump off.
- Turn agitator on and slowly filling tank with water while loading fiber matrix into tank.
- FGM should be completely loaded before water level reaches 75% of the top of tank.
- Top off with water and mix until all fiber is fully broken apart and hydrated (minimum of 10 minutes—increase mixing time when applying in cold conditions).
- Shut off recirculation valve to minimize potential for air entrainment within the slurry.
- Slow down agitator and start applying with a 50-degree fan tip nozzle.
- Spray in opposing directions for maximum soil coverage.

Hand Placement of Mulch

Straw mulch shall consist of wheat, barley, oat or rye straw, hay, grass cut from native grasses, or other plants as approved by the AML Program. The mulch material shall be air-dry and shall not be musty, moldy, caked, or otherwise of low quality. The straw mulch shall be certified weed free. All areas receiving mulch treatments will be treated with M-binder tackifier-soil stabilizer. Product substitutions shall be approved by the AML Program. M-binder shall meet the technical specifications below

M-binder Technical Specifications

Protein content	1.62
Ash content	2.70
Fiber	4.00
pH of 1% solution	6.80
Settleable solids	5.00

Mulch shall be applied within 2 to 3 days of seeding. Mulch shall be applied uniformly over seeded areas at a rate of 1.5 to 2 tons per acre. Mulch layer should be less than 1-inch thick and should cover 75-85% of the soil surface. M-binder shall be applied uniformly over the straw mulch at a rate of 200 lbs/acre. M-binder can be applied as a dry powder or as a wet slurry. M-binder shall be applied in accordance with manufacturer's recommendations.

02990 – SUBMITTALS

Complete data and specifications for the results of the soil analysis, in-place soil density results, wood mulch (if use of other than the products specified is proposed) and accessories shall be submitted in accordance with the procedure set forth in Section 01340.

END OF DIVISION 2

This page was intentionally left blank