



Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# State of West Virginia Purchase Order

CORRECT ORDER NUMBER MUST APPEAR  
 ON ALL PACKAGES, INVOICES, AND  
 SHIPPING PAPERS. QUESTIONS  
 CONCERNING THIS ORDER SHOULD BE  
 DIRECTED TO THE DEPARTMENT  
 CONTACT.

Order Date: 07-09-2025

<b>Order Number:</b>	CPO 0313 0313 DEP2600000001 1	<b>Change Order No:</b>	<b>Procurement Folder:</b>	1257505
<b>Document Name:</b>	EOI - 2023 AML Contract N4	<b>Reason for Modification:</b>		
<b>Document Description:</b>	EOI - 2023 AML Contract N4			
<b>Procurement Type:</b>	Central Purchase Order			
<b>Buyer Name:</b>	Joseph (Josh) E Hager III			
<b>Telephone:</b>	(304) 558-2306			
<b>Email:</b>	joseph.e.hageriii@wv.gov			
<b>Shipping Method:</b>	Best Way	<b>Effective Start Date:</b>	2025-07-11	
<b>Free on Board:</b>	FOB Dest, Freight Prepaid	<b>Effective End Date:</b>		

VENDOR		DEPARTMENT CONTACT			
<b>Vendor Customer Code:</b>	VC0000099853	<b>Requestor Name:</b>	Jessica S Chambers		
RESPEC COMPANY LLC		<b>Requestor Phone:</b>	(304) 414-1140		
3824 JET DRIVE		<b>Requestor Email:</b>	jessica.s.chambers@wv.gov		
RAPID CITY	SD	<h1>2026</h1> <p>FILE LOCATION _____</p>			
US	577090725				
<b>Vendor Contact Phone:</b>	0000000000			<b>Extension:</b>	
<b>Discount Details:</b>					
	<b>Discount Allowed</b>	<b>Discount Percentage</b>	<b>Discount Days</b>		
#1	No	0.0000	0		
#2	Not Entered				
#3	Not Entered				
#4	Not Entered				

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US	ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US

*CR 7-10-25*

**Total Order Amount:** \$10,729,764.00

Purchasing Division's File Copy

<b>PURCHASING DIVISION AUTHORIZATION</b> DATE: <i>7/9/25</i> ELECTRONIC SIGNATURE ON FILE	<b>ATTORNEY GENERAL APPROVAL AS TO FORM</b> DATE: <i>7/11/25</i> ELECTRONIC SIGNATURE ON FILE	<b>ENCUMBRANCE CERTIFICATION</b> DATE: <i>7-11-25</i> ELECTRONIC SIGNATURE ON FILE
---	---	--

**Extended Description:**

The vendor, RESPEC Company LLC., agrees to enter into this contract with the agency, The West Virginia Department of Environmental Protection, for Design Engineering Services for the 2023 AML Contract 4 Projects - North, per the specifications, terms and conditions and the vendors submitted cost proposal and negotiated scope of work dated 5/14/2025, all incorporated herein by reference and made a part hereof.

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
1	81100000	0.00000		0.000000	2685766.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Beech Bottom Highwall

**Extended Description:**

Beech Bottom Highwall

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	1403389.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Bethany (Haizlett) DS, Highwall and AMD

**Extended Description:**

Bethany (Haizlett) DS, Highwall and AMD

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
3	81100000	0.00000		0.000000	1453717.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Buffalo Creek Highwall

**Extended Description:**

Buffalo Creek Highwall

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
4	81100000	0.00000		0.000000	1293847.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Crafts Run Maintenance

**Extended Description:**

Crafts Run Maintenance

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
5	81100000	0.00000		0.000000	1947938.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Logan Run Highwall

**Extended Description:**

Logan Run Highwall

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
6	81100000	0.00000		0.000000	642362.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Richard Mine Drainage Facility Upgrades

**Extended Description:**  
Richard Mine Drainage Facility Upgrades

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
7	81100000	0.00000		0.000000	1302745.00
<b>Service From</b>	<b>Service To</b>	<b>Manufacturer</b>		<b>Model No</b>	

**Commodity Line Description:** Wades Run Dangerous Embankment

**Extended Description:**  
Wades Run Dangerous Embankment

## GENERAL TERMS AND CONDITIONS:

**1. CONTRACTUAL AGREEMENT:** Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.



**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

**Term Contract**

**Initial Contract Term:** The Initial Contract Term will be for a period of \_\_\_\_\_ . The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as \_\_\_\_\_), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Alternate Renewal Term** – This contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

**Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.

**Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

the contract will continue for \_\_\_\_\_ years;

the contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

**One-Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

**Construction/Project Oversight:** This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as \_\_\_\_\_), and continues until the project for which the vendor is providing oversight is complete.

**Other:** Contract Term specified in \_\_\_\_\_

**4. AUTHORITY TO PROCEED:** Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

**Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

**Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

**Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

**One-Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**Construction:** This Contract is for construction activity more fully defined in the specifications.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

**LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

**Commercial General Liability Insurance** in at least an amount of: \$1,000,0000.00 per occurrence.

**Automobile Liability Insurance** in at least an amount of: \$1,000,0000.00 per occurrence.

**Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \$1,000,0000.00 per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

**Commercial Crime and Third Party Fidelity Insurance** in an amount of: \_\_\_\_\_ per occurrence.

**Cyber Liability Insurance** in an amount of: \_\_\_\_\_ per occurrence.

**Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

**Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.

**Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.

**9. WORKERS' COMPENSATION INSURANCE:** Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. VENUE:** All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

**11. LIQUIDATED DAMAGES:** This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

\_\_\_\_\_ for \_\_\_\_\_.

Liquidated Damages Contained in the Specifications.

Liquidated Damages Are Not Included in this Contract.

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

**14. PAYMENT IN ARREARS:** Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

**15. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

**20. TIME:** Time is of the essence regarding all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE WITH LAWS:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

- 24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.
- 25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.
- 28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.



**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**34. VENDOR NON-CONFLICT:** Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

Revised 11/1/2022

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**37. NO DEBT CERTIFICATION:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

**38. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**39. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.division@wv.gov](mailto:purchasing.division@wv.gov).

**40. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
  1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
  2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**44. PROHIBITION AGAINST USED OR REFURBISHED:** Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

**45. VOID CONTRACT CLAUSES:** This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

**46. ISRAEL BOYCOTT:** Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

**ADDITIONAL TERMS AND CONDITIONS  
(Architectural and Engineering Contracts Only)**

- 1. PLAN AND DRAWING DISTRIBUTION:** All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.
  
- 2. PROJECT ADDENDA REQUIREMENTS:** The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.
  
- 3. PRE-BID MEETING RESPONSIBILITIES:** The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.
  
- 4. AIA DOCUMENTS:** All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.
  
- 5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS:** In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Whitney Faulkner, PE, Project Manager

(Address) 146 East Third Street, Lexington, KY 40508

(Phone Number) / (Fax Number) 773.218.5866 / NA

(Email address) Whitney.Faulkner@respec.com

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

RESPEC Company, LLC  
(Company)

(Signature of Authorized Representative)  
John Morgan, Senior Vice President, August 30, 2023

(Printed Name and Title of Authorized Representative) (Date)  
859.361.8392 / NA

(Phone Number) (Fax Number)  
John.Morgan@respec.com

(Email Address)



---

# 2023 AML CONTRACT N4 PROPOSAL FOR PROFESSIONAL SERVICES (CEIO 0313 DEP2400000008)

---

**PREPARED BY**

Whitney Faulkner, P.E.  
Jesse Hatter, P.E.  
Jake Stephens, P.E.

**RESPEC**

146 East Third Street  
Lexington, Kentucky 40508

**PREPARED FOR**

West Virginia Department of Environmental Protection  
Division of Land Restoration  
Office of Abandoned Mine Lands and Reclamation  
1000 Technology Drive, Suite 3220  
Fairmont, WV 26554

**MAY 14, 2025**





## CONTRACT UNDERSTANDING

RESPEC Company, LLC is pleased to submit this proposal to provide engineering services for the 2023 AML Contract N4. The projects included in this contract are:

1. Beech Bottom Highwall
2. Bethany (Haizlett) DS, Highwall and AMD
3. Buffalo Creek Highwall
4. Crafts Run Maintenance
5. Logan Run Highwall
6. Richard Mine Drainage Facility Upgrades
7. Wades Run Dangerous Embankment Phase II

### SCOPE OF SERVICES

Based on our understanding of the contract requirements/criteria provided to date by West Virginia Department of Environmental Protection, Division of Land Restoration, Abandoned Mine Lands and Reclamation (WVDEP-DLR-AML, also WVDEP, and State), including but not limited to letter of notification to negotiate (work directive), AML OSM-51 documents, onsite scoping meetings, subsequent meetings and communications, etc., RESPEC Company, LLC and its subconsultants (collectively RESPEC) will perform the following tasks as described herein. Please note all subconsultant prices are as provided by the contractor.

RESPEC will comply with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), Build American Buy American Act (BABA) compliance with specified or purchased material(s), prevailing wage rates, etc., where applicable.

RESPEC has prepared this proposal as was stated in and based on the generalized work directive letter dated December 7, 2023, as well as with the Cost Proposal Requirements (CPR) dated December 7, 2023, and the Detailed Description of Services Required (DDSR) dated December 7, 2023. These documents are included with and are made part of this proposal and have been included in Appendix B.

The following conditions will be followed for this project:

- / RESPEC will only bill for hours worked and costs incurred. Any hours not worked, and costs not incurred will not be billed.
- / RESPEC will complete this project on a time and materials basis not to exceed the costs provided without prior WVDEP approval.
- / Bill rates will be locked in for the duration of this contract.
- / All bill rates are standard, and the State will not be billed at a higher rate for overtime work.
- / All documents will be prepared by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), calculation briefs, geotechnical



investigation reports etc., must be signed and sealed and dated by an active West Virginia Registered Professional Engineer.

- / All surveying deliverables must be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.
- / PDF's and CAD files (in AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition) of the plans will be included as part of the electronic portion of the final design deliverables to the WVDEP-DLR-AML.
- / Electronic and physical copies will be transmitted to the WVDEP-DLR-AML as part of the final design and document deliverables. The number of physical copies will be determined later. All deliverables will be uploaded into the AML document repository (currently AMLNET).
- / A final certification for the project signed and sealed by a registered West Virginia PE will be provided to the WVDEP-DLR-AML.

In addition to the conditions listed above, RESPEC will adhere to the special terms and conditions listed below.

- / The State owns the intellectual property rights for any deliverable created or modified by Work paid for by the State, unless protected by patent and otherwise accepted or permitted by the State.
- / The State reserves the right to request the removal of any successful A/E firm personnel from any site location or State office, at any time.
- / The State reserves the right to withhold payment for deliverables of unacceptable quality – as determined by the State – until the quality issue is remedied to the satisfaction of the State.

#### **PLANNING WORK**

RESPEC will be responsible for all Planning work for each project. RESPEC will perform all tasks involved with the Planning Work, and as detailed in the CPR and DDSR.

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized. WVDEP-DLR-AML will submit the Authorization to Proceed (ATP) request package to Office of Surface Mining Reclamation & Enforcement (OSMRE) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this would require a change order.

#### **REALTY WORK**

RESPEC will be responsible for the Realty work for each project. RESPEC will perform all tasks included with the Realty work, and as detailed in the CPR and the DDSR.



RESPEC will acquire Exploratory Right-of-Entry (EROE) and Construction Right-of-Entry (CROE) for each landowner affected by the projects.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. No on-site work will be completed prior to permission being granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

#### **DESIGN WORK**

RESPEC will be responsible for the Design work for each project. RESPEC will perform all tasks included with the Design work, and as detailed in the CPR and the DDSR.

The design work will include a conceptual plan (30% design), a preliminary PS&E package (60%), design PS&E package (90%), and 100% issued for bid documents.

RESPEC will obtain all permits required based on each individual project.

RESPEC will conduct pre-bid and pre-construction conferences.

RESPEC will perform any initial site investigations and surveys that may be required. In particular, water, electric, sewage, septic tanks, communications, and any other above or below ground utilities need to be identified and the corresponding 811 requests made as part of that identification process.

#### **CONSTRUCTION OVERSIGHT**

RESPEC will be responsible for construction oversight for each project. RESPEC will perform all tasks included within construction oversight, and as detailed in the CPR and the DDSR.

#### **POST CONSTRUCTION OVERSIGHT**

RESPEC will be responsible for post construction oversight for each project. RESPEC will perform all tasks included within post construction oversight, and as detailed in the CPR and the DDSR.

#### **COMPENSATION**

RESPEC will complete this project on a time and materials basis not to exceed the costs provided in Appendix A without prior WVDEP approval. RESPEC will only invoice for time and expenses incurred.

It is understood that RESPEC will ensure that all subcontractors are fully insured, have worker's compensation coverage and are AVS compliant. If you have any additional questions or need additional information, please let me know.

Sincerely,

Jesse Hatter, PE  
Technical Manager, AML East



## TABLE OF CONTENTS

BEECH BOTTOM HIGHWALL .....	1
BETHANY (HAZLETT) DS, HIGHWALL AND AMD .....	12
BUFFALO CREEK HIGHWALL.....	23
CRAFTS RUN MAINTENANCE .....	34
LOGAN RUN HIGHWALL .....	45
RICHARD MINE DRAINAGE FACILITY UPGRADE.....	66
WADES RUN DANGEROUS EMBANKMENT PHASE II .....	76
APPENDIX A TASK COST BREAKDOWN .....	A-1
APPENDIX B GENERALIZED WORK DIRECTIVE, COST PROPOSAL REQUIREMENTS & DETAILED DESCRIPTION OF SERVICES REQUIRED .....	B-1



# BEECH BOTTOM HIGHWALL

## PROJECT UNDERSTANDING

The project site is located northeast of the town of Beech Bottom, in Brooke County, WV. The general project consists of reducing the hazards associated with multiple highwalls, mine portals or collapsed entries, hazardous water bodies stored on bench, and an abandoned pond requiring mitigation of the effects of poor, acid mine drainage water.

## SCOPE OF SERVICES

### TASK I NEPA/ESA

#### TASK 1A: AGENCY COORDINATION

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office-work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this may require a change order.

RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact West Virginia Region XI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial / planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If a "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.



RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB, a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope includes five (5) visits for water sampling where six (6) water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry / consultation and follow-up for approval including all necessary consultations, surveys, documentation, and generation of reports, as required. All documentation will be uploaded into the AML document repository document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package to WVDEP-DLR-AML Planning once the Plans and Specifications are finalized. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.





RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permission from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, and our subcontractors for site investigations as necessary to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WVDEP-DLR-AML Realty. No on-site work will be completed prior to permission being granted to enter their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights-of-entry are required for parcels where work is performed, including borrow/waste locations, and parcels for access to the site.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subject to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreements with both owners in an effort to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order will be required.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the



information for the Lien Determination Form into the AML document repository (currently AMLNET).

RESPEC will provide status updates on landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known on that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WVDEP-DLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include, but is not limited to, all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AM, as needed and upon request.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time, should revisions become necessary or if any additional reactivity-related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future



construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### **TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK III DESIGN**

#### **TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance, and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information, and attempt to determine the location of any underground mine pools or potential portal locations that may have been missed.

#### **TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals, debris to be removed, and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 310 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake proposed drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project.

RESPEC will conduct a topographic survey and other related services. This includes overlaying the



site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for horizontal and vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include, but is not limited to, planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public), structures, fence, posts, portals, property corners, bodies of water or vegetation, tree lines, garbage, coal refuse piles, ditches, culverts, traveled ways, pavements or roads (public or private), and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK III.C: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation, which will be submitted to WVDEP-DLR-AML for review. The plan will include drilling at the two portal locations identified near both Dangerous Impoundments. Each boring will be extended to a depth that corresponds to the mine seam elevation. For proposal purposes, an average depth of 30 ft. of soil and 80 ft. of rock coring for each hole was used. If a void is not encountered on the first attempt, the hole will be offset about 10 ft. and re-attempted up to two additional times. If a void is encountered, a temporary piezometer with a 10 ft. slotted screen at the bottom will be installed for future monitoring of groundwater levels at the site. If a void is not encountered after the 3rd attempt, and if suitable, a temporary piezometer may be installed in the most fractured boring. The drilling contractor will install the temporary piezometers upon completion of the drilling and seal the ground surface around the top to prevent surface water from infiltrating into the hole. The PVC casing will be left with about three feet of stickup above ground. The maximum anticipated footage for this portion of the project, if multiple attempts are required at each location, is 180 ft. of soil drilling, 480 ft. of rock coring, and 226 ft. of piezometer installation.

Approximately 13,000 ft. of highwall has been selected to be reclaimed. RESPEC proposes to drill 160 borings to define subsurface conditions. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and help to determine the quality of the potential borrow material. It is estimated that a total of 5,200 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area.

It is anticipated that excavator work will be needed to provide drill rig access to the boring locations. Extra care will be taken to minimize damage. Any disturbed areas will be reclaimed with seed and straw mulch upon completion of the drilling. A water truck will be used to haul and pump water to locations that require coring. It is currently estimated that the geotechnical drilling will take 86 days to complete based upon the assumptions made above; however, the actual duration is dependent on actual project conditions. A RESPEC geologist will be on site daily supervising all drilling operations. The geologist will be providing logging, analysis, and guidance.



RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with, and any written confirmation, if available.

#### **TASK IID: ANALYSIS AND DESIGN**

After the subsurface exploration, surveying, water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analysis, portal closure analysis, and stability analysis. The impact of all data on the overall project and design will be reviewed.

#### **TASK IIE: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE**

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plan will include all information required for the existing site conditions including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s and subsequent scope in the proposal. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include, but not be limited to, preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, and preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic and hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase. Temporary and permanent access (for maintenance) as well as pre-existing access will be clearly shown.



Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable, or required. RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET), which will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for Bid design package to the on-site PBC. All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.



#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit, if required.

RESPEC will prepare and obtain a floodplain permit, if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site PBC for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions, answers, and comments discussed during the conference, and provide both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded if required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal and initial estimate, construction time is assumed to be approximately 100 weeks. RESPEC assumes a 7-day, 12-hour/day, work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame may require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML prior to an inspector mobilizing to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent, or better, replacement be provided at any time, at no additional





cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. RESPEC will upload all documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on site and inspecting the work taking place. The construction inspector will actively monitor the job site at all times during construction, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify RESPEC's Project Manager. The inspector will document the issue via photos with a date, location with coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands that they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location and coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Manager and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the RESPEC's Project Manager and the WVDEP-DLR-AML's attention before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed,



sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

**TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete bond release document(s) and submit such to the WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight (8) site visits or meetings required, including one (1) for the warranty release, during the post-construction period.



## **BETHANY (HAZLETT) DS, HIGHWALL AND AMD**

### **PROJECT UNDERSTANDING**

The project site is located west of Bethany in Brooke County, West Virginia. The general project consists of reducing the hazards associated with a highwall, stabilizing several slide areas, and mitigating the effects of acid mine drainage (AMD).

### **SCOPE OF SERVICES**

#### **TASK I NEPA/ESA**

##### **TASK 1A: AGENCY COORDINATION**

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this may require a change order.

RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact West Virginia Region XI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial / planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.



RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry / consultation and follow-up for approval including all necessary consultations, surveys, documentation and generation of reports as required. All documentation will be uploaded into the AML document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.



RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreement with both owners in efforts to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).



RESPEC will provide status updates of landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known at that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WV-DEPDLR- AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.



RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

**TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

**TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

**TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

**TASK III DESIGN**

**TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

**TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals, debris to be removed, and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 30 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake propose drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02.

Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

### **TASK III: GEOTECHNICAL INVESTIGATIONS**

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation, this will be submitted to WVDEP-DLR-AML for review. This will include drilling at the two portal locations. Each boring will be extended to a depth that corresponds to the mine seam elevation. For proposal purposes, an average depth of 30 ft. of soil and 80 ft. of rock coring for each hole. If a void is not encountered on the first attempt, the drill location will be offset about 10 ft. and make up to two additional attempts. If a void is encountered, a temporary piezometer with a 10 ft. slotted screen at the bottom will be installed for future monitoring of groundwater levels at the site. If a void is not encountered after the third attempt, and if suitable, a temporary piezometer may be installed in the most fractured boring. NGE will install the temporary piezometers upon completion of the drilling and seal the ground surface around the top to prevent surface water from infiltrating into the hole. The PVC casing will be left with about three feet of stickup above ground. The maximum anticipated footage for this portion of the project if multiple attempts are required at each location is 180 ft. of soil drilling, 480 ft. of rock coring and 226 ft. of piezometer installation.

An approximate 2,000 ft. long section of highwall has been selected to be reclaimed. RESPEC proposes to drill 35 borings to define subsurface conditions. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and help to determine the quality of the potential borrow material. An estimated total of 1,100 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area.

There are several areas of instability on the project. The large slide is located in the southern portion of the area. It is approximately 200 ft. wide by 300 ft. long and the toe extends down to impact the stream below. There are smaller active slides throughout the property that may be investigated as they are encountered while accessing the project. RESPEC proposed to drill 30 test borings for the landslide areas. It was estimated this will require approximately 900 ft. of soil drilling. No rock coring is planned. It is anticipated that excavator work will be needed to provide drill rig access to the boring locations. Extra care will be taken to minimize damage. Any disturbed areas will be reclaimed with seed and straw mulch upon completion of the drilling. A water truck will be used to haul and pump water to locations that require coring. It is currently estimated that the geotechnical drilling will take 40 days to complete based upon the assumptions made above, however the actual duration is dependent on actual project conditions. A RESPEC geologist will be on site daily supervising all drilling operations. The geologist will be providing logging and analysis and guidance.



RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with and any written confirmation if available.

#### TASK IID: ANALYSIS AND DESIGN

After the subsurface exploration, surveying, and water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analysis and portal closure analysis and stability analyses. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### TASK III: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.



Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. Upon confirmation, RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.



#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded if required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 30 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame may require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related



site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. Upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify the successful RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.



At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

**TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.



## **BUFFALO CREEK HIGHWALL**

### **PROJECT UNDERSTANDING**

The project site is located west of Bethany in Brooke County, West Virginia. The general project consists of reducing the hazards associated with a highwall, stabilizing a slide, and sealing several mine openings. Two of the mine openings are described as "wet" and drainage is percolating from the spoil along the highwall.

### **SCOPE OF SERVICES**

#### **TASK I NEPA/ESA**

##### **TASK 1A: AGENCY COORDINATION**

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this may require a change order.

RESPEC will prepare and submit an EA to the Office of Surface Mining & Reclamation Enforcement (OSMRE) and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact West Virginia Region XI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial / planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.



RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry / consultation and follow-up for approval including all necessary consultations, surveys, documentation and generation of reports as required. All documentation will be uploaded into the AML document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.



RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreement with both owners in efforts to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).





RESPEC will provide status updates on landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known at that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WVDEP-DLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.



RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

**TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

**TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

**TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

**TASK III DESIGN**

**TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

**TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals, debris to be removed, and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 30 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake propose drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project. RESPEC will conduct a topographic survey and other related services. This includes overlaying the

site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping



developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK III: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation, this will be submitted to WVDEP-DLR-AML for review. This will include drilling at the four portal locations. Each boring will be extended to a depth that corresponds to the mine seam elevation. For proposal purposes, an average depth of 30 ft. of soil and 80 ft. of rock coring for each hole. If a void is not encountered on the first attempt, the drilling location will be offset about 10 ft. and make up to two additional attempts. If a void is encountered, a temporary piezometer with a 10 ft. slotted screen at the bottom will be installed for future monitoring of groundwater levels at the site. If a void is not encountered after the 3rd attempt, and if suitable, a temporary piezometer may be installed in the most fractured boring. NGE will install the temporary piezometers upon completion of the drilling and seal the ground surface around the top to prevent surface water from infiltrating into the hole. The PVC casing will be left with about three feet of stickup above ground. The maximum anticipated footage for this portion of the project if multiple attempts are required at each location is 360 ft. of soil drilling, 960 ft. of rock coring and 452 ft. of piezometer.

An approximate 6,000 ft. long section of highwall has been selected to be reclaimed. RESPEC proposes to drill 64 borings to define subsurface conditions. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and help to determine the quality of the potential borrow material. RESPEC estimates a total of 2,100 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area.

There is a large slide located near the northern portion of the highwall covering approximately 1 acre. RESPEC plans to drill 14 borings in this area to define the subsurface conditions. RESPEC estimates 500 ft. of soil drilling will be necessary. No rock coring is planned for the area. It is anticipated that excavator work will be needed to provide drill rig access to the boring locations. Extra care will be taken to minimize damage. Any disturbed areas will be reclaimed with seed and straw mulch upon completion of the drilling. A water truck will be used to haul and pump water to locations that require coring. A boring stake will be left at each drilling location so that it can be surveyed by others. It is currently estimated that the geotechnical drilling will take 60 days to complete based upon the assumptions made above, however the actual duration is dependent on actual project conditions. A RESPEC geologist will be on site daily supervising all drilling operations. The geologist will be providing logging and analysis and guidance.



RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with and any written confirmation if available.

#### **TASK IID: ANALYSIS AND DESIGN**

After the subsurface exploration, surveying, and water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analysis and portal closure analysis and stability analyses. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### **TASK IIE: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE**

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.



Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.



#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded if required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 20 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame may require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related



site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. Upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify the successful RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.



At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

#### **TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.





## **CRAFTS RUN MAINTENANCE**

### **PROJECT UNDERSTANDING**

The Crafts Run Maintenance site is located adjacent to Craft's Run Road and northeast of Madsville, West Virginia. The general project consists of reducing hazards associated with spoil areas, improving/constructing drainage structures, and sealing multiple mine portals.

### **SCOPE OF SERVICES**

#### **TASK I NEPA/ESA**

##### **TASK 1A: AGENCY COORDINATION**

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this may require a change order.

RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region VI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact West Virginia Region VI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial / planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.



RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry / consultation and follow-up for approval including all necessary consultations, surveys, documentation and generation of reports as required. All documentation will be uploaded into the AML document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.



RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, a prompt attempt will be made to elicit right of entry agreement/s with both owners in efforts to avoid a boundary survey. If agreement/s cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository document repository (currently AMLNET). This further



includes inputting the information for the Lien Determination Form into the AML document repository document repository (currently AMLNET).

RESPEC will provide status updates on landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known on that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WV-DEPDLR- AML program and what it has to offer and conduct negotiations to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for the next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future



construction contractor, to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### **TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK III DESIGN**

#### **TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

#### **TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals, debris to be removed, and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 40 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake propose drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project. RESPEC will conduct a topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the



National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include, but is not limited to, planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK IIC: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation, this will be submitted to WVDEP-DLR-AML for review and approval. This will include drilling at the two portal locations. Each boring will be extended to a depth that corresponds to the mine seam elevation. For proposal purposes, an average depth of 30 ft. of soil and 80 ft. of rock coring for each hole. If a void is not encountered on the first attempt, the drilling location will be offset about 10 ft. and make up to two additional attempts. If a void is encountered, a temporary piezometer with a 10 ft. slotted screen at the bottom will be installed for future monitoring of groundwater levels at the site. If a void is not encountered after the 3rd attempt, and if suitable, a temporary piezometer may be installed in the most fractured boring. NGE will install the temporary piezometers upon completion of the drilling and seal the ground surface around the top to prevent surface water from infiltrating into the hole. The PVC casing will be left with about three feet of stickup above ground. If multiple attempts are required at each location, the maximum anticipated footage for this portion of the project is 180 ft. of soil drilling, 480 ft. of rock coring, and 226 ft. of piezometer.

An approximate 100 ft. long section of highwall has been selected to be reclaimed. RESPEC proposes to drill 8 borings to define subsurface conditions. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and help to determine the quality of the potential borrow material. An estimated total of 320 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area.

There are two areas containing mine spoil that need investigating. One is a spoil area along the access road leading to the highwall, approximately 2 acres in size. The other area is a previously reclaimed refuse pile that is saturated with AMD, which is also 2 acres in size. RESPEC plans to drill 10 borings in these areas to help quantify the amount of refuse and aid in the design of remediation measures. RESPEC estimates approximately 300 ft. of soil drilling will be required.

RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with and any written confirmation if available.

#### TASK IIB: ANALYSIS AND DESIGN

After the subsurface exploration, surveying, and water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analyses, and portal closure and stability analyses. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### TASK IIC: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and/or permanent access (for maintenance) will be clearly shown, as well as any pre-existing access ways. Design details need to be present in the plans.

Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.



This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit such to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of the "Issued for Bid" design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

#### TASK III F – PERMITTING

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).





RESPEC will consult with the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded if required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 30 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame will require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review



and approval. Upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).



#### **TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with the construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete the bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.



## LOGAN RUN HIGHWALL

### PROJECT UNDERSTANDING

The project site is located south of Bethany, WV in Brooke County, WV. The project consists of reducing the hazards associated with abandoned mine land features (AMLFs) including a dangerous highwall, addressing a spoil area, and restoring natural drainage channels to eliminate a hazardous water body and unclog a stream bed. This project will include utilizing the spoil area to backfill the highwall and restore the area to a more natural slope while restoring drainage channels for proper surface water flow.

This project will be separated into 2 phases. Phase I will include design and construction of a road to access the property which may include a retaining wall, culvert replacement, and stream restoration. Phase II will include addressing the AMLFs including utilizing the spoil area to reclaim the highwall and addressing the hazardous waterbody and clogged stream.

RESPEC has concerns with property access for this project. Access to the property from WV-88 (W Liberty Rd) is hindered by the deep ditch within the right-of-way, adjacent property access, and Zone A of the special flood hazard area of Buffalo Creek. The existing road and culvert appear to be located on the adjacent property, on which no AMLFs exist. If the adjacent property owner does not allow ingress/egress to the project property, a property boundary survey will be required. In addition, the access road would be located within the floodplain which may pose difficulty with approval for permitting and construction.

### SCOPE OF SERVICES – PHASE I

#### TASK I NEPA/ESA

##### TASK 1A: AGENCY COORDINATION

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, a change order will be required.

RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia State Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will contact WVDNR and prepare any required consultation letters. All documents will be uploaded into the AML document repository (currently AMLNET). RESPEC will clearly show any timing restrictions in the project schedule.



RESPEC will contact SHPO for consultation, follow-up, and provide required documentation for approval. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact the West Virginia Region XI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-Keys). If a "May Affect" determination is received, RESPEC will consult with USFWS. If "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository document repository (currently AMLNET). RESPEC will clearly show any timing restrictions in the project schedule.

RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### TASK IB – PUBLIC INVOLVEMENT

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB, a change order will be required.

#### TASK IC – STUDIES, SURVEYS & MITIGATION PLANS

If required, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets, based on the current specifications. This will include investigation for the presence of any bald eagle nests. A report of the survey findings will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for information and complete all necessary consultations, surveys, documentation, and generation of reports as required for agency approval. All documentation will be uploaded to the AML document repository (currently AMLNET).

#### TASK ID – CATEX / EA / FONSI / EIS

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission and approval, if required. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for review and address any comments for final submittal with



completion of the project plans and specifications. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

## **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will use online research to determine legal ownership of all properties to be affected by the project prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits, including access to the project, and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission being granted for entering the property(ies). This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with physical research at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.



If a dispute or question arises as to boundary lines, a prompt attempt will be made to elicit right of entry agreements with both owners in efforts to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, a change order will be required.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).

RESPEC will provide status updates of landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known on that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WVDEP-DLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Rights of Entry (ROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.



RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload the CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### **TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK III DESIGN**

#### **TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information that is available.

#### **TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals, debris to be removed, and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 40 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake drill hole locations for the proposed retaining wall. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying





deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for Phase 1 of the project.

RESPEC will conduct a topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within the project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK III: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation for the proposed retaining wall to provide access to the project from WV-88. A total of 16 borings are proposed. A minimum of 15 ft. of competent bedrock will be obtained in each boring. If bedrock is not encountered, the borings will be terminated at a depth of 30 ft. The Initial drilling plan will be submitted to WVDEP-DLR-AML for review. Traffic control may be required during drilling activities. Traffic control plans, permitting coordination, and costs are included.

Standard penetration testing and sampling of the soil overburden will be performed at 2.5 ft. intervals in each boring. Groundwater level observations will be made in the borings during drilling operations and upon completion of drilling. The borings will be backfilled with auger cuttings upon completion of the field work. As required by WVDOH, any damages will be repaired or replaced by an approved WVDOH method. Representative portions of each sample collected from the standard penetration testing will be placed in air-tight glass jars. Rock core samples will be placed in partitioned boxes. Upon drilling completion, all samples will be transported to our laboratory for detailed examination and laboratory testing. NGE will make an underground utility locate request and coordinate with any companies which have gas lines that must be crossed. The drilling will take approximately 3 weeks.

The test drilling program will be under the direct supervision of our geotechnical representative.



Laboratory testing will be performed to aid in classifying the soil and determining engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, sieve analysis, and rock core compressive strength.

RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with, and any written confirmation if available.

#### **TASK III: ANALYSIS AND DESIGN**

After the subsurface exploration, surveying, and soil testing are complete, all data will be compiled and analyzed. Analyses to be performed will include, but not limited to, structural calculations for the retaining wall, drainage calculations, and any additional analyses as required. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### **TASK III: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE**

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML no later than three (3) business days after the meeting for review and comment. RESEPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analyses, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary



and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.

Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to the applicable landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.



#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System (NPDES) stormwater permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources Office of Land and Streams, and other appropriate agencies to determine if a 401/404 permit, stream activity permit, or floodplain permit are required. RESPEC will prepare and obtain any necessary permits for working in and around streams and floodplains. If required, a wetland mitigation study will be performed, and a report will be provided. All documents will be uploaded into the AML document repository (currently AMLNET). If required, a wetland mitigation study and report will be conducted.

RESPEC will coordinate with the West Virginia Division of Highways (WVDOH) to prepare and obtain an MM-109 permit, if required, to acquire access to the property.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, or as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 12 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame will require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.



RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. Once approved, RESPEC will upload all documents into the AML document repository (currently AMLNET). RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands that they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

RESPEC will maintain a log for each day that construction occurs that will contain photos with a date, location and coordinates, and time stamp detailing work that was completed. If concrete or grout pouring and testing occurred, these will need to be included in the logs. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the attention of RESPEC's Project Engineer and the WVDEP-DLR-AML's at least before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).



### **TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.

## **SCOPE OF SERVICES – PHASE II**

### **TASK VI NEPA/ESA**

#### **TASK VI A: AGENCY COORDINATION**

RESPEC will attempt to eliminate redundant work between Phase I and Phase II. Any work completed in Phase I that is relevant to Phase II will be used and no hours will be billed to WVDEP-DLR-AML.

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, a change order will be required.

If an additional EA is required, RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

If required, RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia State Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other information RESPEC believes will be useful.

If required, RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

If required, RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

If required, RESPEC will contact West Virginia Region XI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

If required, RESPEC will upload the project into the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, will consult with USFWS. If a "no effect" or "May



Affect, Not likely to Adversely Affect” determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.

If required, RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### TASK VIB – PUBLIC INVOLVEMENT

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB, a change order will be required.

#### TASK VIC – STUDIES, SURVEYS & MITIGATION PLANS

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets in accordance with the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry, consultation, and follow-up for approval including all necessary consultations, surveys, documentation and generation of reports as required. All documentation will be uploaded to the AML document repository (currently AMLNET).

#### TASK VID – CATEX / EA / FONSI / EIS

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will only perform the required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package if the Phase I EA has to be updated. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).



## TASK VII REALTY

Work under this task will only occur if Phase I Realty documents are no longer valid.

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission being granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreement with both owners in efforts to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title





opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).

RESPEC will provide status updates of landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known at that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WV-DEPDLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide



comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### **TASK VIIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK VIIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK VIIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK VIII DESIGN**

#### **TASK VIIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Work on this task will only include additional investigations not performed in Phase I.

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

#### **TASK VIIIB: SURVEYING & MAPPING**

RESPEC will use all surveying completed during Phase I. Only additional information required will be billed under this task item.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake propose drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and



references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for Phase II the project. RESPEC will conduct a topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed that will be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or other approved monument(s) with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK VIII: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for the geotechnical investigation, this will be submitted to WVDEP-DLR-AML for review. This will include drilling in the spoil area to determine the volume of material available to reclaim the highwall. An approximate 3,000 ft. long section of highwall has been selected to be reclaimed. RESPEC proposes to drill 44 borings to define subsurface conditions. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and help to determine the quality of the potential borrow material. An estimated total of 1,500 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area.

It is anticipated that excavator work will be needed to provide drill rig access to the boring locations. Extra care will be taken to minimize damage. Any disturbed areas will be reclaimed with seed and straw mulch upon completion of the drilling. It is currently estimated that the geotechnical drilling will take 24 working days to complete based upon the assumptions made above, however the actual duration is dependent on actual project conditions. A RESPEC geologist will be on site daily supervising all drilling operations. The geologist will be providing logging, analysis, and guidance.

RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with and any written confirmation if available.

#### TASK VIII: ANALYSIS AND DESIGN

After the subsurface exploration, surveying, and water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of

spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analysis and portal closure analysis and stability analyses. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### TASK VIII: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.

Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for



Construction”, or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped “Preliminary – Not for Construction”, or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer’s Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22”x34”) sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

#### TASK VIII F – PERMITTING

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404



permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### TASK VIII – PRE-BID CONFERENCE

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### TASK VIII – PRE-CONSTRUCTION CONFERENCE

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### TASK IX – CONSTRUCTION OVERSIGHT

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 30 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame will require a change order.

At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. RESPEC will upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant



information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will be actively monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands that they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the attention of RESPEC's Project Engineer and the WVDEP-DLR-AML's representative at least before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

#### TASK X – POST CONSTRUCTION OVERSIGHT

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor



to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.





# RICHARD MINE DRAINAGE FACILITY UPGRADE

## PROJECT UNDERSTANDING

The project site is located in Morgantown in Monongalia County, West Virginia. The general project consists of reducing the hazards associated with a highwall and a safety and security problems associated with the construction of the AMD treatment system.

## SCOPE OF SERVICES

### TASK I NEPA/ESA

#### TASK 1A: AGENCY COORDINATION

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this may require a change order.

RESPEC will prepare and submit an EA to the WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region VI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other information RESPEC believe will be useful.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will contact West Virginia Region IV Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial / planned NEPA boundary and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If a "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.



RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB, a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

If required, RESPEC will contact the US Forest Service for an inquiry / consultation and follow-up for approval including whatever consultations, surveys, documentation and generation of reports may be required. All documentation will be uploaded into the AML document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. RESPEC will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. RESPEC will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. RESPEC will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE,



RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property. This information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission being granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreement with both owners to avoid a boundary survey. If agreements cannot be reached, RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).

RESPEC will provide status updates on landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known on that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.



RESPEC will be the frontline contact source in educating the property owner on the WV-DEPDLR- AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.



#### **TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK III DESIGN**

#### **TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. RESPEC will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

#### **TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals debris to be removed and cross sections verification of the drone flight. It is assumed the area to be flown is approximately 7 acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project.

RESPEC will conduct a topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within the project area, surveying original ground features to create an existing conditions basemap with one (1) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetric such as location, size, type, and depth of all marked and observable utilities (private or public), structures, fence, posts, portals, property corners, bodies of water or vegetation, tree lines, garbage, coal refuse piles, ditches, culverts, traveled ways, pavements or roads (public or private), and



any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z, and D, in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or monument with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### **TASK III.C: GEOTECHNICAL INVESTIGATIONS**

There will not be any geotechnical investigations for this site.

#### **TASK III.D: ANALYSIS AND DESIGN**

After surveying is complete, all data will be compiled and analyzed. This will include addressing any issues with the site and property owners due to the location of the fence on the property. RESPEC will investigate fence location above the highwall and types of gated entrances that will best provide the site with the security.

#### **TASK III.E: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE**

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into the AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control



Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.

Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. We will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. We will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. We will upload the preliminary design (60%) PS&E review comments into the AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. We will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. We will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. We will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. We will upload the 90% design package review comments into the AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. Upon confirmation, RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into the AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid



design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. We will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, as directed by the WVDEP-DLR-AML. We will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 20 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame may require a change order.





At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. RESPEC will upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify the successful RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout testing and pouring have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into the AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after the date of the inspection. Any problems or concerns detailed in the inspection forms will be



brought to the RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. We will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

#### **TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. We will complete bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.



## **WADES RUN DANGEROUS EMBANKMENT PHASE II**

### **PROJECT UNDERSTANDING**

The Wades Run Dangerous Embankment Phase II abandoned mine land project is located Northwest of Morgantown in Monongalia County, WV. The project consists of reducing the hazards associated with abandoned mine land features (AMLFs) including dangerous piles and embankments, hazardous equipment and facilities, gob pile, equipment/facilities, water problem area, and dangerous impoundment.

In 2019, an emergency project was conducted to prevent access to the area for public safety due to the condition of the site which included the installation of jersey barriers.

This project will include upgrading the access road to the site, remove the existing safety fencing and jersey barriers, demolish the two structures, excavation of refuse from the stream crossing, possible stream restoration, regrade the refuse area for positive drainage and cover with agricultural lime and topsoil, construct a drainage channel to route surface runoff around the pile, install a modified seal at the dangerous impoundment mine portal, and revegetate all disturbed areas.

### **SCOPE OF SERVICES**

#### **TASK I NEPA/ESA**

##### **TASK 1A: AGENCY COORDINATION**

This task includes coordination with WVDEP-DLR-AML, Environmental Assessment (EA), and office work. Included in this task will be any work needed for the AML document repository (currently AMLNET). This scope assumes an Environmental Impact Statement (EIS) will not be required. If an EIS is required, this would require a change order.

RESPEC will prepare and submit an EA to WVDEP-DLR-AML and address any comments or concerns.

RESPEC will request any consultant letters that have previously been sent, any work that has previously been completed, example of West Virginia Division of Natural Resources (WVDNR) submissions, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Region XI Planning and Development Council submission, example for an EA, existing water quality data, agency contact information, any other existing information pertaining to the project and any other information RESPEC believe will be useful.

RESPEC will contact WVDNR and prepare any consultation letters required. All documents will be uploaded into the AML document repository (currently AMLNET). Any timing restrictions will be clearly shown in the project schedule.

RESPEC will contact SHPO for an inquiry/consultation and follow-up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).



RESPEC will contact West Virginia Region VI Planning and Development Council for an inquiry/consultation and follow up for approval with the required documentation. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will upload the project into US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system including the initial/planned NEPA boundaries and add the WVDEP-DLR-AML's team planner to the project. RESPEC will complete the determination keys (D-KEYS). If a "May Affect" determination is received, RESPEC will consult with USFWS. If "no effect" or "May Affect, Not likely to Adversely Affect" determination is received, RESPEC will continue with the EA package. All documentation will be uploaded into the AML document repository (currently AMLNET). Any timing restriction will be included in the schedule.

RESPEC will complete the Threatened and Endangered Species surveys if deemed necessary via consultation with USFWS, see TASK IC.

#### **TASK IB – PUBLIC INVOLVEMENT**

No work or associated costs have been included for this task at this time. AML Planner will provide documentation from the public involvement that will be incorporated into the EA. If RESPEC is required to support TASK IB a change order will be required.

#### **TASK IC – STUDIES, SURVEYS & MITIGATION PLANS**

If deemed necessary, RESPEC will conduct a habitat assessment survey based on the Phase I Habitat Assessment Data Sheets based on the current specifications. The project area will be surveyed for the presence of any bald eagle nests, if deemed necessary. A findings report of the survey will be uploaded into the AML document repository (currently AMLNET).

RESPEC will conduct water quality analyses that will cover the standard parameters (Field pH, Total Alkalinity, Total Acidity, Mineral Acidity, Specific Conductance, Chlorides, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese, Total Aluminum, Dissolved Aluminum, Total Magnesium, Dissolved Magnesium, Total Calcium, Dissolved Calcium, Total Hardness, Dissolved Hardness, Total Suspended Solids, Total Dissolved Solids, and Temperature). The scope included 5 visits for water sampling where six water samples can be taken during each collection visit.

If required, RESPEC will contact the US Forest Service for an inquiry, consultation, and follow-up for approval including all necessary consultations, surveys, documentation and generation of reports as required. All documentation will be uploaded the AML document repository (currently AMLNET).

#### **TASK ID – CATEX / EA / FONSI / EIS**

RESPEC will abide by the National Environmental Policy Act (NEPA), including surveys, documentation, and generation of the related reports for submission, if applicable. All documentation will be uploaded into the AML document repository (currently AMLNET).

RESPEC will perform all required consultations, surveys, documentation, and generation of reports for the draft Environmental Assessment (EA) package. Information from public involvement will be provided to RESPEC by the AML planning representative. We will submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. A determination will be made if a Categorical Exclusion (CATEX) applies to the project. We will implement revisions and submit the finalized EA package once the Plans and Specifications are finalized to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface



Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). All documentation shall be uploaded into the AML document repository (currently AMLNET).

#### **TASK II REALTY**

RESPEC will request any work that has been previously completed, any existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other available information that WVDEP-DLR-AML may be able to provide.

RESPEC will determine legal ownership of the properties to be affected by the project, using desktop / online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals who have a legal interest in the defined properties. The date of the determination for each property will be documented.

RESPEC will contact WVDEP-DLR-AML to accompany us during the first contact with a landowner. We will acquire landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, RESPEC, our subcontractors for site investigations required to submit a cost proposal. Verbal permission from the landowner will be documented as to the date of contact and permission granting entry onto their property and this information will be transmitted to the WV-DEP-AML Realty. No on-site work will be completed prior to permission granted for entering their property. This restriction applies to each parcel individually. Throughout the course of the project, RESPEC shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. RESPEC understands that rights of entry are required for parcels where work is performed, including borrow/waste locations.

RESPEC will confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed. Accurate and legal documentation substantiating ownership findings will be uploaded into the AML document repository (currently AMLNET). The date of the confirmation at the courthouse for each property will be documented and shall be included in the status updates required. Any miscellaneous expenses not explicitly included in this proposal will be RESPEC expenses.

RESPEC will research and determine if a landowner has:

- / participated in the mining;
- / received royalty payments;
- / leased the land/resource for mining;
- / received a benefit from said mining;
- / benefited from the mining or obtained a legal interest in or accrue a benefit from the present property owner.

If any of the above have occurred, RESPEC understands the ownership is subjected to the lien provision within the West Virginia State Code, Chapter 22, Article 2 and the EROE-lien / CROE-lien forms shall be utilized.

If a dispute or question arises as to boundary lines, an attempt will be made to elicit right of entry agreement with both owners in efforts to avoid a boundary survey. If agreements cannot be reached,



RESPEC will contact WVDEP-DLR-AML about the necessity of a boundary survey or certified title opinions before taking any actions. The cost of this survey is not included in this scope and should it occur, RESPEC will require a change order.

RESPEC will acquire and document useful project-related information from landowners, including but not limited to underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire will be completed, signed, and uploaded into the AML document repository (currently AMLNET). This further includes inputting the information for the Lien Determination Form into the AML document repository (currently AMLNET).

RESPEC will provide status updates on landowner negotiations, landowner questions, and landowner agreements on a regular weekly basis to WVDEP-DLR-AML Realty. This shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all the information known on that date and updated monthly.

Should a landowner request to be listed as an additional insured prior to entering into any agreement, RESPEC will satisfy the landowner's request prior to accessing their property.

RESPEC will be the frontline contact source in educating the property owner on the WV-DEPDRL- AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subconsultants to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). ANY signed document with a landowner must be notarized at RESPEC's expense.

RESPEC understands ownership can change during the duration of the project, which may require new agreements. All ownership of property will be updated utilizing courthouse records prior to the pre-bid conference and pre-construction conference.

Throughout the EROE and CROE process, RESPEC will keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. RESPEC understands legal support will not be required. If, after due diligence by the RESPEC, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

RESPEC will upload each EROE packet to the AML document repository (currently AMLNET) within five (5) business days of completing the package. This will include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondence. RESPEC will retain the original documents for three (3) years after the project's completion and will be supplied to the WVDEP-DLR-AML on an as-needed basis.

RESPEC will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

RESPEC will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide



comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. RESPEC will also attend all design review meetings.

Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, RESPEC will, in a timely and professional manner, schedule a meeting with each property owner involved. RESPEC will review the proposed reclamation plan with each landowner(s) to ensure the landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, RESPEC and our subcontractors, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. RESPEC understands any signed document with a landowner that must be notarized will be at our expense.

RESPEC will upload CROE packet within five (5) business days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

#### **TASK IIA: EXPLORATORY RIGHT OF ENTRY (EROE)**

This task includes all work conducted during EROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIB: CONSTRUCTION RIGHT OF ENTRY (CROE)**

This task includes all work conducted during CROE negotiations as detailed above. It is assumed that the realty agent will travel from Lexington, KY.

#### **TASK IIC: PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC's Realty Agent will attend the meeting.

### **TASK III DESIGN**

#### **TASK IIIA: SITE RECONNAISSANCE, AND INVESTIGATIONS**

Charges for this task will include reviewing the OSM-51 document(s), site reconnaissance and investigation necessary to ensure completion of the scope for this project. We will request any additional project or site information available.

RESPEC will use all available mine maps to verify all AML features, verify geological information and attempt to determine the location of underground mine pools and potential portal locations that may have been missed.

#### **TASK IIIB: SURVEYING & MAPPING**

RESPEC will conduct an aerial drone flight survey and process the data. RESPEC will locate pathways, portals debris to be removed and cross sections verification of the drone flight. It is assumed the area to be flown is approximately forty-five (45) acres. The flight survey will be utilized for the base contour data used in any regrading proposed on the site.

RESPEC will field locate features to confirm cross sections from the drone flight are correct. RESPEC will survey and stake propose drill hole locations. Digital copies of the mapping will be developed and will be compatible with AutoCAD 2020 format, or a WVDEP-DLR-AML accepted later edition. RESPEC will set a sufficient number of survey control monuments (rebar or monument with description and



references noted) as reasonably suitable for the project and based on the size, but no less than three (3), as deemed acceptable and/or necessary by WVDEP-DLR-AML. All surveying deliverables will be signed, sealed and dated by an active West Virginia Registered Professional Surveyor.

RESPEC will provide current mapping of the project site(s) sufficient to achieve the design scope for the project. We will conduct a topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811-ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures / fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or monument with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

#### TASK III: GEOTECHNICAL INVESTIGATIONS

RESPEC will prepare an initial drilling plan for the site to be used for geotechnical investigation, this will be submitted to WVDEP-DLR-AML for review. This will include drilling at the two portal locations. Each boring will be extended to a depth that corresponds to the mine seam elevation. For proposal purposes, an average depth of 30 ft. of soil and 80 ft. of rock coring for each hole. If a void is not encountered on the first attempt, the drilling location will be offset about 10 ft. and make up to two additional attempts. If a void is encountered, a temporary piezometer with a 10 ft. slotted screen at the bottom will be installed for future monitoring of groundwater levels at the site. If a void is not encountered after the 3rd attempt, a temporary piezometer will be installed in the last boring attempt. NGE will install the temporary piezometers upon completion of the drilling and seal the ground surface around the top to prevent surface water from infiltrating into the hole. The PVC casing will be left with about three feet of stickup above ground. The maximum anticipated footage for this portion of the project, if multiple attempts are required at each location, is 180 ft. of soil drilling, 480 ft. of rock coring and 226 ft. of piezometer.

For the gob pile, which is approximately 5.6 acres, RESPEC is proposing to drill 4 borings every 200 feet along the area of concern for a total of 24 borings and estimated 770 ft. of soil drilling. No rock coring is expected in this area.

An excavator will be needed to provide access for the drill rig to the borehole locations. Extra care will be taken to minimize damage to any structures or areas not intended to be disturbed for borehole drilling. All disturbed areas will be reclaimed with seed and straw mulch upon completion of drilling. A water truck will be necessary to provide water for any areas where coring is needed.





It is currently estimated that the geotechnical drilling will take 24 days to complete based upon the assumptions made above; however, the actual duration is dependent on actual project conditions. A RESPEC geologist will be on site daily supervising all drilling operations. The geologist will be providing logging, analysis, and guidance.

RESPEC will perform the 811 calls prior to drilling or excavating and will keep a record of when this was completed, the utilities or representatives that were communicated with and any written confirmation if available.

#### TASK IIID: ANALYSIS AND DESIGN

After the subsurface exploration, surveying, and water sampling and testing are complete, all data will be compiled and analyzed. Analysis to be performed will include, but not be limited to, volumetrics of spoil required and available to reclaim the dangerous highwalls, hydrologic and hydraulics analyses of the site, mine drainage remediation analysis and portal closure analysis and stability analyses. The impact of all data on the overall project and design will be reviewed. Any data that is found to be lacking or missing will be acquired.

#### TASK IIIE: PREPARATION OF PLANS, SPECIFICATIONS & ENGINEER'S ESTIMATE

RESPEC will develop a conceptual plan. The conceptual plan will be 30% of the design. The conceptual plans will include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing information required must be included in the conceptual design. Conceptual plans will include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. will be clearly defined and provided. This design will identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners will be shown and subsequently addressed with an engineered solution in the design at this stage. The site will have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. The plans will be signed, sealed and dated by an active West Virginia Professional Engineer and will be clearly stamped "Preliminary – Not for Construction." These plans will be uploaded into AML document repository (currently AMLNET).

RESPEC will schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. RESPEC will note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days after the meeting for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items.

RESPEC will then develop the 60% preliminary design package and incorporate the applicable concept and ideas discussed during the conceptual design meeting. The 60% preliminary design submission (Preliminary PS&E) will include but not be limited to: preliminary plans, preliminary specifications, an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan. Cut & fill calculations, geotechnical investigation reports (including boring logs, reports, analysis, etc.), and required hydraulic / hydrologic analysis, or other preliminary information, as needed will be



included in the submittal. This design will build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent access (for maintenance) will be clearly shown, as well as any pre-existing access. Design details need to be present in the plans.

Consideration will be given to how the design will be maintained after construction, the location and function of E&S controls, and any preliminary landowner comments or concerns.

This design will be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the preliminary design (60%) PS&E to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. RESPEC will upload the preliminary design (60%) PS&E review comments into AML document repository (currently AMLNET).

Any timing restrictions will be shown clearly on the project schedule.

RESPEC will generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which will include all design deliverables. The specifications and plans will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction", or equivalent. RESPEC will upload the 90% design package to the AML document repository (currently AMLNET).

RESPEC will schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. RESPEC will note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days for review and comment. RESPEC will proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. RESPEC will upload the 90% design package review comments into AML document repository (currently AMLNET).

RESPEC will generate the (100%) Issued for Bid documents, transmit them to WVDEP-DLR-AML, and shall provide confirmation that all comments have been considered and/or incorporated as necessary, applicable or required. Upon confirmation, RESPEC will transmit the electronic files to the WVDEP-DLR-AML and upload the Issued for Bid design package into AML document repository (currently AMLNET) – this will include PDF and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other final documentation for the project. Physical copies of the Issued for Bid design package will be mailed or hand-delivered to the WVDEP-DLR-AML. A minimum of three (3) ANSI D-Size (22"x34") sets of the plans will be provided. RESPEC will bring one (1) physical copy of Issued for bid design package to the on-site pre-bid conference (PBC). All documents will be prepared and/or reviewed by a Professional Engineer, including but not limited to Plans, Specifications, Stormwater Pollution



Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

#### **TASK III F – PERMITTING**

RESPEC will prepare and submit a Construction National Pollutant Discharge Elimination System Storm Water permit (NPDES). If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into AML document repository (currently AMLNET).

RESPEC will consult the US Army Corp of Engineers, WV Division of Natural Resources, Office of Land and Streams to determine if a 401/404 permit or a Stream Activity permit is required. If a 401/404 permit is deemed necessary, RESPEC will prepare and obtain the permit. If required, a wetland mitigation study will be performed, and a report will be provided.

RESPEC will consult and work with the WV Department of Natural Resources for a Stream Activity Permit. If necessary, the submission may be supplemented with the final design drawings should a substantial revision occur. All documents will be uploaded into the AML document repository (currently AMLNET).

RESPEC will prepare and obtain an MM-109 permit if required.

RESPEC will prepare and obtain a floodplain permit if required.

#### **TASK III G – PRE-BID CONFERENCE**

WVDEP-DLR-AML will schedule and RESPEC will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. RESPEC will videotape the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days. RESPEC will stake the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, as directed by the WVDEP-DLR-AML. RESPEC will produce an addendum document within three (3) business days based on the in-person questions with answers, electronic questions submitted in wvOASIS with answers, and conference notes for WVDEP-DLR-AML to process.

#### **TASK III H – PRE-CONSTRUCTION CONFERENCE**

RESPEC will conduct the on-site pre-construction conference. The conference will be videotaped, all questions, answers, comments, and discussions both recorded and noted and provided to WVDEP-DLR-AML for review and uploaded to the AML document repository (currently AMLNET). RESPEC will complete the construction notice to proceed letter and submit to WVDEP-DLR-AML for signature and processing.

#### **TASK IV – CONSTRUCTION OVERSIGHT**

RESPEC will provide construction oversight for this project. For this proposal, construction time is assumed to be 22 weeks. RESPEC assumes a 7-day, 12-hour/day work week. Mileage is assumed to be from Morgantown, WV and a partial per diem of \$25.00 is included for breakfast and lunch onsite. Actual construction time may vary, and a longer construction time frame may require a change order.



At least one (1) month in advance of construction, RESPEC will provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. RESPEC acknowledges WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

RESPEC's Construction Engineer will be an active West Virginia Registered Professional Engineer and will be responsible for collecting all required construction contractor submission documents for review and approval. RESPEC will upload documents into the AML document repository (currently AMLNET), once approved. RESPEC will complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to the AML document repository (currently AMLNET) for recording.

RESPEC's construction inspector will be engaged in construction oversight while any construction is taking place. The construction inspector will be present on-site and inspecting the work taking place. The construction inspector will actively be monitoring the job-site at all times that construction is occurring, ensuring that the construction plans and specifications are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

If construction is not occurring according to the requirements set forth, the inspector will immediately inform the construction contractor of the issue. If the issue is not immediately corrected, the inspector will issue a cease-and-desist order and notify the successful RESPEC's project manager. The inspector will document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day.

RESPEC will be responsible for reviewing and approving all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required to approve the invoice. RESPEC understands they have the authority to reject invoices which are not justified. Invoices will be accepted or rejected within three (3) business days.

A daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day will be completed. If concrete or grout placement and testing have occurred, that will need to be included. The daily log is to be uploaded into the AML document repository (currently AMLNET) daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns will be detailed in the daily log and shall be brought to RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

Each day that an environmental inspector performs an inspection, RESPEC will obtain a copy of the inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. The inspection form will be uploaded into AML document repository (currently AMLNET) on a same-day basis but in no case later than 48 hours after



the date of the inspection. Any problems or concerns detailed in the inspection forms will be brought to the RESPEC's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day.

At the conclusion of the construction, RESPEC will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification will be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of RESPEC. RESPEC will upload the drone videos, pictures, and road videos before, during, and after construction to the AML document repository (currently AMLNET).

#### **TASK V – POST CONSTRUCTION OVERSIGHT**

This task includes post-construction oversight. At the end of the one (1) year warranty period, or when the warranty is released, RESPEC will attend the warranty release meeting with construction contractor to affirm that all warranty obligations have been satisfied and sign off on the release of warranty at the end of the work. RESPEC will complete the bond release document(s) and submit such to WVDEP-DLR-AML for signature and processing. It is assumed that any post construction water monitoring requirements will be completed by WVDEP-DLR-AML. It was assumed that there would be eight site visits or meetings required, including one for the warranty release, during the post-construction period.



---

# APPENDIX A

## TASK COST BREAKDOWN

---

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION  
APPLICATION AND CERTIFICATE FOR PAYMENT

TO: WV DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF ABANDONED MINE LANDS AND RECLAMATION  
101 CAMBRIDGE PLACE  
BRIDGEPORT, WV 26330

ATTN: Troy H. Schell

VENDOR: RESPEC Company, LLC

APPLICATION NUMBER: 1

ADDRESS: 3824 Jet Drive,  
Jet Drive, Rapid City, South Dakota, 57703

PUR. ORD. NO.: CEOI 0313 DEP2400000008

REMIT ADDRESS: Same

CONTRACT NAME: 2023 AML Contract N4

OASIS VENDOR CUSTOMER NUMBER: VC000009953

COMMODITY LINE	PROJECT NO.:	DESCRIPTION (Project Name)	AMOUNT DUE THIS INVOICE
1	EPAM xxxxx	Beech Bottom Highwall	\$0.00
2	EPAM xxxxx	Bethany (Haizlett) DS, Highwall and AMD	\$0.00
3	EPAM xxxxx	Buffalo Creek Highwall	\$0.00
4	EPAM xxxxx	Crafts Run Maintenance	\$0.00
5	EPAM xxxxx	Logan Run Highwall	\$0.00
6	EPAM xxxxx	Richard Mine Drainage Facility Upgrades	\$0.00
7	EPAM xxxxx	Wades Run Dangerous Embankment Phase II	\$0.00
		TOTAL AMOUNT DUE THIS INVOICE	\$0.00

DATES OF SERVICE: FROM 1-Dec-23 TO 31-Dec-23

DATE OF APPLICATION FOR PYMT: 1-Jan-24

ORIGINAL CONTRACT SUM \$10,729,764.00  
NET CHANGE BY CHANGE ORDERS \$0.00  
TOTAL CONTRACT SUM TO DATE \$10,729,764.00  
TOTAL BILLED TO DATE \$0.00  
LESS PREVIOUS PAYMENT TO DATE \$0.00  
CURRENT PAYMENT DUE \$0.00

INVOICE TYPE: REG.  ]  
NO. 1

% COMPLETE: \$0.00 0.00%  
\$10,729,764.00

ALL WORK IS COMPLETE AND THIS IS THE FINAL INVOICE ON THIS CONTRACT:  
YES  ] NO  ]

The undersigned Vendor certifies that the work covered by this Application for Payment has been completed in accordance with the Contract Documents and that the current payment shown herein is now due.

SIGNATURES:

\_\_\_\_\_  
REALTY REPRESENTATIVE

\_\_\_\_\_  
PLANNING REPRESENTATIVE

\_\_\_\_\_  
DESIGN REPRESENTATIVE

\_\_\_\_\_  
CONSTRUCTION REPRESENTATIVE

\_\_\_\_\_  
AML REPRESENTATIVE

\_\_\_\_\_  
VENDOR SIGNATURE (BLUE INK ONLY)

Jesse Hatter  
\_\_\_\_\_  
VENDOR PRINTED NAME

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008	Application No.: 1	Page 2 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 1		
Project Name: Beech Bottom Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
<b>TASK I: NEPA &amp; ESA</b>											
<b>A</b>	<b>Agency Coordinations (including Office Work, AMLNET, etc.)</b>										
1	Senior Project Manager	HR	80	\$215.00	\$17,200.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Administrative	HR	160	\$57.00	\$9,120.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>										
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
<b>C</b>	<b>Studies, Surveys &amp; Mitigation Plans (as applicable)</b>										
<b>a</b>	<b>Bat Assessments</b>										
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
4	Biological Project Manager	HR	10	\$120.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior Environmental Scientist	HR	12	\$105.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00
6	Environmental Scientist I	HR	12	\$75.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
8	Biological Mileage	MILE	180	\$0.95	\$171.00		\$0.00		\$0.00	0.0	\$0.00
<b>b</b>	<b>Bald Eagle Assessments (if required)</b>										
9	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
10	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
12	Biological Project Manager	HR	24	\$120.00	\$2,880.00		\$0.00		\$0.00	0.0	\$0.00
13	Senior Environmental Scientist	HR	24	\$105.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00
14	Environmental Scientist I	HR	36	\$75.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
16	Drone	HR	36	\$175.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
17	Biological Mileage	MILE	500	\$0.95	\$475.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 2 COST</b>	<b>\$63,974.00</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 2 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 2 TO DATE</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP240000008

Application No.: 1

Page 3 of 60 Pages

Contract Name: 2023 AML Contract N4

Commodity Line: 1

Project Name: Beech Bottom Highwall

WORK COMPLETED

SCHEDULE PER CONTRACT

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
						UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK I: NEPA &amp; ESA (CONTINUED)</b>											
	<b>c</b>	<b>Water Sampling and Testing (if required)</b>									
18	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
19	Planning Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00
		<b>Water Sampling Sub Consultant</b>									
20	Senior Environmental Scientist	HR	90	\$105.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00
21	Analytical Test	SAMPLE	30	\$400.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
22	Sampling Mileage	MILE	820	\$0.95	\$779.00		\$0.00		\$0.00	0.0	\$0.00
23	GPS	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
24	Water Quality Probe	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
		<b>D CATEX / EA / FONSI / EIS</b>									
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00
4	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 3 COST</b>	<b>\$51,095.00</b>	<b>SUBTOTAL PAGE 3 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 3 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 3 TO DATE</b>	<b>\$0.00</b>

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	WORK COMPLETED		TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK II: REALTY</b>											
<b>A</b>	<b>Exploratory Rights of Entry (EROE)</b>										
1	Senior Project Manager	HR	12	\$215.00	\$2,580.00		\$0.00		\$0.00	0.0	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00
c	Office Work / AMLNET	HR	26	\$163.00	\$4,238.00		\$0.00		\$0.00	0.0	\$0.00
3	Mileage	MILE	2000	\$0.70	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00
4	Per Diem	DAY	5	\$300.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>Construction Rights of Entry (CROE)</b>										
1	Senior Project Manager	HR	12	\$215.00	\$2,580.00		\$0.00		\$0.00	0.0	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00
c	Office Work / AMLNET	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00
3	Mileage	MILE	2000	\$0.70	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00
4	Per Diem	DAY	5	\$300.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00
<b>C</b>	<b>Pre-Bid Conference</b>										
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
<b>D</b>	<b>Pre-Construction Conference</b>										
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 4 COST</b>	<b>\$52,726.00</b>	<b>SUBTOTAL PAGE 4 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 4 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 4 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
						UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK III: DESIGN</b>											
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>										
1	Principal	HR	8	\$235.00	\$1,880.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	160	\$215.00	\$34,400.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	96	\$163.00	\$15,648.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	144	\$136.00	\$19,584.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
6	Mileage	MILE	2400	\$0.70	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00
7	Per Diem	DAY	12	\$300.00	\$3,600.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Surveying Sub Consultant</b>										
	<b>Survey Services</b>										
4	Aerial Drone LIDAR	HR	24	\$175.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Planning / Engineer	HR	40	\$175.00	\$7,000.00		\$0.00		\$0.00	0.0	\$0.00
6	Survey Crew	HR	100	\$140.00	\$14,000.00		\$0.00		\$0.00	0.0	\$0.00
7	AutoCAD Technician	HR	88	\$80.00	\$7,040.00		\$0.00		\$0.00	0.0	\$0.00
8	Surveying Project Manager	HR	40	\$140.00	\$5,600.00		\$0.00		\$0.00	0.0	\$0.00
9	Surveyor Mileage	MILE	2400	\$0.75	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00
10	Surveyor Per Diem	DAY	10	\$350.00	\$3,500.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 5 COST</b>	<b>\$144,532.00</b>	<b>SUBTOTAL PAGE 5 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 5 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 5 TO DATE</b>	<b>\$0.00</b>

AML-7A (Revised 12/6/2023)

Application No.: 1

Page 5 of 60 Pages

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CE01 0313 DEP240000008						Application No.: 1			Page 6 of 60 Pages		
Contract Name: 2023 AML Contract N4											
Commodity Line: 1											
Project Name: Beech Bottom Highwall						<b>WORK COMPLETED</b>					
SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK III: DESIGN (CONTINUED)</b>											
<b>C</b>	<b>GEO TECHNICAL INVESTIGATION</b>										
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	32	\$215.00	\$6,880.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	50	\$136.00	\$6,800.00		\$0.00		\$0.00	0.0	\$0.00
5	Geologist	HR	1080	\$126.00	\$136,080.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	60	\$131.00	\$7,860.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	18900	\$0.70	\$13,230.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	90	\$300.00	\$27,000.00		\$0.00		\$0.00	0.0	\$0.00
	Geotechnical Sub Consultant										
	Geotechnical Drilling Services										
9	Geotechnical Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
10	Geotechnical Engineer/Geologist	HR	60	\$195.00	\$11,700.00		\$0.00		\$0.00	0.0	\$0.00
11	Mobilization / Demobilization	LS	1	\$18,000.00	\$18,000.00		\$0.00		\$0.00	0.0	\$0.00
12	Soil Augering	LF	5380	\$34.00	\$182,920.00		\$0.00		\$0.00	0.0	\$0.00
13	Rock Coring	LF	480	\$70.00	\$33,600.00		\$0.00		\$0.00	0.0	\$0.00
14	Heavy Equipment	HR	300	\$200.00	\$60,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Piezometer Installation	LF	226	\$44.00	\$9,944.00		\$0.00		\$0.00	0.0	\$0.00
16	Drill Crew Per Diem	DAY	86	\$585.00	\$50,310.00		\$0.00		\$0.00	0.0	\$0.00
17	Reclamation	LF	20000	\$3.00	\$60,000.00		\$0.00		\$0.00	0.0	\$0.00
<b>D</b>	<b>ANALYSIS AND DESIGN</b>										
1	Principal	HR	30	\$235.00	\$7,050.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	165	\$215.00	\$35,475.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	152	\$185.00	\$28,120.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	4000	\$0.70	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 6 COST</b>	<b>\$755,869.00</b>	<b>SUBTOTAL PAGE 6 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 6 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 6 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS COST		
<b>TASK III: DESIGN (CONTINUED)</b>												
<b>E</b>	<b>PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>											
1	Principal	HR	16	\$235.00	\$3,760.00							
2	Senior Project Manager	HR	275	\$215.00	\$59,125.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	275	\$185.00	\$50,875.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	144	\$163.00	\$23,472.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	260	\$136.00	\$35,360.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	260	\$131.00	\$34,060.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
9	Per Diem	DAY	27	\$300.00	\$8,100.00		\$0.00		\$0.00	0.0	\$0.00	
<b>F</b>	<b>PERMITTING</b>											
<b>a</b>	<b>NPDES</b>											
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
<b>b</b>	<b>USACE 401/404</b>											
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior Project Manager	HR	120	\$215.00	\$25,800.00		\$0.00		\$0.00	0.0	\$0.00	
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
<b>c</b>	<b>DNR Stream Activity</b>											
11	Senior Project Manager	HR	6	\$215.00	\$1,290.00		\$0.00		\$0.00	0.0	\$0.00	
12	Project Engineer	HR	50	\$163.00	\$8,150.00		\$0.00		\$0.00	0.0	\$0.00	
13	Staff Engineer	HR	20	\$136.00	\$2,720.00		\$0.00		\$0.00	0.0	\$0.00	
14	Senior CAD Technician	HR	20	\$131.00	\$2,620.00		\$0.00		\$0.00	0.0	\$0.00	
<b>d</b>	<b>MM-109</b>											
15	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
16	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
17	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
18	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
<b>e</b>	<b>Floodplain Permit</b>											
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
<b>f</b>	<b>Permit Fees</b>											
		UNIT	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 7 COST</b>	<b>\$380,982.00</b>	<b>SUBTOTAL PAGE 7 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 7 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 7 TO DATE</b>	<b>\$0.00</b>

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CE01 0313 DEP2400000008	Application No.: 1	Page 8 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 1		
Project Name: Beech Bottom Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
<b>G</b>	<b>PRE-BID CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>H</b>	<b>PRE-CONSTRUCTION CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>TASK IV: CONSTRUCTION OVERSIGHT</b>												
<b>A</b>	<b>Construction Inspection</b>											
1	Senior Project Manager	HR	800	\$215.00	\$172,000.00		\$0.00		\$0.00	0.0	\$0.00	
a	Mileage	MILE	40000	\$0.70	\$28,000.00							
b	Per Diem	DAY	100	\$300.00	\$30,000.00							
2	Construction Inspector											
a	Construction Inspection	HR	8400	\$100.00	\$840,000.00		\$0.00		\$0.00	0.0	\$0.00	
b	Mileage	MILE	105000	\$0.70	\$73,500.00		\$0.00		\$0.00	0.0	\$0.00	
c	Partial Per Diem	DAY	700	\$25.00	\$17,500.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Video Recording Sub Consultant											
a	Project Manager	HR	8	\$185.00	\$1,480.00							
b	Operator	HR	48	\$100.00	\$4,800.00							
c	Drone	HR	48	\$175.00	\$8,400.00							
d	Mileage	MILE	640	\$0.70	\$448.00							
<b>TASK V: POST-CONSTRUCTION OVERSIGHT</b>												
<b>A</b>	<b>FIELD VISITS / INSPECTIONS</b>											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	64	\$215.00	\$13,760.00		\$0.00		\$0.00	0.0	\$0.00	
a	Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
b	Per Diem	DAY	8	\$300.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Inspector											
a	Construction Inspection	HR	288	\$100.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00	
b	Mileage	MILE	3600	\$0.70	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
c	Partial Per Diem	DAY	24	\$25.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 8 COST</b>	\$1,236,588.00			<b>SUBTOTAL PAGE 8 THIS APPLICATION</b>	\$0.00		
						<b>SUBTOTAL PAGE 8 PREVIOUS</b>	\$0.00			<b>SUBTOTAL PAGE 8 TO DATE</b>	\$0.00	

<b>PROJECT TOTAL COST</b>	\$2,685,766.00	<b>PROJECT TOTAL PREVIOUS</b>	\$0.00	<b>PROJECT TOTAL THIS APPLICATION</b>	\$0.00	<b>PROJECT TOTAL TO DATE</b>	\$0.00
---------------------------	----------------	-------------------------------	--------	---------------------------------------	--------	------------------------------	--------



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008	Application No.: 1	Page 9 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 2		
Project Name: Bethany (Haizlett) DS, Highwall and AMD		

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
<b>TASK I: NEPA &amp; ESA</b>											
A	Agency Coordinations (including Office Work, AMLNET, etc.)										
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Administrative	HR	80	\$57.00	\$4,560.00		\$0.00		\$0.00	0.0	\$0.00
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)										
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
C	Studies, Surveys & Mitigation Plans (as applicable)										
a	Bat Assessments (If required)										
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
4	Biological Project Manager	HR	10	\$120.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior Environmental Scientist	HR	12	\$105.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00
6	Environmental Scientist I	HR	12	\$75.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
8	Biological Mileage	MILE	160	\$0.95	\$152.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL</b>	<b>\$29,736.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>
				<b>PAGE 9 COST</b>		<b>PAGE 9 PREVIOUS</b>		<b>PAGE 9 THIS APPLICATION</b>		<b>PAGE 9 TO DATE</b>	<b>\$0.00</b>

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008	Application No.: 1	Page 10 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 2		

Project Name: Bethany (Haizlet) DS, Highwall and AMD

SCHEDULE PER CONTRACT						WORK COMPLETED					
						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK J: NEPA &amp; ESA (CONTINUED)</b>											
	<b>b</b>	<b>Bald Eagle Assessments (If required)</b>									
9	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
10	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
		<b>Biological Sub Consultant</b>									
12	Biological Project Manager	HR	20	\$120.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00
13	Senior Environmental Scientist	HR	24	\$105.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00
14	Environmental Scientist I	HR	24	\$75.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
16	Drone	HR	16	\$175.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
17	Biological Mileage	MILE	200	\$0.95	\$190.00		\$0.00		\$0.00	0.0	\$0.00
	<b>c</b>	<b>Water Sampling and Testing</b>									
18	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
19	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
		<b>Water Sampling Sub Consultant</b>									
20	Senior Environmental Scientist	HR	90	\$105.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00
21	Analytical Test	SAMPLE	30	\$400.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
22	Sampling Mileage	MILE	820	\$0.95	\$779.00		\$0.00		\$0.00	0.0	\$0.00
23	GPS	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
24	Water Quality Probe	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
	<b>D</b>	<b>CATEX / EA / FONSI / EIS</b>									
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00
4	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 10 COST</b>	<b>\$63,901.00</b>	<b>SUBTOTAL PAGE 10 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 10 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 10 TO DATE</b>	<b>\$0.00</b>





WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008

Application No.: 1

Contract Name: 2023 AML Contract N4

Commodity Line: 2

Project Name: Bethany (Haizlett) DS, Highwall and AMD

WORK COMPLETED

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN</b>												
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>											
1	Principal	HR	8	\$235.00	\$1,880.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	80	\$215.00	\$17,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	48	\$131.00	\$6,288.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	MILE	2400	\$0.70	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00	
7	Per Diem	DAY	9	\$300.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00	
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00	
	Surveying Sub Consultant											
	Survey Services											
4	Aerial Drone LiDAR	HR	12	\$175.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
5	Planning / Engineer	HR	41	\$175.00	\$7,175.00		\$0.00		\$0.00	0.0	\$0.00	
6	Survey Crew	HR	65	\$140.00	\$9,100.00		\$0.00		\$0.00	0.0	\$0.00	
7	AutoCAD Technician	HR	44	\$80.00	\$3,520.00		\$0.00		\$0.00	0.0	\$0.00	
8	Surveying Project Manager	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
9	Surveyor Mileage	Miles	1200	\$0.75	\$900.00		\$0.00		\$0.00	0.0	\$0.00	
10	Surveyor Per Diem	DAY	5	\$350.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00	
				<b>SUBTOTAL PAGE 12 COST</b>	<b>\$100,573.00</b>		<b>\$0.00</b>		<b>SUBTOTAL PAGE 12 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 12 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP240000008

Contract Name: 2023 AML Contract N4

Commodity Line: 2

Project Name: Bethany (Haizlet) DS, Highwall and AMD

Application No.: 1

Page 13 of 60 Pages

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS COST	
<b>TASK III: DESIGN (CONTINUED)</b>											
<b>C</b>	<b>GEOTECHNICAL INVESTIGATION</b>										
1	Principal	HR	3	\$235.00	\$705.00						
2	Senior Project Manager	HR	19	\$215.00	\$4,085.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	36	\$163.00	\$5,868.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	12	\$136.00	\$1,632.00		\$0.00		\$0.00	0.0	\$0.00
5	Geologist	HR	464	\$126.00	\$58,464.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	84	\$131.00	\$11,004.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	9450	\$0.70	\$6,615.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	44	\$300.00	\$13,200.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Geotechnical Sub Consultant</b>										
	<b>Geotechnical Drilling Services</b>										
9	Geotechnical Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
10	Geotechnical Engineer/Geologist	HR	20	\$195.00	\$3,900.00		\$0.00		\$0.00	0.0	\$0.00
11	Mobilization / Demobilization	LS	1	\$16,000.00	\$16,000.00		\$0.00		\$0.00	0.0	\$0.00
12	Soil Augering	LF	2180	\$34.00	\$74,120.00		\$0.00		\$0.00	0.0	\$0.00
13	Rock Coring	LF	480	\$70.00	\$33,600.00		\$0.00		\$0.00	0.0	\$0.00
14	Heavy Equipment	HR	160	\$200.00	\$32,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Piezometer Installation	LF	220	\$44.00	\$9,680.00		\$0.00		\$0.00	0.0	\$0.00
16	Drill Crew Per Diem	DAY	40	\$585.00	\$23,400.00		\$0.00		\$0.00	0.0	\$0.00
17	Reclamation	LF	6650	\$3.00	\$19,950.00		\$0.00		\$0.00	0.0	\$0.00
<b>D</b>	<b>ANALYSIS AND DESIGN</b>										
1	Principal	HR	16	\$235.00	\$3,760.00						
2	Senior Project Manager	HR	96	\$215.00	\$20,640.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	39	\$185.00	\$7,215.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	110	\$163.00	\$17,930.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	108	\$136.00	\$14,688.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	104	\$131.00	\$13,624.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	4000	\$0.70	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 13 COST</b>	<b>\$405,680.00</b>		<b>SUBTOTAL PAGE 13 PREVIOUS</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 13 THIS APPLICATION</b>	<b>\$0.00</b>
										<b>SUBTOTAL PAGE 13 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008

Application No.: 1

Contract Name: 2023 AML Contract N4

Commodity Line: 2

Project Name: Bethany (Haizlett) DS, Highwall and AMD

WORK COMPLETED

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
<b>E</b>	<b>PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>											
1	Principal	HR	19	\$235.00	\$4,465.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	197	\$215.00	\$42,355.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	77	\$185.00	\$14,245.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	342	\$163.00	\$55,746.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	268	\$136.00	\$36,448.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	240	\$131.00	\$31,440.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
9	Per Diem	DAY	27	\$300.00	\$8,100.00		\$0.00		\$0.00	0.0	\$0.00	
<b>F</b>	<b>PERMITTING</b>											
<b>a</b>	<b>NPDES</b>											
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
<b>b</b>	<b>USACE 401/404</b>											
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior Project Manager	HR	112	\$215.00	\$24,080.00		\$0.00		\$0.00	0.0	\$0.00	
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 14 COST</b>	<b>\$296,389.00</b>	<b>SUBTOTAL PAGE 14 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 14 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 14 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008

Contract Name: 2023 AML Contract N4

Commodity Line: 2

Project Name: Bethany (Haizlett) DS, Highwall and AMD

Application No.: 1

Page 15 of 60 Pages

**WORK COMPLETED**

**SCHEDULE PER CONTRACT**

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
	<b>c MM-109</b>											
11	Senior Project Manager	HR	4	\$215.00	\$860.00							
12	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
13	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
14	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>d Floodplain Permit</b>											
15	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
16	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
17	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
18	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>e DNR Stream Activity</b>											
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>f Permit Fees</b>	Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>G PRE-BID CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>H PRE-CONSTRUCTION CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
				<b>SUBTOTAL PAGE 15 COST</b>	<b>\$87,908.00</b>		<b>SUBTOTAL PAGE 15 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 15 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 15 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008

Application No.: 1

Contract Name: 2023 AML Contract N4

Commodity Line: 2

Project Name: Bethany (Haizlett) DS, Highwall and AMD

WORK COMPLETED

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK IV: CONSTRUCTION OVERSIGHT</b>												
A	Construction Inspection											
1	Senior Project Manager	HR	160	\$215.00	\$34,400.00		\$0.00		\$0.00	0.0	\$0.00	
a	Mileage	MILE	8000	\$0.70	\$5,600.00							
b	Per Diem	DAY	20	\$300.00	\$6,000.00							
2	Construction Inspector											
a	Construction Inspection	HR	2520	\$100.00	\$252,000.00		\$0.00		\$0.00	0.0	\$0.00	
b	Mileage	MILE	10500	\$0.70	\$7,350.00		\$0.00		\$0.00	0.0	\$0.00	
c	Partial Per Diem	DAY	210	\$25.00	\$5,250.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Video Recording Sub Consultant											
a	Project Manager	HR	8	\$185.00	\$1,480.00							
b	Operator	HR	24	\$100.00	\$2,400.00							
c	Drone	HR	24	\$175.00	\$4,200.00							
d	Mileage	MILE	640	\$0.70	\$448.00							
<b>TASK V: POST-CONSTRUCTION OVERSIGHT</b>												
A	FIELD VISITS / INSPECTIONS											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	64	\$215.00	\$13,760.00		\$0.00		\$0.00	0.0	\$0.00	
a	Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
b	Per Diem	DAY	8	\$300.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Inspector											
a	Construction Inspection	HR	288	\$100.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00	
b	Mileage	MILE	3600	\$0.70	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
c	Partial Per Diem	DAY	24	\$25.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 16 COST	\$370,388.00	SUBTOTAL PAGE 16 PREVIOUS	\$0.00	SUBTOTAL PAGE 16 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 16 TO DATE	\$0.00
					PROJECT TOTAL COST	\$1,403,389.00	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE		
										UNITS	COST	
<b>TASK I: NEPA &amp; ESA</b>												
<b>A</b>	<b>Agency Coordination (including Office Work, AMLNET, etc.)</b>											
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Administrative	HR	96	\$57.00	\$5,472.00		\$0.00		\$0.00			
<b>B</b>	<b>Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>											
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C</b>	<b>Studies, Surveys &amp; Mitigation Plans (as applicable)</b>											
<b>a</b>	<b>Bat Assessments (If required)</b>											
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>Biological Sub Consultant</b>											
4	Biological Project Manager	HR	10	\$120.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior Environmental Scientist	HR	12	\$105.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00	
6	Environmental Scientist I	HR	12	\$75.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00	
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00	
8	Biological Mileage	MILE	180	\$0.95	\$171.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 17 COST</b>	<b>\$30,667.00</b>	<b>SUBTOTAL PAGE 17 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 17 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 17 TO DATE</b>	<b>\$0.00</b>







WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	WORK COMPLETED		TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>Purchase Order No.: CE01 0313 DEP2400000008</b>											
<b>Contract Name: 2023 AML Contract N4</b>											
<b>Commodity Line: 3</b>											
<b>Project Name: Buffalo Creek Highwall</b>											
<b>Application No.: 1</b>											
<b>Task III: DESIGN</b>											
A	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>										
1	Principal	HR	12	\$235.00	\$2,820.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	80	\$215.00	\$17,200.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	48	\$131.00	\$6,288.00		\$0.00		\$0.00	0.0	\$0.00
6	Mileage	MILE	2400	\$0.70	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00
7	Per Diem	DAY	9	\$300.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00
B	<b>SURVEYING &amp; MAPPING</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Surveying Sub Consultant</b>										
	<b>Survey Services</b>										
4	Aerial Drone LiDAR	HR	12	\$175.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00
5	Planning / Engineer	HR	31	\$175.00	\$5,425.00		\$0.00		\$0.00	0.0	\$0.00
6	Survey Crew	HR	65	\$140.00	\$9,100.00		\$0.00		\$0.00	0.0	\$0.00
7	AutoCAD Technician	HR	44	\$80.00	\$3,520.00		\$0.00		\$0.00	0.0	\$0.00
8	Surveying Project Manager	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
9	Surveyor Mileage	Miles	1200	\$0.75	\$900.00		\$0.00		\$0.00	0.0	\$0.00
10	Surveyor Per Diem	DAY	5	\$350.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00
C	<b>GEOTECHNICAL INVESTIGATION</b>										
1	Principal	HR	3	\$235.00	\$705.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	19	\$215.00	\$4,085.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	36	\$163.00	\$5,868.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	12	\$136.00	\$1,632.00		\$0.00		\$0.00	0.0	\$0.00
5	Geologist	HR	808	\$126.00	\$101,808.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	60	\$131.00	\$7,860.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	13650	\$0.70	\$9,555.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	64	\$300.00	\$19,200.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Geotechnical Sub Consultant</b>										
9	Geotechnical Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
10	Geotechnical Engineer/Geologist	HR	30	\$195.00	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00
11	Mobilization / Demobilization	LS	1	\$16,000.00	\$16,000.00		\$0.00		\$0.00	0.0	\$0.00
12	Soil Augering	LF	2960	\$34.00	\$100,640.00		\$0.00		\$0.00	0.0	\$0.00
13	Rock Coring	LF	960	\$70.00	\$67,200.00		\$0.00		\$0.00	0.0	\$0.00
14	Heavy Equipment	HR	160	\$200.00	\$32,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Piezometer Installation	LF	452	\$44.00	\$19,888.00		\$0.00		\$0.00	0.0	\$0.00
16	Drill Crew Per Diem	DAY	60	\$585.00	\$35,100.00		\$0.00		\$0.00	0.0	\$0.00
17	Reclamation	LF	10400	\$3.00	\$31,200.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 20 COST</b>	<b>\$564,654.00</b>		<b>\$0.00</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 20 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.:	CEOI 0313 DEP240000008	Application No.:	1
Contract Name:	2023 AML Contract N4	Page 21 of 60 Pages	
Commodity Line:	3		
Project Name:	Buffalo Creek Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
<b>D</b>	<b>ANALYSIS AND DESIGN</b>											
1	Principal	HR	12	\$235.00	\$2,820.00							
2	Senior Project Manager	HR	96	\$215.00	\$20,640.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	39	\$185.00	\$7,215.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	110	\$163.00	\$17,930.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	108	\$136.00	\$14,688.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	104	\$131.00	\$13,624.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	4000	\$0.70	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00	
<b>E</b>	<b>PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>											
1	Principal	HR	19	\$235.00	\$4,465.00							
2	Senior Project Manager	HR	189	\$215.00	\$40,635.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	77	\$185.00	\$14,245.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	338	\$163.00	\$55,094.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	260	\$136.00	\$35,360.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	240	\$131.00	\$31,440.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
9	Per Diem	DAY	27	\$300.00	\$8,100.00		\$0.00		\$0.00	0.0	\$0.00	
<b>F</b>	<b>PERMITTING</b>											
<b>a</b>	<b>NPDES</b>											
1	Principal	HR	2	\$235.00	\$470.00							
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
<b>b</b>	<b>USACE 401/404</b>											
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior Project Manager	HR	112	\$215.00	\$24,080.00		\$0.00		\$0.00	0.0	\$0.00	
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 21 COST</b>	<b>\$377,146.00</b>	<b>SUBTOTAL PAGE 21 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 21 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 21 TO DATE</b>	<b>\$0.00</b>

AML-7A (Revised 12/6/2023)







WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Application No.: 1

Page 24 of 60 Pages

Purchase Order No.: CEOI 0313 DEP2400000008

Contract Name: 2023 AML Contract N4

Commodity Line: 4

Project Name: Crafts Run Maintenance

WORK COMPLETED

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK I: NEPA &amp; ESA</b>												
<b>A</b>	<b>Agency Coordination (including Office Work, AMLNET, etc.)</b>											
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Administrative	HR	96	\$57.00	\$5,472.00		\$0.00		\$0.00			
<b>B</b>	<b>Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>											
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
5	Planning Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C</b>	<b>Studies, Surveys &amp; Mitigation Plans (as applicable)</b>											
<b>a</b>	<b>Bat Assessments (If required)</b>											
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00	
<b>Biological Sub Consultant</b>												
4	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior Environmental Scientist	HR	6	\$105.00	\$630.00		\$0.00		\$0.00	0.0	\$0.00	
6	Environmental Scientist I	HR	6	\$75.00	\$450.00		\$0.00		\$0.00	0.0	\$0.00	
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00	
8	Biological Mileage	MILE	40	\$0.95	\$38.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 24 COST</b>	<b>\$29,214.00</b>	<b>SUBTOTAL PAGE 24 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 24 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 24 TO DATE</b>	<b>\$0.00</b>



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008

Application No.: 1

Contract Name: 2023 AML Contract N4

Commodity Line: 4

Project Name: Crafts Run Maintenance

**WORK COMPLETED**

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE			
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST		
<b>TASK II: REALTY</b>													
<b>A</b>	<b>Exploratory Rights of Entry (EROE)</b>												
1	Senior Project Manager	HR	20	\$215.00	\$4,300.00		\$0.00		\$0.00	0.0	\$0.00		
2	Realty Agent												
a	Courthouse Work	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00		
b	Field Reconnaissance / Landowner Correspondence	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00		
c	Office Work / AMLNET	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00		
3	Mileage	MILE	2000	\$0.70	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00		
4	Per Diem	DAY	5	\$300.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00		
<b>B</b>	<b>Construction Rights of Entry (CROE)</b>												
1	Senior Project Manager	HR	20	\$215.00	\$4,300.00		\$0.00		\$0.00	0.0	\$0.00		
2	Realty Agent												
a	Courthouse Work	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00		
b	Field Reconnaissance / Landowner Correspondence	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00		
c	Office Work / AMLNET	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00		
3	Mileage	MILE	2000	\$0.70	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00		
4	Per Diem	DAY	5	\$300.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00		
<b>C</b>	<b>Pre-Bid Conference</b>												
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00		
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00		
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00		
<b>D</b>	<b>Pre-Construction Conference</b>												
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00		
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00		
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00		
					<b>SUBTOTAL PAGE 26 COST</b>		<b>\$50,624.00</b>	<b>SUBTOTAL PAGE 26 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 26 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 26 TO DATE</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CE01 0313 DEP2400000008

Contract Name: 2023 AML Contract N4

Commodity Line: 4

Project Name: Crafts Run Maintenance

Application No.: 1

Page 27 of 60 Pages

WORK COMPLETED

SCHEDULE PER CONTRACT

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
						UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK III: DESIGN</b>											
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>										
1	Principal	HR	12	\$235.00	\$2,820.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	168	\$215.00	\$36,120.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	48	\$163.00	\$7,824.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	48	\$131.00	\$6,288.00		\$0.00		\$0.00	0.0	\$0.00
6	Mileage	MILE	2600	\$0.70	\$1,820.00		\$0.00		\$0.00	0.0	\$0.00
7	Per Diem	DAY	10	\$300.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00
	Surveying Sub Consultant						\$0.00		\$0.00	0.0	\$0.00
	Survey Services										
4	Aerial Drone LiDAR	HR	10	\$175.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00
5	Planning / Engineer	HR	41	\$175.00	\$7,175.00		\$0.00		\$0.00	0.0	\$0.00
6	Survey Crew	HR	55	\$140.00	\$7,700.00		\$0.00		\$0.00	0.0	\$0.00
7	AutoCAD Technician	HR	44	\$80.00	\$3,520.00		\$0.00		\$0.00	0.0	\$0.00
8	Surveying Project Manager	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
9	Surveyor Mileage	MILE	800	\$0.75	\$600.00		\$0.00		\$0.00	0.0	\$0.00
10	Surveyor Per Diem	DAY	5	\$350.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00
<b>C</b>	<b>GEOTECHNICAL INVESTIGATION</b>										
1	Principal	HR	3	\$235.00	\$705.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	24	\$215.00	\$5,160.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	52	\$163.00	\$8,476.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	20	\$136.00	\$2,720.00		\$0.00		\$0.00	0.0	\$0.00
5	Geologist	HR	280	\$126.00	\$35,280.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	60	\$131.00	\$7,860.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	5250	\$0.70	\$3,675.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	24	\$300.00	\$7,200.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 27 COST</b>	<b>\$184,683.00</b>		<b>\$0.00</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 27 TO DATE</b>	<b>\$0.00</b>

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Application No.: 1

Page 28 of 60 Pages

Purchase Order No.: CEOI 0313 DEP2400000008

Contract Name: 2023 AML Contract N4

Commodity Line: 4

Project Name: Crafts Run Maintenance

**WORK COMPLETED**

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
	Geotechnical Sub Consultant											
	Geotechnical Drilling Services								\$0.00	0.0	\$0.00	
9	Geotechnical Project Manager	HR	28	\$210.00	\$5,880.00				\$0.00	0.0	\$0.00	
10	Geotechnical Engineer/Geologist	HR	18	\$195.00	\$3,510.00				\$0.00	0.0	\$0.00	
11	Mobilization / Demobilization	LS	1	\$12,000.00	\$12,000.00				\$0.00	0.0	\$0.00	
12	Soil Augering	LF	800	\$34.00	\$27,200.00				\$0.00	0.0	\$0.00	
13	Rock Coring	LF	480	\$70.00	\$33,600.00				\$0.00	0.0	\$0.00	
14	Heavy Equipment	HR	60	\$200.00	\$12,000.00				\$0.00	0.0	\$0.00	
15	Piezometer Installation	LF	226	\$44.00	\$9,944.00				\$0.00	0.0	\$0.00	
16	Drill Crew Per Diem	DAY	20	\$585.00	\$11,700.00				\$0.00	0.0	\$0.00	
17	Reclamation	LF	3000	\$3.00	\$9,000.00				\$0.00	0.0	\$0.00	
<b>D ANALYSIS AND DESIGN</b>												
1	Principal	HR	12	\$235.00	\$2,820.00				\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	76	\$215.00	\$16,340.00				\$0.00	0.0	\$0.00	
3	Project Manager	HR	39	\$185.00	\$7,215.00				\$0.00	0.0	\$0.00	
4	Project Engineer	HR	94	\$163.00	\$15,322.00				\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	100	\$136.00	\$13,600.00				\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	96	\$131.00	\$12,576.00				\$0.00	0.0	\$0.00	
7	Mileage	MILE	2400	\$0.70	\$1,680.00				\$0.00	0.0	\$0.00	
8	Per Diem	DAY	15	\$300.00	\$4,500.00				\$0.00	0.0	\$0.00	
<b>E PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>												
1	Principal	HR	19	\$235.00	\$4,465.00				\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	203	\$215.00	\$43,645.00				\$0.00	0.0	\$0.00	
3	Project Manager	HR	44	\$185.00	\$8,140.00				\$0.00	0.0	\$0.00	
4	Project Engineer	HR	318	\$163.00	\$51,834.00				\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	244	\$136.00	\$33,184.00				\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00				\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	240	\$131.00	\$31,440.00				\$0.00	0.0	\$0.00	
8	Mileage	MILE	3200	\$0.70	\$2,240.00				\$0.00	0.0	\$0.00	
9	Per Diem	DAY	24	\$300.00	\$7,200.00				\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 28 COST</b>	\$383,051.00	<b>SUBTOTAL PAGE 28 PREVIOUS</b>	\$0.00	<b>SUBTOTAL PAGE 28 THIS APPLICATION</b>	\$0.00	<b>SUBTOTAL PAGE 28 TO DATE</b>	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008

Contract Name: 2023 AML Contract N4

Commodity Line: 4

Project Name: Crafts Run Maintenance

Application No.: 1

Page 29 of 60 Pages

**WORK COMPLETED**

**SCHEDULE PER CONTRACT**

PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
UNITS	COST	UNITS	COST	UNITS	COST

**TASK III: DESIGN (CONTINUED)**

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS COST	THIS UNITS	AMOUNT DUE THIS COST	TOTAL UNITS	TOTAL COST
F	<b>PERMITTING</b>										
	<b>a NPDES</b>										
1	Principal	HR	2	\$235.00	\$470.00						
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00
	<b>b USACE 401/404</b>										
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior Project Manager	HR	112	\$215.00	\$24,080.00		\$0.00		\$0.00	0.0	\$0.00
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>c MM-109</b>										
11	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
12	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00
13	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00
14	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00
	<b>d Floodplain Permit</b>										
15	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00
16	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
17	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
18	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>e DNR Stream Activity</b>										
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>f Permit Fees</b>	Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00
G	<b>PRE-BID CONFERENCE</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
H	<b>PRE-CONSTRUCTION CONFERENCE</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00

**SUBTOTAL PAGE 29 COST**

**\$187,242.00**

**SUBTOTAL PAGE 29 PREVIOUS**

**\$0.00**

**SUBTOTAL PAGE 29 THIS APPLICATION**

**\$0.00**

**SUBTOTAL PAGE 29 TO DATE**

**\$0.00**



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: **CEOI 0313 DEP240000008** Application No.: **1** Page 31 of 60 Pages  
 Contract Name: **2023 AML Contract N4**  
 Commodity Line: **5**  
 Project Name: **Logan Run Highwall**

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
Phase I												
<b>TASK I: NEPA &amp; ESA</b>												
<b>A Agency Coordination (including Office Work, AMLNET, etc.)</b>												
1	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Administrative	HR	40	\$57.00	\$2,280.00		\$0.00		\$0.00			
<b>B Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>												
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C Studies, Surveys &amp; Mitigation Plans (as applicable)</b>												
<b>a Bat Assessments (If required)</b>												
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00	
<b>Biological Sub Consultant</b>												
4	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior Environmental Scientist	HR	6	\$105.00	\$630.00		\$0.00		\$0.00	0.0	\$0.00	
6	Environmental Scientist 1	HR	6	\$75.00	\$450.00		\$0.00		\$0.00	0.0	\$0.00	
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00	
8	Biological Mileage	MILE	40	\$0.95	\$38.00		\$0.00		\$0.00			
					<b>SUBTOTAL PAGE 31 COST</b>	<b>\$22,582.00</b>	<b>SUBTOTAL PAGE 31 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 31 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 31 TO DATE</b>	<b>\$0.00</b>

AML-7A (Revised 12/6/2023)



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE			
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST		
Phase I													
<b>TASK I: NEPA &amp; ESA (CONTINUED)</b>													
	b	<b>Bald Eagle Assessments (If required)</b>											
9	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00		
10	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00		
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00		
		<b>Biological Sub Consultant</b>											
12	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00		
13	Senior Environmental Scientist	HR	8	\$105.00	\$840.00		\$0.00		\$0.00	0.0	\$0.00		
14	Environmental Scientist I	HR	8	\$75.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00		
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00		
16	Drone	HR	16	\$175.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00		
17	Biological Mileage	MILE	160	\$0.95	\$152.00		\$0.00		\$0.00	0.0	\$0.00		
		<b>c Water Sampling and Testing</b>											
18	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00		
19	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00		
		<b>Water Sampling Sub Consultant</b>											
20	Senior Environmental Scientist	HR	90	\$105.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00		
21	Analytical Test	SAMPLE	30	\$400.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00		
22	Sampling Mileage	MILE	820	\$0.95	\$779.00		\$0.00		\$0.00	0.0	\$0.00		
23	GPS	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00		
24	Water Quality Probe	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00		
		<b>D CATEX / EA / FONSI / EIS</b>											
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00		
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00		
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00		
4	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00		
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00		
					<b>SUBTOTAL PAGE 32 COST</b>		\$59,543.00	<b>SUBTOTAL PAGE 32 PREVIOUS</b>	\$0.00	<b>SUBTOTAL PAGE 32 THIS APPLICATION</b>	\$0.00	<b>SUBTOTAL PAGE 32 TO DATE</b>	\$0.00

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
	Phase I											
<b>TASK II: REALTY</b>												
<b>A</b>	<b>Exploratory Rights of Entry (EROE)</b>											
1	Senior Project Manager	HR	8	\$215.00	\$1,720.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Agent											
	a Courthouse Work	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
	b Field Reconnaissance / Landowner Correspondence	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
	c Office Work / AMLNET	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
4	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>B</b>	<b>Construction Rights of Entry (CROE)</b>											
1	Senior Project Manager	HR	12	\$215.00	\$2,580.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Agent											
	a Courthouse Work	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
	b Field Reconnaissance / Landowner Correspondence	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
	c Office Work / AMLNET	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
4	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C</b>	<b>Pre-Bid Conference</b>											
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>D</b>	<b>Pre-Construction Conference</b>											
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 33 COST</b>	<b>\$24,588.00</b>	<b>SUBTOTAL PAGE 33 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 33 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 33 TO DATE</b>	<b>\$0.00</b>

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
Phase I												
<b>TASK III: DESIGN</b>												
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	16	\$131.00	\$2,096.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	MILE	1600	\$0.70	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
7	Per Diem	DAY	4	\$300.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00	
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>											
1	Senior Project Manager	HR	8	\$215.00	\$1,720.00		\$0.00		\$0.00	0.0	\$0.00	
2	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
	Surveying Sub Consultant											
	Survey Services											
4	Aerial Drone LiDAR	HR	12	\$175.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
5	Planning / Engineer	HR	30	\$175.00	\$5,250.00		\$0.00		\$0.00	0.0	\$0.00	
6	Survey Crew	HR	65	\$140.00	\$9,100.00		\$0.00		\$0.00	0.0	\$0.00	
7	AutoCAD Technician	HR	44	\$80.00	\$3,520.00		\$0.00		\$0.00	0.0	\$0.00	
8	Surveying Project Manager	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
9	Surveyor Mileage	MILE	1200	\$0.75	\$900.00		\$0.00		\$0.00	0.0	\$0.00	
10	Surveyor Per Diem	DAY	5	\$350.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C</b>	<b>GEOTECHNICAL INVESTIGATION</b>											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	24	\$215.00	\$5,160.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	32	\$136.00	\$4,352.00		\$0.00		\$0.00	0.0	\$0.00	
5	Geologist	HR	160	\$126.00	\$20,160.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	3150	\$0.70	\$2,205.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	14	\$300.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 34 COST</b>	<b>\$96,145.00</b>	<b>SUBTOTAL PAGE 34 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 34 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 34 TO DATE</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP240000008  
 Contract Name: 2023 AML Contract N4  
 Commodity Line: 5  
 Project Name: Logan Run Hhghwall

Application No.: 1

Page 35 of 60 Pages

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE		
										UNITS	COST	
	Phase I											
<b>TASK III: DESIGN (CONTINUED)</b>												
	Geotechnical Sub Consultant											
	Geotechnical Drilling Services											
9	Geotechnical Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
10	Geotechnical Engineer/Geologist	HR	8	\$195.00	\$1,560.00		\$0.00		\$0.00	0.0	\$0.00	
11	Mobilization / Demobilization	LS	1	\$16,000.00	\$16,000.00		\$0.00		\$0.00	0.0	\$0.00	
12	Soil Augering	LF	480	\$34.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00	
13	Rock Coring	LF	240	\$70.00	\$16,800.00		\$0.00		\$0.00	0.0	\$0.00	
14	Heavy Equipment	HR	40	\$200.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
15	Drill Crew Per Diem	DAY	10	\$585.00	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00	
16	Reclamation	LF	300	\$3.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00	
17	Moisture Content Tests	EA	32	\$15.00	\$480.00		\$0.00		\$0.00	0.0	\$0.00	
18	Atterberg Limits (D4318)	EA	16	\$115.00	\$1,840.00		\$0.00		\$0.00	0.0	\$0.00	
19	Particle Size Sieve Analysis with Hydrometer (D422)	EA	32	\$375.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00	
20	Rock Core Unconfined Compression Test (D2166)	EA	16	\$100.00	\$1,600.00		\$0.00		\$0.00	0.0	\$0.00	
21	Senior Geologist	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00	
<b>D ANALYSIS AND DESIGN</b>												
1	Principal	HR	8	\$235.00	\$1,880.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	24	\$185.00	\$4,440.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	1840	\$0.70	\$1,288.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	6	\$300.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
<b>E PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>												
1	Principal	HR	8	\$235.00	\$1,880.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	80	\$215.00	\$17,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	24	\$185.00	\$4,440.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	40	\$163.00	\$6,520.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mileage	MILE	3680	\$0.70	\$2,576.00		\$0.00		\$0.00	0.0	\$0.00	
9	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 35 COST</b>	<b>\$187,790.00</b>			<b>SUBTOTAL PAGE 35 PREVIOUS</b>	<b>\$0.00</b>		
									<b>SUBTOTAL PAGE 35 THIS APPLICATION</b>	<b>\$0.00</b>		
										<b>SUBTOTAL PAGE 35 TO DATE</b>	<b>\$0.00</b>	

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
	Phase I										
<b>TASK III: DESIGN (CONTINUED)</b>											
<b>F</b>	<b>PERMITTING</b>										
	<b>a NPDES</b>										
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00
	<b>b USACE 401/404</b>										
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior Project Manager	HR	112	\$215.00	\$24,080.00		\$0.00		\$0.00	0.0	\$0.00
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>c MM-109</b>										
11	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
12	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00
13	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00
14	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00
	<b>d Floodplain Permit</b>										
15	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00
16	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
17	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
18	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>e DNR Stream Activity</b>										
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
	<b>f Permit Fees</b>	Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00
<b>G</b>	<b>PRE-BID CONFERENCE</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
<b>H</b>	<b>PRE-CONSTRUCTION CONFERENCE</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 36 COST</b>	<b>\$187,242.00</b>	<b>SUBTOTAL PAGE 36 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 36 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 36 TO DATE</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	WORK COMPLETED		TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
Phase II												
<b>TASK VI: NEPA &amp; ESA</b>												
<b>A Agency Coordination (including Office Work, AMLNET, etc.)</b>												
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Administrative	HR	88	\$57.00	\$5,016.00		\$0.00		\$0.00			
<b>B Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>												
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C Studies, Surveys &amp; Mitigation Plans (as applicable)</b>												
<b>a Bat Assessments</b>												
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00	
<b>Biological Sub Consultant</b>												
4	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior Environmental Scientist	HR	6	\$105.00	\$630.00		\$0.00		\$0.00	0.0	\$0.00	
6	Environmental Scientist I	HR	6	\$75.00	\$450.00		\$0.00		\$0.00	0.0	\$0.00	
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00	
8	Biological Mileage	MILE	40	\$0.95	\$38.00		\$0.00		\$0.00			
					<b>SUBTOTAL PAGE 38 COST</b>	\$28,758.00	<b>SUBTOTAL PAGE 38 PREVIOUS</b>	\$0.00	<b>SUBTOTAL PAGE 38 THIS APPLICATION</b>	\$0.00	<b>SUBTOTAL PAGE 37 TO DATE</b>	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008  
 Contract Name: 2023 AML Contract N4  
 Commodity Line: 5  
 Project Name: Logan Run Highwall

Application No.: 1

Page 39 of 60 Pages

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
Phase II											
<b>TASK VI: NEPA &amp; ESA (CONTINUED)</b>											
<b>b Bald Eagle Assessments</b>											
9	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
10	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
<b>Biological Sub Consultant</b>											
12	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00
13	Senior Environmental Scientist	HR	8	\$105.00	\$840.00		\$0.00		\$0.00	0.0	\$0.00
14	Environmental Scientist I	HR	8	\$75.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
16	Drone	HR	16	\$175.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
17	Biological Mileage	MLE	160	\$0.95	\$152.00		\$0.00		\$0.00	0.0	\$0.00
<b>c Water Sampling and Testing</b>											
18	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
19	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
<b>Water Sampling Sub Consultant</b>											
20	Senior Environmental Scientist	HR	90	\$105.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00
21	Analytical Test	SAMPLE	30	\$400.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
22	Sampling Mileage	MLE	820	\$0.95	\$779.00		\$0.00		\$0.00	0.0	\$0.00
23	GPS	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
24	Water Quality Probe	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
<b>D CATEX / EA / FONSI / EIS</b>											
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00
4	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 39 COST</b>	<b>\$59,543.00</b>	<b>SUBTOTAL PAGE 39 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 39 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 39 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008						Application No.: 1				Page 40 of 60 Pages		
Contract Name: 2023 AML Contract N4												
Commodity Line: 5												
Project Name: Logan Run Highwall												
SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
	Phase II											
<b>TASK VII: REALTY</b>												
<b>A</b>	<b>Exploratory Rights of Entry (EROE)</b>											
1	Senior Project Manager	HR	8	\$215.00	\$1,720.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Agent											
a	Courthouse Work	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
b	Field Reconnaissance / Landowner Correspondence	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
c	Office Work / AMLNET	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
4	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>B</b>	<b>Construction Rights of Entry (CROE)</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Agent											
a	Courthouse Work	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
b	Field Reconnaissance / Landowner Correspondence	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
c	Office Work / AMLNET	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
4	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>C</b>	<b>Pre-Bid Conference</b>											
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>D</b>	<b>Pre-Construction Conference</b>											
1	Realty Agent	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 40 COST</b>	<b>\$28,056.00</b>	<b>SUBTOTAL PAGE 40 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 40 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 40 TO DATE</b>	<b>\$0.00</b>



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008	Application No.: 1	Page 41 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 5		
Project Name: Logan Run Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
	Phase II										
<b>TASK VIII: DESIGN</b>											
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>										
1	Principal	HR	8	\$235.00	\$1,880.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	170	\$215.00	\$36,550.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	60	\$163.00	\$9,780.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
6	Mileage	MILE	1840	\$0.70	\$1,288.00		\$0.00		\$0.00	0.0	\$0.00
7	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>										
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
2	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Surveying Sub Consultant</b>										
	<b>Survey Services</b>										
4	Aerial Drone LiDAR	HR	12	\$175.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00
5	Planning / Engineer	HR	16	\$175.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
6	Survey Crew	HR	32	\$140.00	\$4,480.00		\$0.00		\$0.00	0.0	\$0.00
7	AutoCAD Technician	HR	24	\$80.00	\$1,920.00		\$0.00		\$0.00	0.0	\$0.00
8	Surveying Project Manager	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00
9	Surveyor Mileage	MILE	700	\$0.75	\$525.00		\$0.00		\$0.00	0.0	\$0.00
10	Surveyor Per Diem	DAY	2	\$350.00	\$700.00		\$0.00		\$0.00	0.0	\$0.00
<b>C</b>	<b>GEOTECHNICAL INVESTIGATION</b>										
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	48	\$215.00	\$10,320.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00
4	Staff Engineer	HR	34	\$136.00	\$4,624.00		\$0.00		\$0.00	0.0	\$0.00
5	Geologist	HR	340	\$126.00	\$42,840.00		\$0.00		\$0.00	0.0	\$0.00
6	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	MILE	6300	\$0.70	\$4,410.00		\$0.00		\$0.00	0.0	\$0.00
8	Per Diem	DAY	28	\$300.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Geotechnical Sub Consultant</b>										
	<b>Geotechnical Drilling Services</b>										
9	Geotechnical Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
10	Geotechnical Engineer/Geologist	HR	20	\$195.00	\$3,900.00		\$0.00		\$0.00	0.0	\$0.00
11	Mobilization / Demobilization	LS	1	\$16,000.00	\$16,000.00		\$0.00		\$0.00	0.0	\$0.00
12	Soil Augering	LF	1500	\$34.00	\$51,000.00		\$0.00		\$0.00	0.0	\$0.00
13	Heavy Equipment	HR	100	\$200.00	\$20,000.00		\$0.00		\$0.00	0.0	\$0.00
14	Drill Crew Per Diem	DAY	24	\$585.00	\$14,040.00		\$0.00		\$0.00	0.0	\$0.00
15	Reclamation	LF	6100	\$3.00	\$18,300.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 41 COST</b>	<b>\$311,069.00</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 41 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 41 TO DATE</b>	<b>\$0.00</b>

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008	Application No.: 1	Page 42 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 5		
Project Name: Logan Run Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
	Phase II											
<b>TASK VIII:</b>	<b>DESIGN (CONTINUE)</b>											
<b>D</b>	<b>ANALYSIS AND DESIGN</b>											
1	Principal	HR	24	\$235.00	\$5,640.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	130	\$215.00	\$27,950.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	40	\$185.00	\$7,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	1840	\$0.70	\$1,288.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	6	\$300.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
<b>E</b>	<b>PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>											
1	Principal	HR	14	\$235.00	\$3,290.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	284	\$215.00	\$61,060.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	60	\$185.00	\$11,100.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	116	\$163.00	\$18,908.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	240	\$136.00	\$32,640.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geologist	HR	16	\$126.00	\$2,016.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior CAD Technician	HR	240	\$131.00	\$31,440.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mileage	MILE	3680	\$0.70	\$2,576.00		\$0.00		\$0.00	0.0	\$0.00	
9	Per Diem	DAY	15	\$300.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00	
<b>F</b>	<b>PERMITTING</b>											
<b>a</b>	<b>NPDES</b>											
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
<b>b</b>	<b>USACE 401/404</b>											
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior Project Manager	HR	100	\$215.00	\$21,500.00		\$0.00		\$0.00	0.0	\$0.00	
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 42 COST</b>	<b>\$353,642.00</b>	<b>SUBTOTAL PAGE 42 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 42 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 42 TO DATE</b>	<b>\$0.00</b>



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008	Application No.: 1	Page 43 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 5		
Project Name: Logan Run Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
	Phase II											
<b>TASK VIII:</b>	<b>DESIGN (CONTINUED)</b>											
	<b>c MM-109</b>											
11	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
12	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
13	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
14	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>d Floodplain Permit</b>											
15	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
16	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
17	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
18	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>e DNR Stream Activity</b>											
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>f Permit Fees</b>	Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
<b>G</b>	<b>PRE-BID CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>H</b>	<b>PRE-CONSTRUCTION CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
				<b>SUBTOTAL PAGE 43 COST</b>	<b>\$87,908.00</b>		<b>\$0.00</b>		<b>SUBTOTAL PAGE 43 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 43 TO DATE</b>	<b>\$0.00</b>

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CE01 0313 DEP2400000008	Application No.: 1	Page 44 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 5		
Project Name: Logan Run Highwall		

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	WORK COMPLETED		TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
	Phase II											
<b>TASK IX: CONSTRUCTION OVERSIGHT</b>												
<b>A</b>	<b>CONSTRUCTION INSPECTION</b>											
1	Senior Project Manager	HR	160	\$215.00	\$34,400.00		\$0.00		\$0.00	0.0	\$0.00	
	a Mileage	MILE	8000	\$0.70	\$5,600.00							
	b Per Diem	DAY	20	\$300.00	\$6,000.00							
2	Construction Inspector											
	a Construction Inspection	HR	2520	\$100.00	\$252,000.00		\$0.00		\$0.00	0.0	\$0.00	
	b Mileage	MILE	16800	\$0.70	\$11,760.00		\$0.00		\$0.00	0.0	\$0.00	
	c Partial Per Diem	DAY	140	\$25.00	\$3,500.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Video Recording Sub Consultant											
	a Project Manager	HR	8	\$185.00	\$1,480.00							
	b Operator	HR	24	\$100.00	\$2,400.00							
	c Drone	HR	24	\$175.00	\$4,200.00							
	d Mileage	MILE	640	\$0.70	\$448.00							
<b>TASK X: POST-CONSTRUCTION OVERSIGHT</b>												
<b>A</b>	<b>FIELD VISITS / INSPECTIONS</b>											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	64	\$215.00	\$13,760.00		\$0.00		\$0.00	0.0	\$0.00	
	a Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
	b Per Diem	DAY	8	\$300.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Inspector											
	a Construction Inspection	HR	288	\$100.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00	
	b Mileage	MILE	3600	\$0.70	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
	c Partial Per Diem	DAY	24	\$25.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 44 COST</b>	<b>\$373,048.00</b>	<b>SUBTOTAL PAGE 44 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 44 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 44 TO DATE</b>	<b>\$0.00</b>
<b>Logan Run Highwall</b>					<b>PHASE II TOTAL COST</b>	<b>\$1,242,024.00</b>	<b>PHASE II TOTAL PREVIOUS</b>	<b>\$0.00</b>	<b>PHASE II TOTAL THIS APPLICATION</b>	<b>\$0.00</b>	<b>PHASE II TOTAL TO DATE</b>	<b>\$0.00</b>
<b>Logan Run Highwall</b>					<b>PROJECT TOTAL COST</b>	<b>\$1,947,938.00</b>	<b>PROJECT TOTAL PREVIOUS</b>	<b>\$0.00</b>	<b>PROJECT TOTAL THIS APPLICATION</b>	<b>\$0.00</b>	<b>PROJECT TOTAL TO DATE</b>	<b>\$0.00</b>

AML-7A (Revised 12/6/20) Contract Total

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CE01 0313 DEP2400000008	Application No.: 1	Page 45 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 6		
Project Name: Richard Mine Drainage Facility Upgrades		

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK I: NEPA &amp; ESA</b>											
<b>A</b>	<b>Agency Coordinations (including Office Work, AMLNET, etc.)</b>										
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Administrative	HR	80	\$57.00	\$4,560.00		\$0.00		\$0.00	0.0	\$0.00
<b>B</b>	<b>Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)</b>										
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
<b>C</b>	<b>Studies, Surveys &amp; Mitigation Plans (as applicable)</b>										
<b>a</b>	<b>Bat Assessments (If required)</b>										
1	Project Manager	HR	4	\$185.00	\$740.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
4	Biological Project Manager	HR	16	\$120.00	\$1,920.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior Environmental Scientist	HR	16	\$105.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00
6	Environmental Scientist I	HR	16	\$75.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00
7	GPS	DAY	2	\$100.00	\$200.00		\$0.00		\$0.00	0.0	\$0.00
8	Biological Mileage	MILE	40	\$0.95	\$38.00		\$0.00		\$0.00	0.0	\$0.00
<b>b</b>	<b>Bald Eagle Assessments (If required)</b>										
9	Project Manager	HR	4	\$185.00	\$740.00		\$0.00		\$0.00	0.0	\$0.00
10	Planning Staff Engineer	HR	28	\$136.00	\$3,808.00		\$0.00		\$0.00	0.0	\$0.00
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
12	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00
13	Senior Environmental Scientist	HR	8	\$105.00	\$840.00		\$0.00		\$0.00	0.0	\$0.00
14	Environmental Scientist I	HR	8	\$75.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
16	Drone	HR	16	\$175.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00
17	Biological Mileage	MILE	40	\$0.95	\$38.00		\$0.00		\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 45 COST</b>	<b>\$41,976.00</b>		<b>\$0.00</b>		<b>\$0.00</b>	<b>SUBTOTAL PAGE 45 TO DATE</b>	<b>\$0.00</b>



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEO1 0313 DEP2400000008						Application No.: 1		Page 47 of 60 Pages			
Contract Name: 2023 AML Contract N4											
Commodity Line: 6											
Project Name: Richard Mine Drainage Facility Upgrades											

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
<b>TASK I: REALTY</b>											
<b>A</b>	<b>Exploratory Rights of Entry (EROE)</b>										
1	Project Manager	HR	16	\$185.00	\$2,960.00				\$0.00	0.0	\$0.00
<b>B</b>	<b>Construction Rights of Entry (CROE)</b>										
1	Project Manager	HR	32	\$185.00	\$5,920.00				\$0.00	0.0	\$0.00
2	Realty Agent										
	a	Courthouse Work	HR	40	\$163.00	\$6,520.00			\$0.00	0.0	\$0.00
	b	Field Reconnaissance / Landowner Correspondence	HR	48	\$163.00	\$7,824.00			\$0.00	0.0	\$0.00
	c	Office Work / AMLNET	HR	40	\$163.00	\$6,520.00			\$0.00	0.0	\$0.00
3	Mileage	MILE	2000	\$0.70	\$1,400.00				\$0.00	0.0	\$0.00
4	Per Diem	DAY	5	\$300.00	\$1,500.00				\$0.00	0.0	\$0.00
<b>C</b>	<b>Pre-Bid Conference</b>										
1	Realty Agent	HR	16	\$163.00	\$2,608.00				\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00				\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00				\$0.00	0.0	\$0.00
<b>D</b>	<b>Pre-Construction Conference</b>										
1	Realty Agent	HR	16	\$163.00	\$2,608.00				\$0.00	0.0	\$0.00
2	Mileage	MILE	800	\$0.70	\$560.00				\$0.00	0.0	\$0.00
3	Per Diem	DAY	2	\$300.00	\$600.00				\$0.00	0.0	\$0.00
				<b>SUBTOTAL PAGE 47 COST</b>	<b>\$40,180.00</b>	<b>SUBTOTAL PAGE 47 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 47 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 47 TO DATE</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP240000008

Contract Name: 2023 AML Contract N4

Commodity Line: 6

Project Name: Richard Mine Drainage Facility Upgrades

Application No.: 1

Page 49 of 60 Pages

**WORK COMPLETED**

**SCHEDULE PER CONTRACT**

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
<b>D DESIGN (CONTINUED)</b>												
<b>D ANALYSIS AND DESIGN</b>												
1	Principal	HR	4	\$235.00	\$940.00							
2	Senior Project Manager	HR	20	\$215.00	\$4,300.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	40	\$185.00	\$7,400.00					0.0	\$0.00	
4	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	1600	\$0.70	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	4	\$300.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00	
<b>E PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE</b>												
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	20	\$215.00	\$4,300.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Manager	HR	40	\$185.00	\$7,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Engineer	HR	100	\$163.00	\$16,300.00		\$0.00		\$0.00	0.0	\$0.00	
5	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00	
6	Senior CAD Technician	HR	120	\$131.00	\$15,720.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	MILE	1600	\$0.70	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
8	Per Diem	DAY	4	\$300.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00	
<b>F PERMITTING</b>												
<b>a NPDES</b>												
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	24	\$185.00	\$4,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
<b>c MM-109</b>												
6	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
7	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
8	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
9	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
<b>d Floodplain Permit</b>												
10	Project Manager	HR	16	\$185.00	\$2,960.00		\$0.00		\$0.00	0.0	\$0.00	
11	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
12	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
13	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
<b>e DNR Stream Activity</b>												
14	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
15	Project Manager	HR	16	\$185.00	\$2,960.00		\$0.00		\$0.00	0.0	\$0.00	
16	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
<b>f Permit Fees</b>												
		Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
				<b>SUBTOTAL PAGE 49 COST</b>	<b>\$171,270.00</b>		<b>SUBTOTAL PAGE 49 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 49 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 49 TO DATE</b>	<b>\$0.00</b>



**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
<b>Purchase Order No.: CE01 0313 DEP2400000008</b>												
<b>Contract Name: 2023 AML Contract N4</b>												
<b>Commodity Line: 6</b>												
<b>Project Name: Richard Mine Drainage Facility Upgrades</b>												
						<b>WORK COMPLETED</b>						
<b>TASK III- DESIGN (CONTINUED)</b>												
<b>G</b>	<b>PRE-BID CONFERENCE</b>											
1	Project Manager	HR	16	\$185.00	\$2,960.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
<b>H</b>	<b>PRE-CONSTRUCTION CONFERENCE</b>											
1	Project Manager	HR	16	\$185.00	\$2,960.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 50 COST</b>	\$8,240.00	<b>SUBTOTAL PAGE 50 PREVIOUS</b>	\$0.00	<b>SUBTOTAL PAGE 50 THIS APPLICATION</b>	\$0.00	<b>SUBTOTAL PAGE 50 TO DATE</b>	\$0.00





**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CE01 0313 DEP240000008	Application No.: 1	Page 52 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 7		
Project Name: Wades Run Dangerous Embankment Phase II	<b>WORK COMPLETED</b>	

SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK I: NEPA &amp; ESA</b>											
A	Agency Coordination (including Office Work, AMLNET, etc.)										
1	Senior Project Manager	HR	56	\$215.00	\$12,040.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Administrative	HR	120	\$57.00	\$6,840.00		\$0.00		\$0.00	0.0	\$0.00
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)										
1	Principal	HR	0	\$235.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	0	\$215.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Manager	HR	0	\$185.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Engineer	HR	0	\$163.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
5	Staff Engineer	HR	0	\$136.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
6	Geologist	HR	0	\$126.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
7	Senior CAD Technician	HR	0	\$131.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
8	Senior Administrative	HR	0	\$57.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	MILE	0	\$0.70	\$0.00		\$0.00		\$0.00	0.0	\$0.00
10	Per Diem	DAY	0	\$300.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
C	Studies, Surveys & Mitigation Plans (as applicable)										
a	Bat Assessments (If required)										
1	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
2	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
4	Biological Project Manager	HR	10	\$120.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior Environmental Scientist	HR	12	\$105.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00
6	Environmental Scientist I	HR	12	\$75.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00
7	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
8	Biological Mileage	MILE	80	\$0.95	\$76.00		\$0.00		\$0.00	0.0	\$0.00
					<b>SUBTOTAL</b>						
					PAGE 52 COST	\$31,940.00		\$0.00		SUBTOTAL	PAGE 52 TO DATE
								PAGE 52 THIS APPLICATION	\$0.00		\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION  
**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008						Application No.: 1		Page 53 of 60 Pages			
Contract Name: 2023 AML Contract N4											
Commodity Line: 7											
Project Name: Wades Run Dangerous Embankment Phase II						<b>WORK COMPLETED</b>					
<b>SCHEDULE PER CONTRACT</b>						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
<b>TASK I: NEPA &amp; ESA (CONTINUED)</b>											
	<b>b Bald Eagle Assessments</b>										
9	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
10	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
11	Senior CAD Technician	HR	8	\$131.00	\$1,048.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Biological Sub Consultant</b>										
12	Biological Project Manager	HR	8	\$120.00	\$960.00		\$0.00		\$0.00	0.0	\$0.00
13	Senior Environmental Scientist	HR	8	\$105.00	\$840.00		\$0.00		\$0.00	0.0	\$0.00
14	Environmental Scientist I	HR	8	\$75.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00
15	GPS	DAY	1	\$100.00	\$100.00		\$0.00		\$0.00	0.0	\$0.00
16	Drone	HR	20	\$175.00	\$3,500.00		\$0.00		\$0.00	0.0	\$0.00
17	Biological Mileage	MILE	80	\$0.95	\$76.00		\$0.00		\$0.00	0.0	\$0.00
	<b>c Water Sampling and Testing</b>										
18	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00
19	Planning Staff Engineer	HR	16	\$136.00	\$2,176.00		\$0.00		\$0.00	0.0	\$0.00
	<b>Water Sampling Sub Consultant</b>										
20	Senior Environmental Scientist	HR	90	\$105.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00
21	Analytical Test	SAMPLE	30	\$400.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
22	Sampling Mileage	MILE	160	\$0.95	\$152.00		\$0.00		\$0.00	0.0	\$0.00
23	GPS	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
24	Water Quality Probe	DAY	5	\$100.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00
	<b>D CATEX / EA / FONSI / EIS</b>										
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Project Engineer	HR	24	\$163.00	\$3,912.00		\$0.00		\$0.00	0.0	\$0.00
4	Planning Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00
5	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00
					<b>SUBTOTAL</b>						
					<b>PAGE 53 COST</b>		<b>\$59,540.00</b>				
						<b>SUBTOTAL</b>		<b>\$0.00</b>			
						<b>PAGE 53</b>		<b>PREVIOUS</b>			
								<b>SUBTOTAL</b>		<b>\$0.00</b>	
								<b>PAGE 53 THIS</b>		<b>APPLICATION</b>	
									<b>SUBTOTAL</b>		<b>\$0.00</b>
									<b>PAGE 53 TO</b>		<b>DATE</b>
										<b>SUBTOTAL</b>	<b>\$0.00</b>



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN</b>												
<b>A</b>	<b>SITE RECONNAISSANCE AND INVESTIGATIONS</b>											
1	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	104	\$215.00	\$22,360.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	56	\$163.00	\$9,128.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	120	\$136.00	\$16,320.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	120	\$131.00	\$15,720.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	MILE	2040	\$0.70	\$1,428.00		\$0.00		\$0.00	0.0	\$0.00	
7	Per Diem	DAY	16	\$300.00	\$4,800.00		\$0.00		\$0.00	0.0	\$0.00	
<b>B</b>	<b>SURVEYING &amp; MAPPING</b>											
1	Senior Project Manager	HR	32	\$215.00	\$6,880.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
3	Staff Engineer	HR	40	\$136.00	\$5,440.00		\$0.00		\$0.00	0.0	\$0.00	
4	Senior CAD Technician	HR	40	\$131.00	\$5,240.00		\$0.00		\$0.00	0.0	\$0.00	
	<b>Surveying Sub Consultant</b>											
	<b>Survey Services</b>											
5	Aerial Drone LiDAR	HR	12	\$175.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
6	Planning / Engineer	HR	44	\$175.00	\$7,700.00		\$0.00		\$0.00	0.0	\$0.00	
7	Survey Crew	HR	65	\$140.00	\$9,100.00		\$0.00		\$0.00	0.0	\$0.00	
8	AutoCAD Technician	HR	44	\$80.00	\$3,520.00		\$0.00		\$0.00	0.0	\$0.00	
9	Surveying Project Manager	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
10	Surveyor Mileage	MILE	800	\$0.75	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
11	Surveyor Per Diem	DAY	5	\$350.00	\$1,750.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL</b>	<b>\$119,950.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>	<b>SUBTOTAL</b>	<b>\$0.00</b>
					<b>PAGE 55 COST</b>		<b>PAGE 55</b>		<b>PAGE 55 THIS</b>		<b>PAGE 55 TO</b>	
							<b>PREVIOUS</b>		<b>APPLICATION</b>		<b>DATE</b>	





WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI 0313 DEP2400000008  
 Contract Name: 2023 AML Contract N4  
 Commodity Line: 7  
 Project Name: Wades Run Dangerous Embankment Phase II

Application No.: 1

Page 57 of 60 Pages

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
						UNITS	COST	UNITS	COST	UNITS	COST	
<b>TASK III: DESIGN (CONTINUED)</b>												
F	<b>PERMITTING</b>											
	a	<b>NPDES</b>										
1	Principal	HR	2	\$235.00	\$470.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Engineer	HR	32	\$163.00	\$5,216.00		\$0.00		\$0.00	0.0	\$0.00	
4	Staff Engineer	HR	64	\$136.00	\$8,704.00		\$0.00		\$0.00	0.0	\$0.00	
5	Senior CAD Technician	HR	64	\$131.00	\$8,384.00		\$0.00		\$0.00	0.0	\$0.00	
	b	<b>USACE 401/404</b>										
6	Principal	HR	16	\$235.00	\$3,760.00		\$0.00		\$0.00	0.0	\$0.00	
7	Senior Project Manager	HR	112	\$215.00	\$24,080.00		\$0.00		\$0.00	0.0	\$0.00	
8	Project Engineer	HR	80	\$163.00	\$13,040.00		\$0.00		\$0.00	0.0	\$0.00	
9	Staff Engineer	HR	160	\$136.00	\$21,760.00		\$0.00		\$0.00	0.0	\$0.00	
10	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	c	<b>MM-109</b>										
11	Senior Project Manager	HR	4	\$215.00	\$860.00		\$0.00		\$0.00	0.0	\$0.00	
12	Project Engineer	HR	8	\$163.00	\$1,304.00		\$0.00		\$0.00	0.0	\$0.00	
13	Staff Engineer	HR	24	\$136.00	\$3,264.00		\$0.00		\$0.00	0.0	\$0.00	
14	Senior CAD Technician	HR	24	\$131.00	\$3,144.00		\$0.00		\$0.00	0.0	\$0.00	
	d	<b>Floodplain Permit</b>										
15	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
16	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
17	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
18	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	e	<b>DNR Stream Activity</b>										
19	Senior Project Manager	HR	40	\$215.00	\$8,600.00		\$0.00		\$0.00	0.0	\$0.00	
20	Project Engineer	HR	16	\$163.00	\$2,608.00		\$0.00		\$0.00	0.0	\$0.00	
21	Staff Engineer	HR	80	\$136.00	\$10,880.00		\$0.00		\$0.00	0.0	\$0.00	
22	Senior CAD Technician	HR	80	\$131.00	\$10,480.00		\$0.00		\$0.00	0.0	\$0.00	
	f	<b>Permit Fees</b>										
		Unit	5000	\$1.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
G	<b>PRE-BID CONFERENCE</b>											
1	Senior Project Manager	HR	16	\$215.00	\$3,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Mileage	MILE	800	\$0.70	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Per Diem	DAY	2	\$300.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 57 COST</b>	<b>\$182,642.00</b>	<b>SUBTOTAL PAGE 57 PREVIOUS</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 57 THIS APPLICATION</b>	<b>\$0.00</b>	<b>SUBTOTAL PAGE 57 TO DATE</b>	<b>\$0.00</b>





**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CE01 0313 DEP2400000008	Application No.: 1	Page 59 of 60 Pages
Contract Name: 2023 AML Contract N4		
Commodity Line: 7		
Project Name: Wades Run Dangerous Embankment Phase II		

SCHEDULE PER CONTRACT							WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
<b>TASK IV: CONSTRUCTION OVERSIGHT</b>												
A	<b>Construction Inspection</b>											
1	Senior Project Manager	HR	128	\$215.00	\$27,520.00		\$0.00		\$0.00	0.0	\$0.00	
	a Mileage	MILE	6400	\$0.70	\$4,480.00							
	b Per Diem	DAY	96	\$300.00	\$28,800.00							
2	Construction Inspector											
	a Construction Inspection	HR	1848	\$100.00	\$184,800.00		\$0.00		\$0.00	0.0	\$0.00	
	b Mileage	MILE	8960	\$0.70	\$6,272.00		\$0.00		\$0.00	0.0	\$0.00	
	c Partial Per Diem	DAY	112	\$25.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Project Video Recording Sub Consultant											
	a Project Manager	HR	8	\$185.00	\$1,480.00		\$0.00		\$0.00	0.0	\$0.00	
	b Operator	HR	24	\$100.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
	c Drone	HR	24	\$175.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
	d Mileage	MILE	640	\$0.70	\$448.00		\$0.00		\$0.00	0.0	\$0.00	
<b>TASK V: POST-CONSTRUCTION OVERSIGHT</b>												
A	<b>FIELD VISITS / INSPECTIONS</b>											
1	Principal	HR	4	\$235.00	\$940.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Project Manager	HR	64	\$215.00	\$13,760.00		\$0.00		\$0.00	0.0	\$0.00	
	a Mileage	MILE	3200	\$0.70	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
	b Per Diem	DAY	8	\$300.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Inspector						\$0.00		\$0.00	0.0	\$0.00	
	a Construction Inspection	HR	288	\$100.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00	
	b Mileage	MILE	3600	\$0.70	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
	c Partial Per Diem	DAY	24	\$25.00	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
					<b>SUBTOTAL PAGE 59 COST</b>	\$314,460.00	<b>SUBTOTAL PAGE 59 PREVIOUS</b>	\$0.00	<b>SUBTOTAL PAGE 59 THIS APPLICATION</b>	\$0.00	<b>SUBTOTAL PAGE 59 TO DATE</b>	\$0.00

<b>PROJECT TOTAL COST</b>	\$1,302,745.00	<b>PROJECT TOTAL PREVIOUS</b>	\$0.00	<b>PROJECT TOTAL THIS APPLICATION</b>	\$0.00	<b>PROJECT TOTAL TO DATE</b>	\$0.00
---------------------------	----------------	-------------------------------	--------	---------------------------------------	--------	------------------------------	--------

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Purchase Order No.: CEOI 0313 DEP2400000008						Application No.: 1			Page 60 of 60 Pages		
Contract Name: 2023 AML Contract N4											
Commodity Line: N/A											
Project Name: N/A						<b>WORK COMPLETED</b>					
SCHEDULE PER CONTRACT						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST

**CONTRACT NAME:**

2023 AML Contract N4

AML-7 (Revised 12/6/2023)

GRAND TOTAL COST	\$10,729,764.00	GRAND TOTAL PREVIOUS	\$0.00	GRAND TOTAL THIS APPLICATION	\$0.00	GRAND TOTAL TO DATE	\$0.00
------------------	-----------------	----------------------	--------	------------------------------	--------	---------------------	--------



# **APPENDIX B**

## **GENERALIZED WORK DIRECTIVE, COST PROPOSAL REQUIREMENTS & DETAILED DESCRIPTION OF SERVICES REQUIRED**



---

west virginia department of environmental protection

---

Division of Land Restoration  
Office of Abandoned Mine Lands & Reclamation  
101 Cambridge Place  
Bridgeport, WV 26330  
Phone: 304-842-1900

Harold D. Ward, Cabinet Secretary  
<https://dep.wv.gov>

**Via Email Only**

December 7, 2023

Ms. Whitney Faulkner, P.E.  
RESPEC Company LLC  
146 East Third Street  
Lexington, KY 40508

RE: 2023 AML Contract N4  
CEOI 0313 DEP24\*08

Dear Ms. Faulkner:

Your firm has been ranked the highest out of three firms shortlisted for the contract referenced below. In accordance with §5G-1-3, our office can now negotiate a price with your firm to complete the professional services on the projects within this contract.

The following information provides more background on the individual projects within this contract, the project locations, the problems desiring remediation, and the expectations for the professional services required to address these problems.

A. GENERAL DESCRIPTION:

Name of Design Contract:  
2023 AML Contract N4

Names of Problem Areas/Projects included:

- 1) Beech Bottom Highwall
- 2) Bethany (Haizlett) DS, Highwall and AMD
- 3) Buffalo Creek Highwall
- 4) Crafts Run Maintenance
- 5) Logan Run Highwall
- 6) Richard Mine Drainage Facility Upgrades
- 7) Wades Run Dangerous Embankment

Location of Problem Areas:

Projects are in Brooke and Monongalia Counties. Directions to each of the project sites are contained in each of the corresponding AML OSM-51 documents attached herewith. Additional location information and brief description for each project is as follows.

- Project 1: Beech Bottom Highwall** is located northeast of the Town of Beech Bottom, in Brooke County, WV. Approximate coordinates are 40.232889°, -80.642639°. The project is for the remediation of multiple highwalls / highwall benches, multiple portals, installation of a new treatment system, drainage design, hazardous waterbodies, mine spoil, and water impoundments.
- Project 2: Bethany (Haizlett) DS, Highwall and AMD** is located west of the Town of Bethany, in Brooke County, WV. Approximate coordinates are 40.203222°, -80.581750°. The project is for the remediation of a dangerous highwall, multiple portals, multiple dangerous slides, installation of a new treatment system, drainage design, hazardous waterbodies, clogged stream, mine spoil, and water impoundments.
- Project 3: Buffalo Creek Highwall** is located west of the Town of Bethany, in Brooke County, WV. Approximate coordinates are 40.213515°, -80.589306°. The project is for the remediation of a dangerous highwall, multiple collapsed portals, a dangerous slide, installation of new treatment systems, drainage design, mine spoil, water impoundments, and creating / upgrading the access roads to maintenance the above.
- Project 4: Crafts Run Maintenance** is located east of the Town of Madsville, in Monongalia County, WV. Approximate coordinates are 39.690983°, -79.972331°. The project is for the remediation of existing drainage systems, multiple portals, a dangerous highwall, sludge remediation, mine spoil, drainage design, and creating / upgrading the access roads to maintenance the above.
- Project 5: Logan Run Highwall** is located southwest of the Town of Bethany, in Brooke County, WV. Approximate coordinates are 40.198722°, -80.572103°. The project is for the remediation of a dangerous highwall, a hazardous waterbody, a clogged stream, drainage design, and creating / upgrading the access roads to maintenance the above.
- Project 6: Richard Mine Drainage Facility Upgrades** is located southeast of the City of Morgantown, WV, in Monongalia County, WV. Approximate coordinates are 39.608142°, -79.902056°. The project is for the installation of new fencing, security gates, security cameras, door replacements, reskinning (wall and roofs) of certain existing structures (or demolishing and replacing), repaving and new paving of the road within the site, and various other facility additions, replacements, or upgrades.

**Project 7: Wades Run Dangerous Embankment** is located northwest of the Town of Star City, in Monongalia County, WV. Approximate coordinates are 39.677083°, -80.015361°. The project is for the remediation of a collapsed portal, mine spoil / gob and refuse piles, sludge remediation, removing multiple dangerous structures, drainage design, trash cleanup, and creating / upgrading the access roads to maintenance the above.

B. NEED FOR PROJECT (Site Description):

The attached AML OSM-51 document for each of the projects describes in moderate detail what AML problems exist on each site, some assumed remediation for each, and other site related information, as well as rough project construction cost estimates, etc. Note that these documents should not be considered all-inclusive with respect to what the actual problems are, how those problems need to be addressed, or be considered at all accurate on estimated costs. It is assumed all information presented by the State must be verified for accuracy, completeness, and scope.

C. PREFERRED SCOPE OF WORK AND SERVICES REQUIRED

The preferred scope of work for each project within the contract will need to be refined. In general, a complete solution is desired that will address all AML-related problems at each project site(s). This solution will include, at a minimum: Planning, Realty, Design, and Construction Oversight efforts. For more detail on the expectations of what this would include, please find the attached "DETAILED DESCRIPTION OF SERVICES REQUIRED.pdf". Note that these documents, which describe WVDEP-DLR-AML processes, procedures, requirements, etc., are intended as a guide only and do not represent an exhaustive list of every WVDEP-DLR-AML requirement.

D. COST PROPOSAL

Cost Proposal must fit within certain requirements to be acceptable to the State. Please find the attached "COST PROPOSAL REQUIREMENTS.pdf" and the below for additional details. Note that these documents, which describe WVDEP-DLR-AML processes, procedures, requirements, etc., are intended as a guide only and do not represent an exhaustive list of every WVDEP-DLR-AML requirement.

A consultant contract Payment Application file is attached here for use in developing your firm's Proposal Task / Cost Breakdown.

In addition to other provisions for the pending contract, special terms and conditions will be required for inclusion in the proposal. They are as follows:

- a. The State owns the intellectual property rights for any deliverable created or modified by Work paid for by the State, unless protected by patent and otherwise accepted or permitted by the State.
- b. The State reserves the right to require removal of any successful A/E firm personnel from any site location or State office, at any time.
- c. The State reserves the right to withhold payment for deliverables of unacceptable quality – as determined by the State – until the quality issue is remedied to the satisfaction of the State.

The project manager for these projects will be Troy H. Schell, P.E., email address [troy.h.schell@wv.gov](mailto:troy.h.schell@wv.gov), telephone # 304-203-4018. Please contact the above WVDEP Project Manager to schedule the potentially on-site meetings to discuss each of the sites and associated scopes of work prior to submitting your cost proposal.

Should you have any questions, please contact this office.

Sincerely,

Troy H. Schell, P.E.  
Northern Design Administrator

THS

Enclosures: Detailed Description of Services Required, Cost Proposal Requirements, Application and Certificate for Payment, OSM-51s (previously provided)

CC: Eric Simpson, Regional Engineer  
Travis Parsons, Deputy Director AML  
Jonathan Knight, Planning Administrator  
Joseph Lake, EIT, Assistant Project Manager  
Donald Enos, Construction Group Representative  
Mike Blumish, Planning Group Representative  
Realty Group Representative (TBD)

## **COST PROPOSAL REQUIREMENTS**

WVDEP-DLR-AML has provided an Application and Certificate for Payment template spreadsheet file, which will mirror future pay applications / invoices, for the successful A/E firm to develop their Task / Cost Breakdown portion of their proposal for each project that is part of the contract. Please note this Application and Certificate for Payment template will clarify much of what is stated below regarding the Cost Proposal.

Cost Proposal should be electronically returned to WVDEP-DLR-AML representative within 14 calendar days after the conclusion of all meetings with the WVDEP-DLR-AML regarding the proposal. If this is unachievable, the successful A/E firm should contact the WVDEP-DLR-AML representative to establish a mutually agreeable deadline.

Cost proposal from the successful A/E firm will have a “Task / Cost Breakdown Schedule” section detailing Contract Quantities (“not-to-exceed”) and the associated Unit Bid Prices for each task and compensable subtask. Cost Proposal is to include rates locked in for the entire duration of the contract (any escalation / inflation – and any overtime needed to meet the schedule – need incorporated into the unit bid prices provided).

The expectation is that the proposal should encompass reasonably foreseeable contingencies such that change orders will be kept to a minimum or eliminated entirely. In the event of unknowns that cannot be defined at this stage, assumptions should be stated to adequately limit the liability within the proposal. The successful A/E firm could state in their proposal that they are assuming their borings (soil augering and rock coring) required will be beyond the amount that would require a change order. The successful A/E firm would only bill for the boring lengths performed.

Proposal **must** encompass the below:

- a. Proposal must explicitly state, “Hours not worked and costs not incurred will not be billed.”
- b. Proposal must **not** describe itself as time and material with no cost or hours limit.
- c. Proposal must explicitly state that rates are locked in for the duration of the contract.
- d. Proposal must explicitly state that rates are flat rates with the State not being billed a higher rate for overtime.
- e. Proposal must explicitly state that all documents prepared by a Professional Engineer of the successful A/E firm, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.
- f. Proposal must explicitly state that all surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.
- g. Proposal must explicitly state that both PDFs and CAD files (in AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition) of the plans must be included as part of the electronic portion of the final design deliverables to the WVDEP-DLR-AML. Please reference the “Detailed Description of Services Required” document for what encompasses final design deliverables.



- h. Proposal should explicitly state that both electronic (USB / CD and email / Google Drive) and physical copies will be transmitted to the WVDEP-DLR-AML as a part of the final design and documents deliverables. Number of physical copies to be determined on a project-by-project basis. All deliverables to be uploaded into AMLNET (WVDEP-DLR-AML online record-keeping database).
- i. Proposal must explicitly indicate that the WVDEP-DLR-AML has the right to remove any employee or subcontractor of the successful A/E firm from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.
- j. Proposal must explicitly indicate that, at the end of the project, the successful A/E firm will provide a final certification of the project to the WVDEP-DLR-AML.
- k. Proposal should be developed assuming that all information provided upon request from the WVDEP-DLR-AML up to the date of the proposal is the only information available from the WVDEP-DLR-AML. Whatever additional investigation quantities may be required to take this information to completion should be included in the proposal by the successful A/E firm. The successful A/E firm should also build quantities into their proposal to confirm all information received.
- l. Proposal should assume that WVDEP-DLR-AML will serve in only a support capacity (answering questions or making Management decisions), with the successful A/E firm providing a complete solution to the project: planning (including but not limited to all aspects of necessary permitting and consultations), realty, design, and construction oversight.
- m. Proposal should assume that the successful A/E firm will prepare and submit the NPDES Construction Stormwater Permit Registration Application.
- n. Proposal should assume that NEPA consultations will lead to an Environmental Assessment **not** an Environmental Impact Statement (unless specifically required or requested during the proposal development).
- o. If applicable, proposal should assume both Phase I and Phase II bat assessments will be required and have each broken out separately.
- p. Proposal should assume all realty documents requiring signature must be notarized at the successful A/E firm's expense.
- q. Proposal should assume boundary surveys are not included within the scope (however the successful A/E firm needs to have the capability of performing them, should they become necessary).
- r. Proposal should assume quantities for sampling and testing of water for any project requiring such information. All water sampling analysis will occur at a WV-certified lab. Successful A/E firm to coordinate with WVDEP-DLR-AML for specific sampling requirements.
- s. Proposal should assume that any properties operating under a current lease agreement (such as a replacement project) will need to have the current lease agreement boundaries identified / verified and a plat developed, as applicable. Plat must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.
- t. For any permanent facility with electricity going to it containing a Motor Control Center bucket (MCC), the proposal should assume that an arc flash study will be

- required, as applicable.
- u. Proposal should assume compliance with OSHA in both design and construction, and the manhours for the checks to make that happen. For example, any permanent facility with a ladder extending more than 24 feet, the design must include cages around ladders, offset landings, kick plates, mid rail, top rail, self-closing safety gate at the top, and a personal fall arrest system incorporated into the design (see <https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XVII/part-1910/subpart-D> for details), as applicable.
  - v. Proposal should include sufficient quantities to manage the project – this includes tracking all action items due by any party (including the WVDEP-DLR-AML) and regularly following up on each action item until resolved. This also includes taking notes and emailing a summary of all meetings with the WVDEP-DLR-AML, preferably by the next business day but in no case later than 3 business days after the meeting. This further includes providing a more detailed project schedule of the successful A/E firm's scope than what is included in the proposal, regularly updating that schedule, and distributing a copy of the schedule to the WVDEP-DLR-AML at regular intervals (for the purposes of the proposal, assume the schedule will be updated and distributed on a monthly basis).
  - w. Proposal should include sufficient quantities (at least 40hrs) for the successful A/E firm's representative(s) of each discipline to engage in training with the WVDEP-DLR-AML, as well as to provide other support functions, such as presentations, as needed.
  - x. Proposal should include sufficient quantities for all relevant documentation to be uploaded into AMLNET (WVDEP-DLR-AML document storage database).
  - y. Proposal should explicitly state the number of hours per day and days per week that the successful A/E firm has estimated for the construction inspector and the number of weeks of inspection estimated per project.
  - z. Proposal narrative should describe the experience, qualifications, and responsibility-level of construction inspectors, with a different description for each pay scale (tell us the difference between a mid-level construction inspector and a senior construction inspector and what will be expected of each).
  - aa. Proposal should include a manager that all inspectors on all projects within this contract report to (for a small number of projects this could just be a project manager, but if a large number of construction projects are occurring concurrently, this will need its own position).
  - bb. Proposal should include allowing sufficient quantities to produce construction specifications and plans such that all permit requirements are included into the construction contractor's scope of work. This includes making sure the requirement for the construction contractor to provide environmental inspector(s) is included (with AMLNET uploads of inspection reports) as well as ensuring that it is explicitly written that all fines are to be paid by the construction contractor.
  - cc. Proposal should include additional administrative support quantities to oversee and ensure compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

- dd. Proposal should include videotaping the job site (usually with time-lapsed drone videos) and photos (such as close-in photos of building foundations) before, during, and after construction and uploading the video and photos into AMLNET. This usually also includes videotaping the roads to be used by construction before and after construction activities, which also need to be uploaded into AMLNET.
- ee. Proposal should include quantities to attend, schedule, and lead the pre-bid and pre-construction conferences with the construction contractor(s) for each project. This includes videotaping the conferences, documenting any questions / answers / comments discussed during the meeting, and providing both the video and meeting notes to the WVDEP-DLR-AML, preferably by the next business day but in no case later than 3 business days after the conference. Proposal should also include generating an addendum or addenda document(s) (WVDEP-DLR-AML has a template available) based on the in-person questions with answers, electronic questions submitted in Oasis with answers, and meeting notes for WVDEP-DLR-AML to then process.
- ff. Proposal must **not** have legal clauses that remove all responsibility from the successful A/E firm. The successful A/E firm is not responsible for factors beyond its reasonable control, but it is responsible for working in good faith to produce the deliverables it is being paid to provide at a professional level of quality.
- gg. Proposal must **not** use the word “estimated” in front of hours or costs.
- hh. Proposal must structure payment terms to mirror quantities and costs incurred being billed (**not** lump sum based on % complete). Individual line item descriptions (tasks or job classification) within the Task / Cost Breakdown may still be lump sum (such as mobilization for a drilling crew) but not the project in whole.
- ii. Proposal must be consistent with itself. For example, the narrative of the proposal should be subdivided into sections to mirror and match the Task / Cost Breakdown portion of the proposal.
- jj. Within the Task / Cost Breakdown portion of the proposal, if there is a unit rate associated with a given description (like “Engineer II”) that same rate needs applied for all tasks with that description. Subcontractors with a different rate need to have a different task (like “Sub-Engineer II”).
- kk. Task / Cost Breakdown may only pick one of “Vehicle” or “Mileage” for each given task. Both cannot be present for a given task.
- ll. Task / Cost Breakdown must be completely filled out without any blanks present. Zeros should be used as a quantity if a given description is not needed for a given task or project. All units must be identified and associated unit bid prices provided.

Cost proposal is to include a preliminary schedule showing beginning dates, ending dates, and durations for all major tasks – this schedule will need to be consistent with the other parts of the cost proposal (like in the narrative of the proposal where the number of weeks of inspection per project is given and the total quantities for the inspectors being consistent with what is shown in the Task / Cost Breakdown). The schedule also needs to make sense; for instance, showing construction – that isn’t tree clearing – in the middle of winter should be avoided. Likewise, tree clearing windows and when bat studies are permitted to occur need factored into the schedule provided with the proposal. Schedule is to be in the form of a Gantt chart or other WVDEP-DLR-AML acceptable format.

The proposal shall not be considered as open-ended time and material – the successful A/E firm’s proposal is binding once a Purchase Order is given, and any quantities beyond the Contract Quantity (“not to exceed”) are at the successful A/E firm’s risk. Because of this, it is in the successful A/E firm’s interests to include prudent quantities within the Task / Cost Breakdown likely to cover or exceed what might be encountered for each project. Notwithstanding, if any quantities do not appear to be reasonable, the WVDEP-DLR-AML will bring this to the successful A/E firm’s attention for reconsideration and / or correction. If the matter cannot be expediently resolved (as determined by the WVDEP-DLR-AML), the WVDEP-DLR-AML reserves the right to proceed with the 2nd highest ranked bidder.

WVDEP-DLR-AML **is not** willing to proceed with a professional services contract where the invoices are based on a lump-sum / percent complete basis. WVDEP-DLR-AML **is** willing to proceed with a professional services contract where the invoices are based on actual quantities worked and costs incurred up to the limits set in the Task / Cost Breakdown. Once the Purchase Order has been issued by the WVDEP-DLR-AML to the successful A/E firm to properly complete the work, any tasks requiring additional quantities must be evaluated and adjustment made through the change order process. The successful A/E firm may only invoice for task contract quantities incurred and shall not be permitted to exceed in total the contract quantity, as reflected in the Task / Cost Breakdown included in the approved Purchase Order or approved Change Order for a given task. The successful A/E firm should plan to bill monthly until the work is completed.

## **DETAILED DESCRIPTION OF SERVICES REQUIRED**

The successful A/E firm will be responsible for Planning Work of the following (note that the below includes any modifications during design development, construction, or notices of termination at the end of the work):

- 1.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.
- 1.2. Requesting whatever consultation letters have been sent, work that has been done, example of West Virginia Division of Natural Resources (WVDNR) submission, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Regional Planning and Development Council submission, example for an Environmental Assessment (EA), existing water quality data that may exist, agency contact information, any other existing information pertaining to the project, and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.
- 1.3. West Virginia Division of Natural Resources (WVDNR) agency consultation, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET (WVDEP-DLR-AML document storage database). Any timing restrictions to any activity must be clearly shown in the project schedule. Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.
- 1.4. West Virginia Historic Preservation Office (SHPO) agency inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET.
- 1.5. West Virginia Regional Planning and Development Council inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. If no response is received within thirty (30) days, an original signed request letter must be provided to WVDEP-DLR-AML, and the project may move forward. Upload documentation into AMLNET.
- 1.6. US Forest Service (only if on National Forest land) inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET.
- 1.7. Upload project into the USFWS (US Fish and Wildlife Service) Information for Planning and Consultation (IPaC) System including the initial / planned NEPA boundary from the OSM-51, and add the WVDEP-DLR-AML's team planner to the project in IPaC. Obtain the species list for the initial design. Upload the LOD map once the limits are clearly defined. Complete the determination keys (D-KEYS). If a "May Affect" is received, consult with USFWS. If "No Effect" or "May Affect, Not

Likely To Adversely Affect", continue with environmental assessment (EA) package. Upload documentation into AMLNET. Any timing restrictions to any activity must be clearly shown in the project schedule. Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.

- 1.8. NEPA (National Environmental Policy Act), surveys, documentation, and generation of the related reports for submission, if applicable. Upload documentation into AMLNET.
- 1.9. Threatened and Endangered Species investigation that is deemed necessary via consultations with USFWS, including bat surveys (portal surveys, roost tree surveys, etc.), habitat surveys, and water quality analysis (at a West Virginia State-certified lab), as needed. Upload documentation into AMLNET.
- 1.10. Perform all required consultations, surveys, documentation, and generation of reports to generate the draft EA package. Submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. Implement revisions and submit the finalized EA package once the Plans and Specifications are finalized (100% Issued for Bid – see Section 3 below) to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). Upload documentation into AMLNET.
- 1.11. Attend design meetings, pre-bid conferences, and pre-construction conferences, as required.
- 1.12. Engage in any permit or consultation termination activities required at the end of the work for the above, as applicable.

**Note that the successful A/E firm, their subcontractors, and their agents will not be permitted onto private property without prior landowner permission, which must be acquired by the successful A/E firm.**

The successful A/E firm will be responsible for Realty Work of the following:

- 2.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.
- 2.2. Requesting whatever work that has been done, existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.
- 2.3. Coordinate with WVDEP-DLR-AML for an on-site scoping meeting.
- 2.4. Determine legal ownership of the properties to be affected by the project, using desktop

/ online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals owning a legal interest in the defined properties. The date of the determination for each property must be documented.

- 2.5. **\*WVDEP-DLR-AML to accompany successful A/E firm on landowner first contact, unless otherwise indicated by the WVDEP-DLR-AML\*** Acquiring landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, the successful A/E firm's subcontractors, and any other agents of the successful A/E firm to access the landowner's property for whatever investigative activities the successful A/E firm requires to submit a cost proposal to the WVDEP-DLR-AML. Verbal permission from the landowner shall be documented as to the date of contact and the permission granted to enter their property, with this being included in the status updates transmitted to the WVDEP-DLR-AML Realty (see below). **Note that no other on-site activity on private property, by the A/E firm, their subcontractors, or any other A/E firm agents, will be permitted until this has been completed. This restriction applies to each parcel individually (so if the successful A/E firm only has permission from the sole landowner of parcel A, the A/E firm would only be permitted to be on landowner A's property until further permissions were acquired by the A/E firm).** Throughout the course of the project, the successful A/E firm shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. Also note that rights of entry are required, not just for the property where work is taking place, but also from borrow / waste locations where excess or needed soil would be deposited or removed from.
- 2.6. Confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed (see below). Accurate and legal documentation substantiating ownership findings to be uploaded into AMLNET. The date of the confirmation at the courthouse for each property must be documented and shall be included in the status updates required (see below). Any miscellaneous expenses – including expenses for copies – are at the successful A/E firm's expense, if not explicitly included in the proposal.
- 2.7. In addition to determining legal ownership, it is important to research if the legal owner participated in the mining, if they accepted royalty payments or lease the land / resources for the mining, received some benefit from said mining (monetary or otherwise), did the party or entity in question that benefited from the mining obtain a legal interest in or accrue a benefit from present property owner (including being the parent corporation of a subsidiary to the present property owner, etc.). If the answer to all of the above questions is yes, then ownership is subject to the lien provision within the West Virginia State Code, Chapter 22, Article 2, and the EROE-Lien/CROE-Lien Forms shall be utilized.
- 2.8. Should there be any dispute or question as to boundary lines, an attempt shall be made to sign up both sides/owners in efforts to avoid a boundary survey. The necessity for boundary surveys by a licensed WV Land Surveyor or certified title opinions in efforts to resolve boundary disputes and ownership shall be discussed with the WVDEP-DLR-

AML staff and the successful A/E firm before taking any action.

- 2.9. Acquire and document useful project-related information from landowners, including but not limited to: underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire (template available from WVDEP-DLR-AML upon request) to be completed, signed, and uploaded into AMLNET. This further includes inputting the information for the Lien Determination Form into AMLNET.
- 2.10. Provide status updates of landowner negotiations, landowner questions, and landowner agreements on a regular basis to WVDEP-DLR-AML Realty (assume weekly reporting) – this shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all information known at that date and updated monthly.
- 2.11. Should a landowner request to be listed as an additional insured prior to entering into any agreement, the successful A/E firm shall satisfy the landowner's request prior to accessing their property.
- 2.12. Perform as frontline contact source in educating the property owner on the WVDEP-DLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, and all subcontractors / agents of the successful A/E firm to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). Note that any signed document with a landowner must be notarized at the successful A/E firm's expense.
- 2.13. Consideration shall be given that ownership can change at any point from EROE through CROE and may require the successful A/E firm to acquire new agreements. All ownership of property shall be updated utilizing courthouse records prior to the pre-construction conference in efforts to assure that title has not transferred to a new owner at which time a new CROE would be necessary.
- 2.14. Throughout the EROE and CROE (below) process, the successful A/E firm will be required to produce and keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. Legal support will not be required from the successful A/E firm. If, after due diligence by the successful A/E firm, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.



- 2.15. Upload each EROE packet to AMLNET within five (5) working days of completing; each shall include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondences. Original documents to be retained by the successful A/E firm and be available to be supplied to the WVDEP-DLR-AML on an as-needed basis until three (3) years after the project completion.
- 2.16. Upon receiving EROE, the successful A/E firm representative(s) shall conduct their own reconnaissance of project sites to confirm the information provided in the project narrative (OSM-51) is accurate and to inform the WVDEP-DLR-AML of any newly discovered or undocumented AML features not identified.
- 2.17. Take photos of existing conditions, document evidence of visible boundaries, and / or potential corner monuments within the project limits and assess or evaluate the most feasible access route for exploratory and construction activities.
- 2.18. Successful A/E firm will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.
- 2.19. The Realty section of the successful A/E firm will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide (internal to the successful A/E firm) comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. The Realty section of the successful A/E firm will also be responsible for attending all design review meetings.
- 2.20. Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, the Realty representative of the successful A/E firm will, in a timely and professional manner, schedule a meeting with each property owner involved. This effort being to review the proposed reclamation plan and to ensure landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, all subcontractors / agents of the successful A/E firm, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. Note that any signed document with a landowner must be notarized at the successful A/E firm's expense.
- 2.21. Uploading the CROE packet within five (5) working days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.
- 2.22. Engage in other support functions, such as design, pre-bid, and pre-construction conferences attendance, keeping daily logs with thorough notes to document realty-related conversations, and being available for questions or status updates, as needed.

The successful A/E firm will be responsible for Design Work of the following (note

that the below includes any modifications during construction or notices of termination at the end of the work):

- 3.1 Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with specified or purchased material(s), prevailing wage rates, etc., where applicable.
- 3.2 After review of the OSM-51 document(s) and requesting any additional project or site information available, engage in whatever site reconnaissance and investigations the successful A/E firm deems necessary to successfully scope the project. It is strongly recommended that this scope be reviewed by the WVDEP-DLR-AML for comment to generate any additional requirements or items to consider before the successful A/E firm proceeds further.
- 3.3 The successful A/E firm shall request all existing information pertaining to the project, including but not limited to: prior project as-builts (if applicable), example plans / typical details, example specification(s), disclaimer language to be inserted into the specifications for boring, Pay Application Template, Pre-Bid Conference (PBC) addendum template, Construction Notice to Proceed (NTP) Letter template, Construction Date Certification Form template, Certification of Construction form template, status report template (or the successful A/E firm can propose their own for approval), current State of West Virginia's approved (and current) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) General Permit (WV0115924), US Army Corps of Engineers (USACE) Regional General Permit (RGP) for WVDEP-DLR-AML Revised 11/28/2023 (expires 11/28/2028; permit# LRH-2022-932), and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.
- 3.4 Once a more granular scope is agreed upon – which shall include at minimum the problems to be solved and the proposed pathways to the corresponding solutions – the successful A/E firm will generate and embed said written scope into their cost proposal to perform the work that will design solutions to the problems identified.
- 3.5 Adding detail to and refining the preliminary project schedules included in the accepted cost proposal to generate more detailed schedules showing start dates, end dates, and durations for all tasks associated with each project – these schedules will need to be updated and transmitted monthly to the WVDEP-DLR-AML throughout the life of each project. Generate a status report table (Excel format preferred) showing what deliverables are required for each project and inputting the completion date when completed for each item – this shall be kept up to date throughout the life of each project and transmitted monthly. The expectation is that both the more detailed schedule and status report table above would be reviewed during the kickoff meeting below.
- 3.6 Once an approved Purchase Order (PO) is received and signed by the successful A/E firm, the WVDEP-DLR-AML will issue the successful A/E firm a Notice to Proceed (NTP) to authorize the earliest date which work can begin. After the NTP date, the successful A/E firm must hold a kick-off meeting with the WVDEP-DLR-AML stakeholders to bring up any needs it has and the overall plan to move forward in detail

(who specifically is working on what, when it is expected to be completed, and any items of note). The successful A/E firm shall take notes in the meeting and email them to the WVDEP-DLR-AML after the meeting is concluded (no later than three (3) business days after, but one (1) business day is preferred – note this requirement is present for any meeting / conference conducted by the successful A/E firm going forward) for review and comment. The successful A/E firm shall also generate, maintain, distribute, and follow up on any action items lists. The successful A/E firm shall generate, maintain, and distribute a project contact list providing the name, area of responsibility, company / agency, phone, and email information for all project stakeholders acting as agents for the WVDEP-DLR-AML on the project, including within WVDEP-DLR-AML itself and also the successful A/E firm.

- 3.7 Perform any initial site investigations and surveys that may be required. In particular, water, electric, sewage, septic tanks, communications, and any other above or below-ground utilities need to be identified and the corresponding 811 requests made as part of that identification process.
- 3.8 Overlay all available mine maps on the project site, verify and / or identify all AML features for each project, verify geological information, and attempt to determine the location of underground mine pools and potential portal locations that may have been missed based on available data. Relevant features shall be shown on the Plans. The successful A/E firm shall use all available information, investigations, and other resources to determine the best design to properly mitigate and reclaim the sites.
- 3.9 Utilities pathways found by Realty in the process of requesting information from landowners to fill out the Ownership Questionnaire need relayed to design.
- 3.10 The successful A/E firm is responsible to perform (or have performed by their agents) the 811 calls prior to drilling / excavating and to keep a record of when this was done, who was talked to, and any written confirmation, if available. Where there is the possibility of fire, such as a refuse pile or coal seam being excavated or drilled into (that could either start a fire or expose an existing smothered fire within the pile to air to take off), the successful A/E firm shall review the plan with the WVDEP-DLR-AML for approval prior to proceeding with the drilling or excavation.
- 3.11 Perform any geotechnical investigations, materials testing, and analysis that may be necessary to properly define and complete the design of each project.
- 3.12 Provide current mapping of project sites to achieve the design scope for each project. Perform topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811 ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures /

fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or monument with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

- 3.13 All erosion and sediment control designs and details for all projects shall conform with the State of West Virginia's approved (and current) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) General Permit (WV0115924) as obtained by the WVDEP Division of Water and Waste Management (DWWM), and in as such referenced therein the WVDEP Erosion and Sediment Control (ESC) Best Management Practices (BMP) Manual, dated 2006 and revised August 29, 2016 (or current if different). It is preferred that projects be designed such that they can satisfy the requirements of the General Permit and receive a project CSW general permit registration. BMP practices and permit requirements shall be taken into consideration during all stages of the project development and design.
- 3.14 Generate a conceptual (30%) design for review by the WVDEP-DLR-AML, which shall include conceptual plans. Conceptual plans shall include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing required information must be included in the conceptual design. Conceptual plans shall include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. shall all be clearly defined and provided. This design shall identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners need to be shown and subsequently addressed with an engineered solution in the design at this stage. The site shall have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. Consideration shall be given for accessibility during construction and future maintenance. For any construction near a residence, business, or government facility, consideration shall also be given for how the layout / LOD can be tailored to minimize disruption to local landowners, including during construction when both landowners and the construction contractor would need proper access. Consideration shall be given for how the LOD can be tailored to minimize

permitting requirements and schedule impacts. Conceptual engineered solutions need to be practical, feasible, long-term, constructible, legal, technically sound, and be safe for both workers and the public – both in the long-term result and also during the construction process. All details do not need to be present, but what is shown needs to make sense (i.e. not having any fundamental flaws that could carry forward in a complete re-design later). The Plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped “Preliminary – Not for Construction” or equivalent. Upload the conceptual design into AMLNET.

- 3.15 Schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. Note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days (one (1) preferred) after the meeting for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items. Upload the conceptual design review comments into AMLNET.
- 3.16 Throughout the work, effective and timely communication needs to take place within the successful A/E firm itself, between the successful A/E firm and the WVDEP-DLR-AML, and between the successful A/E firm and any external stakeholders who could delay, stop, or hinder the project (such as regulatory agencies or landowners, when appropriate).
- 3.17 Any tree felling timing restrictions need to be communicated to the designers for them to incorporate into the design package (including the construction specifications) and also the project schedule.
- 3.18 Any permitting restrictions on timing of any construction activity (such as installation of bat gates, mine seals, or portal closures) need to be incorporated into the design package (including the construction specifications) and also the project schedule.
- 3.19 Landowner requests need to be considered in the design and incorporated, if approved. This includes asking the landowner(s) for their preference for felled tree disposal (windrowing vs. hauling them off) and incorporating into the design package (including the construction specifications), as needed.
- 3.20 Generate a preliminary (60%) design submission for review by the WVDEP-DLR-AML. The 60% preliminary design submission (Preliminary PS&E) should include but not be limited to: preliminary plans, preliminary specifications (WVDEP-DLR-AML has examples available upon request), an Engineer’s Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan (E&S plans shall be located within the plans), any required cut / fill calculations, any required geotechnical investigation reports (including boring logs, reports, analysis, etc.), and any required hydraulic / hydrologic analysis, or other preliminary information, as needed. This design shall build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent accesses (for maintenance) shall be clearly shown, as well as any pre-existing ROWs (info from the successful A/E firm’s Realty side). Design details need to be present in the plans. This shall show any above-ground

or below-ground utilities, septic tanks, or obstacles that could have an impact on the design or construction. Consideration needs to be given to the location of underground utilities and timber mats properly shown if underground utilities would be crushed by heavy equipment. Consideration shall also be given for any low-hanging above-ground utility lines and the pathway that construction equipment may take, based on the LOD presented. For situations that could involve road obstructions during construction, traffic control needs to be present in the specifications. For a design involving drilling during construction, both plan and profile views of the drilling must be included. When unclassified excavation is paid for by volume quantity, cut / fill calculations must be presented backing up estimated quantities with the shrink / swell factor(s) explicitly stated. Cross-sections for excavations shall be provided, where appropriate. The design needs to be practical, feasible, long-term, constructible, legal, technically sound, and be safe for both workers and the public – both in the long-term result and also during the construction process. At this stage, there shall be consideration given to how the design will be maintained after construction, location and function of E&S Controls, whether a phased E&S control approach is required, any preliminary landowner comments or concerns, and any other granular details. This design shall be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. Both the specifications and plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped “Preliminary – Not for Construction” or equivalent. Upload the preliminary design (60%) PS&E to AMLNET.

- 3.21 Schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. Note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred) for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. Upload the preliminary design (60%) PS&E review comments into AMLNET.
- 3.22 WVDEP DWWM NPDES CSW General Permit Registration via the ESS. Prepare all required documentation to obtain the permit. Any project that requires an NPDES CSW permit shall be put out for public notice through the permit process. WVDEP-DLR-AML stormwater consultations surveys, documentation, and generation of the related reports for submission, if applicable. Upload documentation into AMLNET.
- 3.23 USACE (US Army Corps of Engineers) consultations and preparation of 401/404 stream and wetland permits, water quality sampling (at a West Virginia State-certified lab), etc. as applicable. This also includes checking the National Wetland Mapper to identify any possible wetlands that may exist within the areas of disturbance. Upload documentation into AMLNET.
- 3.24 WV Division of Natural Resources (WVDNR) Office of Land and Streams consultation(s) and preparation of Stream Activity permit(s), as applicable. Upload documentation into AMLNET.
- 3.25 Any timing restrictions to any activity must be clearly shown in the project schedule.

Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.

- 3.26 WVDOH consultations and preparation of Right-of-Way Encroachment Permit Application(s), Form MM-109, and obtain permit(s). Upload documentation into AMLNET.
- 3.27 County / City consultations and permit preparation for county or city-specific permits, such as floodplain permits, as needed. Upload documentation into AMLNET.
- 3.28 WV Bureau of Health consultation and permit preparation (if needed, should water lines extensions or septic line reroutes be required). Upload documentation into AMLNET.
- 3.29 Perform whatever final surveys of the site are needed. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor and the final survey uploaded into AMLNET.
- 3.30 For liability reasons, videotape (with audio narrative) and take pictures with date / coordinates / time stamp to document existing conditions prior to any impacting site investigation work (such as drilling, etc., if applicable) and also prior to construction. Particular attention shall be given to any structures present in the LOD (such as cracks in the foundations of houses) and the condition of roads leading to the job-site. This shall also include an overhead drone video of the site before, during, and after construction (drone pilot to be federally licensed) as well as videotape of the roads before and after construction. Note that the specifications will also need to include requirements that the construction contractor perform similar pre-construction surveys as a part of the construction contract. Upload the pictures and video into AMLNET.
- 3.31 Generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which shall include all design deliverables, with nothing missing. Both the specifications and plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction" or equivalent. Upload the 90% design package to AMLNET.
- 3.32 Schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. Note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred) for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. Upload the 90% design package review comments into AMLNET.
- 3.33 Generate the (100%) Issued for Bid documents, transmit to WVDEP-DLR-AML, and ask for confirmation that all comments have been incorporated. Upon confirmation, transmit the electronic files to the WVDEP-DLR-AML and also upload the Issued for Bid design package into AMLNET – this includes both pdf and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other

final documentation for the project. Physical copies of the Issued for Bid design package to be mailed or hand-delivered to the WVDEP-DLR-AML – a minimum of three (3) ANSI D-Size (22”x34”) sets of the plans are required. The successful A/E firm will also be required to bring one (1) physical copy of Issued for Bid design package to the on-site pre-bid conference (PBC). All documents prepared by a Professional Engineer of the successful A/E firm, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

- 3.34 Once WVDEP-DLR-AML has submitted the (100%) Issued for Bid documents to WVDEP Purchasing, WVDEP Purchasing will review the documents and subsequently put the project out to bid once any required changes have been made to their satisfaction. The successful A/E firm will be responsible to implement any required updates that WVDEP Purchasing requests, restamp, and resubmit accordingly in a timely manner to ensure a quick turnaround to pre-bid.
- 3.35 WVDEP-DLR-AML will schedule and the successful A/E firm will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. This includes videotaping the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred). Staking the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, as directed by the WVDEP-DLR-AML (this helps bidders to visualize what is where). Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on the in-person questions with answers, electronic questions submitted in Oasis with answers, and conference notes (also created by the successful A/E firm) for WVDEP-DLR-AML to then process.
- 3.36 Conduct the on-site pre-construction conference (including all others internal to the successful A/E firm leading the conference). Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on any State-approved changes for WVDEP-DLR-AML to then process, if applicable. Additional detail provided in Section 4 below.
- 3.37 Complete the Construction Notice to Proceed letter and submit to WVDEP-DLR-AML for signature and processing.
- 3.38 Engage in any permit or consultation termination activities required at the end of the work for the above, as applicable.

The successful A/E firm will be responsible for Construction Oversight of the following:

- 4.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the



coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

- 4.2. At least one (1) month in advance of construction, provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. WVDEP-DLR-AML has the right to remove any employee or subcontractor of the successful A/E firm from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.
- 4.3. Inspectors to become familiar with the projects, the specifications, the plans, any permit requirements, any landowner obligations, and any other pertinent information to the projects. Ideally, the other members of the successful A/E firm's team will engage in an on-boarding meeting with the new inspectors to bring them up to speed in advance of being mobilized to the site.
- 4.4. Schedule and lead the on-site pre-construction conference (PCC) with the construction contractor and all other stakeholders. This includes videotaping the conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML for review and comment. Upload video and conference notes into AMLNET upon approval. Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on any State-approved changes for WVDEP-DLR-AML to then process, if applicable.
- 4.5. Successful A/E firm's Construction Engineer (must be an active West Virginia Registered Professional Engineer) shall be responsible for collecting all required construction contractor submission documents for review and approval. Upload documents into AMLNET, once approved.
- 4.6. Successful A/E firm Construction Engineer to complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to AMLNET for record.
- 4.7. During construction, the successful A/E firm's Construction Engineer will be responsible for answering any technical questions that either the Construction Contractor staff or the successful A/E firm's inspectors have concerning the work.
- 4.8. Construction inspector is to engage in construction oversight while any construction is taking place. The expectation is that – whenever the construction contractor is doing work – the construction inspector is present and watching the work take place. The construction inspector must be actively monitoring the job-site at all times that construction is occurring, ensuring that the correct structures are being installed in the locations shown on the plans, proper soil compaction is being implemented, proper concrete / grout testing is occurring, proper materials are being utilized, ensuring that proper revegetation practices are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase

order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

- 4.9. The inspector does not direct means and methods of the work taking place, but the inspector is there to ensure the construction is occurring in accordance with the requirements set forth in the Plans, Specifications, Permits, Purchase Order, etc. If construction is not occurring according to the requirements set forth, the inspector is to immediately inform the construction contractor of the issue. In the event that the issue is not immediately corrected, the inspector is to issue a cease-and-desist order and notify the successful A/E firm's project management. The inspector will need to document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day. It is important that the issue be clearly documented by the inspector and that the inspector always remains professional in his / her dealings with the construction contractor – even and especially when the construction contractor is not professional.
- 4.10. Successful A/E firm will be responsible for reviewing and approving (if justified) all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required for the successful A/E firm Construction Engineer to approve the invoice. This will allow the invoice to be subsequently approved by the WVDEP-DLR-AML for payment. Successful A/E firm Construction Engineer does have the authority to reject invoices which are not justified. Invoices are to be accepted or rejected within three (3) business days.
- 4.11. The successful A/E firm or WVDEP-DLR-AML may, at its discretion, choose to reject any invoice(s) for work not completed in accordance with the contract Plans and Specifications. The inspector will need to document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project. It is important that the issue be clearly documented by the inspector and that the inspector always remains professional in his / her dealings with the construction contractor – even and especially when the construction contractor is not professional.
- 4.12. If the inspector sees a safety issue, which is an immediate risk to life or property, the inspector is to immediately stop the job, provide the contractor an opportunity to correct the issue, and then, if the contractor has not taken corrective actions that remove the immediate risk to life or property, issue a cease-and-desist order. The inspector is to then immediately call the WVDEP-DLR-AML contact(s), including the Project Engineer, for the project. The inspector shall thoroughly document the issue via photos with a date, location / coordinates, and time stamp. The inspector shall assemble all supporting information into an email providing a summary of the issue to the WVDEP-DLR-AML contact(s), including the Project Engineer, for the project. The construction contractor will be required to cease work for a period of time specified in the cease-and-desist order, engage in a safety standdown, and correct the safety issue in order to resume work.

- 4.13. The construction inspector is to keep a daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day. If concrete or grout testing and pouring have occurred, that will need to be included. The daily log is to be uploaded into AMLNET daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns must be detailed in the daily log and shall be brought to the successful A/E firm's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day (but preferably when known).
- 4.14. Each day that an environmental inspector performs an inspection, the inspector is to fill out an inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. Inspection form to be uploaded into AMLNET on a same-day basis but in no case later than 48 hours after the date of the inspection. The same holds true for personnel training records, maintenance reports, and corrective action reports (see Stormwater Permit for details). Any problems or concerns detailed in the inspection forms shall be brought to the successful A/E firm's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day (but preferably when known).
- 4.15. Any update to the Erosion and Sediment Control plans must be approved by the Engineer who stamped the plans and / or the successful A/E firm Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. Once approved, the redline showing this update must be marked on the on-site copy of the E&S plans by the environmental inspector. This must be done before the update is physically implemented. The on-site redline copy of the E&S plans must be kept on-site at all times in the event of an audit. This can often come up with silt fence needing moved because the location shown on the plans would be ineffective or additional E&S controls being required. A photo of the updated redline copy of the E&S plans is to be uploaded into AMLNET by the inspector.
- 4.16. Should a permit modification be needed per DWWM and NPDES requirements, the successful A/E firm shall be required to prepare and submit all needed modification documentation to get the modification approved.
- 4.17. Any update to the plans themselves must be approved by the Engineer who stamped the plans. Once approved, the redline showing this update must be marked on the redlines for the construction (which is the issued for bid drawings with the redline marks written on it). This must be done before the update is physically implemented. A photo of the updated redlines for the construction is to be uploaded into AMLNET by the inspector. At the end of the job, these redlines must be assembled into one (1) package by the Construction Contractor, reviewed by the inspector, and uploaded in one (1) package to AMLNET by the inspector.
- 4.18. At the conclusion of the construction, the successful A/E firm will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of the successful A/E firm. The successful A/E firm will also upload the drone videos, pictures, and road videos before, during, and after construction to AMLNET.

- 4.19. Successful A/E firm will be responsible for inspections during the construction contractor warranty period.
- 4.20. DWWM / Environmental Enforcement will need to be notified that a Notice of Termination (NOT) is being requested once the project is ready to be released from the NPDES permit. This needs to be completed at least sixty (60) days prior to the warranty release meeting. If the project is not released from the NPDES permit, the project is not eligible for the warranty release.
- 4.21. At the conclusion of the one (1) year warranty period or when the warranty is released, whichever is later – and neither of which can occur before all project-related permits are released – the successful A/E firm will be responsible to attend the warranty release meeting with the construction contractor, affirm that all warranty obligations have been satisfied (if they have or reject if not), and sign off on the release of warranty at the end of the Work.
- 4.22. Complete the Bond Release document and submit to WVDEP-DLR-AML for signature and processing.