



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

State of West Virginia Purchase Order

Order Date: 10-30-2024

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

Order Number:	CPO 0313 0313 DEP2500000007 1	Procurement Folder:	1257392
Document Name:	EOI - 2023 AML Contract N2	Reason for Modification:	
Document Description:	EOI - 2023 AML Contract N2		
Procurement Type:	Central Purchase Order		
Buyer Name:	Joseph E Hager III		
Telephone:	(304) 558-2306		
Email:	joseph.e.hageriii@wv.gov		
Shipping Method:	Best Way	Effective Start Date:	2024-11-01
Free on Board:	FOB Dest, Freight Prepaid	Effective End Date:	

VENDOR		DEPARTMENT CONTACT	
Vendor Customer Code:	VS0000019973	Requestor Name:	Jessica S Chambers
DIEFFENBAUCH & HRITZ LLC 1095 CHAPLIN RD STE 200		Requestor Phone:	(304) 414-1140
MORGANTOWN	WV 26501	Requestor Email:	jessica.s.chambers@wv.gov
US		<h1>2025</h1> <p>FILE LOCATION _____</p>	
Vendor Contact Phone:	304-985-5555 Extension:		
Discount Details:			
Discount Allowed	Discount Percentage	Discount Days	
#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 11-7-24

Total Order Amount:	\$10,291,418.00
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Purchasing Division's File Copy

PURCHASING DIVISION AUTHORIZATION DATE: <i>10-30-24</i> ELECTRONIC SIGNATURE ON FILE <i>[Signature]</i>	ATTORNEY GENERAL APPROVAL AS TO FORM DATE: <i>11/14/2024</i> ELECTRONIC SIGNATURE ON FILE <i>[Signature]</i>	ENCUMBRANCE CERTIFICATION DATE: <i>11-14-24</i> ELECTRONIC SIGNATURE ON FILE <i>[Signature]</i>
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Extended Description:

The vendor, Dieffenbach & Hritz LLC., agrees to enter into this contract with the agency, The West Virginia Department of Environmental Protection Agency, for the Design Engineering Services for the 2023 AML Contract 2 Projects North, per the specifications, terms and conditions, and the vendors negotiated cost proposal dated 9/14/2024, 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	1056754.25
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Bridgeport (Tomes) Landslide

Extended Description:

Bridgeport (Tomes) Landslide

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	1625554.50
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Burl Gould Highwall

Extended Description:

Burl Gould Highwall

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
3	81100000	0.00000		0.000000	1394663.75
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Burl Gould Landslides

Extended Description:

Burl Gould Landslides

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
4	81100000	0.00000		0.000000	1326431.75
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Fairmont (Windsor Drive) Subsidence & Highwall

Extended Description:

Fairmont (Windsor Dr) Subsidence & Highwall

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
5	81100000	0.00000		0.000000	1713316.50
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Falls Run (Abruzzino) DH & DS

Extended Description:

Falls Run (Abruzzino) DH & DS

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
6	81100000	0.00000		0.000000	3174697.25
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Glade Run HW & DS

Extended Description:
Glade Run Highwall

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/privacv/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.

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) Eric Stewart - Vice President of Engineering

(Address) 1095 Chaplin Road, Suite 200 Morgantown, WV 26501

(Phone Number) / (Fax Number) 304-985-5555 / 304-985-5557

(Email address) estewart@dandhengineers.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.

Dieffenbauch & Hritz LLC

(Company) 

(Signature of Authorized Representative)

Eric N. Stewart - Vice President of Engineering (10/15/2024)

(Printed Name and Title of Authorized Representative) (Date)

304-985-5555 / 304-985-5557

(Phone Number) (Fax Number)

estewart@dandhengineers.com

(Email Address)



DIEFFENBAUCH & HRITZ
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September 19, 2024

Troy H. Schell, P.E.
Northern Design Administrator
West Virginia Dept. of Environmental Protection
Office of Abandoned Mine Lands & Reclamation
1000 Technology Drive, Suite 3220
Fairmont, WV 26554

RE:

Scope of Work & Cost Proposal:
2023 AML Contract N2
CEOI 0313 DEP 24*06

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Dear Mr. Schell:

Dieffenbach & Hritz (D&H) is pleased to present this work and cost proposal for engineering, environmental, realty, survey and construction management services associated with the projects included with the 2023 AML Contract N2 Contract. D&H has developed a preliminary plan document based on documents provided by the DEP and site visits conducted in February and March 2024. Also included with this proposal is a summary of engineering costs and our proposed project schedule.

Project 1: Bridgeport (Tomes) Landslide

Description of Work:

This project is located in Harrison County, off CR 23 / 9 / Brushy Fork Road in Mt. Clare. The project concerns include the stabilization of a dangerous slide approximately 1,700 ft from the landowner's residence, and a clogged natural drain. A second slip on the east is **not** part of this project.

A site visit was conducted on February 20, 2024. The slide encompasses approximately 1.6 acres has a 25 ft drop, and a 217 ft scarp line in a bowl shape.

The cause of the slide is believed to be a result of the previous abandoned mine workings in the area of which there is limited information other than it was pre-law mine of the Pittsburgh surface under operation of an unknown party.

The subject parcel owner indicates they are concerned about cattle falling over the side and kids that are known to trespass on the properties on ATVs.

Tentative Reclamation Plan:

Slip & Drainage:

- Upgrade access road.
- Clear, grub and install required E&S/BMP controls as required per permit documents.
- Install HDPE culvert under access road.
- Install riprap channel downhill from scarp to toe of slide and tie-in at base of slide to a natural drainage channel.
- Installation of underdrains as required
- Regrade and revegetation of site.

Services:

Task I: NEPA & ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and is not included in the proposal price.

Public Involvement:

D&H has included time for documents, presentations, and WVDEP's website for all submittal requirements throughout the project duration. Also included is time for a representative of each discipline to engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the *Regional Supplement: Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential affects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review. According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB) (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a "no effect" or "not likely to adversely affect" determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a "may affect," then additional consultation with eh USFWS will be required. This proposal does not include additional studies requested by the USFEWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information within the LOI and prepare a report in accordance with the most recent *“Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS”*. This assessment will require a return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be two (2) sampling sites for this project.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the “No-Build” alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates will be provided to D&H of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions

before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors. Coordinate and upload documents, including, but not limited to: legal ownership, each EROE packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia

State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).

- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.
- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm existing building locations (floor elevation), within the project limits.

Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size and type, and direction of flow).

Guardrail (type, face, and stick-up).

Confirm locations of any foundations, concrete pads, building pads.

Control point references coordinates shall be obtained and shown on the design plans.

Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately forty (40) proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;
- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. Landslide/Instability
 - a. The area of concern consists of an approximate 400 ft. by 400 ft. landslide that has an impact on the landowner's livestock and the stream below. NGE plans to drill forty (40) test borings to define subsurface conditions. Twenty-five (25) borings will be drilled for the slide area and the remaining fifteen (15) borings will be drilled in the field above the slide area to analysis stability for temporary stockpile of slide material. Each boring will be extended to bedrock by augering and sampling. No rock coring is

planned for this project. An estimated total of about 1,200 ft. of soil drilling will be performed for the project. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to the boring termination depth.

- b. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to NGE's laboratory for detailed examination and laboratory testing. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.
2. Laboratory Testing: Laboratory testing will be performed on select samples from the landslide areas to aid in classifying the soil and determine their engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing.
 3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the landslide area together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for the landslide remediation. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description,
 - ii. Test boring location plan,
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations,
 - iv. A generalized description of subsurface conditions encountered,
 - v. Laboratory test results,
 - vi. NGE's conclusions and recommendations for stabilization of the landslide area. This work will include a slope stability evaluation for the existing landslide and discussion of alternatives for repair of the landslide. NGE expects to also develop a typical cross-section(s) which illustrates their recommended method of slide repair.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.

- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);
- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while installation and construction of pipes in ditches will be limited to replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DLR-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DLR-AML's comments and corrections prior to preparation of the 60% Preliminary plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, realty feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,

- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the Plans, Specification, and Estimate (PS&E) process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

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Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to

potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H.

Task IV: Construction Oversight

Construction Inspection

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 168-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,
- Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
- Ensuring no substandard materials are used for the project,
- Upload documentation to AMLNET that materials used meet Specifications for the project,
- Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation.
- Recording quantity of materials hauled and delivered to the job site,
- Collecting and verifying the contractor's construction stormwater management reports,
- Ensuring proper revegetation practices are being followed,
- Ensuring safe work practices,
- Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V: Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML's single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLR-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

Project 2: Burl Gould Highwall

Description of Work:

This project is located in Harrison County, off Gains Hollow Road, in Mt. Clare. The project concerns include the reclamation of a highwall, stabilization of a dangerous slide below the highwall, and a clogged stream.

A site visit was conducted on February 20, 2024. The highwall is approximately 4,310 ft in length and 40 to 60ft high. The slide encompasses approximately 26 acres below the highwall, the largest area having a 20 ft scarp line about 100 ft across, and the area of stream clog is approximately 1,410 ft in length. The highwall bench has water flowing in two areas at about 25 GPM each.

The cause of the slide is believed to be a result of the previous abandoned mine workings in the area of which there is limited information other than it was pre-law mine of the Pittsburgh/Redstone surface under operation of an unknown party.

Tentative Reclamation Plan:

Highwall Reclamation, Slip & Drainage:

- Clear, grub and install required E&S/BMP controls as required per permit documents.
- Install riprap channel(s) downhill toward stream.
- Installation of underdrains as required along base of highwall.
- Regrade along and below bench to remove highwall/slide danger, backfill at a 2:1 ratio, and revegetation of site.

Services:

Task I: NEPA&ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and not included in the proposal price.

Public Involvement:

D&H has included time for documents, presentations, and WVDEP's website for all submittal requirements throughout the project duration. Also included is time for a representative of each discipline to engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the Regional Supplement: *Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential effects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review. According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB) (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a “no effect” or “not likely to adversely affect” determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a “may affect,” then additional consultation with the USFWS will be required. This proposal does not include additional studies requested by the USFWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information within the LOI and prepare a report in accordance with the most recent “*Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS*”. This assessment will require a return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be three (3) sampling sites for this project. WVDEP-DLR-AML will conduct pre- and post-construction water sampling.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the “No-Build” alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as

individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors.

Coordinate and upload documents, including, but not limited to: legal ownership, each EROE

packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).
- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of

utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.

- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- o Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm existing building locations (floor elevation), within the project limits.

Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size

and type, and direction of flow).

Guardrail (type, face, and stick-up).

Confirm locations of any foundations, concrete pads, building pads.

Control point references coordinates shall be obtained and shown on the design plans.

Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately fifty (50) proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;
- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. Subsurface Investigation: Highwall Reclamation

- a. An approximate 4,000 ft. long section of highwall has been selected to be reclaimed. NGE plans to drill fifty (50) 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 reclamation. No rock coring is planned for this area. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by their geotechnical engineer. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to NGE's laboratory for detailed examination and laboratory testing.

- b. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.
2. Laboratory Testing: Laboratory testing will be performed on select samples from the highwall areas to aid in classifying the soil and determine their engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing.
3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the highwall area together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for backfilling to reclaim the existing mine highwall. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description,
 - ii. Test boring location plan,
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations,
 - iv. A generalized description of subsurface conditions encountered.
 - v. Laboratory test results,
 - vi. Conclusions and recommendations for backfilling the existing mine highwall will include slope stability considerations for the embankment areas.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.
- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);

- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while Installation and construction of pipes in ditches will be limited to replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DLR-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DLR-AML's comments and corrections prior to preparation of the 60% Preliminary plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, rearty feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,
- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the Plans, Specification, and Estimate (PS&E) process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

- Cover
- Table of Contents
- Project Narrative
- Special Provisions
- Mobilization / Demobilization
- Construction Layout
- Quality Control
- Site Preparation
- Erosion and Sediment Control
- Revegetation
- Drainage Structures
- Unclassified Excavation
- Utilities
- Drill Logs
- Retaining structures

Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit

applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the

Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task IV: Construction Oversight

Construction Inspection

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 300-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,

Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
Ensuring no substandard materials are used for the project,
Upload documentation to AMLNET that materials used meet Specifications for the project,
Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation. Recording quantity of materials hauled and delivered to the job site,
Collecting and verifying the contractor's construction stormwater management reports,
Ensuring proper revegetation practices are being followed,
Ensuring safe work practices,
Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of

the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V:Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML's single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLE-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

Project 3: Burl Gould Landslides

Description of Work:

This project is located in Harrison County, off Falls Run Road in Mt. Clare. The project concerns include the reclamation of a highwall, stabilization of multiple dangerous slides below the highwall, and a hazardous body of water.

A site visit was conducted on February 20, 2024. The highwall is approximately 1,662 ft in length and 40 to 50 ft high with large fallen rocks. The first slide encompasses approximately 7 acres below the highwall with a 3-5 ft scarp, the second slide only about 1 acre also with a 3-5 ft scarp. A third slide is approximately 300 ft from the barn with a scarp of 1-2 ft. This slide is currently clogging drainage ditches along the road. The body of water is about 0.15 acre of an unknown depth and likely caused from improper grading of the bench preventing water from draining away from the highwall.

The cause of the slide is believed to be a result of the previous abandoned mine workings in the area of which there is limited information other than it was pre-law mine of the Pittsburgh/Redstone surface under operation of an unknown party.

Tentative Reclamation Plan:

Highwall Reclamation, Slip & Drainage:

- Clear, grub and install required E&S/BMP controls as required per permit documents.
- Install rock buttress where slide is nearest residence
- Install riprap channel(s) downhill toward stream.
- Installation of underdrains as required along base of highwall.
- Regrade along and below bench to remove highwall/slide danger, backfill at a 2:1 ratio, and revegetation of site.
- Regrade area to no longer hold water.

Services:

Task I: NEPA & ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and not included in the proposal price.

Public Involvement:

D&H has included time for documents, presentations, and WVDEP's website for all submittal requirements throughout the project duration. Also included is time for a representative of each discipline to engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the Regional Supplement: *Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential affects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review. According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a "no effect" or "not likely to adversely affect" determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a "may affect," then additional consultation with eh USFWS will be required. This proposal does not include additional studies requested by the USFEWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information with in the LOI and prepare a report in accordance with the most recent *“Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS”*. This assessment will require a return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be two (2) sampling sites for this project. WVDEP-DLR-AML will conduct pre- and post-construction water sampling.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the “No-Build” alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors. Coordinate and upload documents, including, but not limited to: legal ownership, each EROE packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).
- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.
- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- o Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm existing building locations (floor elevation), within the project limits.

Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size and type, and direction of flow).

Guardrail (type, face, and stick-up).

Confirm locations of any foundations, concrete pads, building pads.

Control point references coordinates shall be obtained and shown on the design plans.

Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately seventy-six (76) proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;
- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. **Subsurface Investigation**

- a. **Landslide/Instability:** The areas of concern consists of three landslide areas. The smaller area is along the farm access road between the highwall and Falls Run Road. It is a small area of instability less than 100 ft. in width. A medium sized landslide area can

be found on the western end of the highwall. It is approximately 400 ft. by 400 ft. The large slide between the highwall and residence is approximately 1,600 ft. in width and extends downhill approximately 400 ft. NGE will also investigate the area behind the residence and below the slide to determine subsurface conditions that can potentially impact the residence. NGE plans to drill fifty (50) test borings to define subsurface conditions in the landslide areas. Each boring will be extended to bedrock by augering and sampling. No rock coring is planned for this area. We estimate a total of about 1,250 ft. of soil drilling will be performed for the project. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to the boring termination depth.

- b. Highwall Reclamation: An approximate 1,800 ft. long section of highwall above the landslides has been selected to be reclaimed. NGE plans to drill twenty-six (26) borings to define subsurface conditions in the highwall area. 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. NGE estimates a total of 700 ft. of soil drilling will be required for the highwall reclamation. No rock coring is planned for this area. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by their geotechnical engineer.
 - c. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to our laboratory for detailed examination and laboratory testing. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.
2. Laboratory Testing: Laboratory testing will be performed on select samples from the landslide areas to aid in classifying the soil and determine their engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing.
 3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the landslide and highwall areas together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for the landslide remediation and backfilling to reclaim the existing mine highwall. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description.
 - ii. Test boring location plan.
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations.
 - iv. A generalized description of subsurface conditions encountered.
 - v. Laboratory test results.
 - vi. NGE's conclusions and recommendations for stabilization of the landslide areas. This work will include a slope stability evaluation for the existing landslides and discussion of alternatives for repair of the landslide. NGE will

- also develop a typical cross-section(s) which illustrates our recommended method of slide repair.
- vii. Conclusions and recommendations for backfilling the existing mine highwall will include slope stability considerations for the embankment areas.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.
- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);
- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while Installation and construction of pipes in ditches will be limited to replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DLR-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DRL-AML's comments and corrections prior to preparation of the final construction plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, realty feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design

review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,
- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the Plans, Specification, and Estimate (PS&E) process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

- Cover
- Table of Contents
- Project Narrative
- Special Provisions
- Mobilization / Demobilization
- Construction Layout
- Quality Control
- Site Preparation
- Erosion and Sediment Control
- Revegetation
- Drainage Structures
- Unclassified Excavation
- Utilities
- Drill Logs

- Retaining structures

Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task IV: Construction Oversight

Construction Inspection

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 237-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,
- Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
- Ensuring no substandard materials are used for the project,
- Upload documentation to AMLNET that materials used meet Specifications for the project,
- Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation. Recording quantity of materials hauled and delivered to the job site,
- Collecting and verifying the contractor's construction stormwater management reports,
- Ensuring proper revegetation practices are being followed,
- Ensuring safe work practices,
- Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any

project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V: Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the

warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML’s single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLE-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

Project 4: Fairmont (Windsor Drive) Subsidence & Highwall

Description of Work:

This project is located in Marion County off Garrett Avenue in Fairmont. The project concerns include subsidence under a new development of 20 homes and a dangerous highwall.

A site visit was conducted on March 4, 2024. The highwall is approximately 335 ft in length and about 20 ft high. The wall is about 200 ft from the nearest residence and 450 ft from a city park.

The homes were constructed over an underground mine, Consol No. 38, operated by Consolidated Coal from 1910 to 1958.

Tentative Reclamation Plan:

Highwall Reclamation:

- Clear, grub and install required E&S/BMP controls as required per permit documents.
- A subsidence hole will be evaluated and sealed or gated as appropriate.
- Installation of underdrains as required along base of highwall.
- Regrade highwall, backfill at a 2:1 ratio, and revegetation of site.

Grouting Plan:

- Clear area for on-site batch plant.
- Drill a minimum of 4 holes into the mine void under each house and pump grout/concrete into each.
- Revegetate all areas disturbed by construction.

Services:

Task I: NEPA & ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and not included in the proposal price.

Public Involvement:

D&H has included time for documents, presentations, and WVDEP's website for all submittal requirements throughout the project duration. Also included is time for a representative of each discipline to engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the Regional Supplement: *Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential effects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review. According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB) (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a “no effect” or “not likely to adversely affect” determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a “may affect,” then additional consultation with the USFWS will be required. This proposal does not include additional studies requested by the USFWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information within the LOI and prepare a report in accordance with the most recent “*Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS*”. This assessment will require a return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be one sampling site for this project. WVDEP-DLR-AML will conduct pre- and post-construction water sampling.

Bat Hibernaculum Study:

D&H will secure the services of a subconsultant, BioSurvey Group, to determine if a subsidence hole present at the site is being used as a hibernaculum by bats. The survey will be conducted in three (3) successive phases.

Phase 1: The hole will first be assessed for potential portal use by bats (to be conducted by the WVDEP if needed)

Phase 2: If the physical dimensions and state of the opening, as provided in Phase I, classify the opening as a potential portal and the portal is found habitable in Phase I, a 30-hour emergence survey will be conducted using a harp trap. Sampling will begin at sunset and continue for at least five hours each night for one night per week for six weeks (six nights). Survey efforts will be suspended if no bats (of any species) are captured after the first two nights of acceptable survey effort. A myotis bat conservation plan (MBCP) will be included and submitted to USFWS.

Phase 3: If a federally listed or proposed listed species is collected during Phase 2, USFWS will be notified within 48 hours. An additional three nights of sampling per week will be conducted for three consecutive weeks (nine additional nights). If the fall emergence survey season (September 15 to October 31) ends prior to the completion of the required additional sampling, then sampling must be completed the following spring.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the "No-Build" alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty Services

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors.

Coordinate and upload documents, including, but not limited to: legal ownership, each EROE packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).
- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.
- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm Existing Building locations (floor elevation), within the project limits.

Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size and type, and direction of flow).

Guardrail (type, face, and stick-up).

Confirm locations of any foundations, concrete pads, building pads.

Control point references coordinates shall be obtained and shown on the design plans.

Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately forty-four (44) proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;

- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. Subsurface Investigation

- a. Subsidence Investigation: The area of concern consists of a new housing development built above the Consol No. 38 underground mine. NGE plans to drill twenty (20) test borings to define subsurface conditions in the area of the housing development. Mats will be used for equipment tramping in the residential yards to reduce surface damage. It is also understood that a sinkhole was discovered on the southwest side of the project area. NGE will drill four (4) test borings around the sinkhole. Each boring will be extended 5 ft. below the suspected mine floor. Rock will be cored if necessary to reach the target depth. We estimate a total of about 480 ft. of soil drilling and 1,200 ft. of rock coring will be performed for the subsidence area of the project. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by the geotechnical engineer. In six of the borings, NGE will install a 1.5-inch PVC piezometer with a 10 ft. slotted screen at the bottom and seal the ground surface around the top to prevent surface water from infiltrating into each boring. Three feet tall locking steel protective covers will be installed over the PVC casing and concreted in-place. Any future monitoring will be performed by others. The anticipated piezometer footage is 400 feet.
- b. Highwall Reclamation: An approximate 335 ft. long section of highwall has been selected to be reclaimed. NGE will drill twenty (20) borings to define subsurface conditions in the highwall area. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and also help to determine the quality of the potential borrow material. An estimated total of 500 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by their geotechnical engineer.
- c. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to NGE's laboratory for detailed examination and laboratory testing. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.

2. Laboratory Testing: Laboratory testing will be performed on select samples from the landslide areas to aid in classifying the soil and determine their engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing.
3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the highwall areas together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for backfilling to reclaim the existing mine highwall. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description.
 - ii. Test boring location plan.
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations.
 - iv. A generalized description of subsurface conditions encountered.
 - v. Laboratory test results.
 - vi. Conclusions and recommendations for backfilling the existing mine highwall will include slope stability considerations for the embankment areas.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.
- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);
- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while Installation and construction of pipes in ditches will be limited to replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DRL-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DRL-AML's comments and corrections prior to preparation of the 60% Preliminary plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, reedy feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,
- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the Plans, Specification, and Estimate (PS&E) process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

- Cover
- Table of Contents
- Project Narrative
- Special Provisions
- Mobilization / Demobilization
- Construction Layout
- Quality Control
- Site Preparation
- Erosion and Sediment Control
- Revegetation
- Drainage Structures
- Unclassified Excavation
- Utilities
- Drill Logs
- Retaining structures

Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H. Any changes to the design or Erosion & Sediment Control plans that are

considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task IV: Construction Oversight

Construction Inspection

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 212-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,
- Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
- Ensuring no substandard materials are used for the project,

Upload documentation to AMLNET that materials used meet Specifications for the project,
Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation. Recording quantity of materials hauled and delivered to the job site,
Collecting and verifying the contractor's construction stormwater management reports,
Ensuring proper revegetation practices are being followed,
Ensuring safe work practices,
Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any

modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V: Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML's single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLE-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

Project 5: Falls Run (Abruzzino) DH & DS

Description of Work:

This project is located in Harrison County, off Falls Run Road in Mt. Clare. The project concerns include the reclamation of a highwall and stabilization of multiple dangerous slides below the highwall.

A site visit was conducted on February 21, 2024. The highwall encircles an entire ridge with no defined start/end points and 40 to 70 ft high. The slides encompass approximately 5 acres below the highwall.

The cause of the slide is believed to be a result of the previous abandoned mine workings in the area of which there is limited information other than it was pre-law mine of the Pittsburgh/Redstone surface under operation of an unknown party.

Tentative Reclamation Plan:

Highwall Reclamation, Slip & Drainage:

- Clear, grub and install required E&S/BMP controls as required per permit documents.
- Install riprap channel(s) downhill toward stream.
- Installation of underdrains as required along base of highwall.
- Regrade around all sides to remove highwall/slide danger, backfill at a 2:1 ratio, and revegetation of site.

Services:

Task I: NEPA & ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and not included in the proposal price.

Public Involvement:

D&H assumes that two (2) presentations on behalf of the WVDEP-DLR-AML may be required during the life of the project. Time for additional presentations and/or meetings have been included for Municipal/County governments to explain the scope of work, remediation methods, and answer any associated questions. Finally, time for a representative of each discipline has been included to

engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the Regional Supplement: *Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential affects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review. According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a “no effect” or “not likely to adversely affect” determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a “may affect,” then additional consultation with eh USFWS will be required. This proposal does not include additional studies requested by the USFEWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information within the LOI and prepare a report in accordance with the most recent “*Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS*”. This assessment will require a

return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be five (5) sampling sites for this project. WVDEP-DLR-AML will conduct pre- and post-construction water sampling.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the “No-Build” alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty Services

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be

limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to

AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors.
Coordinate and upload documents, including, but not limited to: legal ownership, each EROE packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).

- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.
- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm existing building locations (floor elevation), within the project limits.
Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size and type, and direction of flow).
Guardrail (type, face, and stick-up).
Confirm locations of any foundations, concrete pads, building pads.
Control point references coordinates shall be obtained and shown on the design plans.
Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately ninety-six (96) proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;
- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. Subsurface Investigation

- a. Landslide/Instability: The areas of concern consists of two landslide areas. The smaller area to the south below the highwall is approximately 500 ft. by 500 ft. The larger slide to the north is approximately 1,200 ft. by 600 ft. NGE plans to drill sixty (60) test borings define subsurface conditions in the landslide areas. Each boring will be extended to bedrock by augering and sampling. No rock coring is planned for this area. An estimated total of about 1,500 ft. of soil drilling will be performed for the project. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to the boring termination depth.

- b. Highwall Reclamation: An approximate 2,300 ft. long section of highwall has been selected to be reclaimed. NGE plans to drill thirty-six (36) borings to define subsurface conditions within the highwall area. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and also help to determine the quality of the potential borrow material. An estimated total of 900 ft. of soil drilling will be required for the highwall. No rock coring is planned for this area. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by their geotechnical engineer.
 - c. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to NGE's laboratory for detailed examination and laboratory testing. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.
2. Laboratory Testing: Laboratory testing will be performed on select samples from the landslide areas to aid in classifying the soil and determine their engineering properties. Planned lab testing includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing.
3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the landslide and highwall areas together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for the landslide remediation and backfilling to reclaim the existing mine highwall. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description.
 - ii. Test boring location plan.
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations.
 - iv. A generalized description of subsurface conditions encountered.
 - v. Laboratory test results.
 - vi. Conclusions and recommendations for stabilization of the landslide areas will include a slope stability evaluation for the existing landslides and discussion of alternatives for repair of the landslide. NGE will also develop a typical cross-section(s) which illustrates their recommended method of slide repair.
 - vii. Conclusions and recommendations for backfilling the existing mine highwall will include slope stability considerations for the embankment areas.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings

to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.
- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);
- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while Installation and construction of pipes in ditches will be limited to replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DLR-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DLR-AML's comments and corrections prior to preparation of the 60% Preliminary plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, realty feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,
- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the PS&E process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

- | | |
|---------------------------------|--------------------------------|
| ▪ Cover | ▪ Erosion and Sediment Control |
| ▪ Table of Contents | ▪ Revegetation |
| ▪ Project Narrative | ▪ Drainage Structures |
| ▪ Special Provisions | ▪ Unclassified Excavation |
| ▪ Mobilization / Demobilization | ▪ Utilities |
| ▪ Construction Layout | ▪ Drill Logs |
| ▪ Quality Control | ▪ Retaining structures |
| ▪ Site Preparation | |

Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the

NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task IV: Construction Oversight

Construction Inspections

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 372-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual

number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,
- Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
- Ensuring no substandard materials are used for the project,
- Upload documentation to AMLNET that materials used meet Specifications for the project,
- Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation. Recording quantity of materials hauled and delivered to the job site,
- Collecting and verifying the contractor's construction stormwater management reports,
- Ensuring proper revegetation practices are being followed,
- Ensuring safe work practices,
- Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and

approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V: Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML's single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLE-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

Project 6: Glade Run HW & DS

Description of Work:

This project is located in Harrison County, off Glade Run in Bridgeport. The project concerns include the reclamation of two highwalls and stabilization of multiple dangerous slides around the highwalls. Multiple hazardous bodies of water and an impoundment are also present on site and will be mitigated.

A site visit was conducted on March 12, 2024. The first highwall is 7,800 ft long and 35 to 90 ft high. Water ponds along the northwestern and southern sides of the highwall for approximately 2,700 ft. The second highwall is 750 ft long and about 50 ft high all around. The first slide encompasses approximately 10 acres with a 3-5 ft scarp at top and others throughout the slide. This slide is directly above the residence. The second slide encompasses approximately 3 acres with a 1-2 ft scarp and has slid into the road and been cleaned up by the property owners multiple times. The third slide is approximately 14 acres with an 8-10 ft toe bulge and within 50ft of a hunting camp.

Two hazardous bodies of water exist on site, both along the largest highwall. The first runs almost the entire length of the northern face of the highwall, 3250 ft, and about 100 ft at its widest. Depth is estimated to be 30-40 ft. The second body of water is around the western bed of the highwall and is 600 ft in length and 55 ft wide. The highwall is approximately 90ft in this area. A dangerous impoundment exists at the southeastern portion of the second hazardous body of water.

The cause of the slide is believed to be a result of the previous abandoned mine workings in the area of which there is limited information other than it was pre-law mine of the Pittsburgh/Redstone surface under operation of an unknown party.

Tentative Reclamation Plan:

Highwall Reclamation, Slip & Drainage:

- Clear, grub and install required E&S/BMP controls as required per permit documents.
- Install riprap channel(s) downhill toward stream.
- Installation of underdrains as required along base of highwall.
- Regrade around all sides to remove highwall/slide danger, backfill at a 2:1 ratio, and revegetation of site.
- Drain all ponding areas and provide alternate drainage channels to remove water from the site.

Services:

Task I: NEPA & ESA

Cultural Resources Clearance:

D&H will submit the project plans and description to the WV Department of Arts, Culture and History (WVDACH) for a review under Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties" by the State Historic Preservation Officer (SHPO). Because these lands are impacted by former mining activities, the need for a Phase I Cultural Resource Survey is not anticipated and is not included in the proposal price.

Public Involvement:

D&H assumes that two (2) presentations on behalf of the WVDEP-DLR-AML may be required during the life of the project. Time for additional presentations and/or meetings have been included for Municipal/County governments to explain the scope of work, remediation methods, and answer any associated questions. Finally, time for a representative of each discipline has been included to engage in training with the WVDEP-DLR-AML. No public hearings are anticipated for this project and time has not been included in the proposal price for such.

Field Assessments – Ecological Delineations:

D&H will perform a delineation of waters of the United States (WOTUS) and waters of the State (WOTS), including wetlands. The jurisdictional status of the waters observed will be determined using the definition of WOTUS as presented in 33 CFR 328.3 and will generally follow the examples described in the U.S. Army Corps of Engineers (USACE) *Jurisdictional Determination Form Instructional Guidebook* (2007), the *Corps Wetland Delineation Manual, Technical Report Y-87-1* and the *Regional Supplement: Eastern Mountains and Piedmont Region* (Version 2.0) (2012). The limits of investigation will include the LOD areas and an added 100-foot buffer. The extent of the buffer may be adjusted to accommodate property lines and natural features.

D&H will prepare a final report of the stream and wetland delineation. The final report will contain general information about the site and describe the size and type of WOTUS and WOTS delineations. The report will also include a habitat value of each delineated wetland and stream, data forms, photographs, and a delineation map to illustrate the location and extent of identified WOTUS and WOTS features. The final report will be suitable for submission to state and federal agencies as needed.

RTE Survey & Clearance:

D&H will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding potential affects to rare, threatened, or endangered species through the IPaC process. D&H will first gather bat capture data and other RTE information from the WVDNR Natural Heritage Database. D&H will process the bat capture data and project details through the IPaC Determination Keys available for the project review.

According to an unofficial IPaC report, the project is within the range of the Indiana Bat (IB) (endangered), Northern long-eared Bat (NLEB) (endangered), Tricolored Bat (proposed endangered), Clubshell mussel (endangered), Snuffbox Mussel (endangered), and the Monarch Butterfly (candidate species). The Monarch Butterfly and the Tricolored Bat are candidate and proposed species, respectively and have no regulatory protection at the time of this proposal. The project will not directly impact mussel streams. The project will impact potential summertime roosting habitat of both species if tree clearing is required. Seasonal clearing (November 15th to March 31st) will likely be offered as a conservation measure to avoid disruptions to roosting and foraging patterns of the IB and the NLEB. This information will eventually be used in the permitting process. If a “no effect” or “not likely to adversely affect” determination occurs, and no federal permit is required, no further USFWS consultation will be necessary. However, if the project requires a WSACE permit, final consultation may be required between the Corps of Engineers and the USFWS as per Section 7 of the Endangered Species Act. If the IPaC process results in a “may affect,” then additional consultation with eh USFWS will be required. This proposal does not include additional studies requested by the USFEWS unless specifically noted.

If a phase I habitat assessment for bats is requested by the USFWS, D&H scientists will collect habitat information within the LOI and prepare a report in accordance with the most recent “*Range-side Indiana Bat & Northern Long-Eared Bat Survey Guidelines, USFWS*”. This assessment will require a return to the field for data collection. A cost for this scenario has been included should it be required. Hours not used will not be billed.

Water Quality Sampling and Assessments:

The Regional General Permit (see below) may require water quality testing before construction begins and twice a year for two years following the construction. The WVDEP-DLR-AML will sample the waters and have them analyzed at a WV-certified lab for analysis. Parameters to be tested for may include metals, total dissolved solids, turbidity, and pH. This data will be submitted to the USACE and the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management. D&H will establish station(s) and will sample once as part of the investigation phase with data to be used for design purposes. D&H assumes that there will be twenty-five (25) sampling sites for this project. WVDEP-DLR-AML will conduct pre- and post-construction water sampling.

Environmental Assessment:

D&H will prepare an Environmental Assessment (EA) as per DEP guidelines. The EA is required due to the use of federal funding for the project. The EA will describe the impacts of the project and their significance. Any mitigative measures and the “No-Build” alternative will be discussed. A draft of the EA will be submitted to DEP for review and comment. The final document will be provided to AML and made available for public comment. AML will handle all public participation internally. Final determinations will be added to the Record of Decision and appended to the EA. Should any plan adjustments arise from the EA process, D&H will ensure that said adjustments are reflected in the project design.

Task II: Realty Services

D&H, in conjunction with National Right of Way (NROW), will provide the necessary realty services included in the Detailed Description of Services Requested which are summarized below for this project:

Request existing Landowner contact information, agreements, and reference material for all Realty work to be completed on the project, including, but not limited to:

- WVDEP-DLR-AML Ownership Questionnaire template,
- Master Realty Landowner Contact Information Sheet template,
- Lien Determination memorandum,
- and upload the information to AMLNET.

Provide a Preliminary Limited Certificate of Title on the surface ownership of the properties to be affected by the project, using desktop online research, by defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all property owners. The preliminary ownership report will include the date the research was concluded.

Confirm ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed.

- Provide an industry standard title report in the form of a Limited Title Certificate substantiating the title ownership findings. The title examination conducted will be limited to surface ownership. Ownership interests searched will not include interest owners such as lessees, lienholders, tenants, mineral owners, reversionary interests, adverse ownership, etc. NROW interprets legal ownership for this project is defined as individuals/entities having acquired the property by recorded conveyance and are assessed taxes on the property.

Property owners will be questioned if they participated in the mining, if they accepted royalty payments or leased the land/resources for the mining, received some benefit from said mining (monetary or otherwise). A contact report will be provided for each property owner.

In the case of boundary disputes, an effort will be made to sign both sides/owners.

Acquire and document useful project-related information from landowners, including but not limited to: underground utilities, 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.

For any work NROW undertakes on their own, status updates of landowner negotiations, landowner questions, and landowner agreements on a weekly basis from the 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.

Exploratory Rights of Entry (EROE)

- Upon completion of the field work and the conceptual plan, D&H will meet with property owners to review the conceptual plan and confirm any land disturbances from the field work were properly reclaimed and discuss the general schedule for the next phases of the project.

Construction Rights of Entry (CROE)

- Once concept plans are complete, D&H, or representative of, will meet with property owners to discuss the overall construction plans and schedule. The CROE will be requested from the property owner at this time.
- Under this task, D&H will have meetings with the property owner at the completion of specified major milestones of the project to obtain feedback from property owners.

Additional EROE will be secured as deemed necessary during the design phase and in accordance with the above stated criteria. Ownership of all affected properties will be confirmed through courthouse records again prior to the Pre-construction meeting in recognition that ownership can change at any point. New agreements will be acquired in the case of any ownership changes.

Contact reports with thorough notes detailing each landowner conversation will be prepared including: 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.

Upon receiving EROE, additional reconnaissance of the project site will be conducted 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.

D&H will fully document the site with a video and photo log with descriptions of conditions before, during, and after construction for record. Documented features would include but not limited to property markers, pet cemeteries, grave sites, structures, foundations, driveway conditions, access road conditions, utilities, ornamental landscaping etc. and upload to AMLNET.

Notify and contact property owners 48 hours prior to any site visits by D&H and contractors.

Coordinate and upload documents, including, but not limited to: legal ownership, each EROE packet within five (5) working days of completion, and each CROE packet within five (5) working days of completion to AMLNET.

Realty representative to attend pre-bid conference.

Realty representative to attend pre-construction conference.

Task III: Design

Site Reconnaissance and Investigations:

D&H shall request whatever consultation letters have been sent, work that has been done, existing water quality data, agency contact information, and any other existing information pertaining to the project and any other information that may be useful that WVDEP-DLR-AML may be able to provide.

D&H coordinated with WVDEP-DLR-AML for an on-site scoping meeting that took place on February 20, 2024.

Illustrations including proposed access roads and limits of disturbance will be made to assist with educating the landowner(s) on the WVDEP-DLR-AML program, what it has to offer, how the remediation will impact the landowner(s) as well as impacts if left unresolved. Copies of the illustrations will be left with the landowner(s).

Survey & Mapping Services:

D&H shall provide current mapping of the project sites to achieve the design scope of each project. Survey services shall consist of a combination of UAV Lidar mapping to generate the required two (2) foot contour interval mapping along with GPS and conventional survey services to support project control, mapping checks, planimetric locations, and borehole stakeout. D&H has prepared the below scope of services based upon our understanding of project requirements.

All surveying, mapping, etc. shall be performed by or under the direct supervision of a registered Professional Surveyor in the State of West Virginia and all survey and mapping deliverables will be signed, sealed and dated by an active WV Registered Professional Surveyor and uploaded into AMLNET. Deliverables for the mapping shall be provided in an AutoCAD 2020 format .dwg or later version along with a complete .csv file or compatible format showing the point number, northing, easting, elevation, and description.

- (1) D&H will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. D&H will establish a minimum of three (3) control points (3/4" Rebar with cap) at the project site. The horizontal datum will be based upon West Virginia State Plane Coordinate System, North Zone, NAD83 (2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18).
- (2) Utilities will be shown according to surface and overhead observations combined with plans and markings provided by West Virginia 811 Utility service. Note that source information from plans and markings will be combined with observed evidence and landowner interviews of utilities to develop a plan view of the utilities. Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. D&H will obtain heights of overhead wires as necessary and will show on the design plans.
- (3) D&H will utilize a UAS Lidar unit for topographic mapping and a georeferenced ortho mosaic for use in generating the required two (2) foot contour interval and planimetric data for use by the design teams. D&H intends to perform the collection of data on a day with favorable weather and site conditions. If the operation of the UAV causes a safety concern, the Pilot in Command has the right to terminate flight operations until the safety concern is resolved. The use of UAV equipment is regulated by the Federal Aviation Administration with certain regulations that must be adhered to. Below is a limited summary of these regulations.

The UAV must remain in Visual Line of Sight (VLOS) of the Pilot in Command (PIC) and or the Visual Observer (VO).

The National Aerospace system exists to serve as a regulatory framework for the operation of manned and unmanned aircraft. Adherence to these regulations will be strictly followed.

Operation of UAV equipment is not permitted directly overhead non-participating members of the operation. Any personnel on site involved with the operation will be considered as a participating member.

The UAV system will undergo preflight checks to insure safe operations along with a check of the PIC competency.

- (4) D&H will provide a survey crew to perform mapping section checks, provide control, and obtain the necessary supplemental mapping and locations of any utilities, based upon surface evidence and any mapping/markings as provided by the Client or obtained through the placement of a utility line notification through the West Virginia 811. D&H will review and identify in more detail the following within the proposed outlined project limits:

Locate any identified portal openings and seeps, if any.

Locate visible property monumentation and corners identified by landowners within the project limits. D&H will attempt to locate property corners and possession line as identified from deed plot mosaics. This is not to be considered a boundary survey, only the location of the visible monuments in place and those identified through interviews with landowners.

- Boundary surveys are not included within the scope. Should boundary surveys become necessary, D&H will perform them at the rates listed.

Confirm type of road (i.e. gravel, asphalt, dirt, concrete driveway, etc.), edge of pavement, paint lines, edge shoulder/edge of berm (including side roads and driveways).

Confirm location and locate any additional scarp lines, slips, streams that are identified as the result of the geotechnical and ecological investigations.

Fences (type), gates.

Confirm existing building locations (floor elevation), within the project limits.

Confirm and locate any unidentified manholes, catch basins, culverts, pipes, (noting type of pipe and size, upstream and downstream invert elevations, headwall size and type, and direction of flow).

Guardrail (type, face, and stick-up).

Confirm locations of any foundations, concrete pads, building pads.

Control point references coordinates shall be obtained and shown on the design plans.

Spot elevations shall be shown in areas where contours do not accurately depict the topography.

- (5) D&H will survey and stake approximately 175 proposed borings for the proposed geotechnical investigations recording location and elevation for the boring logs and plans.

Conceptual Plan, Review of Available Information, Hydrological and Subsurface Investigation:

D&H will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work area. Tasks to be completed during the field reconnaissance include, but are not limited to:

- Delineate existing and proposed drainage patterns, conveyances, and facilities, including seeps or other wet areas that affect slope stability;

- Locate and note all visible overhead and marked underground utilities and constructions. Contact Miss Utility of West Virginia for a complete listing of affected utilities within the Project area;
- Evaluate and define site access to delineate necessary access upgrade limits for construction equipment and reclamation activities;
- Research public records at the West Virginia Geologic Survey to obtain mine mapping in the area that might be contributing to ground water or seepage;
- D&H will develop a source for cost estimating required construction materials; including calcareous stone for riprap, non-calcareous stone for subsurface drains, high velocity ditch linings (reinforced matting, etc., if used), and erosion control matting (also if used).

D&H will oversee a detailed geotechnical investigation provided by NGE Environmental. The planned scope of services by NGE includes:

1. Subsurface Investigation

- a. Landslide/Instability: The areas of concern consists of three landslide areas. Slide one is approximately 10 acres and is directly behind the Cobun residence. Slide two is approximately 3 acres and is sliding into Glade Run and slide three is approximately 14 acres. NGE plans to drill sixty (60) test borings to define subsurface conditions in the landslide areas. Some of the borings will be drilled directly behind the Cobun residence in anticipation for the design of a retaining wall. Each boring will be extended to bedrock by augering and sampling. Rock will be cored in select borings. An estimated total of about 1,800 ft. of soil drilling and 60 ft. of rock coring will be performed for the project. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to the boring termination depth.
 - b. Highwall Reclamation: Two highwall areas (approximately 750 and 7,800 ft. long sections) have been selected to be reclaimed. The eastern portions of the highwall will not be part of this scope of work due to an existing gas line ROW and an environmental easement. NGE plans to drill 115 borings to define subsurface conditions in the highwall areas. This information will aid in determining the depth and condition of the existing fill around the base of the highwall and also help to determine the quality of the potential borrow material. An estimated total of 3,200 ft. of soil drilling and 200 ft. of rock coring will be required for the highwall. Standard penetration testing and sampling will be performed in each boring at 2.5 ft. intervals to a depth of 20 feet and then 5 feet intervals to refusal in bedrock or as directed by their geotechnical engineer. It may be necessary to install piezometers to monitor water infiltration between the pond on the highwall bench and the Cobun residence. An estimated 100 ft. of piezometer footage will be required for the project.
 - c. All boreholes will be backfilled with auger cuttings upon completion. All samples will be placed in appropriate containers and transported to our laboratory for detailed examination and laboratory testing. Excavator assistance will be required to access some of the drilling areas. Extra care will be taken to minimize damage. All disturbed areas will be reclaimed with seed and straw mulch once the field work has been completed. A boring stake will be left at each drilling location so that it can be surveyed in by D&H personnel.
2. Laboratory Testing: Laboratory testing will be performed on select samples from the landslide areas to aid in classifying the soil and determine their engineering properties. Planned lab testing

includes moisture content, Atterberg liquid and plastic limits, grain size analysis, direct shear testing, and standard Proctor testing. Planned lab testing on bedrock core samples will consist of unconfined compressive strength.

3. Engineering Analysis and Recommendations: NGE will provide digital logs of the borings. Results of the subsurface investigation in the landslide and highwall areas together with their engineer's field observations and topographic mapping will be used to analyze the site conditions and provide recommendations for the landslide remediation and backfilling to reclaim the existing mine highwall. A final report stamped by a licensed West Virginia professional engineer will be submitted upon completion of the field, lab and engineering work and will include the following:
 - i. Project description.
 - ii. Test boring location plan.
 - iii. Test boring logs providing detailed descriptions of subsurface conditions encountered at the boring locations.
 - iv. A generalized description of subsurface conditions encountered.
 - v. Laboratory test results.
 - vi. Conclusions and recommendations for stabilization of the landslide areas will include a slope stability evaluation for the existing landslides and discussion of alternatives for repair of the landslide. Typical cross-section(s) will be developed which illustrate NGE's recommended method of slide repair.
 - vii. Conclusions and recommendations for backfilling the existing mine highwall will include slope stability considerations for the embankment areas.

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, D&H will complete a Conceptual (30%) Design for the Project. Engineering analysis will include slope stability, hydraulic/hydrologic calculations, quantity estimates, and area computations. We will work closely with WVDEP-DLR-AML during this phase to ensure the mitigation plan is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The Conceptual Plan phase is necessary to identify possible mitigation alternatives. Although analyses completed for the Conceptual Plans are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The Conceptual Plans form the basis of the final design for the Project. Conceptual Plans will include:

- A dedicated sheet showing the tax map overlay.
- Mine mapping overlays, EROE list table, planned or actual bore locations.
- LOD and proposed access roads will be clearly shown.
- Conceptual layouts of proposed regraded areas within the sidehill fill, failed ditches, and slip areas for review by WVDEP-DLR-AML;
- Conceptual design of subsurface drains to protect repaired slip areas;
- Conceptual design of proposed passive treatment systems (if incorporated into the design);
- Methods and constructions used to divert surface run-off, ground water, and mine drainage within the project areas. Open ditches will be utilized to the fullest extent possible, while Installation and construction of pipes in ditches will be limited to

replacing existing pipes that may be too small or may be in a deteriorated condition or as required for new installation.

After completion of the surveying and mapping, field investigations, laboratory analysis, and development of Conceptual Plans, D&H will meet with WVDEP-DLR-AML personnel to review and discuss Conceptual Plans for the mitigation of the Project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted and approved during the meeting. The Conceptual Plans will be modified based upon WVDEP-DLR-AML's comments and corrections prior to preparation of the 60% Preliminary plans and specifications.

Engineering Design and Construction Drawings

D&H will prepare final engineering design and construction drawings based on the results of the geotechnical, environmental studies, survey data, rearty feedback, comments from the WVDEP-DLR-AML and the Concept Design. All documents, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, and Geotechnical Investigation Reports, will be prepared, signed, sealed, and dated by an active WV Registered Professional Engineer. The mitigation plan will be prepared in three phases with design review meetings scheduled with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the design plans.

1. Preliminary Plan 60%
2. Final Engineered Plans 90%
3. Issued For Construction (IFC) Plans 100%

All three phases will include progressive plan development working toward the final IFC and Construction Specifications as outlined below. The plan sets will be presented to WVDEP-DLR-AML for review and coordination progressing to the next phase.

The progressive plan package will present details of proposed reclamation measures and will include:

- Cover Sheet,
- Composite Drawing,
- Existing Conditions Drawings,
- Geometric Layout & Survey Control,
- Final Design Drawings,
- Tax Map Overlays,
- Cross Sections,
- Ditch Cross Sections, Profiles, and Details,
- Erosion and Sedimentation Control Plans & Details,
- Miscellaneous Details,
- Drawings shall be provided in both AutoCAD and PDF formats.

The IFC Plan package will be transmitted electronically (USB/CD and email/Google Drive) and physically to the WVDEP-DLR-AML. The number of physical copies will be determined by the WVDEP-DLR-AML. All deliverables will be uploaded into AMLNET.

Construction Specifications:

Each phase listed in the Plans, Specification, and Estimate (PS&E) process (60%, 90%, & 100%) will include a submittal version of the construction specifications, each submittal progressive in nature. Based on the final PS&E construction drawings, a set of technical contract specifications will be finalized. The specifications prepared will be based on the WVDEP-DLR-AML's standard specifications as much as practical. These specifications will include, but not be limited to:

- Cover
- Table of Contents
- Project Narrative
- Special Provisions
- Mobilization / Demobilization
- Construction Layout
- Quality Control
- Site Preparation
- Erosion and Sediment Control
- Revegetation
- Drainage Structures
- Unclassified Excavation
- Utilities
- Drill Logs
- Retaining structures

Engineers Estimate:

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as detailed. In conjunction with WVDEP-DLR-AML, D&H will prepare a detailed cost estimate for each phase of the work, as well as an estimated construction time frame. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with each phase of the work.

Permitting - State & Federal Environmental Permit Preparation:

D&H will perform the tasks as outlined in this proposal to prepare and submit applications for the following environmental permits. Note: permit fees are included in the fee estimates for all the listed permit applications.

General Water Pollution Control Permit for Stormwater Associated with Construction Activities (WVDEP). D&H will perform the tasks and prepare the permit applications as detailed above.

Groundwater Protection Plan (WVDEP). D&H will use the WVDEP Generic Groundwater Protection template to prepare the GPP for submission with the Construction Stormwater Activity permit application.

Highway Occupancy Permits MM-109 WV Department of Highways (WVDOH). D&H will perform the associated field work and prepare the required plans and permit applications to obtain the driveway permits for the county road entrances. D&H will address agency comments until the permits are issued.

Stream Activity Permit (Right-of-Entry License) – Office of Land and Streams (OLS), WVDNR. D&H will submit a permit application to the WVDNR OLS for a Stream Activity Permit to authorize the improvements along streams within the proposed LOD.

Fish Spawning Waiver – WVDNR. D&H will submit a waiver application to the WVDNR for a fish spawning waiver to authorize the mitigation construction across existing streams during spawning season if required.

Regional General Permit - Pre-construction Notification (PCN) – USACE. D&H assumes that the entire project will be permitted under the Regional General Permit (RGP) For Abandoned Mine Lands within the Huntington and Pittsburgh Districts for the state of West Virginia (LRH-2017-00586). D&H will prepare a PCN. A copy of the PCN will be submitted to the WVDEP as per the general provisions of the Section 401 Water Quality Certification (WQC). Part of the WQC provisions of the RGP is that water quality sampling and testing must be conducted before construction and for two years following construction. The WVDEP will conduct the post construction water quality monitoring.

The project may or may not require compensatory mitigation. An assessment of aquatic resource values before and after construction will be made and submitted with the PCN. This assessment will act as a guide in determining an appropriate in-lieu fee payment for compensatory mitigation. However, the USACE will have sole discretion to require compensatory mitigation and to what extent. These unknowns countermand a good-faith estimation of mitigation fees; hence mitigation fees are not included as part of this proposal.

D&H will track the permits during agency review and address technical questions posed by the regulators through approval. D&H will prepare permit binders that include the approved permit applications, permits, and drawings at the time of final project submittal. It is anticipated that the NPDES permit (General Water Pollution Control Permit for Stormwater Associated with Construction Activities WVDEP) will require reauthorization during the preparation process and prior to pre-bid, D&H has included appropriate budget to address and resubmit said permit.

Pre-Bid and Pre-Construction Conference.

D&H will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the project, as well as a realty representative, a construction representative and an environmental representative to run the Pre-Bid Conference. D&H will direct the pre-bid meeting explaining all aspects of the plans and specifications to potential Contractors. D&H will record questions asked by prospective bidders and answers given to those questions. The Pre-Bid Conference video recording and all files shall be uploaded into AMLNET by D&H. Information will be assembled in addenda format and provided to WVDEP-DLR-AML.

D&H will run and supply the same representatives for the Project at the Pre-Construction Conference. D&H staff will answer any questions the successful Contractor has concerning the Project. The Pre-Construction Conference shall be recorded. All Contractor submittals shall be reviewed and approved by D&H. The video recording, all submittals, files, etc., shall be uploaded into AMLNET by D&H. Any changes to the design or Erosion & Sediment Control plans that are

considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task IV: Construction Oversight

Construction Inspection

D&H will ensure compliance with all applicable laws, such as collecting and filing construction contractor certified payroll and 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 purchase materials, prevailing wage rates, etc., where applicable and will ensure that all subcontractors do the same.

D&H will provide professional services, which include but not limited to construction oversight and inspection services during the project acting as an agent for the WVDEP-DLR-AML. These services will include full construction oversight of the project daily whenever construction activities are occurring. The oversight will include daily inspection reports from a qualified construction inspector and uploaded to AMLNET within 48 hours. D&H personnel will be responsible for performing the duties and responsibilities in the same manner as are defined in the current (or equivalent) version of the Division of Land Restoration, "Supplemental Specifications for Construction and Reclamation Contracts", as AML personnel having equivalent job classifications defined therein.

The project is assumed to have a 640-day timeframe to complete construction. The actual number of days shall be determined once final design documents are completed. The actual number of days will be stated in the construction contractor "Terms and Conditions" document, a part of the bidding documents, which contractors are required to sign when submitting bids. The number of days shall also be stated at the Pre-Bid Conference and again at the Pre-Construction Conference.

The Construction Services Manager is responsible for:

- Management of construction services including construction compliance and inspection,
- Construction management,
- Monitoring construction schedule,
- Contractor management;
- Project development, management, and project completion;
- Planning, design, permitting, and construction phase services.

The Construction Inspector will be responsible for:

- Monitoring construction site to ensure contractors remain compliant to the plans and specifications,
- Ensuring QA/QC is occurring for materials that require in-field/lab testing as planned/required and to Specifications,
- Ensuring no substandard materials are used for the project,

Upload documentation to AMLNET that materials used meet Specifications for the project,
Documenting project activities with daily reports and photos to be filed daily. Daily reports will be modeled after the WVDEP-DLR-AML AMLNET reports to at a minimum contain all of the data currently required for documentation. Recording quantity of materials hauled and delivered to the job site,
Collecting and verifying the contractor's construction stormwater management reports,
Ensuring proper revegetation practices are being followed,
Ensuring safe work practices,
Confirming, when applicable, state requirements for compliance/certification, report, and document deficiencies.

Resumes and reference lists of the construction inspector(s) planned to be used for the work will be submitted at least one (1) month in advance of construction for approval by the WVDEP-DLR-AML. WVDEP-DLR-AML has the right to remove any employee or subcontractor from any project-related site, at the sole discretion of the WVDEP-DLR-AML for any reason and require equivalent replacement at no additional cost to the State.

If the construction is not occurring according to the plans, specifications, permits, purchase order, etc, the Inspector may issue a cease-and-desist order and shall notify the Project Manager. All issues will be documented with time/date and geolocation marked photographs. Similarly, the Inspector shall immediately stop the job if any safety issue is observed. The contractor will be given an opportunity to correct the issues, and then, if the contractor has not taken actions that correct the deficiency or remove the immediate risk to life or property, the inspector shall issue a cease-and-desist order.

The Inspector will provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. All construction contractor invoices will be reviewed and approved based on information provided by the Inspector. Invoice(s) may also be rejected for work not completed in accordance with the contract Plans and Specifications. Invoices can be rejected if not justified. Invoices are to be accepted or rejected within three (3) business days. All rejected invoices will be clearly documented by the Inspector and forwarded to WVDEP-DLR-AML Construction Representative. Rejected invoices will be corrected at no cost to the WVDEP-DLR-AML.

The Inspector shall document any environmental inspections with date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note with the inspection form to be uploaded to AMLNET no later than 48 hours after the date of inspection.

Any update to the Erosion and Sediment Control plans will be approved by the Engineer who stamped the plans and/or the Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. The redline showing this update must be marked on the on-site copy of the E&S plans by the Inspector. This will be completed before the update is physically implemented. The redline copy of the E&S plans will be kept on-site at all times and a photo of the plans will be uploaded to AMLNET by the Inspector. The same applies for any Plan updates. Any changes to the design or Erosion & Sediment Control plans that are considered significant enough to warrant an official NPDES modification to the permit shall be performed. Any

modification fees assessed by WVDEP DWWM shall be paid for or compensated for payment by WVDEP-DLR-AML.

Task V: Post-Construction Oversight

Field Visits/Inspections

At the conclusion of the project and upon review of the final cross-sections and as-built drawings provided by the contractor a final certification of the project will be provided to the WVDEP-DLR-AML by the Responsible Charge Engineer at D&H.

Project Conditional Inspections shall continue during the construction contractor warranty period.

A Notice of Termination (NOT) will need to be sent to DWWM/Environmental Enforcement once the project is ready to be released from the NPDES permit. The project is not eligible for the warranty release if the NOT is not complete. After 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 – a warranty release meeting with the construction contractor will be held to affirm that all warranty obligations have been satisfied. A Complete the Bond Release document will be submitted to the WVDEP-DLR-AML for signature and processing at the same time.

Project Management:

Eric Stewart, PE will serve as Practice Manager and WVDEP-DLR-AML's single point of contact for this project.

Fees & Schedule:

A breakdown and total for the consulting costs for each phase of the work herein described is presented as an attachment and summarized below. Hours not worked and costs not incurred will not be billed. D&H proposes to perform the services for each task using the rate schedule outlined on the Design Cost Spreadsheet. Rates quoted are locked in for the duration of the contract. Rates are flat rates with the State and will not be billed a higher rate for overtime.

The proposal includes sufficient quantities to manage the project – including tracking all action items due by any party and regularly following up on each action item until resolved. This includes taking notes and emailing a summary of all meetings with the WVDEP-DLE-AML no later than three (3) business days after the meeting. A more detailed project schedule of the scope will be provided and regularly updated and distributed to the WVDEP-DLR-AML at least monthly.

These estimates do not include any costs associated with services outside of the scope of work outlined in this proposal and RFP award. Additional services can be provided through an approved scope and fee determined at the time of request.

D&H appreciates the opportunity to submit a proposal for these projects. We are prepared to begin work on the project immediately. If you have any questions or require any additional information, please feel free to contact me at (304) 985-5555 ext. 1020 or via email at estewart@dandhengineers.com.

Sincerely,
DIEFFENBAUCH & HRITZ, LLC



Eric Stewart, PE.
Vice President of Engineering

Attachments:

- Summary of Engineering Costs Spreadsheet
- Proposed Project Cost Spreadsheets
- Proposed Project Schedules



Project Cost Summary

	Task I NEPA & ESA	Task II Realty	Task III Design	Task IV Construction Oversight	Task IV Post Construction Oversight	Total
1 Bridgeport (Tomes) Landslide	\$ 98,860.00	\$ 44,856.25	\$ 467,108.00	\$ 349,152.00	\$ 96,778.00	\$ 1,056,754.25
2 Burl Gould Highwall	\$ 147,525.00	\$ 55,900.00	\$ 675,569.00	\$ 647,782.50	\$ 98,778.00	\$ 1,625,554.50
3 Burl Gould Landslides	\$ 136,055.00	\$ 77,841.75	\$ 585,726.00	\$ 496,263.00	\$ 98,778.00	\$ 1,394,663.75
4 Fairmont (Windsor Drive) Subsidence & Highwall	\$ 164,932.50	\$ 76,843.75	\$ 529,394.50	\$ 454,653.00	\$ 100,608.00	\$ 1,326,431.75
5 Falls Run (Abruzzino) DH & DS	\$ 135,770.00	\$ 63,893.50	\$ 638,012.00	\$ 776,863.00	\$ 98,778.00	\$ 1,713,316.50
6 Glade Run HW & DS	\$ 185,095.00	\$ 122,030.25	\$ 1,382,379.00	\$ 1,386,415.00	\$ 98,778.00	\$ 3,174,697.25
TOTAL	\$ 868,237.50	\$ 441,365.50	\$ 4,278,188.50	\$ 4,111,128.50	\$ 592,498.00	\$ 10,291,418.00



DIEFFENBAUCH & HRITZ

1

BRIDGEPORT (TOMES)
LANDSLIDE

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	TOTAL BILLED TO DATE COST
Purchase Order No.: CPO DEPxx*xx											
Contract Name: 2023 AML Contract N2						Application No.: 1			Page 2 of 6 Pages		
Commodity Line: 1											
Project Name: Bridgeport (Tomes) Landslide											
TASK I: NEPA & ESA											
A	Agency Coordinations (including Office Work, AMLNET, etc.) [SHPO COORDINATION]										
1	Project Manager	HR	45	\$210.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	45	\$180.00	\$8,100.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training etc.)										
1	Practice Manager	HR	24	\$250.00	\$6,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	84	\$210.00	\$17,640.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINEATION]										
1	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	4	\$180.00	\$720.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	52	\$140.00	\$7,280.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]										
1	Project Manager	HR	8	\$210.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	12	\$180.00	\$2,160.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	26	\$140.00	\$3,640.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]										
1	Project Manager	HR	6	\$210.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00
7	Lab Analysis	EA	2	\$225.00	\$450.00		\$0.00		\$0.00	0.0	\$0.00
D	CATEX / EA / FONSI / EIS [EA]										
1	Project Manager	HR	16	\$210.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	35	\$180.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	90	\$140.00	\$12,600.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	14	\$95.00	\$1,330.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 2 COST	\$98,860.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 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	TOTAL BILLED TO DATE COST	
TASK II: REALTY												
A	Exploratory Rights of Entry (EROE)											
1	Practice Manager	HR	2	\$250.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	4	\$180.00	\$720.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	4	\$140.00	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Agent	HR	77	\$100.00	\$7,700.00		\$0.00		\$0.00	0.0	\$0.00	
6	Realty Technician	HR	38	\$95.00	\$3,610.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	945	\$0.75	\$708.75		\$0.00		\$0.00	0.0	\$0.00	
B	Construction Rights of Entry (CROE)											
1	Practice Manager	HR	2	\$250.00	\$500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	4	\$180.00	\$720.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	4	\$140.00	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Agent	HR	154	\$100.00	\$15,400.00		\$0.00		\$0.00	0.0	\$0.00	
6	Realty Technician	HR	38	\$95.00	\$3,610.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	1890	\$0.75	\$1,417.50		\$0.00		\$0.00	0.0	\$0.00	
C	Pre-Bid Conference											
1	Senior Realty Agent	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	9	\$90.00	\$810.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
D	Pre-Construction Conference											
1	Senior Realty Agent	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	9	\$90.00	\$810.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 3 COST	\$44,856.25	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 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	UNIT BID PRICE	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE AND INVESTIGATIONS										
1	Practice Manager	HR	10	\$250.00	\$2,500.00				\$0.00	0.0	\$0.00
2	Project Manager	HR	20	\$210.00	\$4,200.00				\$0.00	0.0	\$0.00
3	Senior Engineer	HR	21	\$180.00	\$3,780.00				\$0.00	0.0	\$0.00
4	Engineer	HR	40	\$140.00	\$5,600.00				\$0.00	0.0	\$0.00
5	CADD Lead	HR	40	\$121.00	\$4,840.00				\$0.00	0.0	\$0.00
6	CADD	HR	32	\$95.00	\$3,040.00				\$0.00	0.0	\$0.00
B	SURVEYING & MAPPING										
1	Practice Manager	HR	10	\$250.00	\$2,500.00				\$0.00	0.0	\$0.00
2	Project Manager/Professional Land Surveyor	HR	15	\$210.00	\$3,150.00				\$0.00	0.0	\$0.00
3	Senior Surveyor	HR	15	\$180.00	\$2,700.00				\$0.00	0.0	\$0.00
4	Project Surveyor	HR	30	\$140.00	\$4,200.00				\$0.00	0.0	\$0.00
5	Survey Crew	HR	150	\$121.00	\$18,150.00				\$0.00	0.0	\$0.00
6	CADD Lead	HR	60	\$121.00	\$7,260.00				\$0.00	0.0	\$0.00
7	CADD Tech	HR	80	\$95.00	\$7,600.00				\$0.00	0.0	\$0.00
8	Topographic, Planimetric and Check Surveying	Acre	80	\$90.00	\$7,200.00				\$0.00	0.0	\$0.00
9	Mileage	Mile	1500	\$0.75	\$1,125.00				\$0.00	0.0	\$0.00
C	GEOTECHNICAL INVESTIGATION										
1	Practice Manager	HR	10	\$250.00	\$2,500.00				\$0.00	0.0	\$0.00
2	Project Manager	HR	32	\$210.00	\$6,720.00				\$0.00	0.0	\$0.00
3	Senior Engineer	HR	60	\$180.00	\$10,800.00				\$0.00	0.0	\$0.00
4	Engineer	HR	8	\$140.00	\$1,120.00				\$0.00	0.0	\$0.00
5	CADD	HR	16	\$95.00	\$1,520.00				\$0.00	0.0	\$0.00
4	Geotechnical Project Manager	HR	26	\$210.00	\$5,460.00				\$0.00	0.0	\$0.00
5	Geotechnical Engineer/Geologist	HR	30	\$195.00	\$5,850.00				\$0.00	0.0	\$0.00
6	Mobilization / Demobilization	LS	1	\$8,000.00	\$8,000.00				\$0.00	0.0	\$0.00
7	Soil Augering	LF	1200	\$34.00	\$40,800.00				\$0.00	0.0	\$0.00
8	Rock Coring	LF	0	\$70.00	\$0.00				\$0.00	0.0	\$0.00
9	Heavy Equipment	HR	120	\$200.00	\$24,000.00				\$0.00	0.0	\$0.00
10	Piezometer Installation	LF	0	\$38.00	\$0.00				\$0.00	0.0	\$0.00
11	Drill Crew Per Diem	Day	17	\$555.00	\$9,435.00				\$0.00	0.0	\$0.00
12	Reclamation	LS	1	\$12,000.00	\$12,000.00				\$0.00	0.0	\$0.00
13	Geotechnical Investigation Report	LS	1	\$24,000.00	\$24,000.00				\$0.00	0.0	\$0.00
14	Geotechnical Engineer Mileage	Mile	400	\$0.75	\$300.00				\$0.00	0.0	\$0.00
15	Geotechnical Engineer Per Diem	Day	2	\$185.00	\$370.00				\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 4 COST	\$230,720.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 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.: CPO DEPxx*xx	Application No.: 1	Page 5 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 1		
Project Name: Bridgeport (Tomes) Landslide		

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	
TASK III: DESIGN (CONTINUED)												
D	ANALYSIS AND DESIGN											
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	56	\$210.00	\$11,760.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	56	\$180.00	\$10,080.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	164	\$140.00	\$22,960.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	112	\$121.00	\$13,552.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	160	\$95.00	\$15,200.00		\$0.00		\$0.00	0.0	\$0.00	
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE											
1	Practice Manager	HR	32	\$250.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	88	\$210.00	\$18,480.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	104	\$180.00	\$18,720.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	156	\$140.00	\$21,840.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	20	\$121.00	\$2,420.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	80	\$95.00	\$7,600.00		\$0.00		\$0.00	0.0	\$0.00	
Fa	PERMITTING [USACE-PCN APPLICATION]											
1	Project Manager	HR	26	\$210.00	\$5,460.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	35	\$140.00	\$4,900.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]											
1	Project Manager	HR	25	\$210.00	\$5,250.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	46	\$180.00	\$8,280.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	56	\$92.00	\$5,152.00		\$0.00		\$0.00	0.0	\$0.00	
5	Permit Fees	EA	1	\$1,170.00	\$1,170.00		\$0.00		\$0.00	0.0	\$0.00	
Fc	PERMITTING [NPDES, MM-109]											
1	Practice Manager	HR	6	\$250.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	20	\$210.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	16	\$180.00	\$2,880.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	44	\$140.00	\$6,160.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	56	\$95.00	\$5,320.00		\$0.00		\$0.00	0.0	\$0.00	
7	Permit Fees	EA	1	\$200.00	\$200.00		\$0.00		\$0.00	0.0	\$0.00	
G	PRE-BID CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
3	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	176	\$0.75	\$132.00		\$0.00		\$0.00	0.0	\$0.00	
H	PRE-CONSTRUCTION CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	16	\$210.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00	
3	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Manager	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	Construction Inspector	HR	32	\$137.00	\$4,384.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	264	\$0.75	\$198.00		\$0.00		\$0.00	0.0	\$0.00	
				SUBTOTAL PAGE 5 COST	\$236,388.00		\$0.00		SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx	Application No.: 1	Page 6 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 1		
Project Name: Bridgeport (Tomes) Landslide	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
TASK IV: CONSTRUCTION OVERSIGHT											
A	Construction Inspection										
1	Project Manager	HR	96	\$210.00	\$20,160.00		\$0.00		\$0.00	0.0	\$0.00
2	Construction Manager	HR	192	\$200.00	\$38,400.00		\$0.00		\$0.00	0.0	\$0.00
3	Construction Inspector	HR	2016	\$137.00	\$276,192.00		\$0.00		\$0.00	0.0	\$0.00
4	Mileage	Mile	19200	\$0.75	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00
TASK V: POST-CONSTRUCTION OVERSIGHT											
A	FIELD VISITS / INSPECTIONS										
1	Project Manager	HR	40	\$210.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00
2	Construction Manager	HR	40	\$200.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00
3	Construction Inspector	HR	544	\$137.00	\$74,528.00		\$0.00		\$0.00	0.0	\$0.00
4	Mileage	Mile	7800	\$0.75	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00

	SUBTOTAL PAGE 6 COST	\$445,930.00		SUBTOTAL PAGE 6 PREVIOUS	\$0.00		SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00		SUBTOTAL PAGE 6 TO DATE	\$0.00
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AML-7A (Revised 12/6/2023)

Bridgeport (Tomes) Landslide

PROJECT TOTAL COST	\$1,056,754.25		PROJECT TOTAL PREVIOUS	\$0.00		PROJECT TOTAL THIS APPLICATION	\$0.00		PROJECT TOTAL TO DATE	\$0.00
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Bridgeport (Tomes) Landslide

Dieffenbach & Hritz, LLC
Eric Stewart, PE

Project Start:

Mon, 10/14/2024

Display Week:

1

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-30 days (30d)	0%	10/14/24	11/13/24
Develop 30% Design	30-60 days (30d)	0%	1/27/25	2/26/25
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	60-120 days (60d)	0%	2/26/25	4/27/25
Develop 100% Design	90-120 days (30d)	0%	4/27/25	5/27/25
Secure Right-of-Entry (Construction)	120-180 days (60d)	0%	5/27/25	7/26/25
Field Studies				
Geotech	45	0%	12/13/24	1/27/25
Survey Verification	30	0%	12/13/24	1/12/25
Environmental Field Work	30	0%	12/13/24	1/12/25
Permit Application Development				
NEPA EA (WVAML)	90	0%	2/26/25	5/27/25
NPDES (WVDEP)	30	0%	5/27/25	6/26/25
MM-109	30	0%	5/27/25	6/26/25
RGP (USACE)	60	0%	4/27/25	6/26/25
SAP (OLS-WVDNR)	15	0%	5/27/25	6/11/25
WVSHPO	30	0%	5/27/25	6/26/25
WVDNR (T&E Species)	30	0%	5/27/25	6/26/25
USFWS (T&E Species)	30	0%	5/27/25	6/26/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	5/27/25	7/26/25
NPDES (WVDEP)	120	0%	6/26/25	10/24/25
M-109	60	0%	6/26/25	8/25/25
RGP (USACE)	180	0%	6/26/25	12/23/25
SAP (OLS-WVDNR)	120	0%	6/11/25	10/9/25
WVSHPO	60	0%	6/26/25	8/25/25
WVDNR (T&E Species)	60	0%	6/26/25	8/25/25
USFWS (T&E Species)	180	0%	6/26/25	12/23/25
Pre-Build				
Finalize Quantities / Estimate	30	0%	12/23/25	1/22/26

Bridgeport (Tomes) Landslide

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start:

Mon, 10/14/2024

Display Week:

1

TASK	Days	PROGRESS	START	END
Finalize Construcion Plan Set & Specifications	30	0%	12/23/25	1/22/26
Bidding	15	0%	1/22/26	2/6/26
Pre-Build Water Quality Testing	15	0%	12/23/25	1/7/26
Construction				
Construction	168	0%	3/8/26	8/23/26
Clear Trees (Bats)	22	0%	3/8/26	3/30/26
Construction Inspection	168	0%	3/8/26	8/23/26
Post Construction				
Project Conditional Inspections	365	0%	8/23/26	8/23/27

Insert new rows ABOVE this one



DIEFFENBAUCH & HRITZ

2

BURL GOULD HIGHWALL

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	TOTAL BILLED TO DATE COST	
Purchase Order No.: CPO DEPxx*xx						Application No.: 1			Page 2 of 6 Pages			
Contract Name: 2023 AML Contract N2												
Commodity Line: 2												
Project Name: Burl Gould Highwall												
TASK I: NEPA & ESA												
A	Agency Coordinations (including Office Work, AMLNET, etc.)(SHPO COORDINATION)											
1	Project Manager	HR	75	\$210.00	\$15,750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	75	\$180.00	\$13,500.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training, etc.)											
1	Practice Manager	HR	40	\$250.00	\$10,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	100	\$210.00	\$21,000.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINIATION]											
1	Project Manager	HR	15	\$210.00	\$3,150.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	91	\$140.00	\$12,740.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	24	\$95.00	\$2,280.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	300	\$0.75	\$225.00		\$0.00		\$0.00	0.0	\$0.00	
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]											
1	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	17	\$180.00	\$3,060.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	34	\$140.00	\$4,760.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00	
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]											
1	Project Manager	HR	6	\$210.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
7	Lab Analysis	EA	3	\$225.00	\$675.00		\$0.00		\$0.00	0.0	\$0.00	
D	CATEX / EA / FONSI / EIS [EA]											
1	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	160	\$140.00	\$22,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 2 COST	\$147,525.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 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	TOTAL BILLED TO DATE COST	
TASK II: REALTY												
A	Exploratory Rights of Entry (BROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	7	\$180.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Agent	HR	103	\$100.00	\$10,300.00		\$0.00		\$0.00	0.0	\$0.00	
6	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	1260	\$0.75	\$945.00		\$0.00		\$0.00	0.0	\$0.00	
B	Construction Rights of Entry (CROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	6	\$180.00	\$1,080.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Agent	HR	205	\$100.00	\$20,500.00		\$0.00		\$0.00	0.0	\$0.00	
6	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	2522	\$0.75	\$1,891.50		\$0.00		\$0.00	0.0	\$0.00	
C	Pre-Bid Conference											
1	Senior Realty Agent	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	12	\$90.00	\$1,080.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	533	\$0.75	\$399.75		\$0.00		\$0.00	0.0	\$0.00	
D	Pre-Construction Conference											
1	Senior Realty Agent	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	12	\$90.00	\$1,080.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	1125	\$0.75	\$843.75		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 3 COST	\$55,900.00	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx	Application No.: 1	Page 4 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 2		
Project Name: Burl Gould Highwall		

SCHEDULE PER CONTRACT						WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE AND INVESTIGATIONS										
1	Practice Manager	HR	14	\$250.00	\$3,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	46	\$210.00	\$9,660.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	54	\$180.00	\$9,720.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	60	\$140.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Tech	HR	50	\$95.00	\$4,750.00		\$0.00		\$0.00	0.0	\$0.00
B	SURVEYING & MAPPING										
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager/Professional Land Surveyor	HR	20	\$210.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Surveyor	HR	25	\$180.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Surveyor	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Survey Crew	HR	300	\$121.00	\$36,300.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00
7	CADD Tech	HR	100	\$95.00	\$9,500.00		\$0.00		\$0.00	0.0	\$0.00
8	Topographic, Planimetric and Check Surveying	Acre	225	\$90.00	\$20,250.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	Mile	3000	\$0.75	\$2,250.00		\$0.00		\$0.00	0.0	\$0.00
C	GEOTECHNICAL INVESTIGATION										
1	Practice Manager	HR	12	\$250.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	36	\$210.00	\$7,560.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	66	\$180.00	\$11,880.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00
6	Geotechnical Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00
7	Geotechnical Engineer/Geologist	HR	30	\$195.00	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00
8	Mobilization / Demobilization	LS	1	\$12,000.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
9	Soil Augering	LF	1500	\$34.00	\$51,000.00		\$0.00		\$0.00	0.0	\$0.00
10	Rock Coring	LF	0	\$70.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
11	Heavy Equipment	HR	150	\$200.00	\$30,000.00		\$0.00		\$0.00	0.0	\$0.00
12	Piezometer Installation	LF	0	\$38.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
13	Drill Crew Per Diem	Day	15	\$555.00	\$8,325.00		\$0.00		\$0.00	0.0	\$0.00
14	Reclamation	LS	1	\$15,000.00	\$15,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Geotechnical Investigation Report	LS	1	\$25,000.00	\$25,000.00		\$0.00		\$0.00	0.0	\$0.00
16	Geotechnical Engineer Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00
17	Geotechnical Engineer Per Diem	Day	2	\$185.00	\$370.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 4 COST	\$314,975.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 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.: CPO DEPxx*xx						Application No.: 1		Page 5 of 6 Pages			
Contract Name: 2023 AML Contract N2											
Commodity Line: 2											
Project Name: Burl Gould Highwall											
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
TASK III: DESIGN (CONTINUED)											
D	ANALYSIS AND DESIGN										
1	Practice Manager	HR	20	\$250.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	112	\$210.00	\$23,520.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	160	\$180.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	240	\$140.00	\$33,600.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	360	\$121.00	\$43,560.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	400	\$95.00	\$38,000.00		\$0.00		\$0.00	0.0	\$0.00
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE										
1	Practice Manager	HR	32	\$250.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	112	\$210.00	\$23,520.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	102	\$180.00	\$18,360.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	134	\$140.00	\$18,760.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	120	\$121.00	\$14,520.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	208	\$95.00	\$19,760.00		\$0.00		\$0.00	0.0	\$0.00
Fa	PERMITTING [USACE-PCN APPLICATION]										
1	Project Manager	HR	34	\$210.00	\$7,140.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	22	\$180.00	\$3,960.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	57	\$140.00	\$7,980.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]										
1	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	12	\$180.00	\$2,160.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	24	\$140.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	20	\$92.00	\$1,840.00		\$0.00		\$0.00	0.0	\$0.00
5	Permit Fees	EA	1	\$1,170.00	\$1,170.00		\$0.00		\$0.00	0.0	\$0.00
Fc	PERMITTING [NPDES, MM-109]										
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	28	\$210.00	\$5,880.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	24	\$180.00	\$4,320.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	44	\$140.00	\$6,160.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	20	\$121.00	\$2,420.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	76	\$95.00	\$7,220.00		\$0.00		\$0.00	0.0	\$0.00
7	Permit Fees	EA	1	\$1,200.00	\$1,200.00		\$0.00		\$0.00	0.0	\$0.00
G	PRE-BID CONFERENCE										
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00
3	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	176	\$0.75	\$132.00		\$0.00		\$0.00	0.0	\$0.00
H	PRE-CONSTRUCTION CONFERENCE										
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	16	\$210.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00
3	Construction Manager	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00
4	Construction Inspector	HR	32	\$137.00	\$4,384.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	264	\$0.75	\$198.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 5 COST	\$360,594.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx	Application No.: 1	Page 6 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 2		
Project Name: Burl Gould 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	
TASK IV: CONSTRUCTION OVERSIGHT												
A	Construction Inspection											
1	Practice Manager	HR	8	\$250.00	\$2,000.00				\$0.00	0.0	\$0.00	
2	Project Manager	HR	172	\$210.00	\$36,120.00				\$0.00	0.0	\$0.00	
3	Construction Manager	HR	344	\$200.00	\$68,800.00				\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	3600	\$137.00	\$493,200.00				\$0.00	0.0	\$0.00	
5	UTV	Day	300	\$45.00	\$13,500.00				\$0.00	0.0	\$0.00	
6	Mileage	Mile	45550	\$0.75	\$34,162.50				\$0.00	0.0	\$0.00	
TASK V: POST-CONSTRUCTION OVERSIGHT												
A	FIELD VISITS / INSPECTIONS											
1	Practice Manager	HR	8	\$250.00	\$2,000.00				\$0.00	0.0	\$0.00	
2	Project Manager	HR	40	\$210.00	\$8,400.00				\$0.00	0.0	\$0.00	
3	Construction Manager	HR	40	\$200.00	\$8,000.00				\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	544	\$137.00	\$74,528.00				\$0.00	0.0	\$0.00	
5	Mileage	Mile	7800	\$0.75	\$5,850.00				\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 6 COST	\$746,560.50	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00

PROJECT TOTAL COST	\$1,625,554.50	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00
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Burl Gould Highwall

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start:
Display Week:

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-30 days (30d)	0%	10/14/24	11/13/24
Develop 30% Design	30-75 days (45d)	0%	11/13/24	12/28/24
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	60-150 days (90d)	0%	2/11/25	5/12/25
Develop 100% Design	150-195 days (45d)	0%	5/12/25	6/26/25
Secure Right-of-Entry (Construction)	195-155 days (60d)	0%	6/26/25	8/25/25
Field Studies				
Geotech	60	0%	12/13/24	2/11/25
Survey Verification	45	0%	12/13/24	1/27/25
Environmental Field Work	45	0%	12/13/24	1/27/25
Permit Application Development				
NEPA EA (WVAML)	90	0%	12/28/24	3/28/25
NPDES (WVDEP)	45	0%	6/26/25	8/10/25
MM-109	30	0%	6/26/25	7/26/25
RGP (USACE)	60	0%	5/12/25	7/11/25
SAP (OLS-WVDNR)	15	0%	6/26/25	7/11/25
WVSHPO	30	0%	6/26/25	7/26/25
WVDNR (T&E Species)	30	0%	6/26/25	7/26/25
USFWS (T&E Species)	30	0%	6/26/25	7/26/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	3/28/25	5/27/25
NPDES (WVDEP)	120	0%	8/10/25	12/8/25
MM-109	60	0%	7/26/25	9/24/25
RGP (USACE)	180	0%	7/11/25	1/7/26
SAP (OLS-WVDNR)	120	0%	7/11/25	11/8/25
WVSHPO	60	0%	7/26/25	9/24/25
WVDNR (T&E Species)	60	0%	7/26/25	9/24/25
USFWS (T&E Species)	180	0%	7/26/25	1/22/26
Pre-Build				

Burl Gould Highwall

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start:

Display Week:

TASK	Days	PROGRESS	START	END
Finalize Quantities / Estimate	45	0%	1/7/26	2/21/26
Finalize Constructon Plan Set & Specifications	60	0%	1/7/26	3/8/26
Bidding	30	0%	3/8/26	4/7/26
Pre-Build Water Quality Testing	15	0%	1/7/26	1/22/26
Construction				
Construction	300	0%	5/7/26	3/3/27
Clear Trees (Bats)	80	0%	5/7/26	7/26/26
Construction Inspection	300	0%	5/7/26	3/3/27
Post Construction				
Project Conditional Inspection	365	0%	3/3/27	3/2/28

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DIEFFENBAUCH & HRITZ

3

BURL GOULD LANDSLIDES

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						
						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	
Purchase Order No.: CPO DEPxx*xx												
Contract Name: 2023 AML Contract N2						Application No.: 1			Page 2 of 6 Pages			
Commodity Line: 3												
Project Name: Burl Gould Landslides												
TASK I: NEPA & ESA												
A	Agency Coordinations (including Office Work, AMLNET, etc.) [SHPO COORDINATION]											
1	Project Manager	HR	75	\$210.00	\$15,750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	75	\$180.00	\$13,500.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training, etc.)											
1	Practice Manager	HR	24	\$250.00	\$6,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	84	\$210.00	\$17,640.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINIATION]											
1	Project Manager	HR	13	\$210.00	\$2,730.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	81	\$140.00	\$11,340.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	200	\$0.75	\$150.00		\$0.00		\$0.00	0.0	\$0.00	
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]											
1	Project Manager	HR	8	\$210.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	15	\$180.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	32	\$140.00	\$4,480.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00	
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]											
1	Project Manager	HR	6	\$210.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
6	Lab Analysis	EA	2	\$225.00	\$450.00		\$0.00		\$0.00			
D	CATEX / EA / FONSI / EIS [EA]											
1	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	160	\$140.00	\$22,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 2 COST	\$136,055.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
 Contract Name: 2023 AML Contract N2
 Commodity Line: 3
 Project Name: Burl Gould Landslides

Application No.: 1

Page 4 of 6 Pages

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
TASK III: DESIGN												
A	SITE RECONNAISSANCE AND INVESTIGATIONS											
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	44	\$180.00	\$7,920.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	40	\$140.00	\$5,600.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	20	\$121.00	\$2,420.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Tech	HR	70	\$95.00	\$6,650.00		\$0.00		\$0.00	0.0	\$0.00	
B	SURVEYING & MAPPING											
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager/Professional Land Surveyor	HR	15	\$210.00	\$3,150.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Surveyor	HR	20	\$180.00	\$3,600.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Surveyor	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	Survey Crew	HR	250	\$121.00	\$30,250.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00	
7	CADD Tech	HR	80	\$95.00	\$7,600.00		\$0.00		\$0.00	0.0	\$0.00	
8	Topographic, Planimetric and Check Surveying	Acre	83	\$90.00	\$7,470.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	Mile	2500	\$0.75	\$1,875.00		\$0.00		\$0.00	0.0	\$0.00	
C	GEOTECHNICAL INVESTIGATION											
1	Practice Manager	HR	20	\$250.00	\$5,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	58	\$210.00	\$12,180.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	56	\$180.00	\$10,080.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00	
6	Geotechnical Project Manager	HR	45	\$210.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00	
7	Geotechnical Engineer/Geologist	HR	32	\$195.00	\$6,240.00		\$0.00		\$0.00	0.0	\$0.00	
8	Mobilization / Demobilization	LS	1	\$12,500.00	\$12,500.00		\$0.00		\$0.00	0.0	\$0.00	
9	Soil Augering	LF	1900	\$34.00	\$64,600.00		\$0.00		\$0.00	0.0	\$0.00	
10	Rock Coring	LF	0	\$70.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
11	Heavy Equipment	HR	170	\$200.00	\$34,000.00		\$0.00		\$0.00	0.0	\$0.00	
12	Piezometer Installation	LF	0	\$38.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
13	Drill Crew Per Diem	Day	35	\$555.00	\$19,425.00		\$0.00		\$0.00	0.0	\$0.00	
14	Reclamation	LS	1	\$20,000.00	\$20,000.00		\$0.00		\$0.00	0.0	\$0.00	
15	Geotechnical Investigation Report	LS	1	\$33,000.00	\$33,000.00		\$0.00		\$0.00	0.0	\$0.00	
16	Geotechnical Engineer Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00	
17	Geotechnical Engineer Per Diem	Day	2	\$185.00	\$370.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 4 COST	\$327,820.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 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	TOTAL BILLED TO DATE COST	
TASK III: DESIGN (CONTINUED)												
D	ANALYSIS AND DESIGN											
1	Practice Manager	HR	12	\$250.00	\$3,000.00							
2	Project Manager	HR	72	\$210.00	\$15,120.00							
3	Senior Engineer	HR	104	\$180.00	\$18,720.00							
4	Engineer	HR	140	\$140.00	\$19,600.00							
5	CADD Lead	HR	140	\$121.00	\$16,940.00							
6	CADD Technician	HR	220	\$95.00	\$20,900.00							
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE											
1	Practice Manager	HR	24	\$250.00	\$6,000.00							
2	Project Manager	HR	96	\$210.00	\$20,160.00							
3	Senior Engineer	HR	120	\$180.00	\$21,600.00							
4	Engineer	HR	148	\$140.00	\$20,720.00							
5	CADD Lead	HR	56	\$121.00	\$6,776.00							
6	CADD Technician	HR	120	\$95.00	\$11,400.00							
Fa	PERMITTING [USACE-PCN APPLICATION]											
1	Project Manager	HR	34	\$210.00	\$7,140.00							
2	Senior Scientist	HR	22	\$180.00	\$3,960.00							
3	Environmental Scientist	HR	57	\$140.00	\$7,980.00							
4	CADD Technician	HR	18	\$95.00	\$1,710.00							
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]											
1	Project Manager	HR	8	\$210.00	\$1,680.00							
2	Senior Scientist	HR	10	\$180.00	\$1,800.00							
3	Environmental Scientist	HR	20	\$140.00	\$2,800.00							
4	CADD Technician	HR	18	\$92.00	\$1,656.00							
5	Permit Fees	EA	1	\$1,170.00	\$1,170.00							
Fc	PERMITTING [NPDES, MM-109]											
1	Practice Manager	HR	6	\$250.00	\$1,500.00							
2	Project Manager	HR	24	\$210.00	\$5,040.00							
3	Senior Engineer	HR	24	\$180.00	\$4,320.00							
4	Engineer	HR	44	\$140.00	\$6,160.00							
5	CADD Lead	HR	10	\$121.00	\$1,210.00							
6	CADD Technician	HR	46	\$95.00	\$4,370.00							
7	Permit Fees	EA	1	\$400.00	\$400.00							
G	PRE-BID CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00							
2	Project Manager	HR	24	\$210.00	\$5,040.00							
3	Mileage	Mile	176	\$0.75	\$132.00							
H	PRE-CONSTRUCTION CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00							
2	Project Manager	HR	16	\$210.00	\$3,360.00							
3	Engineer	HR	16	\$140.00	\$2,240.00							
4	Construction Manager	HR	16	\$200.00	\$3,200.00							
5	Construction Inspector	HR	32	\$137.00	\$4,384.00							
6	CADD Technician	HR	16	\$95.00	\$1,520.00							
7	Mileage	Mile	264	\$0.75	\$198.00							
					SUBTOTAL PAGE 5 COST	\$257,906.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 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.: CPO DEPxx*xx	Application No.: 1	Page 6 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 3		

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	
TASK IV: CONSTRUCTION OVERSIGHT												
A	Construction Inspection											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	136	\$210.00	\$28,560.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	272	\$200.00	\$54,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	2844	\$137.00	\$389,628.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	28900	\$0.75	\$21,675.00		\$0.00		\$0.00	0.0	\$0.00	
TASK V: POST-CONSTRUCTION OVERSIGHT												
A	FIELD VISITS / INSPECTIONS											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	40	\$210.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	40	\$200.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	544	\$137.00	\$74,528.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	7800	\$0.75	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 6 COST	\$595,041.00	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00

AML-7A (Revised 12/6/2023)

Burl Gould Landslides

PROJECT TOTAL COST	\$1,394,663.75	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00
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Burl Gould Landslides

Dieffenbach & Hritz, LLC
Eric Stewart, PE

Project Start:

Mon, 10/14/2024

Display Week:

1

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-30 days (30d)	0%	10/14/24	11/13/24
Develop 30% Design	30-60 days (30d)	0%	11/13/24	12/13/24
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	60-120 days (60d)	0%	2/11/25	4/12/25
Develop 100% Design	120-150 days (30d)	0%	4/12/25	5/12/25
Secure Right-of-Entry (Construction)	150-195 days (45d)	0%	5/12/25	6/26/25
Field Studies				
Geotech	60	0%	12/13/24	2/11/25
Survey Verification	30	0%	12/13/24	1/12/25
Environmental Field Work	30	0%	12/13/24	1/12/25
Permit Application Development				
NEPA EA (WVAML)	120	0%	12/13/24	4/12/25
NPDES (WVDEP)	30	0%	5/12/25	6/11/25
MM-109	30	0%	5/12/25	6/11/25
RGP (USACE)	60	0%	4/12/25	6/11/25
SAP (OLS-WVDNR)	15	0%	5/12/25	5/27/25
WVSHPO	30	0%	5/12/25	6/11/25
WVDNR (T&E Species)	30	0%	5/12/25	6/11/25
USFWS (T&E Species)	30	0%	5/12/25	6/11/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	4/12/25	6/11/25
NPDES (WVDEP)	90	0%	6/11/25	9/9/25
MM-109	60	0%	6/11/25	8/10/25
RGP (USACE)	180	0%	6/11/25	12/8/25
SAP (OLS-WVDNR)	120	0%	5/27/25	9/24/25
WVSHPO	60	0%	6/11/25	8/10/25
WVDNR (T&E Species)	60	0%	6/11/25	8/10/25
USFWS (T&E Species)	180	0%	6/11/25	12/8/25
Pre-Build				
Finalize Quantities / Estimate	30	0%	12/8/25	1/7/26

Burl Gould Landslides

Dieffenbach & Hritz, LLC
Eric Stewart, PE

Project Start:

Mon, 10/14/2024

Display Week:

1

TASK	Days	PROGRESS	START	END
Finalize Construcion Plan Set & Specifications	45	0%	12/8/25	1/22/26
Bidding	15	0%	1/22/26	2/6/26
Pre-Build Water Quality Testing	15	0%	12/8/25	12/23/25
Construction				
Construction	237	0%	3/8/26	10/31/26
Clear Trees (Bats)	80	0%	3/8/26	5/27/26
Construction Inspection	237	0%	3/8/26	10/31/26
Post Construction				
Project Conditional Inspection	365	0%	10/31/26	10/31/27

Insert new rows ABOVE this one



DIEFFENBAUCH & HRITZ

4

FAIRMONT (WINDSOR DRIVE)
SUBSIDENCE & HIGHWALL

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx Application No.: 1 Page 2 of 7 Pages

Contract Name: 2023 AML Contract N2

Commodity Line: 4

Project Name: Fairmont (Windsor Drive) Subsidence & Highwall **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	
TASK I: NEPA & ESA												
A	Agency Coordinations (including Office Work, AMLNET, etc.) [SHPO COORDINATION]											
1	Project Manager	HR	45	\$210.00	\$9,450.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	45	\$180.00	\$8,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training, etc.)											
1	Practice Manager	HR	24	\$250.00	\$6,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	84	\$210.00	\$17,640.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINEATION]											
1	Project Manager	HR	11	\$210.00	\$2,310.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	4	\$180.00	\$720.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	52	\$140.00	\$7,280.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]											
1	Project Manager	HR	8	\$210.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	12	\$180.00	\$2,160.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	26	\$140.00	\$3,640.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]											
1	Project Manager	HR	4	\$210.00	\$840.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	4	\$180.00	\$720.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	4	\$140.00	\$560.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	50	\$0.75	\$37.50		\$0.00		\$0.00	0.0	\$0.00	
6	Lab Analysis	EA	1	\$225.00	\$225.00		\$0.00		\$0.00	0.0	\$0.00	
Cd	Studies, Surveys & Mitigation Plans [BAT HIBERNACULUM STUDY - PHASE I]											
1	Project Manager	HR	0	\$210.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	0	\$180.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
4	Per Diem	Day	0	\$200.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 2 COST	\$72,567.50	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 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						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	
TASK I: NEPA & ESA (Continued)												
Cc	Studies, Surveys & Mitigation Plans (as applicable) [BAT HIBERNACULUM STUDY - PHASE II]											
1	Project Manager	HR	13	\$210.00	\$2,730.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	110	\$180.00	\$19,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	66	\$140.00	\$9,240.00		\$0.00		\$0.00	0.0	\$0.00	
4	Mileage	Mile	520	\$0.75	\$390.00		\$0.00		\$0.00	0.0	\$0.00	
5	Per Diem	Day	12	\$200.00	\$2,400.00		\$0.00		\$0.00	0.0	\$0.00	
6	Harp Trap	Day	6	\$150.00	\$900.00		\$0.00		\$0.00	0.0	\$0.00	
CF	Studies, Surveys & Mitigation Plans (as applicable) [BAT HIBERNACULUM STUDY - PHASE III]											
1	Project Manager	HR	11	\$210.00	\$2,310.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	81	\$180.00	\$14,580.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	81	\$140.00	\$11,340.00		\$0.00		\$0.00	0.0	\$0.00	
4	Mileage	Mile	180	\$0.75	\$135.00		\$0.00		\$0.00	0.0	\$0.00	
5	Per Diem	Day	18	\$200.00	\$3,600.00		\$0.00		\$0.00	0.0	\$0.00	
6	Harp Trap	Day	9	\$150.00	\$1,350.00		\$0.00		\$0.00	0.0	\$0.00	
D	CATEX / EA / FONSI / EIS [EA]											
1	Project Manager	HR	16	\$210.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	35	\$180.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	90	\$140.00	\$12,600.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	14	\$95.00	\$1,330.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 3 COST	\$92,365.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$1.00	SUBTOTAL PAGE 2 TO DATE	\$0.00

WORK COMPLETED

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx	Application No.: 1	Page 4 of 7 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 4		
Project Name: Fairmont (Windsor Drive) Subsidence & 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	
TASK II: REALTY												
A	Exploratory Rights of Entry (EROE)											
1	Practice Manager	HR	5	\$250.00	\$1,250.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	20	\$210.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	11	\$180.00	\$1,980.00		\$0.00		\$0.00	0.0	\$0.00	
4	Realty Agent	HR	170	\$100.00	\$17,000.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	1890	\$0.75	\$1,417.50		\$0.00		\$0.00	0.0	\$0.00	
B	Construction Rights of Entry (CROE)											
1	Practice Manager	HR	5	\$250.00	\$1,250.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	20	\$210.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	11	\$180.00	\$1,980.00		\$0.00		\$0.00	0.0	\$0.00	
4	Realty Agent	HR	340	\$100.00	\$34,000.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	3785	\$0.75	\$2,838.75		\$0.00		\$0.00	0.0	\$0.00	
C	Pre-Bid Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	6	\$90.00	\$540.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	800	\$0.75	\$600.00		\$0.00		\$0.00	0.0	\$0.00	
D	Pre-Construction Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	6	\$90.00	\$540.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	890	\$0.75	\$667.50		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 4 COST	\$76,843.75	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00

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	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE AND INVESTIGATIONS										
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	19	\$180.00	\$3,420.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	32	\$140.00	\$4,480.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	40	\$121.00	\$4,840.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Tech	HR	50	\$95.00	\$4,750.00		\$0.00		\$0.00	0.0	\$0.00
B	SURVEYING & MAPPING										
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager/Professional Land Surveyor	HR	19	\$210.00	\$3,990.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Surveyor	HR	15	\$180.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Surveyor	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Survey Crew	HR	150	\$121.00	\$18,150.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00
7	CADD Tech	HR	80	\$95.00	\$7,600.00		\$0.00		\$0.00	0.0	\$0.00
8	Topographic, Planimetric and Check Surveying	Acre	28	\$90.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	Mile	750	\$0.75	\$562.50		\$0.00		\$0.00	0.0	\$0.00
							\$0.00		\$0.00		
C	GEOTECHNICAL INVESTIGATION										
1	Practice Manager	HR	17	\$250.00	\$4,250.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	38	\$210.00	\$7,980.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	72	\$180.00	\$12,960.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00
5	Geotechnical Project Manager	HR	26	\$210.00	\$5,460.00		\$0.00		\$0.00	0.0	\$0.00
6	Geotechnical Engineer/Geologist	HR	30	\$195.00	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00
7	Mobilization / Demobilization	LS	1	\$10,000.00	\$10,000.00		\$0.00		\$0.00	0.0	\$0.00
8	Soil Augering	LF	980	\$34.00	\$33,320.00		\$0.00		\$0.00	0.0	\$0.00
9	Rock Coring	LF	1200	\$70.00	\$84,000.00		\$0.00		\$0.00	0.0	\$0.00
10	Heavy Equipment	HR	120	\$200.00	\$24,000.00		\$0.00		\$0.00	0.0	\$0.00
11	Piezometer Installation	LF	400	\$44.00	\$17,600.00		\$0.00		\$0.00	0.0	\$0.00
12	Drill Crew Per Diem	Day	32	\$555.00	\$17,760.00		\$0.00		\$0.00	0.0	\$0.00
13	Reclamation	LS	1	\$10,000.00	\$10,000.00		\$0.00		\$0.00	0.0	\$0.00
14	Geotechnical Investigation Report	LS	1	\$20,000.00	\$20,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Geotechnical Engineer Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00
16	Geotechnical Engineer Per Diem	Day	2	\$185.00	\$370.00		\$0.00		\$0.00	0.0	\$0.00
17	City of Fairmont B&O Tax	EA	2026	\$2.00	\$4,052.00		\$0.00		\$0.00	0.0	\$0.00
							\$0.00		\$0.00		
				SUBTOTAL	\$329,482.50	SUBTOTAL	\$0.00	SUBTOTAL	\$0.00	SUBTOTAL	\$0.00
				PAGE 5 COST		PREVIOUS		THIS APPLICATION		PAGE 4 TO DATE	

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	TOTAL BILLED TO DATE COST
TASK III: DESIGN (CONTINUED)											
D	ANALYSIS AND DESIGN										
1	Practice Manager	HR	10	\$250.00	\$2,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	32	\$210.00	\$6,720.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	48	\$180.00	\$8,640.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	100	\$140.00	\$14,000.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	140	\$121.00	\$16,940.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	100	\$95.00	\$9,500.00		\$0.00		\$0.00	0.0	\$0.00
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE										
1	Practice Manager	HR	12	\$250.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	48	\$210.00	\$10,080.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	156	\$140.00	\$21,840.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	160	\$121.00	\$19,360.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	160	\$95.00	\$15,200.00		\$0.00		\$0.00	0.0	\$0.00
Fa	PERMITTING [USACE-PCN APPLICATION]										
1	Project Manager	HR	26	\$210.00	\$5,460.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	35	\$140.00	\$4,900.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]										
1	Project Manager	HR	0	\$210.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	0	\$180.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	0	\$140.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	0	\$92.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
5	Permit Fees	EA	0	\$1,170.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
6	Mileage	Mile	0	\$0.75	\$0.00		\$0.00		\$0.00	0.0	\$0.00
Fc	PERMITTING [NPDES, MM-109]										
1	Practice Manager	HR	6	\$250.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	12	\$210.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	16	\$180.00	\$2,880.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	52	\$140.00	\$7,280.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	8	\$121.00	\$968.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	46	\$95.00	\$4,370.00		\$0.00		\$0.00	0.0	\$0.00
7	Permit Fees	EA	1	\$400.00	\$400.00		\$0.00		\$0.00	0.0	\$0.00
G	PRE-BID CONFERENCE										
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	25	\$210.00	\$5,250.00		\$0.00		\$0.00	0.0	\$0.00
3	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	176	\$0.75	\$132.00		\$0.00		\$0.00	0.0	\$0.00
H	PRE-CONSTRUCTION CONFERENCE										
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	18	\$210.00	\$3,780.00		\$0.00		\$0.00	0.0	\$0.00
3	Construction Manager	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00
4	Construction Inspector	HR	32	\$137.00	\$4,384.00		\$0.00		\$0.00	0.0	\$0.00
5	Mileage	Mile	264	\$0.75	\$198.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 6 COST	\$199,912.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

Fairmont (Windsor Drive) Subsidence & Highwall

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start: Mon, 10/14/2024

Display Week: 1

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-30 days (30d)	0%	10/14/24	11/13/24
Develop 30% Design	30-60 days (30d)	0%	11/13/24	12/13/24
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	60-120 days (60d)	0%	2/11/25	4/12/25
Develop 100% Design	120-150 days (30d)	0%	4/12/25	5/12/25
Secure Right-of-Entry (Construction)	150-195 days (45d)	0%	5/12/25	6/26/25
Field Studies				
Geotech	60	0%	12/13/24	2/11/25
Survey Verification	30	0%	12/13/24	1/12/25
Environmental Field Work	30	0%	12/13/24	1/12/25
Permit Application Development				
NEPA EA (WVAML)	120	0%	12/13/24	4/12/25
NPDES (WVDEP)	30	0%	5/12/25	6/11/25
MM-109	30	0%	5/12/25	6/11/25
RGP (USACE)	60	0%	4/12/25	6/11/25
SAP (OLS-WVDNR)	15	0%	5/12/25	5/27/25
WVSHPO	30	0%	5/12/25	6/11/25
WVDNR (T&E Species)	30	0%	5/12/25	6/11/25
USFWS (T&E Species)	30	0%	5/12/25	6/11/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	4/12/25	6/11/25
NPDES (WVDEP)	120	0%	6/11/25	10/9/25
MM-109	60	0%	6/11/25	8/10/25
RGP (USACE)	180	0%	6/11/25	12/8/25
SAP (OLS-WVDNR)	120	0%	5/27/25	9/24/25
WVSHPO	60	0%	6/11/25	8/10/25
WVDNR (T&E Species)	60	0%	6/11/25	8/10/25
USFWS (T&E Species)	180	0%	6/11/25	12/8/25
Pre-Build				

Fairmont (Windsor Drive) Subsidence & Highwall

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start:

Mon, 10/14/2024

Display Week:

1

TASK	Days	PROGRESS	START	END
Finalize Quantities / Estimate	30	0%	12/8/25	1/7/26
Finalize Construcion Plan Set & Specifications	30	0%	12/8/25	1/7/26
Bidding	15	0%	1/7/26	1/22/26
Pre-Build Water Quality Testing	15	0%	12/8/25	12/23/25
Construction				
Construction	212	0%	2/21/26	9/21/26
Clear Trees (Bats)	80	0%	2/21/26	5/12/26
Construction Inspection	212	0%	2/21/26	9/21/26
Post Construction				
Project Conditional Inspection	365	0%	9/21/26	9/21/27

Insert new rows ABOVE this one



DIEFFENBAUCH & HRITZ

5

FALLS RUN (ABRUZZINO)
DH & DS

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	TOTAL BILLED TO DATE COST	
TASK I: NEPA & ESA												
A	Agency Coordinations (including Office Work, AMLNET, etc.) [SHPO COORDINATION]											
1	Project Manager	HR	75	\$210.00	\$15,750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	75	\$180.00	\$13,500.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training, etc.)											
1	Practice Manager	HR	24	\$250.00	\$6,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	84	\$210.00	\$17,640.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00	
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINIATION]											
1	Project Manager	HR	13	\$210.00	\$2,730.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	8	\$180.00	\$1,440.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	81	\$140.00	\$11,340.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	200	\$0.75	\$150.00		\$0.00		\$0.00	0.0	\$0.00	
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]											
1	Project Manager	HR	8	\$210.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	15	\$180.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	32	\$140.00	\$4,480.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00	
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]											
1	Project Manager	HR	6	\$210.00	\$1,260.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	6	\$95.00	\$570.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	100	\$0.75	\$75.00		\$0.00		\$0.00	0.0	\$0.00	
6	Lab Analysis	EA	5	\$225.00	\$1,125.00		\$0.00		\$0.00			
D	CATEX / EA / FONSI / EIS [EA]											
1	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	160	\$140.00	\$22,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00			
					SUBTOTAL PAGE 2 COST	\$135,770.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 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	TOTAL BILLED TO DATE COST	
TASK II: REALTY												
A	Exploratory Rights of Entry (EROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	11	\$210.00	\$2,310.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	9	\$180.00	\$1,620.00							
4	Realty Agent	HR	128	\$100.00	\$12,800.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	1575	\$0.75	\$1,181.25		\$0.00		\$0.00	0.0	\$0.00	
B	Construction Rights of Entry (CROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
4	Realty Agent	HR	257	\$100.00	\$25,700.00							
5	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	3155	\$0.75	\$2,366.25		\$0.00		\$0.00	0.0	\$0.00	
C	Pre-Bid Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	15	\$90.00	\$1,350.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	667	\$0.75	\$500.25		\$0.00		\$0.00	0.0	\$0.00	
D	Pre-Construction Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	15	\$90.00	\$1,350.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	741	\$0.75	\$555.75		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 3 COST	\$63,893.50	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 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	UNIT BID PRICE	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE AND INVESTIGATIONS										
1	Practice Manager	HR	12	\$250.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	24	\$210.00	\$5,040.00						
3	Senior Engineer	HR	34	\$180.00	\$6,120.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	40	\$140.00	\$5,600.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	40	\$121.00	\$4,840.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Tech	HR	50	\$95.00	\$4,750.00		\$0.00		\$0.00	0.0	\$0.00
B	SURVEYING & MAPPING										
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager/Professional Land Surveyor	HR	20	\$210.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Surveyor	HR	25	\$180.00	\$4,500.00		\$0.00		\$0.00	0.0	\$0.00
4	Project Surveyor	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
5	Survey Crew	HR	250	\$121.00	\$30,250.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00
7	CADD Tech	HR	80	\$95.00	\$7,600.00		\$0.00		\$0.00		
8	Topographic, Planimetric and Check Surveying	Acre	171	\$90.00	\$15,390.00		\$0.00		\$0.00	0.0	\$0.00
9	Mileage	Mile	2500	\$0.75	\$1,875.00		\$0.00		\$0.00	0.0	\$0.00
							\$0.00		\$0.00		
C	GEOTECHNICAL INVESTIGATION										
1	Practice Manager	HR	19	\$250.00	\$4,750.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	46	\$210.00	\$9,660.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	8	\$140.00	\$1,120.00		\$0.00		\$0.00	0.0	\$0.00
5	Geotechnical Project Manager	HR	46	\$210.00	\$9,660.00		\$0.00		\$0.00	0.0	\$0.00
6	Geotechnical Engineer/Geologist	HR	46	\$195.00	\$8,970.00		\$0.00		\$0.00	0.0	\$0.00
7	Mobilization / Demobilization	LS	1	\$12,000.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
8	Soil Augering	LF	2400	\$34.00	\$81,600.00		\$0.00		\$0.00	0.0	\$0.00
9	Rock Coring	LF	0	\$70.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
10	Heavy Equipment	HR	180	\$200.00	\$36,000.00		\$0.00		\$0.00	0.0	\$0.00
11	Piezometer Installation	LF	0	\$44.00	\$0.00		\$0.00		\$0.00	0.0	\$0.00
12	Drill Crew Per Diem	Day	40	\$555.00	\$22,200.00		\$0.00		\$0.00	0.0	\$0.00
13	Reclamation	LS	1	\$24,000.00	\$24,000.00		\$0.00		\$0.00	0.0	\$0.00
14	Geotechnical Investigation Report	LS	1	\$35,000.00	\$35,000.00		\$0.00		\$0.00	0.0	\$0.00
15	Engineer Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00
16	Engineer Per Diem	Day	5	\$185.00	\$925.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 4 COST	\$369,210.00		\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 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.: CPO DEPrx*xx	Application No.: 1	Page 5 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 5		
Project Name: Falls Run (Abruzzio) DH & DS		

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	
TASK III: DESIGN (CONTINUED)												
D	ANALYSIS AND DESIGN											
1	Practice Manager	HR	12	\$250.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	72	\$210.00	\$15,120.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	104	\$180.00	\$18,720.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	220	\$140.00	\$30,800.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	200	\$121.00	\$24,200.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	220	\$95.00	\$20,900.00		\$0.00		\$0.00	0.0	\$0.00	
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE											
1	Practice Manager	HR	24	\$250.00	\$6,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	88	\$210.00	\$18,480.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	112	\$180.00	\$20,160.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	128	\$140.00	\$17,920.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	56	\$121.00	\$6,776.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	100	\$95.00	\$9,500.00		\$0.00		\$0.00	0.0	\$0.00	
Fa	PERMITTING [USACE-PCN APPLICATION]											
1	Project Manager	HR	34	\$210.00	\$7,140.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	22	\$180.00	\$3,960.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	57	\$140.00	\$7,980.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00	
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]											
1	Project Manager	HR	8	\$210.00	\$1,680.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$92.00	\$1,656.00		\$0.00		\$0.00	0.0	\$0.00	
5	Permit Fees	EA	1	\$1,170.00	\$1,170.00		\$0.00		\$0.00	0.0	\$0.00	
Fc	PERMITTING [NPDES, MM-109]											
1	Practice Manager	HR	6	\$250.00	\$1,500.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	12	\$210.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	16	\$180.00	\$2,880.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	60	\$140.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	16	\$121.00	\$1,936.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Technician	HR	56	\$95.00	\$5,320.00		\$0.00		\$0.00	0.0	\$0.00	
7	Permit Fees	EA	1	\$700.00	\$700.00		\$0.00		\$0.00	0.0	\$0.00	
G	PRE-BID CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
3	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	176	\$0.75	\$132.00		\$0.00		\$0.00	0.0	\$0.00	
H	PRE-CONSTRUCTION CONFERENCE											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	16	\$210.00	\$3,360.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	32	\$137.00	\$4,384.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	264	\$0.75	\$198.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 5 COST	\$268,802.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx						Application No.: 1			Page 6 of 6 Pages		
Contract Name: 2023 AML Contract N2											
Commodity Line: 5											
Project Name: Falls Run (Abruzzino) DH & DS											

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	
TASK IV: CONSTRUCTION OVERSIGHT												
A	Construction Inspection											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	212	\$210.00	\$44,520.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	424	\$200.00	\$84,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	4464	\$137.00	\$611,568.00		\$0.00		\$0.00	0.0	\$0.00	
5	Milcage	Mile	45300	\$0.75	\$33,975.00		\$0.00		\$0.00	0.0	\$0.00	
TASK V: POST-CONSTRUCTION OVERSIGHT												
A	FIELD VISITS / INSPECTIONS											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	40	\$210.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	40	\$200.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	544	\$137.00	\$74,528.00		\$0.00		\$0.00	0.0	\$0.00	
5	Milcage	Mile	7800	\$0.75	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 6 COST	\$875,641.00	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00

PROJECT TOTAL COST	\$1,713,316.50	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00
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Falls Run (Abruzzino) DH & DS

Dieffenbauch & Hritz, LLC
Eric Stewart, PE

Project Start: Mon, 10/14/2024
Display Week: 1

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-30 days (30d)	0%	10/14/24	11/13/24
Develop 30% Design	30-60 days (30d)	0%	11/13/24	12/13/24
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	60-120 days (60d)	0%	2/26/25	4/27/25
Develop 100% Design	120-150 days (30d)	0%	4/27/25	5/27/25
Secure Right-of-Entry (Construction)	150-195 days (45d)	0%	5/27/25	7/11/25
Field Studies				
Geotech	75	0%	12/13/24	2/26/25
Survey Verification	30	0%	12/13/24	1/12/25
Environmental Field Work	30	0%	12/13/24	1/12/25
Permit Application Development				
NEPA EA (WVAML)	120	0%	12/13/24	4/12/25
NPDES (WVDEP)	30	0%	5/27/25	6/26/25
MM-109	30	0%	5/27/25	6/26/25
RGP (USACE)	60	0%	4/27/25	6/26/25
SAP (OLS-WVDNR)	15	0%	5/27/25	6/11/25
WVSHPO	30	0%	5/27/25	6/26/25
WVDNR (T&E Species)	30	0%	5/27/25	6/26/25
USFWS (T&E Species)	30	0%	5/27/25	6/26/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	4/12/25	6/11/25
NPDES (WVDEP)	120	0%	6/26/25	10/24/25
MM-109	60	0%	6/26/25	8/25/25
RGP (USACE)	180	0%	6/26/25	12/23/25
SAP (OLS-WVDNR)	120	0%	6/11/25	10/9/25
WVSHPO	60	0%	6/26/25	8/25/25
WVDNR (T&E Species)	60	0%	6/26/25	8/25/25
USFWS (T&E Species)	180	0%	6/26/25	12/23/25
Pre-Build				
Finalize Quantities / Estimate	30	0%	5/27/25	6/26/25

Falls Run (Abruzzino) DH & DS

Dieffenbauch & Hritz, LLC
 Eric Stewart, PE

Project Start:

Display Week:

TASK	Days	PROGRESS	START	END
Finalize Construcion Plan Set & Specifications	30	0%	5/27/25	6/26/25
Bidding	15	0%	6/26/25	7/11/25
Pre-Build Water Quality Testing	15	0%	5/27/25	6/11/25
Construction				
Construction	372	0%	8/10/25	8/17/26
Clear Trees (Bats)	80	0%	8/10/25	10/29/25
Construction Inspection	372	0%	8/10/25	8/17/26
Post Construction				
Project Conditional Inspection	365	0%	8/17/26	8/17/27

Insert new rows ABOVE this one



DIEFFENBAUCH & HRITZ

6

GLADE RUN HW & DS

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						
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	
TASK I: NEPA & ESA												
A	Agency Coordinations (including Office Work, AMLNET, etc.) [SHPO COORDINATION]											
1	Project Manager	HR	85	\$210.00	\$17,850.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	85	\$180.00	\$15,300.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	20	\$140.00	\$2,800.00		\$0.00		\$0.00	0.0	\$0.00	
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, training, etc.)											
1	Practice Manager	HR	40	\$250.00	\$10,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	100	\$210.00	\$21,000.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	10	\$180.00	\$1,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	10	\$140.00	\$1,400.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	10	\$121.00	\$1,210.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD	HR	10	\$95.00	\$950.00		\$0.00		\$0.00	0.0	\$0.00	
7	Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00	
Ca	Studies, Surveys & Mitigation Plans [WOTUS DELINIATION]											
1	Project Manager	HR	15	\$210.00	\$3,150.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	20	\$180.00	\$3,600.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	120	\$140.00	\$16,800.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	36	\$95.00	\$3,420.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	500	\$0.75	\$375.00		\$0.00		\$0.00	0.0	\$0.00	
Cb	Studies, Surveys & Mitigation Plans [HABITAT ASSESSMENT-BATS]											
1	Project Manager	HR	10	\$210.00	\$2,100.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	20	\$180.00	\$3,600.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	40	\$140.00	\$5,600.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
Cc	Studies, Surveys & Mitigation Plans [WATER SAMPLING: Pre and During Construction only]											
1	Project Manager	HR	18	\$210.00	\$3,780.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	30	\$180.00	\$5,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	18	\$95.00	\$1,710.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	300	\$0.75	\$225.00		\$0.00		\$0.00	0.0	\$0.00	
6	Lab Analysis	EA	25	\$225.00	\$5,625.00		\$0.00		\$0.00	0.0	\$0.00	
D	CATEX / EA / FONSI / EIS [EA]											
1	Project Manager	HR	30	\$210.00	\$6,300.00		\$0.00		\$0.00	0.0	\$0.00	
2	Senior Scientist	HR	90	\$180.00	\$16,200.00		\$0.00		\$0.00	0.0	\$0.00	
3	Environmental Scientist	HR	190	\$140.00	\$26,600.00		\$0.00		\$0.00	0.0	\$0.00	
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 2 COST	\$185,095.00	SUBTOTAL PAGE 2 PREVIOUS	\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 2 TO DATE	\$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 UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
TASK II: REALTY												
A	Exploratory Rights of Entry (EROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	11	\$210.00	\$2,310.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	26	\$180.00	\$4,680.00		\$0.00		\$0.00	0.0	\$0.00	
4	Realty Agent	HR	276	\$100.00	\$27,600.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	3150	\$0.75	\$2,362.50		\$0.00		\$0.00	0.0	\$0.00	
B	Construction Rights of Entry (CROE)											
1	Practice Manager	HR	3	\$250.00	\$750.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	12	\$210.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Realty Agent	HR	26	\$180.00	\$4,680.00		\$0.00		\$0.00	0.0	\$0.00	
4	Realty Agent	HR	552	\$100.00	\$55,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	Realty Technician	HR	30	\$95.00	\$2,850.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	6303	\$0.75	\$4,727.25		\$0.00		\$0.00	0.0	\$0.00	
C	Pre-Bid Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	30	\$90.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	1332	\$0.75	\$999.00		\$0.00		\$0.00	0.0	\$0.00	
D	Pre-Construction Conference											
1	Senior Realty Agent	HR	9	\$180.00	\$1,620.00		\$0.00		\$0.00	0.0	\$0.00	
2	Realty Technician	HR	30	\$90.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00	
3	Mileage	Mile	1482	\$0.75	\$1,111.50		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 3 COST	\$122,030.25	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx+xx	Application No.: 1	Page 4 of 6 Pages
Contract Name: 2023 AML Contract N2		
Commodity Line: 6		
Project Name: Glade Run HW & DS		

SCHEDULE PER CONTRACT						WORK COMPLETED						
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST	
TASK III: DESIGN												
A	SITE RECONNAISSANCE AND INVESTIGATIONS											
1	Practice Manager	HR	36	\$250.00	\$9,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	72	\$210.00	\$15,120.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	80	\$180.00	\$14,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	Engineer	HR	80	\$140.00	\$11,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	CADD Lead	HR	100	\$121.00	\$12,100.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Tech	HR	130	\$95.00	\$12,350.00		\$0.00		\$0.00	0.0	\$0.00	
B	SURVEYING & MAPPING											
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager/Professional Land Surveyor	HR	24	\$210.00	\$5,040.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Surveyor	HR	30	\$180.00	\$5,400.00		\$0.00		\$0.00	0.0	\$0.00	
4	Project Surveyor	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00	
5	Survey Crew	HR	350	\$121.00	\$42,350.00		\$0.00		\$0.00	0.0	\$0.00	
6	CADD Lead	HR	60	\$121.00	\$7,260.00		\$0.00		\$0.00	0.0	\$0.00	
7	CADD Tech	HR	120	\$95.00	\$11,400.00		\$0.00		\$0.00	0.0	\$0.00	
8	Topographic, Planimetric and Check Surveying	Acre	310	\$90.00	\$27,900.00		\$0.00		\$0.00	0.0	\$0.00	
9	Mileage	Mile	3500	\$0.75	\$2,625.00		\$0.00		\$0.00	0.0	\$0.00	
C	GEOTECHNICAL INVESTIGATION											
1	Practice Manager	HR	28	\$250.00	\$7,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	68	\$210.00	\$14,280.00		\$0.00		\$0.00	0.0	\$0.00	
3	Senior Engineer	HR	104	\$180.00	\$18,720.00		\$0.00		\$0.00	0.0	\$0.00	
4	Geotechnical Project Manager	HR	60	\$210.00	\$12,600.00		\$0.00		\$0.00	0.0	\$0.00	
5	Geotechnical Engineer/Geologist	HR	50	\$195.00	\$9,750.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mobilization / Demobilization	LS	1	\$16,000.00	\$16,000.00		\$0.00		\$0.00	0.0	\$0.00	
7	Soil Angering	LF	5000	\$34.00	\$170,000.00		\$0.00		\$0.00	0.0	\$0.00	
8	Rock Coring	LF	260	\$70.00	\$18,200.00		\$0.00		\$0.00	0.0	\$0.00	
9	Heavy Equipment	HR	360	\$200.00	\$72,000.00		\$0.00		\$0.00	0.0	\$0.00	
10	Piezometer Installation	LF	100	\$44.00	\$4,400.00		\$0.00		\$0.00	0.0	\$0.00	
11	Drill Crew Per Diem	Day	75	\$555.00	\$41,625.00		\$0.00		\$0.00	0.0	\$0.00	
12	Reclamation	LS	1	\$35,000.00	\$35,000.00		\$0.00		\$0.00	0.0	\$0.00	
13	Geotechnical Investigation Report	LS	1	\$60,000.00	\$60,000.00		\$0.00		\$0.00	0.0	\$0.00	
14	Geotechnical Engineer Mileage	Mile	400	\$0.75	\$300.00		\$0.00		\$0.00	0.0	\$0.00	
15	Geotechnical Engineer Per Diem	Day	5	\$185.00	\$925.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 4 COST	\$665,145.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 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						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
TASK III: DESIGN (CONTINUED)											
D	ANALYSIS AND DESIGN										
1	Practice Manager	HR	48	\$250.00	\$12,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	180	\$210.00	\$37,800.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	320	\$180.00	\$57,600.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	600	\$140.00	\$84,000.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	840	\$121.00	\$101,640.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	840	\$95.00	\$79,800.00		\$0.00		\$0.00	0.0	\$0.00
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE										
1	Practice Manager	HR	40	\$250.00	\$10,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	184	\$210.00	\$38,640.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	260	\$180.00	\$46,800.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	340	\$140.00	\$47,600.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	160	\$121.00	\$19,360.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	480	\$95.00	\$45,600.00		\$0.00		\$0.00	0.0	\$0.00
Fa	PERMITTING [USACE-PCN APPLICATION]										
1	Project Manager	HR	39	\$210.00	\$8,190.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	30	\$180.00	\$5,400.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	70	\$140.00	\$9,800.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	20	\$95.00	\$1,900.00		\$0.00		\$0.00	0.0	\$0.00
Fb	PERMITTING [STREAM ACTIVITY PERMIT APPLICATION]										
1	Project Manager	HR	12	\$210.00	\$2,520.00		\$0.00		\$0.00	0.0	\$0.00
2	Senior Scientist	HR	16	\$180.00	\$2,880.00		\$0.00		\$0.00	0.0	\$0.00
3	Environmental Scientist	HR	30	\$140.00	\$4,200.00		\$0.00		\$0.00	0.0	\$0.00
4	CADD Technician	HR	20	\$92.00	\$1,840.00		\$0.00		\$0.00	0.0	\$0.00
5	Permit Fees	EA	1	\$1,170.00	\$1,170.00		\$0.00		\$0.00	0.0	\$0.00
Fc	PERMITTING [NPDES, MM-109]										
1	Practice Manager	HR	12	\$250.00	\$3,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	48	\$210.00	\$10,080.00		\$0.00		\$0.00	0.0	\$0.00
3	Senior Engineer	HR	60	\$180.00	\$10,800.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	120	\$140.00	\$16,800.00		\$0.00		\$0.00	0.0	\$0.00
5	CADD Lead	HR	80	\$121.00	\$9,680.00		\$0.00		\$0.00	0.0	\$0.00
6	CADD Technician	HR	112	\$95.00	\$10,640.00		\$0.00		\$0.00	0.0	\$0.00
7	Permit Fees	EA	1	\$2,700.00	\$2,700.00		\$0.00		\$0.00	0.0	\$0.00
G	PRE-BID CONFERENCE										
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	40	\$210.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00
4	Engineer	HR	16	\$140.00	\$2,240.00		\$0.00		\$0.00	0.0	\$0.00
7	CADD Technician	HR	16	\$95.00	\$1,520.00		\$0.00		\$0.00	0.0	\$0.00
8	Mileage	Mile	176	\$0.75	\$132.00		\$0.00		\$0.00	0.0	\$0.00
H	PRE-CONSTRUCTION CONFERENCE										
1	Practice Manager	HR	16	\$250.00	\$4,000.00		\$0.00		\$0.00	0.0	\$0.00
2	Project Manager	HR	32	\$210.00	\$6,720.00		\$0.00		\$0.00	0.0	\$0.00
5	Construction Manager	HR	16	\$200.00	\$3,200.00		\$0.00		\$0.00	0.0	\$0.00
6	Construction Inspector	HR	32	\$137.00	\$4,384.00		\$0.00		\$0.00	0.0	\$0.00
7	Mileage	Mile	264	\$0.75	\$198.00		\$0.00		\$0.00	0.0	\$0.00
				SUBTOTAL PAGE 5 COST	\$717,234.00		\$0.00		\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00
						SUBTOTAL PAGE 5 PREVIOUS		SUBTOTAL PAGE 5 THIS APPLICATION			

WORK COMPLETED

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx					Application No.: 1			Page 6 of 6 Pages		
Contract Name: 2023 AML Contract N2										
Commodity Line: 6										
Project Name: Glade Run HW & DS										

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	
TASK IV: CONSTRUCTION OVERSIGHT												
A	Construction Inspection											
1	Practice Manager	HR	32	\$250.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	368	\$210.00	\$77,280.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	736	\$200.00	\$147,200.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	7680	\$137.00	\$1,052,160.00		\$0.00		\$0.00	0.0	\$0.00	
5	UTV	Day	640	\$45.00	\$28,800.00		\$0.00		\$0.00	0.0	\$0.00	
6	Mileage	Mile	97300	\$0.75	\$72,975.00		\$0.00		\$0.00	0.0	\$0.00	
TASK V: POST-CONSTRUCTION OVERSIGHT												
A	FIELD VISITS / INSPECTIONS											
1	Practice Manager	HR	8	\$250.00	\$2,000.00		\$0.00		\$0.00	0.0	\$0.00	
2	Project Manager	HR	40	\$210.00	\$8,400.00		\$0.00		\$0.00	0.0	\$0.00	
3	Construction Manager	HR	40	\$200.00	\$8,000.00		\$0.00		\$0.00	0.0	\$0.00	
4	Construction Inspector	HR	544	\$137.00	\$74,528.00		\$0.00		\$0.00	0.0	\$0.00	
5	Mileage	Mile	7800	\$0.75	\$5,850.00		\$0.00		\$0.00	0.0	\$0.00	
					SUBTOTAL PAGE 6 COST	\$1,485,193.00	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00

AML-7A (Revised 12/6/2023)

Glade Run HW & DS

PROJECT TOTAL COST	\$3,174,697.25	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00
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Glade Run HW & DS

Dieffenbach & Hritz, LLC
Eric Stewart, PE

Project Start: Mon, 10/14/2024

Display Week: 1

TASK	Days	PROGRESS	START	END
Design				
Site Reconnaissance and Investigation	0-45 days (45d)	0%	10/14/24	11/28/24
Develop 30% Design	45-105 days (60d)	0%	11/28/24	1/27/25
Secure Right-of-Entry	0-60 days (60d)	0%	10/14/24	12/13/24
Develop 60% Design	105-225 days (120d)	0%	3/28/25	7/26/25
Develop 100% Design	225-300 days (60d)	0%	7/26/25	10/9/25
Secure Right-of-Entry (Construction)	300-360 days (60d)	0%	10/9/25	12/8/25
Field Studies				
Geotech	105	0%	12/13/24	3/28/25
Survey Verification	60	0%	12/13/24	2/11/25
Environmental Field Work	60	0%	12/13/24	2/11/25
Permit Application Development				
NEPA EA (WVAML)	120	0%	1/27/25	5/27/25
NPDES (WVDEP)	60	0%	10/9/25	12/8/25
MM-109	30	0%	10/9/25	11/8/25
RGP (USACE)	60	0%	7/26/25	9/24/25
SAP (OLS-WVDNR)	30	0%	10/9/25	11/8/25
WVSHPO	30	0%	10/9/25	11/8/25
WVDNR (T&E Species)	30	0%	10/9/25	11/8/25
USFWS (T&E Species)	30	0%	10/9/25	11/8/25
Permit Review & Issue				
NEPA EA (WVAML)	60	0%	5/27/25	7/26/25
NPDES (WVDEP)	120	0%	12/8/25	4/7/26
MM-109	60	0%	11/8/25	1/7/26
RGP (USACE)	180	0%	9/24/25	3/23/26
SAP (OLS-WVDNR)	120	0%	11/8/25	3/8/26
WVSHPO	60	0%	11/8/25	1/7/26
WVDNR (T&E Species)	60	0%	11/8/25	1/7/26
USFWS (T&E Species)	180	0%	11/8/25	5/7/26
Pre-Build				

Glade Run HW & DS

Dieffenbach & Hritz, LLC
Eric Stewart, PE

Project Start: Mon, 10/14/2024

Display Week: 1

TASK	Days	PROGRESS	START	END
Finalize Quantities / Estimate	60	0%	10/9/25	12/8/25
Finalize Construcion Plan Set & Specifications	60	0%	10/9/25	12/8/25
Bidding	15	0%	12/8/25	12/23/25
Pre-Build Water Quality Testing	15	0%	10/9/25	10/24/25
Construction				
Construction	640	0%	1/22/26	10/24/27
Clear Trees (Bats)	80	0%	1/22/26	4/12/26
Construction Inspection	640	0%	1/22/26	10/24/27
Post Construction				
Project Conditional Inspection	365	0%	10/24/27	10/23/28

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx						Application No.: 1		Page 1 of 1 Pages			
Contract Name: 2023 AML Contract N2											
Commodity Line: N/A											
Project Name: N/A						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	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST

CONTRACT NAME:

2023 AML Contract N2

GRAND TOTAL COST	\$10,291,418.00	GRAND TOTAL PREVIOUS	\$0.00	GRAND TOTAL THIS APPLICATION	\$0.00	GRAND TOTAL TO DATE	\$0.00
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