



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header @ 4

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1337601

Procurement Type: Central Purchase Order

Vendor ID: 000000173443

Legal Name: POTESTA & ASSOCIATES INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 01/30/2024

Response Time: 11:25

Responded By User ID: Potesta

First Name: Dana

Last Name: Burns

Email: clracer@potesta.com

Phone: 3043421400

SO Doc Code: CEOI

SO Dept: 0313

SO Doc ID: DEP2400000010

Published Date: 1/12/24

Close Date: 1/30/24

Close Time: 13:30

Status: Closed

Solicitation Description: DLR - Design-Build Owner Advisor Services

Total of Header Attachments: 4

Total of All Attachments: 4



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 1337601
Solicitation Description: DLR - Design-Build Owner Advisor Services
Proc Type: Central Purchase Order

| Solicitation Closes | Solicitation Response | Version |
|---------------------|------------------------------|---------|
| 2024-01-30 13:30 | SR 0313 ESR01302400000003621 | 1 |

VENDOR
 000000173443
 POTESA & ASSOCIATES INC

Solicitation Number: CEOI 0313 DEP2400000010
Total Bid: 0
Response Date: 2024-01-30
Response Time: 11:25:04
Comments:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III
 (304) 558-2306
 joseph.e.hageriii@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|------|------------------------|-----|------------|------------|-----------------------------|
| 1 | Owner Advisor Services | | | | 0.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 80101600 | | | |

Commodity Line Comments:

Extended Description:

Owner Advisor Services



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

State of West Virginia
Centralized Expression of Interest
Architect/Engr


Proc Folder: 1337601
Doc Description: DLR - Design-Build Owner Advisor Services
Proc Type: Central Purchase Order
Reason for Modification:

| Date Issued | Solicitation Closes | Solicitation No | Version |
|-------------|---------------------|-------------------------|---------|
| 2024-01-12 | 2024-01-30 13:30 | CEOI 0313 DEP2400000010 | 1 |

BID RECEIVING LOCATION
 BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR
Vendor Customer Code: 000000173443
Vendor Name : Potesta & Associates, Inc.
Address : 7012
Street : MacCorkle Avenue, SE
City : Charleston
State : West Virginia **Country :** US **Zip :** 25304
Principal Contact : Dana L. Burns, P.E., P.S., Vice President
Vendor Contact Phone: 304.342.1400 **Extension:**

FOR INFORMATION CONTACT THE BUYER
 Joseph E Hager III
 (304) 558-2306
 joseph.e.hageriii@wv.gov

Vendor Signature X  **FEIN#** 31-1509066 **DATE** 01/29/2024

ADDITIONAL INFORMATION

The Acquisitions and Contract Administration Section of the Purchasing Division ("Purchasing Division") is soliciting Expression(s) of Interest ("EOI" or "Bids") for the West Virginia Department of Environmental Protection, Division of Land Restoration ("Agency"), from qualified firms to provide Owner Advisor ("OA") services ("Vendors") as defined herein.

2.PROJECT: The project for which bids are being solicited is to provide experienced OA services to the Agency for a Design-Build pilot program (West Virginia Code 22-34-1 et seq.) for the rehabilitation of former mining lands ("Project"). The Agency seeks to employ a team with experience managing and constructing stream restoration, water treatment, land reclamation and subsidence projects and a successful history of collaborating on the same or similar type of project per the attached specifications and terms and conditions.

| INVOICE TO | SHIP TO |
|---|---|
| ENVIRONMENTAL PROTECTION DIVISION OF LAND RESTORATION 601 57TH ST SE CHARLESTON WV 25304 US | ENVIRONMENTAL PROTECTION DIVISION OF LAND RESTORATION 601 57TH ST SE CHARLESTON WV 25304 US |

| Line | Comm Ln Desc | Qty | Unit Issue |
|------|------------------------|-----|------------|
| 1 | Owner Advisor Services | | |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 80101600 | | | |

Extended Description:

Owner Advisor Services

SCHEDULE OF EVENTS

| <u>Line</u> | <u>Event</u> | <u>Event Date</u> |
|-------------|--------------|-------------------|
|-------------|--------------|-------------------|

| | Document Phase | Document Description | Page |
|--------------|----------------|---|------|
| DEP240000010 | Final | DLR - Design-Build Owner Advisor Services | 3 |

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

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) _____

(Address) _____

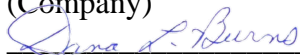
(Phone Number) / (Fax Number) _____

(email address) _____

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.

(Company)



(Signature of Authorized Representative)

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

(Phone Number) (Fax Number)

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company



Authorized Signature

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

ABANDONED MINE LANDS (AML) CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining Reclamation and Enforcement (OSMRE) to determine if you are eligible to receive an AML contract. This requirement can be found under OSMRE's regulations at 30 CFR 874.16. **NOTE:** This form must be signed and **dated within 30 days** of submission to be considered for a current bid.

Part A: General Information

Business Name: _____
 Tax ID #: _____
 Address: _____
 City, State, & Zip: _____
 Phone Number: _____
 Email Address: _____

Part B: Obtain an Organizational Family Tree (OFT) from the Applicant Violator System (AVS)

If you plan to certify the existing AVS information or submit updates under Part C, you must include an OFT. Instructions for downloading an OFT from the AVS can be found at: <https://www.osmre.gov/sites/default/files/2022-02/OMB%201029-0119%20instructions.pdf>. If you require assistance you may contact the AVS Office by phone at: 800-643-9748, or by email at: avshelp@osmre.gov.

Part C: Certifying and updating information in the AVS

Select one of the options, follow the instructions for the selected option, sign, and date below.

I, _____, have express authority to certify that:
 (Print Name)

1. Our business is listed in the AVS. The information is accurate, complete, and up to date. (If you select this option, you must attach an Entity OFT from the AVS to this form). Do not complete Part D.
2. Our business is in the AVS. The information needs to be updated. (If you select this option, you must attach an Entity OFT from the AVS to this form). Complete Part D to provide the missing or corrected information.
3. Our business is not listed in the AVS. The information needs to be added. Complete Part D to provide the information.

Date_____
Signature_____
Title

Part D: OFT Information

Contractor's Business Name: _____

If the current Entity OFT information for your business is incomplete in the AVS, or if there is no information in the AVS for your business, you must provide all of the following information as it applies to your business. Please include additional copies of this page if the space below is not sufficient to capture all information.

- Every officer (President, Vice President, Secretary, Treasurer, etc.);
- All Directors, Partners, and Members;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.
- **Please list an end date for any person who is no longer with your business.**

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

PAPERWORK REDUCTION STATEMENT

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

Public reporting burden for this form is estimated to range from 15 minutes to one hour, with an average of 30 minutes per response, including time for reviewing instructions, gather and maintaining data, and completing and reviewing the form. You may direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, 1849 C Street, NW, Room 4559, Washington, DC 20240.



AVS OFT Report - 3/21/2023 10:37:56 AM

All OFT's where the selected entity is listed as an entity or related entity

Entity Selected (247598) Potesta & Associates Inc

| Parent Entity | Relationship | Description | Related Entity | % Ownership | Begin Date | End Date |
|-----------------------------------|----------------|-------------|----------------------------|-------------|------------|------------|
| (247598) Potesta & Associates Inc | Vice President | | (247600) Dana L Burns | | 3/7/1997 | |
| (247598) Potesta & Associates Inc | Shareholder | | (247600) Dana L Burns | 20% | 3/7/1997 | |
| (247598) Potesta & Associates Inc | Shareholder | | (264075) Peter Potesta | 10% | 1/1/2021 | |
| (247598) Potesta & Associates Inc | President | | (247599) Ronald R Potesta | | 3/7/1997 | |
| (247598) Potesta & Associates Inc | Shareholder | | (247599) Ronald R Potesta | 65% | 3/7/1997 | |
| (247598) Potesta & Associates Inc | Vice President | | (247601) Laidley Eli McCoy | | 6/7/1997 | 12/31/2014 |

STATEMENT OF QUALIFICATIONS



PREPARED
FOR:



WVDEP
Department of Administration
Purchasing Division
2019 Washington St. E
Charleston, West Virginia 25305

SOLICITATION NO. CEOI 0313 DEP2400000010 DLR– DESIGN-BUILD OWNER ADVISOR SERVICES



OFFICES
IN:

CHARLESTON

7012 MacCorkle Avenue, SE
Charleston, WV 25304
(304) 342-1400

MORGANTOWN

125 Lakeview Drive
Morgantown, WV 26508
(304) 225-2245

WINCHESTER

15 South Braddock Street
Winchester, VA 22601
(540) 450-0180

TABLE OF CONTENTS

| | |
|-----------------------------|----|
| General Information | 1 |
| Project Understanding | 14 |
| Staffing | 18 |
| Project Experience | 25 |
| Proximity to Site | 32 |

APPENDIX

| | |
|---|---|
| AML and Related Project Experience Matrix | A |
| Key Personnel Resumes | B |



1. GENERAL INFORMATION



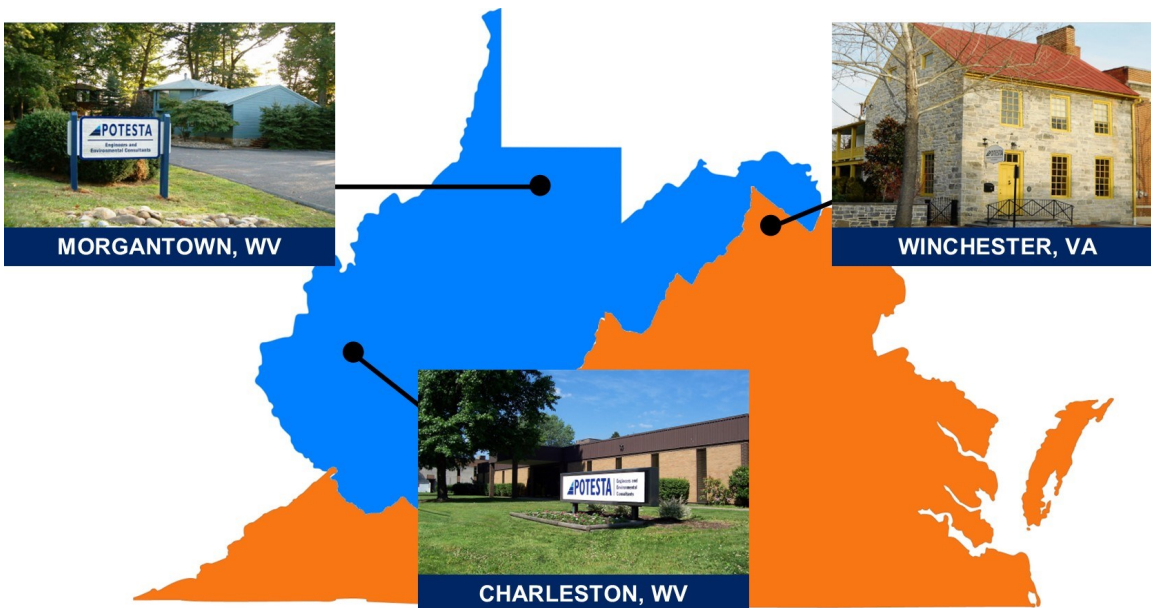
STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Established by Mr. Ronald Potesta, POTE STA operates as a comprehensive engineering and environmental consulting firm. Since the beginning, POTE STA has consistently delivered high-quality engineering and environmental consulting services across the Mid-Atlantic region. Our team comprises a diverse staff of experienced engineers, scientists, and support personnel, with branch offices situated in Winchester, Virginia, and Morgantown, West Virginia. Our clientele spans various sectors, including local, state, and federal agencies, as well as mining, manufacturing, and chemical companies, utility companies, waste management firms, land developers, attorneys, financial institutions, insurance companies, K-12 schools, colleges, universities, construction companies, and architects.



Varied Range of Professional Services

- Air
- Asbestos Inspection
- Biological and Toxicological
- Civil Engineering and Design
- Coal Supply and Procurement
- CADD
- Construction Monitoring
- Endangered Species Consultation
- Environmental Emergency Response
- Environmental Management System
- Environmental Site Assessment
- Environmental, Safety, and Management Systems Auditing
- Environmental-Reclamation Liability Assessments
- Geographic Information Systems
- Geotechnical Engineering
- Groundwater
- Hydrology and Hydraulics Design
- Landfills and Solid Waste Management
- Land Management
- Litigation Support
- Mining
- Mixing Zone Analysis and Diffuser Design
- Occupational Safety and Health
- Oil and Natural Gas
- Permitting
- Remedial
- Risk-Based Remediation
- Roadway Engineering and Design
- Sampling
- Site Design
- Solar Development
- Storage Tanks
- Stormwater
- Stream Restoration
- Surveying and Mapping
- Water and Wastewater Engineering
- Water Quality Study
- Wetlands

STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

POTESTA offers a diverse team of professionals skilled in various disciplines who are experienced in providing planning and conceptualization, design development, and construction support for design-build contracts. In addition to technical expertise, POTESTA excels at facilitating effective communication between the design and construction teams and can implement solutions to keep the project on schedule and within budget. POTESTA has a long history of collaborating on design-build projects. Included on page 11 in this Statement of Qualifications is an organizational chart illustrating the firm's management structure and its relationships.

Examples of Design Build—Project Criteria Documents and Performance Specifications

Project criteria play an important role in guiding and shaping the goals and objectives of the project. POTESTA is experienced in defining project criteria as part of the design-build team.

- Expansion and Renovation of the Charleston Civic Center (Charleston, WV)
- WVU Transportation Center and Garage (Morgantown, WV)
- Grant County Data Center/Broadband Educational and Training Center (Grant County, WV)
- Middle Mile Fiber Optic Broadband Network (Grant County, WV)



Examples of Design Build—Concept Design/Detailed Design/Construction Documents

POTESTA has developed preliminary drawings and construction documents for projects as part of multiple design-build teams. This phase benefits from having input from the other partners on the team to deliver an efficient, innovative, and successful project from conception to completion.

- Marshall University Brad D. Smith Schools of Business (Huntington, WV)
- Marshall University Biotechnology Center (Huntington, WV)
- Glenville State University Student Residence Hall (Glenville, WV)
- University of Charleston Brotherton Residence Hall (Charleston, WV)
- University of Charleston Innovation Center (Charleston, WV)
- Marshall University Third Avenue Parking Garage (Huntington, WV)

STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

POTESTA's expertise in the mining sector, particularly our proficiency in abandoned mine reclamation in the area, positions us as a valuable addition to the design-build team handling mining reclamation construction projects. Our extensive understanding of the region and its mining legacy, coupled with our experience in design-build initiatives and diverse service capabilities, establishes us as the optimal choice for providing Owner Advisor (OA) services for the WVDEP's Design-Build pilot program.

Abandoned Mine Lands

Developing post-mined land presents a multifaceted challenge that requires a strategic and sustainable approach to rehabilitation and restoration. The aftermath of mining activities often leaves landscapes scarred, ecosystems disrupted, and communities affected. Successful development of post-mined land involves a combination of ecological, social, and economic considerations. Ecological restoration efforts may include re-vegetation, soil stabilization, and water management to recreate a sustainable and biodiverse environment. Our dedicated team of professionals remains current on policy and regulatory shifts, a critical practice that ensures the Owner is well-informed and that our projects remain at the forefront of an ever-evolving regulatory landscape.

POTESTA boasts the foremost team in West Virginia specializing in resolving challenges related to the mitigation of issues associated with abandoned mine lands (AML). Our accomplished team comprises individuals with over 125 years of collective experience working on West Virginia Department of Environmental Protection's (WVDEP) AML projects, as well as contributing expertise to AML initiatives in various other states. Notably, POTESTA is proud to have over 20 employees with substantial experience specifically on WVDEP's AML projects and having completed over 250 AML Projects.

Appendix A includes an AML and Related Project Experience Matrix documenting our professionals previous experience:

- Passive Acid Mine Drainage Treatment
- Assessment of Contamination (e.g., PCBs, asbestos), Hazardous Waste Remediation
- Demolition of Structures
- Diversion and Control of Stormwater
- Identifying and Controlling Acid Mine Drainage
- Mine Fires
- Landslide Stabilization
- Slope Stabilization
- Reclamation of Refuse Piles
- Sealing Mine Portals
- Stream Restoration
- Subsidence Assessment and Remediation
- USCOE Permitting
- Water Line Design
- Water Supply Feasibility Studies and Design
- Inventory of Residential Water Supplies
- Wetland Assessments
- Revegetation Plan
- Environmental Permitting



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Civil Engineering/Site Design

POTESTA's engineering team possesses extensive expertise in the various aspects of civil engineering, encompassing utility/infrastructure design, roadway design, grading plan development, and stormwater management. Our diverse staff, consisting of engineers, geologists, and scientists, actively engages in these project types. They collaborate closely with project teams on a daily basis, working towards the successful completion of projects that align with and exceed the client's expectations.

Beyond providing engineering services, POTESTA is uniquely equipped to deliver environmental consulting and ensure regulatory compliance, essential components for projects of this nature. The majority of projects undertaken by POTESTA necessitate regulatory support. Our team possesses a working knowledge of the level of detail required to secure approvals for successful project outcomes.

Preliminary Engineering and Design Services:

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations
- Foundation Recommendations
- Surveying
- GIS Mapping
- Utility Planning
- Earthwork Evaluations
- Opinion of Probable Costs/Engineer's Construction Cost Estimate
- Permitting
- Geometric Site Layout
- Vehicular and Pedestrian Circulation
- Grading and Drainage Plans, Including Excavation and Fill Optimization
- Access Road Design
- Hydraulic Structure Design
- Water and Sewer Design
- Earth Retaining Structures Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications, and Contract Document Preparation



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Stream Restoration

POTESTA's team of skilled aquatic ecologists, aquatic biologists, and engineers collaboratively undertake a diverse range of stream assessment and restoration projects, catering to clients from both the private and public sectors. Our scientists and staff have worked with clients to provide very detailed stream restoration/rehabilitation plans that include in-stream structure/habitat improvements, channel realignment and/or bank stabilization, as well as less labor-intensive plans that may only require minor bank stabilization and buffer zone establishment.

Stream Restoration Services:

- Stream Habitat Assessment
- Channel Stability Evaluation
- Biological Studies/Monitoring
- Riparian Corridor/Watershed Assessment
- Preliminary/Conceptual Restoration Plans
- Detailed Restoration Plans
- Construction Plans
- Reference Reach Assessments
- Mitigation Feasibility Analysis
- Rosgen Classification
- Construction Monitoring
- Post Construction Monitoring and Reporting

When brought in on a project which may potentially effect “waters of the U.S.” and require mitigation, POTESTA staff can provide “cradle to grave” services, from identifying potential sites, determining feasibility, providing restoration plans, to completing post construction monitoring. When completing stream restoration for mitigation or other regulatory requirements, it is POTESTA's philosophy that conceptual design is an important component in the overall process.

Stream restoration is often completed as part of the permitting process. POTESTA also has professional staff that specialize in Clean Water Act (CWA) permitting and compliance. When brought into the permitting process early, POTESTA staff can also make recommendations regarding avoidance and minimization to aquatic resources, reducing the need for mitigation and potential stream restoration activities. POTESTA can answer your questions about stream restoration, provide assistance in planning for new operations, or help in determining mitigation methods that may be used to satisfy state and federal regulatory requirements.



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Geotechnical Engineering

POTESTA can provide field engineers and geologists who are knowledgeable using the latest technologies subsurface explorations, monitoring well and piezometer installations, foundation design recommendations, slope stability analysis, retaining walls, and remedial designs as they relate to construction, mining, waste disposal, environmental remediation, and other projects. Our knowledge of the proper procedures and familiarity with local conditions allows office and field personnel to adjust the exploration plan if unanticipated field conditions are found.



Subsurface Explorations:

- Attend an initial meeting with the client.
- Conduct preliminary site reconnaissance.
- Develop a recommended exploration program.

Slope Stability Analysis and Remedial Design:

- Utilize various methods to predict slope stability.
- Analysis of existing or proposed soil embankments, rock fills, dam analysis and design, landfill design and operation, assessing the causation of slope failure, and designing remedial measures.
- Analyses—circular or sliding block met
- hods, interface friction angles, and estimate of the strength parameters of the soil or rock.
- Develop preventive measures during initial project design or recommendations for to repair slope failures.
- Consider various remedial measure—regarding the site to obtain more suitable conditions, management of groundwater, and design of retaining structures.
- Familiar with wide variety of retaining structures—gabion baskets, soldier beam and lagging walls, sheet piles, reinforced concrete and reinforced earth slopes.

Foundation Design Recommendations:

- Experience with various types of foundations and will recommend the appropriate type of foundation given the anticipated application and site conditions.
- Foundations—spread and strip footings, steel piles, auger-cast concrete piles, drilled piers, and reinforced mats.
- Preliminary foundation design recommendations and cost analyses.
- Preliminary alternatives for final recommendation.
- Construction documents.
- Final recommendation—construction drawings, technical specifications, recommendations for allowable bearing capacity, engineer's construction cost estimate, and contractor's bid sheet.

STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Permitting and NEPA Compliance

Acquiring environmental permits is a critical element for the success of every project. POTESTA offers its clients exceptional expertise and experience when it comes to the permitting process, including all phases of application preparation, negotiations, modifications, compliance, and renewal at all levels of government. POTESTA has prepared the required environmental documents for numerous mined lands, roadways, cross country pipelines/high voltage power lines, and site developments. POTESTA has the experience and knowledge and the regulatory relationships to provide timely, cost-effective solutions to your permitting needs.



Planning and environmental assessments are essential for securing the necessary authorization to proceed with these projects. POTESTA's environmental consulting group is well-equipped to conduct required surveys, engage with resource agencies, and prepare essential documents, including environmental assessment reports, ensuring compliance with regulatory requirements.

POTESTA has completed numerous projects including environmental assessments, environmental impact statements, categorical exclusions, cultural resource studies, endangered species assessments, environmental compliance with various federal and state regulations (Clean Water Act [CWA], NEPA, and Endangered Species Act), permitting, wetlands delineation/mitigation, sampling and remediation.

Permits/approvals typically required for projects:

- Environmental Site Assessments
- Environmental Impact Statements
- Stormwater Management Permits
- Air Quality Permits
- Wetland Delineation and Mitigation Permits
- National Pollutant Discharge Elimination System (NPDES) Permits
- Groundwater Protection Plans
- Spill Prevention, Control and Countermeasure Plans
- Floodplain Management Studies and Permits
- Stream Activity Permits



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Surveying/Mapping

POTESTA proposes to utilize our own survey crews for work on this project. Our surveyors have worked on numerous site development, geotechnical, roadway and bridge construction, utility construction, and landfill development projects. Surveys and mapping are completed to the standards as outlined by the National Map Standards as well as other applicable quality standards. Small topographic mapping projects can be completed in-house, however, larger projects are better suited for mapping using aerial photography.

POTESTA is equipped with modern surveying instruments allowing efficient data processing and accurate gathering of field information. The latest versions of software are then used to process survey data and create drawings or required end products.



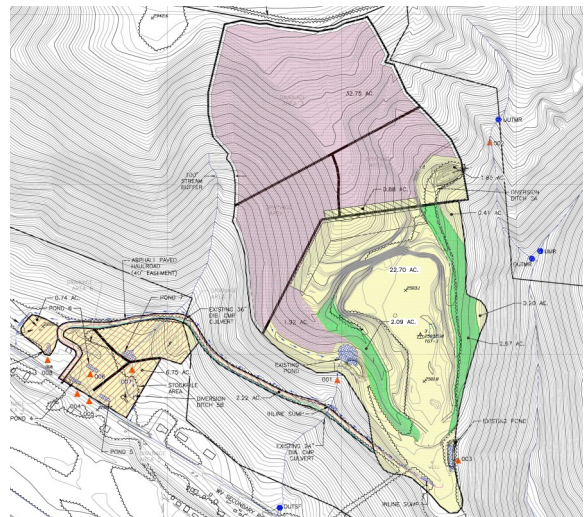
- Total Station Instruments
- Trimble R-8 Glonass
- RTK GPS Systems
- AutoCAD
- Autodesk Land Desktop
- Autodesk Civil 3D Design Software

CADD

The CADD department utilizes the latest drafting/design software and computer hardware to maintain productivity at the high levels that clients demand and expect. We utilize Autodesk Civil 3D design software to prepare, revise, and manipulate drawings and engineering data efficiently. POTESTA's experienced and trained professionals allow clients' projects and assignments to be completed rapidly and at a reasonable cost.

Our CADD services include:

- Surveying data manipulation—including development of topographic mapping, cross sections, profiles, isopach drawings, etc.
- Site design—including grading plans, drainage plans, utilities plans, right-of-way plans, etc.
- Roadway design
- Water, sanitary sewer, electric, natural gas, and telecommunications design
- Permit drawings, maps, and exhibits
- Earthwork and planimetric quantity development
- Two and three dimensional graphics



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

Construction Observation

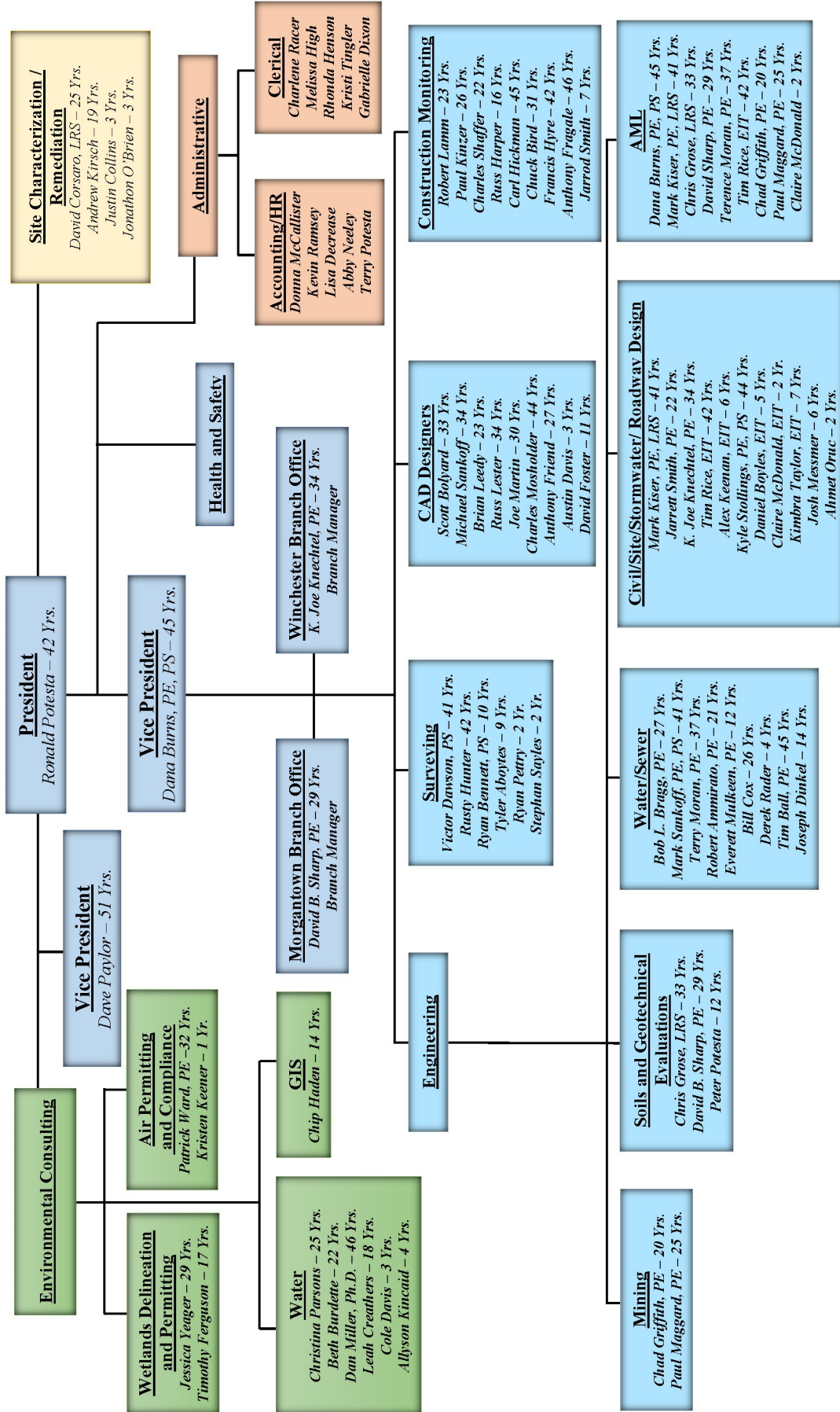
POTESTA provides construction monitoring and construction administration services to assist clients in achieving regulatory and contractual compliance, document that contractor activities are in compliance with design requirements, and to serve as an extension of clients' staff. Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA's construction observation and administration personnel are experienced with varying types of construction, geotechnical, and environmental projects, including adherence to specifications, sampling/testing, pay quantity verification, and dispute resolution.



Construction Contract Administration Services:

- Review contract documents, particularly items that were not prepared by POTESTA.
- Review, meet, comment on and accept contractor's preliminary (and subsequent adjustments to) progress schedule, preliminary schedule of shop drawing and sample submittals, and preliminary schedule of values (for progress payments).
- Attend pre-construction conference.
- Review underground facilities not shown on contract documents to determine potential changes to contract documents.
- Attend progress meetings and as needed meetings.
- Review and approve shop drawings and samples (if required), including review of revised shop drawings if necessary.
- Review substitutes and "or equal" items, and issue written acceptance/denials.
- Review contractor work plan, if required by specification special conditions.
- Attend progress meetings and as needed meetings.
- Issue written clarifications or interpretations of the requirements of the contract documents, including issuance of additional specifications and drawings.
- Provide a full-time representative to observe construction for compliance with the contract documents, and observe testing by the contractor and record results on appropriate forms.
- Prepare weekly reports summarizing construction activities.
- Prepare change orders for the work, including issuance of additional specifications and drawings, if necessary.
- Review contractor invoices (i.e., Applications for Payment) and issue written recommendations for payment or denial.
- Issue Certificate of Substantial Completion, as typically required by the contract documents.
- Provide record drawings showing "as-built" features.

ORGANIZATION CHART POTESTA & ASSOCIATES, INC.



STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

1.1.1. BUSINESS ORGANIZATION

POTESTA was established in 1997 as a S Corporation by Mr. Ronald R. Potesta in Charleston, West Virginia.

1.1.2. TAX ID NUMBERS

- Federal Tax ID Number: 31-1509066
- State Tax ID Number: 1025-9671

1.1.3. NAMES OF OWNERS, PRINCIPALS, AND/OR OFFICERS

- Mr. Ronald R. Potesta, President
- Mr. Dana L. Burns, PE, PS, Vice President
- Mr. Peter S. Potesta, Senior Engineer

1.1.4. AUTHORIZED OFFICER

Mr. Dana L. Burns, PE, PS, Vice President
7012 MacCorkle Avenue, SE
Charleston, West Virginia 25304
dlburns@potesta.com
P: 304.342.1400 F: 304.343.9031

1.1.5. PROJECT MANAGER

Mr. D. Mark Kiser, PE, LRS, Chief Engineer
7012 MacCorkle Avenue, SE
Charleston, West Virginia 25304
dmkiser@potesta.com
P: 304.342.1400 F: 304.343.9031

1.1.6. STAFFING AND WORKLOAD CAPACITY

Our upcoming workload is at a moderate level. Fortunately, our well-sized team is capable of supporting our key staff on various projects without causing any disruptions to our ongoing commitments. POTESTA is fully prepared to allocate the necessary personnel and resources to ensure the timely, technically sound, and cost-efficient completion of reclamation projects. With our extensive experience and technical expertise, we are equipped to deliver OA Services for the design and construction for WVDEP-AML reclamation projects. Our dedicated team is assembled and ready to initiate projects promptly upon receiving the Notice to Proceed.

STATEMENT OF QUALIFICATIONS

1. GENERAL INFORMATION



1.1. COMPANY PROFILE

1.1.6. STAFFING AND WORKLOAD CAPACITY

At POTESTA, each project is approached with the aim of providing clients compelling reasons to return and fostering long-term, successful relationships. We recognize the significance of timely and budget-conscious project completion, thus prioritizing these aspects to ensure client satisfaction and project success.

POTESTA believes effective communication is the key to a successful project:

- Communicate early and often.
- Mutual work scope development.
- Startup meeting including site visit.
- We work as extension of your staff—we work for you!
- Meet your objectives—how you want it!
- Weekly project updates.



1.1.7. CONTINGENCY PLAN

POTESTA maintains a contingency plan for staff in the event of illness, disability, death, or separation from the company. POTESTA has identified key roles within the organization and have ensured multiple employees are familiar with critical tasks. In the event a key team member for this contract needs to be replaced, POTESTA will deploy the suitable classification of personnel to carry out the project activities. POTESTA has a centralized project repository accessible to all staff. This is a unified location for storing, managing, and retrieving project-related data throughout its lifecycle. Any key personnel substitutions will not be made without the consent of the WVDEP.

POTESTA is available to respond immediately to emergency situations that may occur.

2. PROJECT UNDERSTANDING



STATEMENT OF QUALIFICATIONS

2. PROJECT UNDERSTANDING



2.1. UNDERSTANDING OF THE PROJECT AND APPROACH

POTESTA understands with the recent approval of legislation the WVDEP will merge the design and construction components of a project into a single contract, thus offering a collaborative and streamlined approach for a smooth project experience for the Owner with reduced risks and enhanced communication from a unified team. POTESTA understands for this specific contract, the WVDEP is seeking to hire a firm to provide OA Services to represent the Owner's interests and provide expertise throughout the various stages of the project.

POTESTA will collaborate with various stakeholders to address concerns, provide technical guidance, and ensure alignment with project objectives. As a technical resource, POTESTA can resolve any engineering-related issues that may arise during the design and construction process. POTESTA will be responsible for providing independent guidance and support to ensure that the Owner's goals, expectations, and requirements are met.

POTESTA has reviewed and is fully capable of providing the required scope of services in "Section Three: Project Specifications" of Solicitation No. CEOI 0313 DEP2400000010 Expression of Interest. We have the technical expertise in stream restoration study and design, the various techniques and technologies to address water pollution, and the restoration and rehabilitation of the land and ground subsidence of abandoned mine lands.

2.1.1. ORGANIZE AND PERFORM TASKS

POTESTA has identified key aspects of OA Services for the Design-Build Projects including:

- Project planning to assist the Owner to define project goals, scope and requirements, as well as offer insight into the feasibility and viability of the proposed project.
- Contract negotiation to provide input during the negotiation of the design-build contract to ensure that the contract terms align with the owner's best interests.
- Identify potential risks associated with the project and propose mitigation strategies, as well as review and evaluate the risk allocation within the design-build contract.

2.1.2. IDENTIFY CRITICAL MILESTONES AND ENSURE PROGRESS

POTESTA believes identifying critical milestones is an essential part of project planning and management. POTESTA is experienced and routinely utilizes Gantt charts to provide a comprehensive visual representation of project timelines, sequence, and progress. The Gantt chart will determine the major deliverables expected at the critical milestones. It is important to engage key stakeholders to gather input on what they consider to be critical points in the project. POTESTA will periodically review and refine the list of critical milestones as the project progresses allowing for adjustments based on performance, change in scope, or unforeseen circumstances. The Gantt chart will ensure success throughout the project lifecycle.

2.1.3. CONTINGENCIES THAT MAY ARISE

An integral aspect of delivering OA services involves considering external factors or dependencies that could potentially affect the project. It is important in the planning stages the risks are identified. It is important to focus on the high-impact activities that significantly affect the project timeline or budget. POTESTA will develop contingency plans to allocate additional resources, adjust timelines, and

STATEMENT OF QUALIFICATIONS

2. PROJECT UNDERSTANDING



2.1. UNDERSTANDING OF THE PROJECT AND APPROACH

2.1.3. CONTINGENCIES THAT MAY ARISE

implement alternative strategies. Open and transparent communication with the project team and stakeholders will allow for prompt reporting and addressing of issues that may arise.

POTESTA manages, mitigates, and overcomes changes in scope, cost, budget, timeline, and other features, by following these principles:

- Develop a clear, defined scope.
- A written contract is important part of setting expectations at the beginning of the project.
- Communication is a priority.
- Preparation of thorough design-build development criterion based on Owner's input.
- Track expenses and compare relative to the budget.
- Identify and use milestones to assess project performance.
- Check calculations, review methods, and approach early.
- Evaluate proposed changes to the project scope and provide recommendations to the Owner.
- Scope change is an official decision made by the project manager and the key stakeholders.
- Ensure the changes align with the project's objectives and budget constraints.
- Obtain Owner approval prior to performing additional work.

2.1.4. MANAGE PROJECT BUDGET, SCHEDULE AND SCOPE

In March 2024, POTESTA will celebrate our 27th anniversary, a testament to the company's consistent performance on various projects. A remarkable 85% of our projects are derived from repeat clients, underscoring our commitment to delivering exceptional results. POTESTA has effectively executed multiple AML projects for the WVDEP and various other clients. We anticipate the opportunity to continue delivering successful projects under this contract. POTESTA utilizes our technical expertise and extensive experience to navigate the complexities of project management. This includes accurate estimation, effective scope management, proactive risk mitigation, and informed decision-making to keep the project on track within the defined budget, schedule, and scope.

POTESTA's guidance and support to the Owner include:

- Collaborating with the owner to establish a realistic budget for the project.
- Monitoring costs throughout the design and construction phases to prevent overruns.
- Working with the design-build team to develop and maintain a realistic project schedule.
- Monitoring progress and addressing any delays to keep the project on track.
- Facilitating effective communication between the Owner and the design-build team.
- Keeping the Owner informed about project developments and key decisions.

STATEMENT OF QUALIFICATIONS

2. PROJECT UNDERSTANDING



2.1. UNDERSTANDING OF THE PROJECT AND APPROACH

2.1.5. ENSURE QUALITY CONTROL

POTESTA has implemented a comprehensive quality assurance program that covers drafting, engineering design, and written documents. This program incorporates standardized Quality Assurance/Quality Control (QA/QC) practices, including consistency checks, color coding of reviewed copies/calculations, and a meticulous review of the method of measurements compared to quantity tallies. As a standard practice, both the Project Manager and the Principal-in-Charge conduct thorough reviews and provide comments on materials before submission to the Owner. An engineer will conduct a constructability review of the construction project's design and plans to evaluate the feasibility of construction and pinpoint potential challenges prior to the commencement of actual construction. POTESTA is a proud member of ASFE, an organization that emphasizes professional practices aimed at minimizing liability and reducing loss.

In the role of Owner Advisor as part of a design-build program, POTESTA will:

- Overseeing the design and construction processes to ensure compliance with industry standards and the owner's expectations.
- Conducting periodic reviews to assess the quality of work.
- Assisting in the resolution of disputes or conflicts that may arise during the project.
- Serving as a mediator between the owner and the design-build team if necessary.
- Supporting the owner during the project closeout phase.
- Verifying that all contractual obligations have been met before final project handover.



3. STAFFING



STATEMENT OF QUALIFICATIONS

3. STAFFING



3.1. STAFFING PROPOSAL

The presence of our sizable and seasoned staff enables us to respond promptly, offering flexibility and the opportunity for substantial input from in-house experts on intricate multi-disciplinary projects. Our typical approach to project staffing involves assigning a compact project team that takes full responsibility for delivering the work to the client's contentment and within the budget. POTESTA will assign appropriately qualified staff to execute the project tasks. In instances where required, the team can tap into the expertise available within POTESTA's extensive staff.

POTESTA understands the specific needs, requirements, goals, and challenges of the targeted projects for the Design-Build pilot program include:

- Richard Mine Drainage—Stream Restoration
- Vassar Lane Vertical Opening Phase 2—Stream Restoration, Subsidence, and Land Reclamation
- Meadow Fork Clogged Stream—Stream Restoration and Land Reclamation
- Morgantown Drilling/Grouting—Subsidence and Land Reclamation
- Gold Resources, LLC—Land Reclamation

POTESTA has assigned an adept Project Manager designated to oversee the comprehensive scope of the projects. Additionally, we've curated a proficient team of experienced engineers and scientists who will collaborate seamlessly to support WVDEP in each phase of the project. At POTESTA, we take pride in our capacity to deliver innovative and succinct engineering design packages, ensuring that a greater proportion of the client's funds is directed towards actual construction rather than engineering design fees. POTESTA provide our staffing plan in a formal document to the Owner. POTESTA also recognizes that staffing goals may need to be adaptable due to changing circumstances and has built flexibility into the staffing plan. Before finalizing any staffing changes, POTESTA will seek feedback and approval from relevant stakeholders. An organizational chart of the proposed team is detailed on the subsequent page.



STATEMENT OF QUALIFICATIONS

3. STAFFING

3.1. STAFFING PROPOSAL



DANA L. BURNS, PE, PS

Principal-in-Charge—45 Yrs.

Directs engineering day-to-day operations and management of technical and support staff

D. MARK KISER, PE, LRS

Project Manager—41 Yrs.

Project activities perform under his direction and maintains schedule and budget

FIELD RECONNAISSANCE, DESIGN, RECLAMATION PLAN, AND CONSTRUCTION DOCUMENTS

Paul Maggard, PE—25 Yrs.
Chad Griffith, PE—20 Yrs.
Jarrett Smith, PE – 22 Yrs.
Robert Ammirato, PE—21 Yrs.
Terence Moran, PE—37 Yrs.
Tim Rice, EIT – 42 Yrs.
Everett Mulkeen, PE—12 Yrs.
Mark Sankoff, PE, PS—41 Yrs.
Alex Keenan, EIT – 6 Yrs.
Kyle Stollings, PE, PS – 44 Yrs.
Daniel Boyles, EIT – 5 Yrs.
Claire McDonald, EIT – 2 Yr.
Kimbra Taylor, EIT – 7 Yrs.
Derek Rader—4 Yrs.
Ahmet Oruc – 1 Yr.

SOILS/GEOTECHNICAL/HYDROLOGICAL EVALUATIONS

Chris Grose, LRS – 33 Yrs.
Dave Sharp, PE – 29 Yrs.
Peter Potesta – 12 Yrs.

SURVEYING

Victor Dawson, PS – 41 Yrs.
Rusty Hunter – 42 Yrs.
Ryan Bennett, PS – 10 Yrs.
Tyler Aboytes – 9 Yrs.
Ryan Pettry – 2 Yrs.
Stephan Sayles – 2 Yrs.

MAPPING/CADD

Chip Haden (GIS) – 14 Yrs.
Scott Bolyard – 33 Yrs.
Michael Sankoff – 34 Yrs.
Brian Leedy – 23 Yrs.
Russ Lester – 34 Yrs.
Joe Martin – 30 Yrs.
Charles Mosholder – 44 Yrs.
Anthony Friend – 27 Yrs.
David Foster – 11 Yrs.
Austin Davis – 2 Yrs.

PERMITTING, NATURAL STREAM DESIGN, AND NEPA COMPLIANCE

Jessica Yeager – 29 Yrs.
Timothy Ferguson – 17 Yrs.
Christina Parsons – 25 Yrs.
Beth Burdette – 22 Yrs.
Dan Miller, PhD – 46 Yrs.
Leah Creathers – 18 Yrs.
Cole Davis – 3 Yrs.
Allyson Kincaid – 4 Yrs.

CONSTRUCTION MONITORING

Robert Lamm – 23 Yrs.
Paul Kinzer – 26 Yrs.
Charles Shaffer – 22 Yrs.
Russ Harper – 16 Yrs.
Carl Hickman – 45 Yrs.
Chuck Bird – 31 Yrs.
Jarrod Smith – 7 Yrs.

STATEMENT OF QUALIFICATIONS

3. STAFFING



3.1. STAFFING PROPOSAL

3.1.1. KEY PERSONNEL RESPONSIBLE

Principal-in-Charge:

Dana L. Burns, PE, PS, Vice President

Oversees and manages POTESTA's staff, provides responses to inquiries, addresses encountered challenges, and reviews the project budget. With an extensive background spanning over 45 years in civil and environmental engineering projects, Mr. Burns brings a wealth of experience. His expertise encompasses a diverse range of initiatives, including water line extensions, portal sealing, refuse regrading, site assessments, mine fires, preliminary feasibility evaluations, detailed design, and the preparation of construction documents. Mr. Burns has previously served as project manager or principal-in-charge on three open-end contracts for WVDEP, AML, managing over 90 projects from 1986 through 1997. Furthermore, he has continued to contribute as the Principal-in-Charge for numerous WVDEP, AML projects since 2003. He has been Principal-in-Charge for West Virginia University (WVU), Marshall University (MU), University of Charleston (UC), and the City of Charleston design-build projects.

Project Manager:

D. Mark Kiser, PE, LRS, Chief Engineer

With over 41 years in engineering, Mr. Kiser has actively contributed to more than 75 different AML projects for WVDEP. His extensive AML background includes involvement in diverse areas such as abandoned surface and deep mine reclamation, mine portal and shaft closures, hydraulic and hydrologic design/evaluation, landslide investigation and stabilization, remining explorations, mine refuse fire abatement and extinguishing plans, subsidence explorations and stabilization plans, water feasibility studies and water system design, construction observation and management plans, natural stream restoration projects, geotechnical explorations, slope stability analyses, preparation of construction drawings, specifications, and engineers estimates, as well as directing both pre-bid and pre-construction meetings. Mr. Kiser is well-versed in managing subcontractors, overseeing staff, and addressing equipment needs for the design team. He oversees the 2023 AML Contract S2 as the Project Manager and possesses design-build expertise gained from working on the City of Charleston Civic Center Renovation Project.

Reclamation and Subsidence Design Engineers:

Christopher A. Grose, LRS, Senior Engineering Associate

More than 33 years of experience, Mr. Grose will assume the role of geotechnical engineer for this project. His extensive expertise encompasses geological and geotechnical explorations, surface and subsurface hydrology, hydrogeology, and the analysis, modeling, and restoration of failed slopes and landslides. Mr. Grose's professional background includes designing and assessing geotechnical explorations for various structures such as bridges, culverts, earth retention systems, and slope stability, along with expertise in engineered fill construction. Mr. Grose has been actively involved in WVDEP, AML projects since 1990. In his capacity as the geotechnical engineer for this project, he will focus on evaluating slope stability concerns related to regraded coal refuse, landslide mitigation, and other applications involving steep slopes. He has served as Geotechnical Engineer and/or Project Manager on the design-build teams for WVU, MU, UC, and City of Charleston.

STATEMENT OF QUALIFICATIONS

3. STAFFING



3.1. STAFFING PROPOSAL

3.1.1. KEY PERSONNEL RESPONSIBLE

Reclamation and Subsidence Design Engineers:

Terence C. Moran, PE, Senior Engineer

Abundance of expertise in AML reclamation, having served as project manager/project engineer or contributed to over 60 AML projects in both West Virginia and Virginia. With 37 years of expertise in civil and environmental engineering projects, his skills encompass evaluation, design, preparation of plans and specifications, and construction administration. Mr. Moran has co-authored several papers, notably one addressing the abatement of AMD at the Omega Mine site and another focusing on the evaluation of AMD at AML sites during pre-acquisition site assessments. His extensive involvement in AML projects has addressed diverse technical challenges, including AMD mitigation, sealing portals, refuse regrading, stormwater diversion, landslides, subsidence, and water supply. Mr. Moran, well-versed in the requirements of AML projects, is committed to ensuring WVDEP's satisfaction with POTESTA's work through rigorous adherence to proper QA/QC procedures and timely project delivery.

Paul G. Maggard, PE, Senior Engineer

Managed over 40 AML-related projects in Virginia as a project manager/project engineer, Mr. Maggard boasts more than 25 years of experience in successfully executing mining and environmental services projects. His involvement in AML projects encompassed various aspects, including landslide stabilization, AMD assessment and treatment, subsidence remediation, portal closures, refuse regrading, revegetation, and drainage control, including flood mitigation. Additionally, Mr. Maggard played a crucial role in assisting coal companies with no-cost reclamation projects and drinking water replacement initiatives. His responsibilities included overseeing field explorations and surveying, preparing construction plans and specifications, estimating reclamation costs, and providing support during the bidding and construction phases. Notably, Mr. Maggard is also an FAA-licensed Drone pilot, having completed well over 100 missions, all conducted at mine sites.

Timothy M. Rice, EIT, Senior Engineer

With an extensive professional tenure exceeding 42 years, Mr. Rice has been involved in nearly 80 distinct AML projects spanning West Virginia, Maryland, Ohio, and Pennsylvania. For the present project, he will function as an in-house consultant, available as needed. His diverse AML experience encompasses abandoned surface and deep mine reclamation, closures of mine portals and shafts, hydraulic and hydrologic design/evaluation, remining explorations, abatement and extinguishing plans for mine refuse and deep mine fires, slope stability analyses, and the preparation of construction drawings, specifications, and engineers' estimates. Additionally, Mr. Rice has a history of directing both pre-bid and pre-construction meetings. He is the Project Manager for the 2022 AML Contract 5 Project North.

STATEMENT OF QUALIFICATIONS

3. STAFFING



3.1. STAFFING PROPOSAL

3.1.1 KEY PERSONNEL RESPONSIBLE

Reclamation and Subsidence Design Engineers:

David B. Sharp, PE, Senior Engineer/Branch Manager of Morgantown branch office

Function as an in-house consultant on an as-needed basis for this project. Mr. Sharp brings over 29 years of expertise in engineering and environmental consulting projects across the region. He has dedicated a significant portion of his career to geotechnical engineering and construction observation/management endeavors. His extensive experience includes managing various projects related to landslide investigation and repair, mine permitting, mine reclamation, acid mine drainage, hydrology, and other components typically encountered in abandoned mine reclamation initiatives. Many of these projects involved preliminary planning and assessments, geotechnical engineering, evaluations of potential treatment technologies, and the preparation of bidding and construction documents. Mr. Sharp manages the design-build contracts for WVU and the AML Contract 5 Project North.

Environmental Compliance/Stream Restoration:

Jessica L. Yeager, Senior Scientist

With 29 years of experience as an aquatic biologist and toxicologist, Ms. Yeager specializes in evaluating the impacts of human activities on aquatic communities. Her expertise extends to reviewing and preparing environmental assessments, biological assessments, and other impact studies, along with securing environmental permits. Proficient in integrating GIS into project development, she has served as a project manager for coordination and consultation with Threatened and Endangered (T&E) species and State Historic Preservation Office (SHPO). Ms. Yeager's additional strengths lie in crafting impact assessments for planned disturbances and accidental releases, formulating and executing recovery plans for streams and rivers, supervising field personnel engaged in impact assessments, designing studies on benthic macroinvertebrates and fish for permitting needs, conducting biological assessments for federally threatened and endangered species, and offering guidance to clients on matters related to the Endangered Species Act, Clean Water Act, and the National Environmental Policy Act. As a certified wetland soil scientist, botanist, and hydrologist, Ms. Yeager possesses field experience in Kentucky, Virginia, and West Virginia. Notably, she is also recognized as a forensic delineation professional.

Timothy R. Ferguson, Senior Scientist

With over 17 years of experience in environmental compliance and permitting, he has held the role of project manager for numerous projects. His expertise lies in the identification and delineation of streams and wetlands, as well as the development and planning of mitigation strategies. He is well-versed in obtaining permits from various agencies, including USACE, WVDEP, WVDNR, West Virginia State Historical Preservation Office (SHPO), United States Fish and Wildlife Service, and the United States Environmental Protection Agency. Having received formal training in the utilization of the 1987 USACE Wetland Delineation Manual from Ohio State University in 2008, he has consistently applied the Eastern Mountains and Piedmont Regional Supplement since its issuance.

STATEMENT OF QUALIFICATIONS

3. STAFFING



3.1. STAFFING PROPOSAL

3.1.2. RESUMES

Resumes of key personnel are included in Appendix B.

3.1.3. KEY PERSONNEL'S OFFICE LOCATION

POTESTA will utilize skilled personnel from both the Charleston and Morgantown offices, under the direction and supervision of Project Manager David Kiser, in accordance with the project's location.

Total Staff:

- Charleston, West Virginia—67
- Morgantown, West Virginia—12
- Winchester, Virginia—4

| EMPLOYEE | OFFICE LOCATION | | |
|---------------------------|-----------------|------------|------------|
| | Charleston | Morgantown | Winchester |
| DANA L. BURNS, PE, PS | Yellow | | |
| D. MARK KISER, PE, LRS | Yellow | | |
| CHRISTOPHER A. GROSE, LRS | Yellow | | |
| TERENCE C. MORAN, PE | Yellow | | |
| PAUL G. MAGGARD, PE | Yellow | | |
| TIMOTHY M. RICE, EIT | | Green | |
| DAVID B. SHARP, PE | | Green | |
| JESSICA L. YEAGER | Yellow | | |
| TIMOTHY R. FERGUSON | Yellow | | |

3.1.4. EXTERNAL SUB-CONSULTANTS

In the role of OA, POTESTA will be providing expertise throughout the various stages of the project. If required to perform geotechnical services, POTESTA will need to utilize subs for drilling and laboratory analysis.

4. PROJECT EXPERIENCE



STATEMENT OF QUALIFICATIONS

4. PROJECT EXPERIENCE



4. SIMILAR PROJECT EXPERIENCE AND REFERENCES

4.1. CURRENT AND RECENT EXPERIENCE AS AN OA

The following projects demonstrates our experience as part of design-build teams completed within the last five years.

| CITY OF CHARLESTON, WV | | | |
|--|---|------------------------------|-----------|
| CONTACT | ADDRESS | PROJECT LOCATION | COMPLETED |
| Ben Mishoe, City Manager citymanager@cityofcharleston.org (304) 348-8014 | 501 Virginia Street, East Charleston, WV 25301 | Charleston, West Virginia | 2019 |

POTESTA was retained by the former Odell Associates, an architectural firm, to provide project criteria document and performance specifications for the expansion and renovation of the Charleston Civic Center in Charleston, West Virginia in a design-build contract. The Charleston Civic Center, now known as the Charleston Coliseum and Convention Center, renovations, upgrades, and new additions include spacious glass lobbies, new 25,000 square foot ballroom, 15,000 square feet of new meeting rooms, and 8,000 square foot atrium overlooking the Elk River.

Project Personnel: Dana Burns (Principal-in-Charge), Chris Grose (Design Engineer), and Mark Kiser (Design Engineer)

POTESTA completed the following services:

- Venue Analysis—conducting site due diligence.
- Program Development—estimation of site demolition and new infrastructure.
- Master Plan—civil narrative.
- Design Build Performance—civil and landscaping narrative, civil engineering performance specifications, and landscape architectural performance specifications.
- Design Build Selection—design selection review of three teams.
- Design Build Oversight—Owner’s criteria consultant review and site observation report.
- Geotechnical Design Development Criteria
- Surveying—review of site mapping.



STATEMENT OF QUALIFICATIONS

4. PROJECT EXPERIENCE



4. SIMILAR PROJECT EXPERIENCE AND REFERENCES

4.1. CURRENT AND RECENT EXPERIENCE AS AN OA

| MARSHALL UNIVERSITY | | | |
|---|---|------------------------------|--------------------|
| CONTACT | ADDRESS | PROJECT LOCATION | COMPLETED |
| Jeff Pratt, Project Manager pratt65@marshall.edu (304) 696-6415 | One John Marshall Drive Huntington, WV 25755 | Huntington, West Virginia | Under Construction |

POTESTA is retained by Perkins-Eastman Architects, to provide civil engineering, surveying and site utility mapping, and geotechnical engineering for the design-build of the Lewis College of Business/Brad D. Smith Schools of Business at Marshall University in Huntington, West Virginia. The project includes the construction of a multistory educational structure totaling approximately 75,000 square feet. The building will be a three-story steel frame structure with partially cantilevered second and third floor to the north and east. A landscaped greenspace area will be located immediately to the east of the structure with surface parking and a loading dock provided along the southern side of the building. The project is a public-private partnership in conjunction with the developer.



Project Personnel: Dana Burns (Principal-in-Charge) and Chris Grose (Project Manager)

POTESTA has completed the following services to assist in the land use, conceptual architectural design, and programming services for the proposed development:

- Surveying—ALTA survey of the approximate 1.4-acre parcel.
- Geotechnical Engineering—subsurface exploration, soil strength testing of subsurface soil and rock samples, Geotechnical Report, and construction observation and field testing services.
- Civil Engineering and Site Design—schematic design including utility coordination, preliminary site grading and drainage design, permitting, final plan with final building location and survey references for layout, and construction administration.
- Public ROW Improvements—summary table of items and alternatives regarding pavement and regarding.

STATEMENT OF QUALIFICATIONS

4. PROJECT EXPERIENCE



4. SIMILAR PROJECT EXPERIENCE AND REFERENCES

4.1. CURRENT AND RECENT EXPERIENCE AS AN OA

| WEST VIRGINIA DEPARTMENT OF TRANSPORTATION | | | |
|--|--|---------------------------------|-----------|
| CONTACT | ADDRESS | PROJECT LOCATION | COMPLETED |
| Shawn A. Smith, PE shawn.a.smith@wv.gov (304) 558-3304 | 1900 Kanawha Blvd., E. Building 5, Room A-722 Charleston, WV 25305 | Cabell County, West Virginia | 2019 |

POTESTA was retained by West Virginia Paving to provide engineering and inspection services for the construction of a six-lane upgrade of Interstate 64 from Hal Greer Boulevard to 29th Street Interchange in Cabell County, West Virginia.

Project Personnel: Dana Burns (Principal-in-Charge), Chris Grose (Project Manager), Mark Kiser (Design Engineer)

POTESTA completed the following services:

- Preparation of Quality Assurance/Quality Control Plan for roadway design plans.
- Evaluate cross slope information and prepare remedial plan to modify cross slopes to address areas of the project where the pavement cross slopes differed from design standards.
- Approximately 18 months of construction monitoring.
- Performed mobile lidar surveying and prepare record plans.



STATEMENT OF QUALIFICATIONS

4. PROJECT EXPERIENCE



4. SIMILAR PROJECT EXPERIENCE AND REFERENCES

4.2. SUCCESSFUL MANAGING OF SIMILAR PROJECTS

Our combination of leadership, organization, communication, technical expertise have allowed has allowed POTE STA to successfully manage the example projects on time and within budget. POTE STA's management has been instrumental in leading the team to achieve the projects' goals.

POTE STA follows critical success factors for each project:

- Clear project definition
- Effective planning
- Strong leadership
- Team building and collaboration
- Communication
- Adaptability
- Problem solving
- Risk management
- Time and resource management
- Quality control
- Budget control
- Stakeholder engagement

Cost Deviation in Similar Project:

There was a cost deviation for the I-64 Widening Project in Cabell County, West Virginia. The West Virginia Division of Highway's (WVDOH) request for proposal for the project indicated that (1) the normal cross slope on traveled lanes shall at a minimum match existing cross slopes and (2) the existing pavement may remain and the existing wearing surface will receive a minimum 1.5-inch overlay of hot-mix asphalt or 1.5-inch mill and fill with hot-mix asphalt. As the project team prepared our proposal for the design-build project, we made the assumption that pavement cross slopes would match existing slopes. POTE STA did not include time in our proposal to evaluate cross slope information, prepare remedial plans to modify cross slopes, or to otherwise address areas of the project where pavement cross slopes differed from design standards. Our approach was to match existing cross slopes over the length of the project. POTE STA reviewed data obtained from our design survey and data obtained from West Virginia Paving and made observations that existing cross slopes were not in accordance with current design standards.

Federal Highways Administration (FHWA) informed WVDOH that the project design must match the existing cross slopes and that current design standards for cross slopes in both tangent sections and curves would not be achieved. WVDOH and FHWA requested that a Design Exception Justification Report be prepared and submitted for WVDOH/FHWA approval.

POTE STA attended several project meetings, prepared two preliminary Design Exception Justification Reports for review. POTE STA completed a detailed analysis of existing pavement cross slopes in both eastbound and westbound directions on 50-foot intervals, reviewed and presented accident data, and prepared a narrative and data to support the request for design exceptions. POTE STA had to request payment for additional services.

STATEMENT OF QUALIFICATIONS

4. PROJECT EXPERIENCE



4. SIMILAR PROJECT EXPERIENCE AND REFERENCES

4.3. ROLES AND RESPONSIBILITIES OF THE KEY PERSONNEL

POTESTA practices project management controls to provide quality service, rapid response, and project completion that will exceed your expectations for services performed under this contract:

| ROLE | TASK |
|---|--|
| PRINCIPAL-IN-CHARGE | Responsible for contract management (administration) and shall coordinate and direct all aspects of the project. |
| PRINCIPAL-IN-CHARGE | Review the proposed project and assist the Project Manager to assemble a project team and the necessary resources. |
| PRINCIPAL-IN-CHARGE / PROJECT MANAGER/ CLIENT | The Principal-in-Charge and Project Manager will visit the site with client to review site conditions and the proposed services to be completed and guide the preparation of a detailed proposal and cost estimate. |
| PROJECT MANAGER/ CLIENT | Prepare a written proposal including a detailed scope of work and an associated |
| PROJECT MANAGER/ CLIENT | Review the proposal with the Client including a task-by-task discussion of work items and the related costs. Upon the Client's approval of the proposal, the Project Manager will arrange for the start of project activities. |
| PROJECT MANAGER | Develop a detailed step by step project work plan so that the project activities are completed in a correct manner, within budget, and on time. |
| PROJECT MANAGER | Manage day-to-day project activities for this project. |
| PRINCIPAL-IN-CHARGE | Review the project budget and schedule during performance of the project. |
| PROJECT MANAGER | Review work products at intermediate points and prior to project completion and submittal to the client. |
| PRINCIPAL-IN-CHARGE/ PROJECT MANAGER/ CLIENT | Conduct project status reports which may include weekly meetings, memos, or telephone calls with the client's project manager as required. |



5. PROXIMITY TO SITE



STATEMENT OF QUALIFICATIONS

5. PROXIMITY TO SITE



5.1. KEY PERSONNELS OFFICE AND PROJECT LOCATIONS

POTESTA will leverage its two office locations in West Virginia, situated in Charleston and Morgantown, throughout the project's execution. Team members from both offices will be accessible for on-site meetings and will also be available to participate in meetings at the WVDEP office locations based on project location.

5.1.1. KEY PERSONNEL'S OFFICE LOCATION AND STAFF

Charleston, West Virginia (67):

- Dana L. Burns, PE, PS
- D. Mark Kiser, PE, LRS
- Christopher A. Grose, LRS
- Terence C. Moran, PE
- Paul G. Maggard, PE
- Jessica L. Yeager
- Timothy R. Ferguson

Morgantown, West Virginia (12):

- Timothy M. Rice, EIT
- David B. Sharp, PE

5.1.2. KEY PERSONNEL CURRENT PROJECT LOCATION

POTESTA has included experienced personnel from our Morgantown office as the five projects for which OA services are required are believed to be located in the northern and southern regions of West Virginia. POTESTA's Morgantown office currently holds the AML Contract 5 Project North consisting of the four projects (1) Laurel Point (Travinski) Portals, (2) Left Fork of Little Sandy Subsidence, (3) McAlpin (Lambert) Landslide, and (4) Smith Run Portal. Projects included mine portal closures, stream subsidence stabilization, landslide abatement/stabilization, drainage control, demolition of dangerous mine structures, refuse regrading, and vegetation of disturbed areas. Mr. David Sharp is the Project Manager for this contract.

POTESTA's Charleston office was awarded in 2023 an AML Contract S2 consisting of 13 projects in Boone, Fayette, and Kanawha Counties, West Virginia. POTESTA is providing design, planning, realty, an construction oversight services including environmental compliance, obtaining rights of entry, mapping, surveying, geotechnical explorations, slope stabilization, design of access, portal seals, and regrades, refuse reclamation, drainage conveyances, underground mine fire reclamation, and provide construction quality assurance and quality control, resident project representative, and other engineering support and services required. Mr. Mark Kiser is the Project Manager for this contract.

Richard Mine Drainage and Morgantown Drilling/Grouting projects are located close to our Morgantown office location. Vassar Lane Vertical Opening Phase 2 is located further south just west of White Hall and Gold Resources, LLC is near Lost Creek. POTESTA's experienced AML professional staff will be available to visit each site as needed, attend meetings with WVDEP representatives at WVDEP's office locations, attend virtual meetings as necessary, and visit other locations as may be required in the execution of this contract.

APPENDIX A

AML AND RELATED PROJECT EXPERIENCE MATRIX

| PROJECT | Exp. Basis C=Corp. P=Personnel * | Additional Info Provided in EOI (page) ** | PROJECT EXPERIENCE REQUIREMENTS | | | | | | | | | | | | | | PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional | | | | | | | | | | | | | | |
|---|--|--|------------------------------------|---------------------------------|----------------------|-----------------------------------|---------------------|----------------------------|-------------------------------------|--------------------------|------------------------|---|------------------------------------|-----------------|-----------------------------|--------------------|--|---------------|-------------|----------------|----------------|---------------|------------------|-----------------|---------------|------------------|--------------|------------------|---------------|---------------|---|
| | | | Abandoned Surface Mine Reclamation | Abandoned Deep Mine Reclamation | Portal/Shaft Closure | Hydrologic/Hydraulic Design/Eval. | Remining Evaluation | Mine/Refuse Fire Abatement | Subsidence Investigation Mitigation | Hazardous Waste Disposal | Project Specifications | Water Quality Evaluation/Mitigation/Replacement | Construction Inspection/Management | Water Treatment | Equipment/Structure Removal | Stream Restoration | Geotechnical/Stability | Dana L. Burns | Tim M. Rice | David B. Sharp | Chris A. Grose | D. Mark Kiser | Terence C. Moran | Michael Sankoff | Jarrett Smith | Robbert Ammirato | Paul Maggard | Scott A. Bolyard | Chad Griffith | Peter Potesta | |
| City of Charleston - Grandview Slip Repair - Kanawha County WV | C | | | | | ✓ | | | | | ✓ | ✓ | | | | ✓ | | | M | P | | | | | | | | | | | P |
| Chemical Plant - Parkersburg, WV | C | | | | ✓ | | | | | ✓ | ✓ | | | | | | | | | | M | | | | | | | | | | |
| CEF 8 Ltd. Partnership -Artisan Heights Townhouse Dev. Stability Review | C | | | | | | | | | | | | | | | ✓ | | | P,M | | | | | | | | | | | | |
| Burlew Landslide Repair | P | | | | | | | | | | | | | | | ✓ | | | P, M | | | | | | | | | | | | |
| Bradshaw Schools | C | | | | ✓ | | | | | ✓ | | ✓ | | | | | | | | | | M | | | P | | | | | | |
| Boone County PSD - Trace Branch/Robinson Water Line Extension | C | | | | | | | | | | | | | | | | | | | | | M | | | P | | | | | | |
| Boone County PSD - Stephens Auto/Betsy Lane Water Line Extension | C | | | | | | | | | | | | | | | | | | | | | M | | | P | | | | | | |
| Boone County PSD - Six Mile Extension/Corridor G | C | | | | | | | | | | | | | | | | | | | | | M | | | P | | | | | | |
| Boone County PSD - Lick Creek Water Line Extension | C | | | | | | | | | | | | | | | | | | | | | M | | | P | | | | | | |
| Boone County PSD - Joes Creek Water Line Extension | C | | | | | | | | | | | | | | | | | | | | | M | | | P | | | | | | |
| Birchfield Landslide - Engineering | P | | ✓ | | | | | | | ✓ | | | | | | | ✓ | | | | | | | | | | M,P | | | | |
| Barrackville Mine Expansion | C | | | | ✓ | | | | | ✓ | ✓ | | | | | ✓ | | | | | | M | | | | | | | | P | |
| Baker AMD | P | | | ✓ | | | | | | ✓ | ✓ | | ✓ | | | | | | | | | | | | | M,P | | | | | |
| Avery Court | C | | | | ✓ | | | | | ✓ | | | | | | | | | M | | | | | | | | | P | | | |
| Allen Sheridan Hazardous Facility (Asbestos) | P | | ✓ | | | | | | ✓ | ✓ | | | | | | | | M | | | | | | | | | | | | | |
| 6th Street Tower Landslide Repair | P | | | | | | | | | | | | | | | ✓ | | | P, M | | | | | | | | | | | | |

* List whether project experience is corporate or personnel based or both.

** Use this area to provide specific sections or pages if needed for reference.

*** List Primary Design personnel and their functional capacity for the projects listed.

APPENDIX B



EDUCATION

M.S. Civil Engineering, 1979
West Virginia University

B.S. Civil Engineering, 1978
West Virginia University

EMPLOYMENT HISTORY

1997-Present Potesta & Associates, Inc.
1994-1997 Terradon
1979-1994 GAI Consultants, Inc.
1978-1979 West Virginia University
1976-1977 West Virginia Department of Highways
(summers)

PROFESSIONAL REGISTRATIONS

- Professional Engineer – West Virginia, Illinois
- Professional Surveyor – West Virginia

PROFESSIONAL CERTIFICATIONS

40-Hour Health and Safety Training

SERVICE ON BOARDS AND COMMISSIONS

- Environmental/Technical Committee member – West Virginia Coal Association
- Environmental Committee member – Kentucky Coal Association

- Past Board of Directors member and current Waste Team Chairman on the Environmental Safety and Health Committee – West Virginia Manufacturers Association
- Environmental and Safety Committee member – Independent Oil and Gas Association of West Virginia
- Environmental Committee member – West Virginia Oil and Natural Gas Association
- Past President – West Virginia Society of Professional Engineers, Professional Engineers in Private Practice
- Past President and past Board of Directors member – American Council of Engineering Companies West Virginia Chapter
- Past Chairman of Transportation Committee – American Council of Engineering Companies West Virginia Chapter
- Past Board of Directors member – Society of American Military Engineers Huntington Post
- Member Committee D-18 on Soil and Rock – American Society for Testing and Materials (ASTM)

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- National Society of Professional Engineers
- WV Society of Professional Surveyors

AREAS OF SPECIALIZATION

Management of design and permitting of civil, environmental, geotechnical, and mining engineering projects. Siting, designing, and permitting industrial and municipal waste disposal sites; reclamation of abandoned mine lands; and development of stormwater management plans and groundwater sampling programs. Environmental/reclamation liability assessments. Development of site plans for commercial and industrial facilities including hydrologic and hydraulic analyses. Expert witness testimony. Directs engineering division including day-to-day operation of headquarters and three branch offices concerning staffing, coordination, training, business development, and overall management of technical and support staff.

PROFESSIONAL EXPERIENCE**Abandoned Mine Lands**

Development of reclamation plans for over 70 projects including landslides, mine fires, acid mine drainage, mine subsidence, refuse piles, water supply systems, and asbestos abatement. Projects were completed for the West Virginia Division of Energy, West Virginia Division of Environmental Protection, Virginia Abandoned Mine Lands, and Ohio Department of Natural Resources and include the following:

- Duncan Hill Subsidence
- Beckley Subsidence
- Jonben (Haga) Subsidence
- Holden (Padgett) Subsidence
- Gray and Iaquina Subsidence
- St. John's Road Subsidence
- Route 19/28 Subsidence
- Mt. Hope Subsidence
- Huffman Street Subsidence
- Morgantown Airport Drainage/Subsidence
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Cheyenne Sales Company Reclamation
- Little Whitestick Refuse
- Crany Mine Dump
- Morgan Mine Fire
- MacArthur Phase 2 Subsidence
- Lake Lynn Complex
- MacArthur Mine Subsidence
- East Lynn II
- Flipping Hollow Complex
- Sundial (Hatfield) Refuse Piles
- Mill Creek Refuse Pile
- John's Branch Coal Refuse Dam
- Jessop Highway #10
- Lando (Edwards) Drainage
- Taylorville (Cantrell) Drainage
- Borderland (Matney) Portals
- Peach Ridge Complex
- Measle Fork Refuse
- Georges Creek Portals
- Putney Impoundment
- Kopperston (John's Branch) Refuse Emergency
- Marmet (Wells Drive) Landslide Emergency
- Marmet (Clark) Drainage
- Pringle Run #2
- Mountain Run Refuse and Portals
- Fairmont East Mine Drainage
- May Portal (Virginia Abandoned Mine Lands)
- Williamson (Hatfield) Landslide
- Georges Creek (Lucas) Rockslide
- Rachel Refuse
- Grass Run Refuse
- Allen Sheridan Hazardous Facility (asbestos)
- Elk City- Century- Volga Phase I/II Water Study
- Camp Mohonegan Regrade
- Comfort Run Coal Company (asbestos)
- Allen AMD
- Cora Mine Drainage No. II
- Covey Creek Mine Fire
- Vivian Refuse Pile
- Summerlee Refuse Pile (won 1996 Southern Reclamation Award)
- Kimball Refuse Pile (won 1995 Southern Reclamation Award)
- Hampden (Smith) Landslide
- Bear Run Refuse (won 1994 Ducks Unlimited award)
- Charleston (Ratcliffe) Landslide
- Garrison Complex
- Mulberry Fork (Stover) Landslide
- Courtright Highwall
- Belle Landslide
- Minden Drilling
- Kitchen/Gibson Landslide
- High Coal Tipple
- Omar Refuse Pile (won reclamation of the year award)
- Logan Drainage
- Switzer Adams/Robinson Drainage
- Follansbee Drainage
- Hawkins AMD
- Vargo Drainage
- Duck Creek Landslide
- Kistler Mine Fire
- Turner Douglas Complex
- Buffalo Creek No. 5 Refuse
- Dawmont Mine Facility
- Helen (Lewis) Refuse
- Upshur 10/15 Drainage
- Webster County Water Studies
- Jaeger Water Feasibility Study
- Burnwell, Standard, and Collinsdale Water Line Extension
- Clay-Roane PSD Water Feasibility Study
- Burnsville PSD Water Feasibility Study
- Brandonville/Pisgah Water Feasibility Study
- Cuzzart/4-H Water Feasibility Study
- Hudson/Mt. Nebo Water Feasibility Study
- Phase I Water Studies Brooke and Fayette Counties

- Gauley River PSD – Belva
- Hammond PSD – Wellsburg
- New Haven Chamber of Commerce – Hico
- Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln, and Logan Counties)
- Godby Branch Phase II Water Study
- Madison Street Portals/Fairview Route 218 Portals
- Putnam County Phase I Water Studies
 - Heizer Creek
 - Manila Creek
- Boone County Phase I Water Studies
 - Jeffrey Area – Jeffery, Hewett Creek, Seasonal
 - Ottawa Area – Ottawa, Greenview, Missouri Fork, Meadow Fork, Aleshire Branch, Dent Fork, Mike’s Fork
- Phase II Water Feasibility Studies
 - Logan County – Cow Creek, Crooked Creek, Upper Rum Creek
- Phase I Water Studies for Logan County
 - Pecks Mill – Godby Heights Communities
 - Cow Creek – Sarah Ann – Crystal Blocks Communities
 - Upper Rum Creek Community
 - Clothier Community
 - Crooked Creek Community
 - Godby Branch
 - Whitman Creek – Holden Project
- Beaver Creek Waterline Extension: Phase II Water Project
- Cassity Fork Water Supply Extension: Phase II Water Project

Mining

Subsurface explorations, subsidence monitoring, review of a coal reserve analysis, site plans, pre-blast/subsidence surveys, hydrologic analyses, preparation of mining permits, and design and permitting of coal slurry impoundments for coal mining companies in West Virginia, Virginia, Kentucky, Ohio, and Maryland.

- Peabody Coal Company
- Eastern Associated Coal Company
- Southern Ohio Coal Company
- Island Creek Corporation
- Massey Coal Services
- Appalachian Mining, Inc.
- Oneida Coal Company
- Old Ben Coal Company
- Mettiki Coal Company
- Shafer Brothers Coal Co.
- LP Minerals

Management of fly ash utilization permits for various coal companies:

- Rawl Sales, Inc.
- Elk Run Coal Company
- Appalachian Mining, Inc.
- Peerless Eagle Coal Company

Managed subsurface investigation, foundation design, and development of mine stabilization program for NASA’s Independent Verification and Validation Center in Fairmont, West Virginia.

Monongahela Power Company – Development of fly ash flowable fill specification for submittal to WV Division of Highways in Fairmont, West Virginia.

Computer modeling of groundwater movement of contaminants resulting from underground coal gasification.



EDUCATION

B.S. Civil Engineering, 1984
West Virginia University

EMPLOYMENT HISTORY

1997-Present Potesta & Associates, Inc.
1995-1997 Terradon Corporation
1984-1995 GAI Consultants

PROFESSIONAL REGISTRATION

- Professional Engineer – West Virginia
- Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATION

- Hazardous Waste Site Operations and Superfund
- Worker Protection Training, 40-Hour Training
- Supervisory Training and Annual Refreshers
- Troxler Nuclear Densometer Certification

SERVICE ON BOARDS AND COMMISSIONS

Commissioner – Sissonville Public Service District

AREAS OF SPECIALIZATION

Environmental assessments, environmental sampling, and remedial programs, conceptual and final designs for chemical, utility, and municipal solid waste disposal sites, including liner systems, leachate management systems,

stormwater management systems, operational plans, capping/closure systems, and abandoned mine land reclamation projects, sludge stabilization and basin/pond closure projects, environmental permitting, hydrologic and hydraulic analyses, and quality assurance/quality control monitoring.

PROFESSIONAL EXPERIENCE

Abandoned Mine Lands

West Virginia Division of Environmental Protection (WVDEP) Abandoned Mine Lands (AML) Reclamation – Project engineer/project manager for open-end contract from 1988 through 1995. Continued after 1995 with AML projects for WVDEP AML including reclamation designs, preparation of plans, specifications, bid documents, and permitting. Projects included:

- Duncan Hill No. 1 and No. 2 Subsidence
- Urso Subsidence
- Jonben Subsidence
- Doug Gray Subsidence
- Turner Douglas Complex
- Omar Refuse Piles (project won reclamation of the year award)
- Bear Run Refuse (project won 1994 Ducks Unlimited award)
- Kimble Refuse Pile (project won 1995 Southern Reclamation Award)
- Vivian Refuse Pile
- Summerlee Refuse Pile
- Godby Branch Water Extension
- Williamson (Elias) Landslide
- Lefthand Fork Burning Refuse
- Belle Landslide
- Harris Acid Mine Drainage
- Numerous Phase I and Phase II Water Quality Studies/Survey
- Williamson (Hatfield) Landslide
- Taylorville (Cantrell) Drainage
- Sundial Refuse
- Sundial (Hatfield) Refuse Piles
- St. John's Road Subsidence
- Rachel Refuse
- Putney Impoundment
- Pringle Run No. 2
- Peach Ridge Complex
- Mountain Run Refuse and Portals

- Mill Creek Refuse Pile
- Measle Fork Refuse
- Marmet (Wells Drive) Landslide
- Marmet (Clark) Drainage
- MacArthur Mine Subsidence
- MacArthur Phase 2 Subsidence
- Little Whitestick Refuse
- Lando (Edwards) Drainage
- Kopperston (John's Branch) Refuse
- John's Branch Coal Refuse Dam (Kopperston)
- Jessop Highway #10
- High Coal Tipple
- Harris AMD
- Gray and Laquinta Subsidence
- Grass Run Refuse
- Godby Branch Waterline Extension
- Georges Creek Portals
- Georges Creek (Lucas) Rockslide
- Garrison Complex
- Flipping Hollow Complex
- Fairmont East Mine Drainage
- East Lynn II
- Crany Mine Dump
- Courtright Highwall
- Cora Mine Drainage No. II
- Charleston (Ratcliffe) Landslide
- Cassity Fork Waterline Extension
- Camp Mohonegan Regrade
- Buffalo Creek No. 5 Refuse
- Borderland (Matney) Portals
- Beckley Subsidence
- Allen AMD

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

WVDEP-AML – Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs, and preparation of summary reports.

Buffalo Creek No. 5 – Subsurface investigation, surveying coal refuse reprocessing evaluation and report, and design of reclamation plan to stabilize an approximately 15-acre refuse pile at Buffalo Creek No.

5 in Marion County, West Virginia. Developed plans, specifications, cost estimates, and calculations brief for drainage control and regrading plan.

Reclamation Plan – Subsurface investigation, surveying, and design for reclamation of three coal refuse piles and six mine entries. The design included the replacement of a water well and related supply piping for the Town of Kimball. Completed preparation of plans, specifications, cost estimate, coal refuse report, West Virginia Department of Health permit for a new well, and other supporting documents for reclaiming this large site with over ½ million cubic yards of regrading.

Reclamation Plan – Subsurface investigation, surveying, coal refuse reprocessing evaluation, water quality monitoring, and design of a reclamation plan for coal refuse piles, unreclaimed high walls, and slurry and water treatment ponds in Lewis County, West Virginia. Plans, specifications, cost estimates, and calculation briefs were completed for the project.

Mining

Eastern Associated Coal Corporation – Coal ash utilization study including five mining operations and four coal ash sources in Virginia and West Virginia. The study evaluated both surface and underground beneficial uses of ash to neutralize acidic drainage.

Permitting – Project manager/engineer for the preparation of coal ash utilization permits for West Virginia mining operations. Permits included placing ash in the embankment of refuse disposal sites and placing ash with spoil backfill.

- Elk Run Coal Company
- Appalachian Mining, Inc.
- Peerless Eagle Coal Company
- Rawl Sales and Processing Company

Pace Carbon Fuels, LLC. – Consulting and permitting for the development of seven coal-based synthetic fuel manufacturing plants in West Virginia, Indiana, Kentucky, and Illinois. The project included obtaining pre-construction and operating permits for air, water, and mining for the manufacturing plants and the feedstock coal recovery operations. Assignments included permit application preparation, assistance in locating and evaluating coal feedstock sites, construction monitoring, Phase 1 environmental site

assessments, and other miscellaneous engineering consulting functions.

Pennsylvania Electric Company – Yearly construction designs for lined coal ash and coal refuse disposal sites at the Keystone and Conemaugh power stations, including a synthetic liner system, groundwater and surface-water control, leachate collection, landfill development, and haul road design. Construction quantity and cost estimates and development of IBM-PC software for evaluating the storage capacity of the disposal sites.

CHRISTOPHER A. GROSE, L.R.S.

Senior Engineering Associate



EDUCATION

M.S. Geological Engineering, 1990
University of Missouri-Rolla

B.S. Civil Engineering, 1988
West Virginia Institute of Technology

EMPLOYMENT HISTORY

| | |
|--------------|--|
| 1997-Present | Potesta & Associates, Inc. |
| 1994-1997 | Terradon Corporation |
| 1990-1994 | GAI Consultants, Inc. |
| 1989-1990 | University of Missouri-Rolla |
| 1989 | Triad Engineering Consultants (summer) |
| 1988 | West Virginia Institute of Technology |
| 1983-1988 | Clint Bryan & Associates Architects (summers) |

PROFESSIONAL REGISTRATIONS

Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATIONS

- Hazardous Waste Site Operations and Superfund Worker Protection Training
- American Red Cross Standard First Aid and CPR
- Troxler Moisture-Density Gauge

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- Association of Engineering Geologists
- Society of America Military Engineers

AREAS OF SPECIALIZATION

Geological/Geotechnical engineering related to subsurface exploration studies, soil and rock slope design, landslide causation studies, foundation system design, surface/subsurface hydrogeology, ground subsidence, contaminant transport, and groundwater flow modeling. Planning, design, and permitting of natural gas production well pads and access roads. Geological study of hazardous waste remediation sites, CERCLA/SARA, RI, and FS report compilation, geological and geotechnical aspects of siting and design of municipal and industrial waste landfills.

PROFESSIONAL EXPERIENCE

Abandoned Mine Lands

WVDEP Abandoned Mine Lands and Reclamation – Preparation of Phase I and II water studies throughout the state of West Virginia. Work items included interviews of area residents to determine major quality and quantity problems, field and records research to determine the location of known pre-law mining activity (which could potentially affect groundwater quality), collection of groundwater samples, and design of water distribution facilities.

WVDEP Abandoned Mine Lands and Reclamation – Subsurface investigation to determine the extent of a landslide for Courtright Highwall AML Project in Bridgeport, West Virginia. Field surveying was completed to establish topographic mapping and control, and subsequent design of landslide repair alternatives. The design ultimately selected included a reinforced slope using a stabilizing grid. Landslide contained 400,000 cubic yards of material.

WVDEP Abandoned Mine Lands and Reclamation – Subsurface investigation, surveying, and design for reclamation of a large coal refuse pile and two mine entries for the Vivian Refuse Pile AML Project in Vivian, West Virginia. Plans, specifications, cost estimate, coal refuse reprocessing evaluation, and supporting documents

for regrading over 150,000 cubic yards of refuse, surface water control, mine seals, and riprap toe protection were completed.

WVDEP Abandoned Mine Lands and Reclamation – Subsurface investigation, surveying, and design for reclamation of three coal refuse piles and six mine entries for the Kimball Refuse Pile AML Project in Kimball, West Virginia. The design included the replacement of a water well and related supply piping for the Town of Kimball. Completed preparation of plans, specifications, cost estimate, coal refuse reprocessing report, permit for a new well, and other supporting documents for reclaiming this large site with over ½ million cubic yards of regarding.

WVDEP Abandoned Mine Lands and Reclamation – Project Engineer for the Mulberry (Stover) AML Landslide Project in Fayette County, West Virginia. Work included a difficult subsurface investigation, design of a remediation of landslide associated with abandoned mines, and preparation of plans and specifications for a reclamation project.

WVDEP Abandoned Mine Lands and Reclamation – Project Engineer for assessment of the Covey Creek Mine Fire AML Project Boone County, West Virginia. Work included subsurface investigation and temperature assessments inside an abandoned burning deep mine.

Geotechnical

Responsible for the development of geotechnical and geological recommendations as well as the development of stabilization designs for many failed soil/rock slopes in West Virginia. This work included initial site reconnaissance visits, the development of a subsurface exploration study and materials testing program, evaluation of stabilization alternatives, and construction plan preparation.

Travelers Insurance/City of Charleston – The Project included a subsurface exploration study, engineering design, and global stability evaluation of a failed soil slope in a residential neighborhood on Bona Vista Drive for the City of Charleston, West Virginia. The slide was caused by a water main break along an existing residential neighborhood paved roadway. The recommended slope stabilization method was to install a soldier beam and lagging retaining wall along an existing paved roadway (supporting the buried utilities) with the remainder of the

failed slope below being removed and replaced with compacted soil backfill.

West Virginia Division of Highways – Geotechnical engineer on geotechnical/landslide master services agreement for on-call services.

Expert Witness

Forensic study, expert testimony, and legal support related to the failure of numerous soil/rock slopes throughout West Virginia. This work included an extensive review of relevant project case documents, site reconnaissance visits, interviews with project personnel, and deposition testimony.

Lynn Elementary School – Technical insight and recommendations to attorneys representing an adjacent property owner related to the contributing factors related to the formation and continued failure of an excavated soil slope. The toe of the slope was excavated during the site development of the proposed elementary school site in Lynn, West Virginia.

Crichton & Crichton – Landslide formed along a wooded hillside below a residential driveway on Pleasant Lane in Wood County, West Virginia. The slope failure was noted during a substantial leak in an existing water main. The work included a review of case documents, interviews with various residents (plaintiffs in the case), and the development of supporting causation theory for the formation of the landslide. The work also includes the development of repair alternatives and associated construction estimates to be considered during the dispute hearing between the plaintiff and defendants.

Chesapeake Appalachia/Law Office of Jeffrey Mahal (R. Baker Natural Gas Production) – Provided technical study and file review of case documents related to the grading contractor’s construction work efforts to prepare a well pad for the installation of a series of horizontal gas production wells in Marshall County, West Virginia. The work included the removal of soil and rock from an existing hilltop. The resulting material was placed or wasted in a series of three side hill files along the edges of the resulting well pad. All three of these fills experienced progressive and ongoing failures following the construction effort. Reviewed design documents, construction records, and details related to several repair attempts to result in the development of a professional

opinion related to the various factors contributing to the multiple slope failures.

Nationwide Trial Division/Khan & Wheeler (Ross v. WVAV Landslide Case) – Provided professional opinion related to the formation of a slope failure along the Elk River immediately behind several commercial and residential homes near the Town of Elkview, West Virginia. The initial landslide occurred immediately following a main waterline break along the front of the structures. The regressive and prolonged failure continued over several weeks and ultimately damaged a gravity sanitary line as well as several of the structures. Work included an extensive review of several years of case records provided for the case including a review of existing utility maintenance records, historic climatologic data, river stage information, and depositional testimony from many of the affected parties. A summary of a professional opinion report was prepared describing several factors including lack of maintenance storm culverts in the area as well as an increase of saturation along the slope from the failed water main as the cause of the slide. It was determined that several of the structures were supported on previously placed fill material which was placed along the river bank in the early 1900's in conjunction with the initial roadway construction. This coupled with the lack of maintenance and the presence of deteriorated drainage culverts likely contributed to the slope failure. The initial installation of this fill material was determined through an extensive study of the historic topographic mapping of the area.

City of Charleston – Geotechnical assessment and development of regrading construction plans for the repair of a failed soil slope below Grandview Drive for the City of Charleston, West Virginia. The slope failure occurred between two adjacent residential structures and encompassed a sanitary sewer main as well as a storm drainage pipe receiving storm drainage from Grandview Drive. The stabilization plan involved the removal of the failed mass beginning at the toe of the slope and then working progressively upslope to result in a stabilized and regraded slope surface. The work required the removal of all failed material to the underlying rock surface and included the installation of a shot rock toe buttress which was installed along a natural topographic bench near the toe. Following completion of the work the affected utilities were installed either below the fill material or outside the regraded slide area.

Responsible for the design, management, and inspection of a geotechnical investigation of a proposed five-mile rail extension located in Nicholas County, West Virginia. The investigation included the study and design of planned rock cuts, and track foundation materials.

General Services Administration – Site evaluation, including continuous HNU scanning of collected soil samples and installation of piezometers for two proposed sites near Charleston, West Virginia.

West Virginia Department of Environmental Protection – Foundation design for a proposed 1,000,000-gallon potable water storage tank and valve pit near Cassidy, West Virginia.

Preparation of foundation investigations for several large structures including a parking garage and student housing complex at Marshall University in Huntington, West Virginia. Tasks included the development of a subsurface exploration program, soil/rock sampling, testing program, and preparation of a final geotechnical report.

Mining

West Virginia Division of Environmental Protection – Engineering evaluations, including collection and analysis of core samples, for possible subsidence-related fracturing of several areas potentially affected by mining subsidence.

Peabody Coal Company – Subsidence evaluation and slope monitoring, using extensometers and tilt plates located on the slope face, of a 60-foot road cut experiencing subsidence-induced fracturing near Kopperston, West Virginia.

Mingo Logan Coal Company – Completion of formal subsidence control plan for a proposed 14,000-acre long-wall mining operation at the Mountaineer Mine in Wharncliff, West Virginia.

Peabody Coal Company – Evaluation of potential stream flow attributed to long-wall deep mining subsidence in minimal overburden areas in southern West Virginia. Responsibilities included the review of mine maps, stream reconnaissance studies, and the establishment of three in-stream V-notch weirs. The weirs were monitored and maintained during a seasonal study period to generate direct flow measurements. The WVDEP also prepared a

study for the site that was reviewed, and comments prepared for the results.

Evaluation of numerous failed soil fill slopes to determine probable failure mechanisms to develop remediation alternatives. Responsible for the development of regrading plans which included subsurface drains, benching schemes, and toe buttresses.

Completion of several environmental assessments for coal properties. Work included an emphasis on both environmental and reclamation liabilities associated with pre- and post-SMCRA sites on the properties.

- Massey Coal Services, Inc.
- Eastern Associated Coal Corporation

West Virginia Department of Environmental Protection – Engineering design of several wetland habitat areas relating to the effective remediation of a coal refuse disposal site in Glenville, West Virginia.

Preparation of several Article 3 surface mining permit applications for various West Virginia coal companies:

- Eastern Associated Coal Corporation – Proposed deep mine using longwall mining techniques in Boone County, WV, located in the Eagle coal seam.
- Hobet Mining, Inc. – Deep mine using conventional mining techniques near Madison in Boone County, WV. Located in the No. 2 Gas (Campbell's Creek) coal seam.
- Rum Creek Coal Sales – Deep mine using conventional mining techniques near Logan in Logan County, WV. Located in the Alma coal seam.
- Eastern Associated Coal Corporation – Surface mine mountain top removal techniques near Twilight in Boone County, WV. Located in the Coalburg and Lower Kittanning Seams.



EDUCATION

- M.S. Civil Engineering, 1989
West Virginia University
- B.S. Civil Engineering, 1987
West Virginia University

EMPLOYMENT HISTORY

- 1999-Present Potesta & Associates, Inc.
1989-1999 GAI Consultants
1987-1989 West Virginia University
1985-1987 West Virginia Division of Highways
(summers)

PROFESSIONAL REGISTRATION

Professional Engineer – West Virginia, Virginia

PROFESSIONAL CERTIFICATION

- Troxler Moisture-Density Gauge
- American Red Cross Standard First Aid and CPR
- OSHA 40-Hour Hazardous Waste Worker Training

AREAS OF SPECIALIZATION

Water and wastewater engineering and permitting; preparation of studies, design calculations, drawings, technical specifications, and cost estimates; bidding phase services; and construction phase services, including construction administration.

PROFESSIONAL EXPERIENCE

Abandoned Mine Lands

Project Manager/Project Engineer for the design and development of reclamation plans and feasibility studies for more than 60 abandoned mine land projects for the WVDEP, Office of Abandoned Mine Lands and Reclamation, and the Commonwealth of Virginia, Abandoned Mine Lands Program. Tasks included:

- Client/contract management
- Mapping development
- Hydrologic evaluations
- Reclamation design
- Subsidence evaluation and abatement
- AMD evaluation and abatement
- Hydraulic design
- Geotechnical investigations
- Preparation of drawings, specifications, and cost estimates
- Preparation of Public Lands Corporation, U.S. Army Corps of Engineers, West Virginia Division of Highways, and NPDES permit applications.

West Virginia Division of Environmental Protection – Project Manager for Left Hand Fork reclamation project. The design included 1,600 feet of stormwater ditch, 1,900 feet of riprap toe protection, culverts, relocation of a road, and regrading of refuse. Regulatory approval was obtained. Deliverables included drawings, specifications, and a cost estimate

West Virginia Division of Environmental Protection – Project Manager for reclamation design for the Owings Mine Complex site in Harrison County, West Virginia. The design included 8,300 feet of stormwater ditch (including relocation of stream), 1,000 feet of culvert/subsurface drains, manholes, and a box culvert in addition to reclamation of refuse piles and sealing of mine portals. Deliverables included drawings, specifications, and a cost estimate. Included was interaction with the WVDOH, and obtainment of USCOE approval for relocation of a stream.

West Virginia Division of Environmental Protection – Project Manager for the Majesty Mine Complex project. The design included stormwater ditches, stream relocations, culverts, regrading of refuse piles, and sealing of mine portals. Regulatory approval from the WVDOH

and USCOE was obtained. Deliverables included drawings, specifications, and a cost estimate.

West Virginia Department of Energy, Abandoned Mine Lands – Stabilization program for mine subsidence at the Doug Gray Site in Fairmont, West Virginia, including a subsurface investigation, development of an injection plan, preparation of construction quantities, and a pre-bid meeting.

West Virginia Division of Environmental Protection – Project Manager for stabilization program for mine subsidence at the Glen Morgan (Lilly) site in Raleigh County, West Virginia, and the Mainella Site in Marion County, West Virginia. Included were the development of an injection plan, construction drawings and specifications, and cost estimates.

Assisted on St. John’s Road Subsidence Project, Brooke County, West Virginia. Subsurface investigation and development of specifications and construction drawings for remedial work on mine subsidence affecting 30 acres and 50 homes were conducted.

Project Engineer for Holden (Padgett) Subsidence Project, Whitman Junction, West Virginia. The project included a subsurface investigation to determine the extent of mine workings and, the development of a stabilization plan, including drainage channels/pipes and mine seals. Construction documents were prepared, and participation in pre-bid and pre-construction meetings was completed.

Assisted on Jonben (Haga) Subsidence Project, Jonben, West Virginia. Subsidence control on an emergency basis including sinkhole backfilling and drainage control. The project included drilling to determine the extent of mining and subsidence, field surveying to develop topographic mapping, and the development of a backfilling and drainage plan.

West Virginia Division of Environmental Protection – Project Manager for 380 residence water supply inventory (including sampling) as part of the Phase II Water feasibility study for the New Haven Study Area in Fayette County, West Virginia.

West Virginia Division of Environmental Protection – Project Manager for 600 resident water supply inventory (including sampling) as part of the Phase II Water feasibility study for the Mill Creek Study Area in Boone, Lincoln, and Logan Counties, West Virginia.

West Virginia Division of Environmental Protection – Project Manager for 200+ residence water supply inventory as part of the Phase II water feasibility study for the Gauley River Study Area in Fayette and Nicholas Counties, West Virginia.

West Virginia Department of Energy – Abandoned Mine Lands – Project Manager for Phase II groundwater contamination study for drinking water wells in the Crooked Creek, Cow Creek, and Upper Rum Creek communities in Logan County, West Virginia. Work included water supply inventories of 250+ residences, collection and analyzing surface and well water samples, researching water quality records, designing and costing remedial measures, and calculating the percent of wells that had been degraded by mining activity.

West Virginia Division of Environmental Protection – Project Manager for the design of site drainage along WV Route 16/2 (including channels and culverts), reclamation of two landslide areas along WV Route 16/2, and a soldier (pile and lagging) wall to support a slip in WV Route 16/2. In addition, responsibilities included compiling technical specifications, including WVDOH standard specifications, and communications with WVDOH for design approval.

West Virginia Division of Environmental Protection – Project Manager for Harris AMD reclamation project. The design included 400 feet of ditch, one culvert, manholes, 500 feet of subsurface drains, and sealing of mine portals. Deliverables included drawings, specifications, and a cost estimate.

West Virginia Division of Environmental Protection – Project Manager for evaluation and design of passive AMD treatment system at the Owings Mine Complex site in Harrison County, West Virginia. Included were detailed sampling plans, issuance of pre-construction water quality reports, and preparation of construction drawings, specifications, and cost estimates.

Mining

Estimation of AMD treatability and treatment costs at multiple mining sites in West Virginia as part of pre-acquisition site assessments, including records review of 303(d) TMDL list.

Eastern Associated Coal Corporation – Project Manager for oversight of water supply inventory of structures over a 3200-acre SMCRA permit expansion (during 1994-1995) of the Federal No. 2 longwall deep mine in Monongalia County, West Virginia. Included were negotiations with the West Virginia Division of Environmental Protection (WVDEP) regarding the locations of permanent surface and groundwater monitoring points.

Eastern Associated Coal Corporation – Project Manager for the design of Guyses Run AMD facility. The design included a 3,000,000-gallon pond, 180 feet of relocated stream, and stream crossings. Included was regulatory approval from USCOE, PLC, and WVDEP. Deliverables included drawings, specifications, and a cost estimate.

Old Ben Coal Company – Project Engineer for preparation of PHC statement for SMCRA permit application for the Nile Stone Slurry Impoundment in Mingo County, West Virginia.

Pre-mining, pre-blast surveys, including field investigations and report preparation, for various coal companies in Ohio, Virginia, and West Virginia.

- Elk Run Coal Company
- Island Creek Coal Corporation
- Oneida Coal Company
- Southern Ohio Coal Company

Eastern Associated Coal Corporation – Project Manager for preparation for SMCRA Incidental Boundary Revision and NPDES permit modification applications for the addition of a 3.7-million-gallon mine drainage treatment pond at Martinka Coal Company's Guyses Run AMD facility.

Southern Ohio Coal Company – Project Manager for water supply interviews with occupants of 70 structures in Gallia, Meigs, and Vinton Counties, Ohio.

Project Engineer for the grouting project to abate acid mine drainage at the Omega Mine Complex project in Monongalia County, West Virginia. The project involved the collaboration of private/public agencies to provide resources for an approximate \$2,500,000 project.

Meadow River Coal Company – Project Manager for water supply inventory of 37 structures over a deep mine in Fayette County, West Virginia, and preparation of

subsequent SMCRA permit revision to incorporate water supply inventory to an existing permit.

Eastern Associated Coal Corporation – Project Engineer for identification of permanent groundwater and surface water monitoring points including negotiation of locations with the West Virginia Division of Environmental Protection (WVDEP) for 1,750-acre and 3,200-acre SMCRA permit expansions of the Federal No. 2 longwall deep mine in Monongalia County, West Virginia.

Rum Creek Coal Sales, Inc. – Project Engineer for preparation of probable hydrologic consequences (PHC) statement for SMCRA permit application for below drainage deep mine in Logan County, West Virginia.

Eastern Associated Coal Corporation – Project Engineer for preparation of probable hydrologic consequences (PHC) statement for SMCRA permit application for 5000+ acre Montcoal Eagle longwall deep mine, including the establishment of permanent surface and groundwater monitoring points.

Ranger Fuel Corporation – Project Manager for SMCRA Incidental Boundary Revision (IBR) for new face-up and portal at the Clinton No. 4 mine in Boone County, West Virginia.

Southern Ohio Coal Company – Completion of drawdown field tests and estimation of well yields for over 12 wells.

Southern Ohio Coal Company – Project Manager for preparation of SMCRA permit application for the remaining life of the Meigs No. 2 and No. 31 mines in Ohio, including an inventory of water supplies of over 200 residents.

Ranger Fuel Corporation – Design of an access road for a new deep mine portal at the Clinton No. 4 Mine in Boone County, West Virginia. The project included site grading, hydrology calculations, channel and culvert design, cut/fill balance, and selection of road surfacing material. Deliverables included drawings and specifications. Regulatory approval was obtained.

EDUCATION

B.S. Civil Engineering, 1994
Virginia Polytechnic Institute & State University

EMPLOYMENT HISTORY

2022-Present Potesta & Associates, Inc.
2019-2022 Gress Engineering, PC
2018-2019 King General Contractors
2017-2018 Appalachian Technical Services
2016 Rogers Group, Inc.
2001-2016 Gress Engineering, PC
1999-2001 Appalachian Technical Services

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia, Virginia,
Kentucky, Tennessee

TRAINING/RELEVANT COURSE WORK

- 2011 – River Restoration and Natural Channel Design (Rosgen)
- 2010 – Level III River Assessment and Monitoring (Rosgen)
- 2009 – Level I Applied Fluvial Geomorphology (Rosgen)
- 2009 – Level II River Morphology and Applications
- 2008 – Stream Morphology Assessment (North Carolina State University)
- 2008 – Natural Channel Design Principals (North Carolina State University)
- 2008 – HEC-RAS for Stream Restoration (North Carolina State University)

AREAS OF SPECIALIZATION

Civil engineering projects include land development, water distribution, wastewater collection systems, stormwater management, coal mining, and recreational trails. Design work includes site layout, erosion, and sediment control, cut and fill, hydraulic calculations, and cost estimates. Permitting and compliance activities include site inspections, meetings with regulatory officials, compliance training, environmental preparedness documents, stormwater, air quality, and mining permits.

PROFESSIONAL EXPERIENCE

Abandoned Mine Lands

Virginia Department of Energy – Project Manager for Ison Portals Project to evaluate the reclamation of several mine portals (at least six), the eroding out slope below the mine portals, an area of gob adjacent to the mine portals, and approximately 2,400 linear feet (LF) of clogged stream channel. The clogged stream channel conveys water to a recreational pond that has been impacted by abandoned mine land (AML) related sediment. This pond will be evaluated for needed repairs, sediment removal, and upgrades.

Virginia Department of Mines, Minerals and Energy – Reclamation design for Klondyke Portals Project including a retaining wall between the stream and the portals in Russell County, Virginia. Work included site surveying, geotechnical investigations, preparation of plans and specifications, and assistance with bidding.

Virginia Department of Mines, Minerals and Energy – Design of open limestone channels and improvements to an existing wetland for treatment of acid mine drainage at the Baker Abandoned Mine Drainage site in Lee County, Virginia. Work included site surveying, wetland delineation, preparation of plans and specifications, and assistance with bidding.

Mining

Design, permitting, and environmental compliance services related to aggregate mining and asphalt production in Virginia, Tennessee, North Carolina, and South Carolina.

Logan County Commission – Engineering services related to the transfer of the Mining Certificate of Approval to an EE Non-Coal Certificate of Approval at the Rockhouse Creek Dam near Mifflin in Logan County, West Virginia. Work included the update of the Monitoring and Emergency Action Plan, inspection of the upstream and downstream sides of the embankment and primary and secondary spillways and documentation of existing conditions, and development of Maintenance Plan.

EDUCATION

B.S. Civil Engineering, 1982
West Virginia University

EMPLOYMENT HISTORY

2014-Present Potesta & Associates, Inc.
2006-2014 Hatch Mott MacDonald
1987-2006 CTL Engineering
1978-1987 George E. Pigott & Associates

PROFESSIONAL REGISTRATIONS

Engineer in Training – West Virginia

TRAINING/RELEVANT COURSE WORK

Natural Stream Channel Design Levels I-IV

AREAS OF SPECIALIZATION

Diversified experience with civil, environmental, surveying, and geotechnical engineering projects for public, state, and private clients with an emphasis on project management and coordination of engineering services and environmental services, including permitting and compliance, hydraulic and hydrological analysis, slope stability analysis, geotechnical design, Phase I Environmental Site Assessments, stormwater management, municipal water and sewer design, civil site design, water resources analysis/design, natural gas production well pads and roads, and construction monitoring/observation.

PROFESSIONAL EXPERIENCE

Abandoned Mine Lands

Project Manager/Senior Engineer for 80 abandoned mine lands projects in West Virginia, Maryland, Ohio, and Pennsylvania. These projects include reclamation design, mine fire and burning refuse pile extinguishment, impoundments, slope stability, mine sealing, acid mine drainage abatement, subsidence investigations and stabilization plans, landslides, water feasibility studies, and watershed studies. These services also included detailed design drawings and specifications for construction, as well as assisting with the bidding and any construction issues of each project.

West Virginia Department of Environmental Protection, Pendleton Creek Strip, Thomas, Tucker County, West Virginia - Project Manager responsible for reclamation design and stream remediation of an abandoned surface mine. Geosynthetic liners and Natural Stream Design techniques were used to prevent headwater base flows from entering an abandoned deep mine through mine voids and subsidence features. Existing wetlands were protected utilizing staged culverts and low water crossings. This project also included ARRI reforestation techniques and riparian habitat replacement.

West Virginia Department of Environmental Protection, Taylor Creek Impoundment – Project Manager responsible for reclamation of a 120-acre burning refuse pile and a 24-acre impoundment in Clay County, West Virginia. This work involved the reclamation and extinguishment of the burning refuse pile, dewatering of the impoundment, subsurface investigation of burning material to depths of approximately 110 feet, and the design and reconstruction of approximately 3,400 feet of Taylor Creek.

West Virginia Department of Environmental Protection, Blackwater River Beaver Creek Treatment Project – Project Manager responsible for the rehabilitation of an existing concrete dam, the installation of rotating drums, and a limestone slurry treatment facility on the Blackwater River in Tucker County, West Virginia. This was a cooperative project with WVDEP and WVDNR and has been recognized by “Trout Unlimited” and “Outdoor Life”. This project has successfully transformed a formerly dead section of the Blackwater River into a high-quality trout fishery and was recognized by the US Department of Interior, Office of Surface Mining, as the 1999 Appalachian Region Award Winner.

West Virginia Department of Environmental Protection – Decker’s Creek Watershed Study, Monongalia and Preston County, WV - Project Manager responsible for a comprehensive study of the watershed to determine if improvements can produce a sustainable fishery. Graphic Information Systems (GIS), stream invertebrate data, water quality data, and in-stream limestone sand test sites were used to complete the investigation. The Decker’s Creek Watershed has a 60 square mile drainage area impacted by both abandoned surface and abandoned deep mines causing the upper reaches of the stream to be net acidic, with elevated concentrations of iron.

West Virginia Department of Environmental Protection, Brushy Fork Waterline Feasibility Study – Project Manager for the hydrologic study of a mine-impacted watershed for the design of a public waterline extension to serve the rural community in Harrison County, West Virginia. The study included documentary, field assessment, and laboratory review of conditions to determine eligibility.

West Virginia Department of Environmental Protection, Amigo Smokeless Refuse Pile – Project Manager for the stabilization of a 300-foot-high coal slurry impoundment and refuse pile in Wyoming County, West Virginia. This pile was placed using an aerial tram and consisted mainly of coarse refuse. The primary drainage structures had failed, and the slope was deteriorating. Several residences and active railroads were within the breach zone.

West Virginia Department of Environmental Protection, Moundsville Water Supply Study – Project Manager responsible for an investigative study of the freshwater well field for the City of Moundsville situated along the Ohio River in Wood County, West Virginia. Increasing levels of manganese contamination were deteriorating the quality of this aquifer. A site investigation study was performed to determine the location and effects of mining activities on the local groundwater aquifers. Existing mine maps, geologic information, and background data were reviewed. Geotechnical investigations and aquifer testing were performed to determine the location, depth, and extent of the potential contaminants.

Maryland Department of the Environment, Shalimar Limestone Doser – Project Manager responsible for the design of an AquaFix doser treating AMD runoff from a reclaimed surface mine discharging to the Potomac River basin in Garrett County, Maryland. The design included a silo, foundation, and maintenance provisions for this water-driven doser.

Maryland Department of the Environment, Jackson Mountain Mine Fire – The project included engineering design services and construction documents necessary to determine the location and characteristics of a mine fire and then design an excavated cutoff barrier to prevent the crop line fire from encroaching on the roadway and an existing high-pressure gas line in Alleghany County, Maryland. Additional services included the stabilization of an existing landslide that had occurred as a result of the mine fire.

Maryland Department of the Environment, Kingsland Mine Pool Investigation – This project included an engineering assessment of the existing conditions of a flooded, abandoned deep mine and its blowout potential as related to public safety concerns of the residents in Alleghany County, Maryland.

Mining

Project Manager for surface and deep mining activities associated with coal and aggregate mining facilities. Projects include civil site design, geotechnical, surveying, environmental compliance, permitting, stream monitoring, and mitigation services.

Shannopin Materials, LLC, Shannopin Dock Site, Dilliner – Project Manager responsible for the PADEP permitting necessary for the re-opening of an abandoned stockpile area, dock site, and rail load-out facility in Greene County, Pennsylvania.

Dana Mining Company, 4-West Mine, Eisenhower Shaft Site – Project Manager responsible for PADEP permitting, necessary for the installation of a mine shaft at the 4-West Deep Mine in Mt. Morris, Greene County, Pennsylvania.

Dana Mining Company, Prime No. 1 Deep Mine – Project Manager responsible for PADEP permit revisions necessary for an extension of the mining limits and affected area of an existing deep mine facility in Mt. Morris, Greene County, Pennsylvania.

Coresco, LLC, Cobra Refuse Dump #4 – Project Manager responsible for the PADEP permitting necessary for the development and operation of a coarse coal refuse disposal site in Greene County, Pennsylvania. This site also included the land application of alkaline material.

DAVID B. SHARP, P.E.

Branch Manager/Senior Engineer



and right-of-way plans; and municipal water and wastewater projects.

PROFESSIONAL EXPERIENCE

Geotechnical

Engineer responsible for performing subsurface investigations, preparation of geotechnical reports, coordinating laboratory analysis programs, providing recommendations for lateral earth pressures, bearing capacities, modulus of subgrade reactions, settlements, and construction specifications for multi-story structures. Foundations considered have included steel H-piles, auger-cast piles, drilled piers, spread footings, and mat foundations:

EDUCATION

M.S. Civil Engineering, 1995
West Virginia University

B.S. Civil Engineering, 1993
West Virginia University

EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.
2000-2003 CTL Engineering, Inc.
1997-2000 Potesta & Associates, Inc.
1994-1997 Terradon Corporation

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia, Pennsylvania, Maryland, Ohio, and Kentucky

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

AREAS OF SPECIALIZATION

Involved with many aspects of civil engineering with a special interest in the geotechnical/environmental aspects. Responsibilities have included projects involving Civil/Site Design; Geotechnical Design, Solid Waste Management Facility Design, including geosynthetic applications; hydrologic and hydraulic design; transportation/highway projects, including geotechnical

- Snowshoe Resort Activity Center – Snowshoe, WV
- Stockert Youth Center – Buckhannon, WV
- D&E College Dormitory – Elkins, WV
- Suncrest UMC Parsonage – Morgantown, WV
- Elkins-Randolph Public Library – Elkins, WV
- Historic Tygart Hotel Elevator – Elkins, WV
- Mon County BOE Tech Center Feasibility – Morgantown, WV
- MedExpress Admin Office – Morgantown, WV
- Firefly Commons Housing Dev – Elkins, WV
- Solvay Expansion – Marietta, OH
- Superior Fibers Add. – Reedsville, WV
- Citizens Bank Add. – Buckhannon, WV
- Chemours Fire Station – Washington, WV
- Camp Dawson 2 New Buildings – Kingwood, WV
- Dental Spa – Morgantown, WV
- Marshall Baseball Stadium – Huntington, WV
- Citizen's Bank – Buckhannon, WV
- Miners & Merchants Bank – Davis, WV
- D&E College Myles Center Add. – Elkins, WV
- Buzz Foods Add. – Charleston, WV
- Solvay WWTP Clarifier – Marietta, OH
- Black Oak Office Building – Morgantown, WV
- D&E College Harper McNeeley Waterproofing – Elkins, WV
- Family Dollar Store – Berkeley Springs, WV
- Rubbermaid Distribution Ctr Add. – Winchester, VA
- WVU Transportation Ctr/ Garage – Morgantown, WV
- 4 West WTP – Greene County, PA
- CA Ventures Student Housing – Morgantown, WV
- Copper Beech Student Housing – Morgantown, WV
- Sunnyside Commons Student Housing – Morgantown, WV

- WVU Eng. Building East Add. – Morgantown, WV
- PSC Admissions Bldg. Add. – Mineral County, WV
- GSC Health & Sciences Bldg. – Gilmer County, WV
- GSC Residence Hall – Gilmer County, WV
- Christy Street Office Building – Morgantown, WV
- Harry Green Nissan Dealership Building Add. – Harrison County, WV
- Elkins Dodge Dealership – Randolph County, WV
- Sam’s Club Fueling Station – Clarksburg, WV
- Wal-Mart Fueling Station – Connellsville, PA
- Cheat Lake Elementary School Bldg. Add. – Monongalia County, WV
- Churchill Village Housing Project – Monongalia County, WV
- R.E. Michel HVAC Commercial Bldg. – Monongalia County, WV
- ICM Islamic Center – Morgantown, WV
- Catlettsburg Refining Company Alkylation and Wastewater Control Room – Catlettsburg, KY
- WVARNG Camp Dawson Fueling System – Kingwood, WV
- MEPCO Dock Expansion Project – Morgantown, WV
- West Run Student Housing – Morgantown, WV
- Fairmont Federal Credit Union – Bridgeport, WV
- Morgantown Waterfront Marina – Morgantown, WV
- Residence Inn – Morgantown, WV
- Suncrest Executive Office Plaza and Parking Garage – Morgantown, WV
- WVU Research Park – Morgantown, WV
- View at the Park Apt Complex – Morgantown, WV
- Marriott Hotel – Morgantown, WV
- Bucks Tavern – Morgantown, WV
- Stouts Run United Methodist Church Add. – Parkersburg, WV
- Fairfield Inn Hotel – Fairmont, WV
- Wendy’s Restaurant – Morgantown, WV
- Sunoco Service Station – Robinson Township, PA
- St. Stephen Baptist Church – Morgantown, WV
- Islamic Center – South Charleston, WV
- Oak Hill Public Library – Oak Hill, OH
- Westside High School – Oceana, WV
- WVARNG Readiness Center – Summersville, WV
- Marshall Student Housing Facility – Huntington, WV
- Marshall Parking Garage – Huntington, WV
- Marshall Library – Huntington, WV
- Marshall Student Center Add. – Huntington, WV
- Marshall Jomie Jazz Center – Huntington, WV
- Marshall Child Care Center – Huntington, WV
- U.S. Equipment Distributors – Huntington, WV
- Pace Carbon Fuels WV #2 and #3 – Summersville and Eckman, WV
- WVU Luxury Box – Morgantown, WV
- Marshall Mid-Ohio Valley Ctr – Point Pleasant, WV
- Arbor Terrace Assisted Living – Charleston, WV
- Arbor Terrace Assisted Living – Huntington, WV
- Pocahontas County PSD WTP – Snowshoe, WV
- Pt. Marion Water Tank Replacement – Pt. Marion, PA
- Mon Gen Hospital/Access Road – Morgantown, WV
- Kasson Elem/Middle School Repair – Kasson, WV
- North Marion Vocational/Technical Center School Repair – Marion County, WV
- Mon County Public Office Bldg. – Morgantown, WV
- Cell Phone Towers in WV, PA, and MD
- EQT – Natural gas compressor stations pads and additions in Wetzel and Marion Counties, WV, and Monroe County, OH
 - EQT – Logansport Compressor Station Add.
 - EQT – Plasma Compressor Station Pad
 - EQT – Corona Compressor Station Pad
 - EQT – Gemini Compressor Station – Geotechnical Feasibility
 - EQT – Gemini Interconnect Pad
- Basic Systems, Inc. – Natural gas compressor stations pads and additions in Greene, Franklin, and Adams Counties, PA and Wetzel and Randolph Counties, WV
 - Basic Systems, Inc. – Waynesburg Compressor Station Add.
 - Basic Systems, Inc. – Gettysburg Compressor Station Add.
 - Basic Systems, Inc. – Greencastle Compressor Station Add.
 - Basic Systems, Inc. – Files Creek Compressor Station Add.
 - Basic Systems, Inc. – Smithfield Compressor Station Add.
- Dominion Transmission – Crayne Compressor Station Add. in Greene County, PA
- Stone Energy –Marcellus Well Pad Sites in Wetzel County, WV:
 - Stone Energy – Mills Wetzel #3 Well Pad – Wetzel County, WV
 - Stone Energy – Conley Well Pad – Wetzel County, WV
 - Stone Energy – Langmyer Pad – Wetzel County, WV
- Mountaineer Keystone – Mackey-Wolfe Well Pad in Barbour County, WV
- Chesapeake Energy – Rayle Coal Co. Well Pad in Ohio County, WV
- Residential geotechnical projects in Charleston and Morgantown, WV
- EQT Midstream – Geotechnical recommendations for natural gas transmission lines including horizontal directional drilling projects:
 - H-310 Coal Refuse Area – Monroe County, OH
 - Harrison County HDD – Harrison County, WV

- Ohio River HDD – Wetzel County, WV and Monroe County, OH

Responsible for the coordination of subsurface investigation, laboratory testing program, slope stability analysis, and preparation design documents associated with the repair of landslide at various site throughout West Virginia. Representative designs have included soldier beam and lagging retaining walls, gabion basket retaining walls, segmental block retaining walls, rock toe keys and buttresses, and drainage improvements. The following provides a list of representative projects:

- Polan Properties Landslide Repair – Huntington, WV
- WVDEP AML Sardis Landslide Repair – Harrison County, WV
- Upper Grave Creek Dam – Cameron, WV
- WVU University Ave Rockfall – Morgantown, WV
- Kinetic Park Landslide Repair – Huntington, WV
- Morgantown Parking Authority Armory Lot Retaining Wall – Morgantown, WV
- Town of Granville Bowser Street Landslide Repair – Monongalia County, WV
- Marshall Portal Access Road Landslide Repair – Greene County, PA
- Weekley Well Pad Landslide Repair – Wetzel County, WV
- Shupbach Ridge Road Landslide Repair – Wetzel County, WV
- Mills Wetzel #2 Well Pad Landslide Repair – Wetzel County, WV
- Mills Wetzel #2 Road Landslide Repair – Wetzel County, WV
- Potts Well Pad Landslide Repair (2 separate landslides) – Wetzel County, WV
- Haynes Branch Gas Line Landslide Repair – Wetzel County, WV
- Decker’s Creek Mine Stockpile Area Landslide Repair – Preston County, WV
- Wentz Freshwater Impoundment Embankment Stability Repair – Barbour County, WV
- Columbia Gas Transmission Well #7331 Slide Repair – Elkview, WV
- Cline Tower Landslide – Winfield, WV
- Wellford Tower Landslide – Clendenin, WV
- Massie Ridge Tower Landslide – Camp Creek, WV
- Fisher Landslide – Elkview, WV
- Kennawa Landslide – Charleston, WV
- Burlew Landslide – Charleston, WV
- Lee Landslide – South Charleston, WV
- Fairmont North Tower Landslide – Fairmont, WV
- 6th Street Tower Landslide – Huntington, WV

- Joyce Landslide – Chesapeake, OH
- WVAML Emergency Landslide – Tappers Creek, WV
- Schmidt Landslide – Gallipolis, OH
- Disposal Service, Inc. Landslide – Hurricane, WV
- Wellston HS Landslide Repair – Wellston, OH
- Pribble Tank Landslide Repair – New Martinsville, WV
- Potokczny Well Pad Landslide Repair – Marion County, WV
- Ridgepoint Landslide Repair – Morgantown, WV

Involved with the layout of the boring plan, staking borings in the field, preparation of the boring contract documents, soliciting bids, awarding drilling contracts, monitoring of drilling operations, coordination of laboratory testing programs, preparation of boring diagrams, and preparation of subsurface exploration report foundation recommendations and slope reviews for various West Virginia Department of Transportation Projects:

- Platinum Drive Urban Connector – Bridgeport, WV
- Segment of WV State Route 2 – Moundsville, WV
- Segment of National Road – Wheeling, WV
- Segment of North Bridgeport Bypass – Bridgeport, WV
- Corridor H, Section IV – Davis, WV
- Sulphur Springs Bridge – Hundred, WV
- Dry Run Interchange – Martinsburg, WV
- Interstate 81 Hainsville, Bessemer and Tuscorora Creek Bridges – Martinsburg, WV
- CR 24 Bridge Replacement – Jackson County, WV
- CR 3 Temporary Bridge – Jackson County, WV
- CR 56 Temporary Bridge – Wetzel County, WV
- CR 28 Bridge Replacement – Ritchie County, WV
- CR 3 Temporary Bridge – Roane County, WV

Expert Witness

Served as Expert Witness in cases involving geotechnical, earthwork construction, and/or drainage issues. Many of these cases involved a review of available information, development of professional opinions, issuance of an expert report, depositions, and expert testimony.

- West Virginia Division of Highways v. GoMart, Inc. et al. – Jackson Kelly – Circuit Court, Wood County, Civil Action No. 17-C-205 – Civil Site Design/Traffic Turning Movements (Defense)
- First Baptist Church of Burnsville v. Hall Dozer Company, Inc. – Jenkins Fenstermaker, PLLC –

- Circuit Court, Braxton County, Civil Action No. 20-C-46 – Construction/Geotechnical (Defense)
- LMR Property, LLC v. City of Bridgeport – Pullin, Fowler, Flanagan, Brown & Poe, PLLC – Circuit Court, Harrison County, Civil Action 21-C-262-2 – Geotechnical/Utility (Defense)
- Corotoman v. Yeager Airport – Milberg Coleman Bryson Phillips Grossman – Geotechnical (Plaintiff)
- Critchfield v. State Farm et. Al. – Bowles Rice – Circuit Court Taylor County – Civil Action 19-C-48 – Vehicular Damage resulting in Building Damage (Defense)
- Caloccia v. Enervest – Jackson Kelly & Smith Law – Harrison County – Civil Action 20-C-9 Geotechnical (Defense)
- First Baptist Church of Burnsville v. Hall Dozer – Braxton County – Civil Action 20-C-46 – Geotechnical (Defense)
- Solem v. Highlands of the Potomac, LLC – Shuman McCuskey Slice, PLLC – Circuit Court Berkley Co. – Civil Action 18-C-408 – Flooding (Defense)
- Liston v. Frontier West Virginia, Inc. – Bowles Rice – Circuit Court Monongalia Co. – Civil Action 16-C-279 – Flooding (Defense)
- Pauley v. Schumacher Homes of WV, Inc. – Bowles Rice – AAA – Case 01-18-0000-0240 – Foundation Construction (Defense)
- Logan County Board of Education – Bowles Rice – Circuit Court Logan County – Civil Action 17-C-11-B – Geotechnical (Plaintiff)
- JKLM Energy, LLC et. al. vs. Big Level Wind, LLC, John Hancock Life Insurance et. al. Court of Common Places of Potter County, Pennsylvania No. 86 CD 2017 – Construction, geotechnical and civil/site design associated with gas well pads (Defense)
- Wilkins, Scott v. R&R Holdings – Civil Action 15-c-295 – Flooding and drainage (Defense)
- Larry Rine, et. al. vs. Chesapeake Appalachia, LLC. Robinson & McElwee – Civil Action No. 5:11-CV-4 – Landslide on Natural Gas Well Pad (Defense)
- Bisacca v. Pennsylvania Department of Transportation, Thomas J. Dempsey, Attorney at Law – Earthwork Construction Practices (Plaintiff)
- Sven Verlinden and Lisa Verlinden v. Morgantown Utility Board, et. al. Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-573 – Combined Sewer Flooding (Defense)
- Russell D. Kitchen and Suzanne G. Kitchen v. Morgantown Utility Board – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-745 – Combined Sewer Flooding (Defense)
- Darin O. Arnold and Sarif J. Arnold v. Morgantown Utility Board – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-749 – Combined Sewer Flooding (Defense)
- Rider v. Fairmont Homes, LLC. – Flaherty, Sensabaugh & Bonasso, PLLC – Claim No. 1012802 – Landslide and Residential Construction Issues (Defense)
- Thomas A. Logston and Joanne C. Logston v. Charles E. Kolb d/b/a Kolb Excavating – A.D. Baker Homes, Inc. and Alan D. Baker, Bowles, Rice, McDavid, Graff & Love – Civil Action No. 10-C-116 – Landslide Resulting in Property Damage (Plaintiff)
- LJH, Inc. v. Quadruple S. Farms, LLC and Four-S-Development, Bowles Rice LLP – Civil Action No. 09-C-438 – Rockfall and Commercial Construction Practices (Plaintiff)
- Mingo County Airport Authority Claim Against Appalachian Paving & Aggregate, Inc. – Robinson & McElwee, PLLC – Earthwork and Construction Related Issues (Defense)
- Children’s Home of Wheeling v. Cast & Baker, et. al. Civil Action No. 06-CV-374W – Geotechnical (Plaintiff)
- Colaianni Construction, Inc. Claim for Cost Recovery Against Koker Drilling at Wetzel County Hospital, Wellness Center Add. – Spilman, Thomas & Battle – Retaining Wall Failure Resulting in Building Damage
- Hilling Enterprises, LLC et. al. v. Midtown Motors, Inc. et. al. – Civil Action No. 13-C-308 – Landslide Causing Property Damage (Defense)
- Stan-Corp v. Scott Properties, LLC. et. al – Bowles Rice LLC – Landslide Impacting Roadway and Property (Defense)
- Stephen C. Fish et. al. v. McCloy Construction et. al. – Bowles Rice, LLP – Civil Action 03-C-3050 – Structure Foundation Settlement (Plaintiff)
- Industrial Machine v. American Geotech – Bowles Rice, LLP – Civil Case 02-C-115 – Subsurface Exploration and Geotechnical Design (Defense)
- Pell, Robert K., et. al. v. SAMOA, LLC, et. al. – Claim No. 010510386236 – Drainage Related Claim (Defense)
- Timothy J. and Victoria Calissie v. AB Resources, LLC, et al. – Steptoe & Johnson, PLLC – Civil Action No: 13-C-43K – Circuit Court of Marshall County, WV
- Counts v. City of Charleston, et al. – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 15-C-2169

- Huggins v. AAA Mobile Homes of New Martinsville et. al. – Pullin, Fowler, Flanagan, Brown & Poe, PLLC – Civil Action No. 14-C-60 – New Martinsville, Wetzel County, West Virginia
- The Board of Education of the County of Logan, West Virginia a/k/a Logan County Board of Education v. Triad Engineering, Inc. – Bowles Rice McDavid Graff & Love – Civil Action No. 17-C-11

Civil/Site Design

Project Manager/Engineer on projects involving most aspects of site development. Involvement has included civil/site design, geotechnical aspects, hydrology/hydraulics, permitting, erosion/sediment control/permitting, etc.:

- D&E College Student Dormitory – Elkins, WV
- Stockert Youth Center – Buckhannon, WV
- Appalachian Hotel – Kingwood, WV
- D&E College Myles Plaza Improvement – Elkins, WV
- Citizen’s Bank – Buckhannon, WV
- Citizen’s Bank – Elkins, WV
- Miners & Merchants Bank – Davis, WV
- Dental Spa – Morgantown, WV
- University Place Parking Garage – Morgantown, WV
- Sunnyside Commons Student Housing – Morgantown, WV
- Coombs Farm Residential Development – Morgantown, WV
- Morgan Point Residential Subdivision – Morgantown, WV
- Town of Granville Boat Ramp – Granville, WV
- West Run Student Housing – Morgantown, WV
- Copper Beech Student Housing – Morgantown, WV
- Summit at Cheat Lake Residential Development – Morgantown, WV
- Summit at Greystone Residential Development – Morgantown, WV
- Sleepy Hollow Residential Development – Morgantown, WV
- Shiloh Residential Development – Morgantown, WV
- Summerfield Residential Development – Morgantown, WV
- Mayfield Estates Residential Development – Morgantown, WV
- Cheat Landing Residential Development – Morgantown, WV
- Churchill Village Complex – Morgantown, WV
- Trinity Christian School Football Field – Morgantown, WV
- Morgantown Technical Services Industrial Expansion – Mt. Morris, PA
- WVU Beechhurst Parking Lot – Morgantown, WV
- Marcellus Well Pad Sites for Various Clients – Northern WV

Construction Monitoring

Project Manager/Engineer involved with and/or responsible for construction observation/testing on construction projects. These projects routinely involved earthwork testing utilizing a nuclear density gauge and other test methods during earthwork placement and compaction. Many projects also included concrete testing including slump, comprehensive strength, air entrainment and/or floor flatness testing. The following is a summary of projects involving construction observation and testing:

- Sunnyside Commons Student Housing – Morgantown, WV
- Family Dollar Store – Smithfield, PA
- University Place Parking Garage – Morgantown, WV
- Church Hill Village Housing – Morgantown, WV
- Mills Wetzel #3 Well Pad – Wetzel County, WV
- Shupbach Ridge Road Landslide Repair – Wetzel County, WV
- Potts Landslide Repairs – Wetzel County, WV
- Pribble Tank Landslide Repair – Wetzel County, WV
- Potokczny Landslide Repair – Marion County, WV
- Tucker County Industrial Park – Tucker County, WV
- Pocahontas County Landfill Cell 3 Expansion – Pocahontas County, WV
- Disposal Services Landfill Expansion Area – Hurricane, WV
- Platinum Drive Urban Connector Landslide Repair – Bridgeport, WV
- Trinity Christian School Football Field – Morgantown, WV
- Kasson Elem/Middle School Pyrite Remediation – Barbour County, WV
- City of Philippi Water Improvement – Barbour County, WV
- Mackey Wolfe Well Pad – Barbour County, WV
- Morgantown Technical Services Expansion – Mt. Morris, WV
- Lakin Correctional Center – Wood County, WV
- Western Regional Jail – Cabell County, WV
- Merrick Creek Farm Commercial Development – Cabell County, WV

Served as the Manager responsible for equipping and staffing a fully operational soils and concrete material testing laboratory used in support of construction observation projects. The laboratory became validated by the U.S. Army Corps of Engineers to perform approximately 45 ASTM test methods will under Mr. Sharp's direct supervision. Representative test methods included standard and modified proctors, Atterburg limits, grain size determination, aggregate sieve analysis, specific gravity, organic matter, lightweight particles, soil classification, compressive strength, and moisture content determinations. Establishment of the laboratory also included the preparation of a site-specific quality systems manual in accordance with ASTM guidelines.

Water Lines, Water Storage Tanks, and Water Treatment Plants

Morgantown Utility Board – Provide expert witness services on a routine basis.

Project Manager/Engineer on public utility projects involving potable water supply. In most of the projects, it not only included the technical design, but also included assistance with funding applications, preparation of technical specifications and construction documents, assistance with bidding documents, and construction observation/administration.

- City of Wellsburg Water Improvement (plant upgrade and line extension) – Wellsburg, WV
- City of Glenville Water Improvement – Glenville, WV
- Preston County PSD #2 Howesville Water Improvement – Preston County, WV
- City of Philippi Water Improvement – Philippi, WV
- City of Philippi Water Tank Upgrade – Philippi, WV
- Town of Mill Creek Water Improvement – Mill Creek, WV
- Town of Marlinton Water Plant Assessment – Marlinton, WV
- Town of Huttonsville Water System Assessment – Huttonsville, WV
- Preston County PSD #2 Water Improvement – Preston County, WV

Sewer Lines and WWTPs

Project Manager/Engineer on public utility projects, such as sanitary sewer collection/treatment, as well as combined sewer/storm water improvements:

- Town of Marlinton CSO Project
- City of Buckhannon Sanitary Sewer Extension
- City of Glenville Infiltration/Inflow Study for the Sanitary Sewer
- Pocahontas County PSD Geotechnical and Environmental Permitting Services for Wastewater Improvement



EDUCATION

- M.S. Biology (Emphasis in Aquatic Ecology and Toxicology)
Virginia Polytechnic Institute and State University
- B.S. Biology/Chemistry
Fairmont State College

EMPLOYMENT HISTORY

- 2000-Present Potesta & Associates, Inc.
1998-2000 Biological Monitoring, Inc.
1995-1998 Virginia Tech
1994-1995 Center for Environmental and Hazardous Materials Studies

PROFESSIONAL CERTIFICATIONS

- Certified Hydric Soil Investigator
- Certified Wetland Botanist
- Certified Wetland Delineator
- Certified Wetland Hydrologist
- State of West Virginia Office of Miners' Health, Safety & Training Class 32 Safety Sensitive Personnel

TRAINING/RELEVANT COURSE WORK

- River Morphology and Applications, Wildland Hydrology
- Applied Fluvial Geomorphology, Wildland Hydrology
- Methods for Stream Assessment and Analysis, WVU
- Introduction to Natural Stream Channel Design, WVU
- Advanced Stream Design, WVU
- Fluvial Geomorphology, WVU
- Developing Wetland Water Budgets, Swamp School

PROFESSIONAL AFFILIATIONS

- Society of Freshwater Scientist
- Society of Environmental Toxicology and Chemistry
- National Association of Wetland Managers

AREAS OF SPECIALIZATION

Clean Water Act (CWA) permitting, compliance, and enforcement including water pollution control permitting and regulatory compliance, stream and wetland delineation, United States Army Corp of Engineering permitting (including mitigation), state water quality standards reporting, underground injection permits, and State water quality certification for coal and non-coal projects, threatened and endangered species compliance, cultural and historic resource coordination, development of large scale environmental risk assessments, environmental assessments, biological assessments, environmental impact studies and other National Environmental Policy Act (NEPA) documents (noise, cumulative impacts, aesthetics), development of biological studies, toxicity evaluations, and preparation of environmental documents for non-environmental regulatory agencies, including the Public Service Commission.

PROFESSIONAL EXPERIENCE

Stream/Wetland Delineation, Permitting, and Mitigation

Responsible for managing large scale Clean Water Act Projects associated with Marcellus Shale Production (well sites, well lines, and gathering lines) including field crew scheduling and coordination, stream/wetland delineation reporting, agency consultation, coordination of archaeological and bat/mussel surveys, and USACE 404

permitting. Responsible for managing pipeline projects where the role was environmental review or providing environmental permitting. Play role in agency interactions and litigation support.

Served as project manager and senior scientist for multiple CWA permitting tasks covering Section 401, 402, and 404 compliances as well as Office of Land and Streams authorizations, floodplain coordination and permitting with modeling, and hydrostatic testing.

Prepared permit packages for stream and wetland impacts for United States Army Corps of Engineers individual and general Department of the Army authorizations, State (401) Water Quality Certification, and Public Lands Corporations.

Supervised and assisted in the preparation of mitigation plans and associated restoration plans, as well as environmental information documents for large scale surface disturbances.

Prepared large adaptive management plans that are compliant with Department of the Interior (DOI) recommendations.

Supervised and prepared projects that determine stream status (perennial, intermittent, or ephemeral) utilizing benthic and stream channel indicators (wetland and stream delineations) in West Virginia, Kentucky, Virginia, and Maryland. Projects have included the determination of jurisdictional streams and wetlands in atypical field conditions, as well as after-the-fact stream/wetland impacts utilizing site specific data as well as interpretation of historical data using ArcGIS.

Acted as an agent for applicants during negotiations with agency personnel. Typically, issues addressed are associated with impact determination and NEPA compliance (cultural resources, threatened and endangered species, land use, cumulative impacts, and aesthetics.)

Familiar with most Federal protocols utilized for the assessment of impacts to “waters of the U.S.” Prepared the banking documents (prospectus, banking instrument, etc.) for the first mitigation banking program for stream and wetland credits in West Virginia.

Supervise, evaluate, and report mitigation success using applicable performance standards for CWA Section 404 permitting.

NPDES Industrial/Municipal Permitting

Worked as part of a permitting team that prepared new, modified, and renewed (reissued) National Permit Discharge Elimination System (NPDES) permits for various clients in the energy and commercial sectors. Specific areas include water monitoring and narrative criteria applications, toxicity (standard bioassays, as well as toxic identification studies), aquatic ecosystem protection, biological studies, watershed hydrology, water quality, groundwater and surface water inventories, long-term flow studies, site specific water quality criteria and or variances, mixing zones, database management and adaptive management plans.

Responsible for managing and/or preparing State and Federal Regulatory Permits/Renewals/Modifications, including Section 7 Threatened and Endangered Species USFWS and WVDNR Consultation, Section 106 State Historic Preservation Office Consultation, United States Army Corps of Engineers 404 Permits, West Virginia Division of Natural Resources - Office of Land and Streams Stream Activity Permits, and Individual State 401 Water Quality Certification. Work includes permitting and supporting documentation for wasteload allocation, Industrial NPDES Permit Applications/Permit Renewals, General WV/NPDES Storm Water Permit Applications/Permit Renewals, sampling plans, Groundwater Protection Plans (GPP), Storm Water Pollution Prevention Plans (SW3P), and Municipal Separate Storm Sewer System (MS4) General Permits.

Surface Water Sampling

Supervised multiple water quality monitoring programs. Projects have included oversight and management of sampling teams for pre-construction baseline, routine and special study water quality monitoring projects including non-traditional monitoring techniques such as sediment respiration. Many of the projects have included a database management and compliance component.

Mining

Worked as part of a permitting team (for various clients) that prepares new mining permits, as well as modification and renewals. Specific areas include land use, parks and

historic lands information, fish and wildlife information including threatened/endangered species, water quality data, drainage information, NPDES permits, and narrative criteria applications.

Completed studies to address notice of violation (NOV) orders for accidental discharges into waters by mining companies including assessments of fish kills and the extent of black-water discharges as well as routine non-compliance issues. Act as representative for company in board hearings to address violations.

Risk Assessment

Completed large scale risk assessment in watersheds in Kentucky, West Virginia, and Virginia for associated with impacts to waters. Assessments included the use of biological monitoring (fish and benthic macroinvertebrates (including mussels)), acute and chronic toxicity testing, sediment toxicity testing, juvenile mussel toxicity testing, entrainment studies, water quality monitoring, water quality modeling, and specialized sediment sampling which included both physical and chemical characterizations. These projects have required large-scale data integration, database management with an ArcGIS component.

Threatened/Endangered Species

Completed biological assessments for mussel species in the Kanawha and Gauley Rivers, as well as a document similar to a biological assessment for the Big Sandy River watershed. Completed biological assessments for bat species in West Virginia for various clients. Prepared appropriate documentation for Section 7 consultations with the United States Fish and Wildlife Service for various regulated entities.

Environmental Assessments/Impact Statements

Preparation and submittal of environmental information documents submitted to regulatory agencies for the development of the agency's environmental assessments. Topics addressed included: fish and wildlife resources; surface and groundwater, endangered species, noise, viewshed and aesthetics, traffic, floodplains, conservation, flooding, navigation, recreation, safety, environmental justice, socioeconomics, and other general environmental concerns. Development of alternative analyses including: a federal highways project which required a supplemental EIS; several large-scale mining operations whose alternatives included various mining

methodologies (underground mining, highwall mining, etc.) as well as post mining land uses. Prepared and submitted environmental assessments for federal regulatory agencies as third-party contractor. Prepared, reviewed, and commented on Draft Environmental Impact Statements and for various federal agencies as third-party contractor. Completed assessments for federal agencies to determine the need for supplemental environmental documents.

Regulatory and Litigation Support

Provided testimony as both a factual witness and expert witness in federal court and before the West Virginia Environmental Quality Board. Testimony included site conditions, evaluation of reasonable potential, water quality issues, mitigation, stream structure, and function. Negotiated with state and federal agencies regarding fines for non-compliance. This includes completing large scale after-the-fact delineations and associated reporting for Section 308 and 309 Orders, negotiating mitigation, and evaluating and assessing NPDES compliance issues. Compliance issues include discharge monitoring reports, non-compliance notices, toxicity, and narrative guidance concerns.

Additional litigation work has included work performed for meeting specialized permitting requirements, like those for the Public Service Commission. This work has included testimony regarding studies for wind energy development and its impact on birds and threatened and endangered species.

Work for energy development has included applications for the Public Service Commission, completed for clients with the assistance of an attorney. Studies and documents have included: noise studies, landscape scale land use analysis, viewshed analysis, surface and groundwater studies, species consultations, delineations, coordination of contractors for consultations, and packaging of the applications.

Biological Studies and Sampling

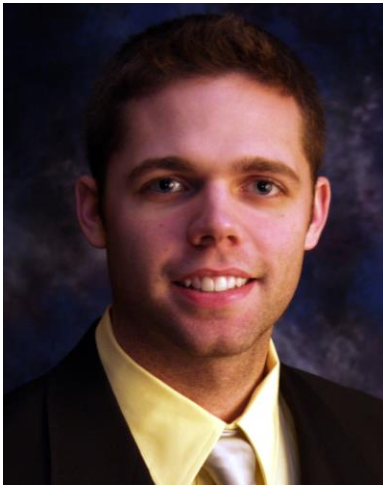
Responsible for managing and reporting biological surveys using State and federal protocols for permitting and compliance. Responsible for the development, managing, and reporting of special studies including functional assessment studies, algal studies, vegetative studies, wetland macroinvertebrate studies, avian studies, bat studies, benthic macroinvertebrate studies, mussel surveys, fish surveys and specialized trout surveys. Responsible for managing and reporting biological

toxicity evaluations using standard testing species, as well as specialized studies like those completed using juvenile mussels and larval fish for selenium deformities.

Completed an evaluation of the physical, chemical, and biological effects of acid mine drainage from abandoned mine lands in Virginia. Work included bioassays, biological monitoring, chemical monitoring, physical habitat evaluations, and functional assessments of the biological communities including algal community structure. Prepared documents for the use of acid mine drainage remediation for mitigation purposes.

Benthics

Completed benthic sampling for 28+ years. Capable of identifying most benthic macroinvertebrates at the genus level. Completed aquatic entomology coursework under Dr. R. Voschell at Virginia Tech.



EDUCATION

- M.S. Environmental Science, 2010
Marshall University
- B.S. Environmental Biology, 2006
Marshall University

EMPLOYMENT HISTORY

- 2006-Present Potesta & Associates, Inc.
2013 In-House Consultant EQT
2014 In-House Consultant Columbia Gas

PROFESSIONAL CERTIFICATIONS

- 3.3 Continuing Education Units for Wetland Delineation – Olentangy Wetland Research Park at Ohio State University
- April 2012 – Applied Fluvial Geomorphology NCTC (Rosgen)
- April 2012 – River Morphology and Applications NCTC (Rosgen)

AREAS OF SPECIALIZATION

Clean Water Act permitting, compliance, collection, identification, and analysis of biological data for research via habitat, electrofishing surveys, water sampling, and chemistry analysis. Environmental reporting and permitting. Wetland and stream identification and delineation. National Environmental Protection Act (NEPA) reporting for federal agency approval.

Regulatory support and expert testimony for West Virginia Public Service Commission.

PROFESSIONAL EXPERIENCE

Stream/Wetland Delineation, Permitting, and Mitigation

Served as project manager for environmental permitting for large scale oil and gas projects including roadway improvements, pipeline maintenance and construction, well pad development and other associated projects for the industry. Leads and trains staffing in field work and preparing environmental applications.

Supervised and conducted numerous wetland identifications and delineations for private companies throughout West Virginia, Virginia, Ohio, and Pennsylvania. Work included identification, delineations, and verification process with the United States Army Corps of Engineers (USACE), wetland reporting, permitting, and mitigation.

Met on-site with USACE, West Virginia Department of Environmental Protection for wetland verifications with governmental agencies.

Completed stream and wetland delineations for the construction of Highline Transmission Projects in Pennsylvania, West Virginia, Maryland, and Virginia. Worked with contractors to limit stream and wetland impacts as much as possible.

Supervised and completed stream and wetland delineations for oil and gas companies, including pipeline right-of-way and well layout locations.

Supervised and prepared and submitted numerous USACE Section 404 Applications and WVDEP 401 Applications. Obtained numerous 401 and 404 Permits for various types of projects.

Prepared numerous stream and wetland reports pertaining to oil and gas industry.

Prepared and analyzed field data for state and federal permit applications.

Responsible for Section 7 Consultation of Endangered Species Act, Section 106 Consultation of the National Historic Preservation Act and Section 404 of the Federal

Clean Water Act for numerous projects throughout West Virginia. Work includes field reconnaissance and assessment and report writing.

Experienced in consulting with USACE on Nationwide Permits and Individual Permits.

Experienced in completing the West Virginia Stream and Wetland Valuation Metric calculator for mitigation projects.

Conducted after-the-fact delineations with the U.S. Environmental Protection Agency.

NEPA Documentation

Preparation and submittal of environmental information documents submitted to numerous federal regulatory agencies. Preparation of Environmental Report level to the Programmatic Environmental Assessment level for agency review and approval. Topic included:

- Fish and wildlife resources
- Surface and groundwater
- Endangered species
- Noise
- Viewshed
- Aesthetics
- Cultural resources
- Traffic
- Floodplains
- Navigation
- Recreation
- Safety
- Environmental justice
- Socioeconomics
- Climate change
- General environmental concerns

Mining

Authored sections of mining permit applications and environmental information documents.

Surface Water Sampling

Conducted surface and groundwater sampling.

GIS

Analyzed longitudinal and cross-sectional data associated with stream profiles.

Acquired skills in operation of GPS equipment.

Oil and Gas

Managed environmental permitting for large scale roadway improvement project across 10 counties throughout West Virginia.

Permitted hundreds of natural gas well pads, pipelines, and access road upgrades.

Managed field crews performing environmental inspections pertaining to aquatic resources and erosion and sedimentation control devices:

- Directed field crews and scheduling
- Reviewed daily reports and presented to contractor and client
- Performed field visits and meetings

Biological and Sampling

Conducted electrofishing surveys with species identification.

Collected water samples and performed chemical analysis with various instruments.

Conducted benthic macroinvertebrate surveys utilizing procedures described in the USEPA's Rapid Bioassessment Protocol (RBP).

Performed habitat and stream assessments utilizing the standard EPA RBP in freshwater ecosystems.

Regulatory Support

Provided expert witness testimony before the West Virginia Public Service Commission for renewable development. Completed the necessary studies and prepared documents energy generation projects.