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.

Solicitation Response(SR) **Dept:** 0310 **ID:** ESR12032500000003370 **Ver.:** 1 **Function:** New **Phase:** Final

Modified by batch , 12/03/2025

Header 1

List View

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

Procurement Folder: 1834025

Procurement Type: Central Contract - Fixed Amt

Vendor ID: 000000173443

Legal Name: POTESTA & ASSOCIATES INC

Alias/DBA:

Total Bid: $0.00

Response Date: 12/03/2025

Response Time: 10:50

Responded By User ID: KJTINGLER

First Name: Kristi

Last Name: Tingler

Email: kjtinger@potesta.com

Phone: 3045531269

SO Doc Code: CEOI

SO Dept: 0310

SO Doc ID: DNR2600000003

Published Date: 11/10/25

Close Date: 12/3/25

Close Time: 13:30

Status: Closed

Solicitation Description: A&E - Meadow River WMA Wetlands Project

Total of Header Attachments: 1

Total of All Attachments: 1

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:	1834025
Solicitation Description:	A&E - Meadow River WMA Wetlands Project
Proc Type:	Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2025-12-03 13:30	SR 0310 ESR12032500000003370	1

VENDOR

000000173443
POTESTA & ASSOCIATES INC

Solicitation Number: CEOI 0310 DNR2600000003

Total Bid: 0 **Response Date:** 2025-12-03 **Response Time:** 10:50:08

Comments:

FOR INFORMATION CONTACT THE BUYER
Joseph (Josh) 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	Civil engineering				0.00

Comm Code	Manufacturer	Specification	Model #
81101500			

Commodity Line Comments:

Extended Description:

Design and Contract Administration of a new wetlands area at Meadow River Wildlife Management Area.

POTESTA
Engineers and Environmental Consultants
7012 MacCorkle Avenue, SE, Charleston, WV 25304 • (304) 342-1400 • www.potesta.com

December 3, 2025

West Virginia Division of Natural Resources
112 California Avenue, Building 4
Charleston, West Virginia 25304

RE: Solicitation No.: DNR2600000003
Meadow River WMA Wetlands Project
Greenbrier County, West Virginia
POTESTA Project No. 0101-25-0323

To Whom It May Concern:

Potesta & Associates, Inc. (POTESTA) is pleased to submit this Letter of Interest and Statement of Qualifications to the West Virginia Division of Natural Resources (WVDNR) to deliver comprehensive engineering services, including site evaluation, design development, preparation of technical specifications, and construction administration, for the establishment of a natural wetland area within the Meadow River Wildlife Management Area (WMA) in Greenbrier County, WV. The project will create a seasonal wetland on the Meadow River WMA and install water-control and distribution features to enhance hydrology and support habitat for waterfowl and other wetland-dependent species. POTESTA has extensive experience in wetland development, including the evaluation and design of wetland systems that balance ecological goals with practical site constraints. Our team specializes in hydrologic and hydraulic design, providing water-control and distribution solutions that achieve and maintain required hydrologic performance for similar projects.

POTESTA is already well-acquainted with the Meadow River WMA Wetland Project and the goals of WVDNR. We previously submitted our qualifications for a related solicitation in 2022 and later consulted with WVDNR in 2024 regarding engineering design services for establishing a wetland area. During that effort, POTESTA obtained and reviewed the 2019 wetland delineation and conceptual plan prepared by Allstar Ecology, further strengthening our understanding of site conditions and enabling us to provide informed, efficient, and highly beneficial support to WVDNR for this project. Jurisdictional delineations and determinations generally remain valid for five years. Accordingly, POTESTA will review the existing data to assess whether additional fieldwork or updates are necessary to deliver the required work product. POTESTA is mindful of budget constraints and will work diligently to develop plans and specifications, obtain environmental permits, and provide comprehensive bidding and construction-phase support to ensure the project's success within the established budget. POTESTA has a strong background in securing funding for our clients through federal, state, and local programs, helping to maximize project resources and ensure successful implementation.

Given our technical expertise, comprehensive experience, project knowledge, management capabilities, project approach, and cost structure, POTESTA is the ideal choice for this work.

We look forward to meeting with the WVDNR and the selection committee to discuss our qualifications, experience, and approach in further detail.

Sincerely,

POTESTA & ASSOCIATES, INC.

Dana L. Burns, PE, PS
President

DLB/kjt

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:	1834025	**Reason for Modification:**
Doc Description:	A&E - Meadow River WMA Wetlands Project	
Proc Type:	Central Contract - Fixed Amt	

Date Issued	Solicitation Closes	Solicitation No	Version
2025-11-10	2025-12-03 13:30	CEOI 0310 DNR2600000003	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., President
Vendor Contact Phone: 304-342-1400 **Extension:**

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

Vendor Signature X Dana L. Burns **FEIN#** 31-1509066 **DATE** 12/02/2025

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

ADDITIONAL INFORMATION

The Acquisitions and Contract Administration Section of the Purchasing Division is soliciting Expression(s) of Interest for the Division of Natural Resources from qualified firms to provide necessary engineering to evaluate, design, specify and provide construction administration for the establishment of a natural wetland area located on the Meadow River Wildlife Management Area (WMA) located in Greenbrier County, WV. per the attached specifications and terms and conditions.

INVOICE TO	SHIP TO
DIVISION OF NATURAL RESOURCES	STATE OF WEST VIRGINIA
112 CALIFORNIA AVENUE	JOBSITE - SEE SPECIFICATIONS
BLDG 4	
CHARLESTON WV 25305	No City WV 99999
US	US

Line	Comm Ln Desc	Qty	Unit Issue
1	Civil engineering		

Comm Code	Manufacturer	Specification	Model #
81101500			

Extended Description:
Design and Contract Administration of a new wetlands area at Meadow River Wildlife Management Area.

SCHEDULE OF EVENTS

Line	Event	Event Date

	Document Phase	Document Description	Page 3
DNR2600000003	Final	A&E - Meadow River WMA Wetlands Project	

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) Dana L. Burns, PE, PS, President

(Address) 7012 MacCorkle Avenue, SE, Charleston, WV 25304

(Phone Number) / (Fax Number) (304) 342-1400 / (304) 343-9031

(email address) dlburns@potesta.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, 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.

Potesta & Associates, Inc.

(Company)

Dana L. Burns

(Signature of Authorized Representative)

Dana L. Burns, PE, PS, President 12/02/2025

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

(304) 342-1400 / (304) 343-9031

(Phone Number) (Fax Number)

dlburns@potesta.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: DNR2600000003

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)

☐ Addendum No. 1	☐ Addendum No. 6
☐ Addendum No. 2	☐ Addendum No. 7
☐ Addendum No. 3	☐ Addendum No. 8
☐ Addendum No. 4	☐ Addendum No. 9
☐ Addendum No. 5	☐ 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.

Potesta & Associates, Inc.
Company

Dana L. Burns
Authorized Signature

12/02/2025
Date

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

Subcontractor List Submission (Construction Contracts Only)

Bidder's Name: Potesta & Associates, Inc.

☑ Check this box if no subcontractors will perform more than $25,000.00 of work to complete the project.

Subcontractor Name	License Number if Required by W. Va. Code § 21-11-1 et. seq.

Attach additional pages if necessary

Statement of QUALIFICATIONS

WEST VIRGINIA DNR

WVDNR

112 California Avenue, Building 4

Charleston, West Virginia 25305

DNR2600000003

MEADOW RIVER WMA WETLANDS PROJECT

PREPARED BY:

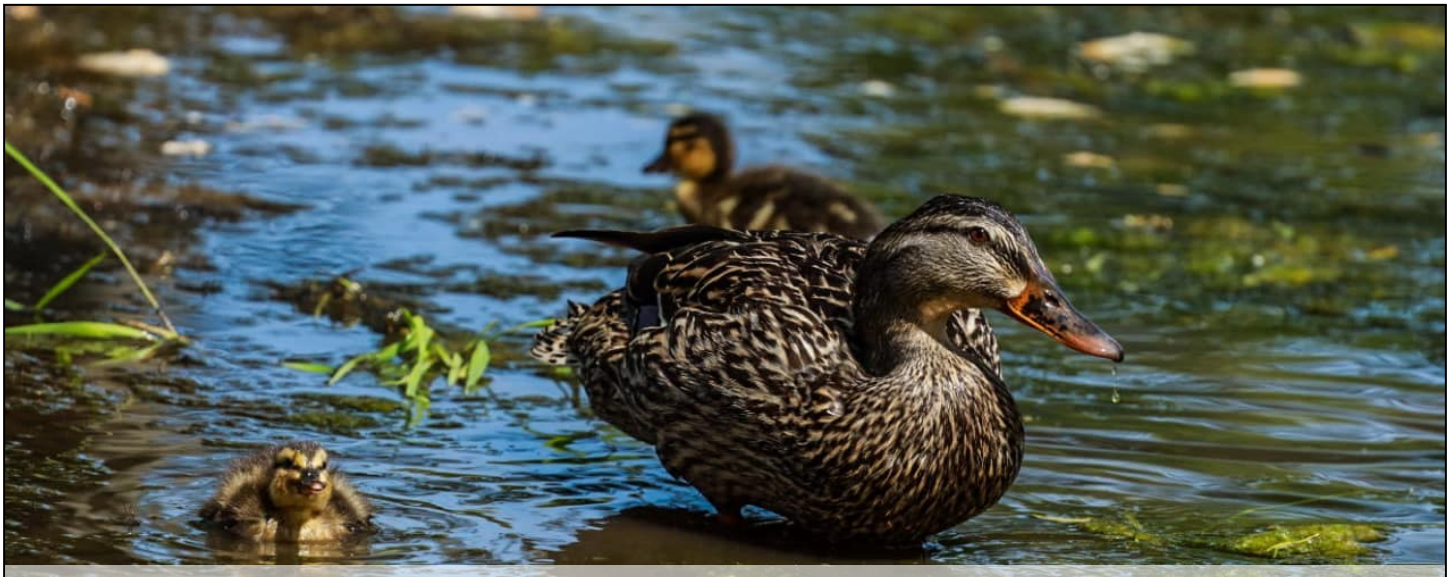
POTESTA

Engineers and Environmental Consultants

CHARLESTON
7012 MacCorkle Ave., SE
Charleston, WV 25304
(304) 342-1400

MORGANTOWN
125 Lakeview Dr.
Morgantown, WV 26508
(304) 225-2245

WINCHESTER
15 South Braddock St.
Winchester, VA 22601
(540) 450-0180



Project Contact:

Jessica L. Yeager ⏩ jlyeager@potesta.com

7012 MacCorkle Ave., SE ⏩ Charleston, WV 25304

Submission Date:

December 3, 2025

Project Number ⏩ 0101-25-0323

TABLE OF CONTENTS

APPENDIX

QUALIFICATIONS

POTESTA
Engineers and Environmental Consultants

POTESTA
Engineers and Environmental Consultants

COMPANY PROFILE

Incorporated in 1997 in Charleston, West Virginia by Mr. Ronald R. Potesta, POTESTA is a full-service engineering and environmental consulting firm that has been delivering exceptional services across the Mid-Atlantic region since its inception. Our team is composed of skilled engineers, scientists, and support staff, with branch offices in Winchester, Virginia, and Morgantown, West Virginia. We serve a diverse range of clients, including local, state, and federal agencies, as well as industries such as mining, manufacturing, utilities, waste management, land development, legal, finance, insurance, education, construction, and architecture.

MAIN POINT OF CONTACT

Ronald R. Potesta
CEO
rrpotesta@potesta.com
(304) 342-1400

With over 28 years of proven success, we've delivered countless projects marked by quality, reliability, and lasting client relationships.

OFFICE LOCATIONS

MORGANTOWN, WV


WINCHESTER, VA

CHARLESTON, WV

90+ EMPLOYEES

- **27** Engineers
- **39** Technical Support
- **14** Environmental
- **11** Administrative

SERVICES

ENGINEERING SERVICES

- Civil Engineering
- Geotechnical Engineering
- Water Resources Engineering
- Environmental Engineering
- Site Design
- Stormwater Management
- Water & Wastewater Design
- Transportation Engineering
- Mining Engineering
- Construction Monitoring
- Surveying & CADD

ENVIRONMENTAL SERVICES

- Wetlands & Ecological Studies
- Remediation & Contaminated Site Cleanup
- Air Quality & Emissions Monitoring
- Waste Management & Recycling
- Environmental Site Assessments
- Water & Wastewater Management
- Hazardous Materials Management

REGULATORY SERVICES

- Permitting
- Environmental Impact Assessments (NEPA)
- Regulatory Liaison
- Health & Safety Plans
- Risk Management & Due Diligence

SPECIALIZED SERVICES

- Geographic Information Systems
- Renewable Energy Consulting
- Oil & Gas Consulting
- Coal Supply & Procurement
- Land Management Services
- Litigation Support

POTESTA
Engineers and Environmental Consultants

HIGHLIGHTED PROJECT DISCIPLINES

EXPERTISE

ENGINEERING & ENVIRONMENTAL SERVICES

To create a functional seasonal wetland, you need hydrologic engineering, ecological design, environmental permitting, and construction management—all working together to capture, direct, and hold water in a way that mimics natural wetland processes and supports wildlife.

WETLANDS *PROJECT*

- **SITE ASSESSMENT & FEASIBILITY STUDIES**
- **WETLAND DESIGN & HYDROLOGIC ENGINEERING**
- **ECOLOGICAL & HABITAT DESIGN**
- **CONSTRUCTION DOCUMENTS & OVERSIGHT**
- **ENVIRONMENTAL PERMITTING & COMPLIANCE**
- **MONITORING & LONG-TERM MANAGEMENT**

TECHNICAL EXPERTISE

POTESTA
Engineers and Environmental Consultants

POTESTA
Engineers and Environmental Consultants

WETLAND DELINEATION/MITIGATION

Wetlands support diverse plant and animal life and help clean and hold water across a landscape. Protecting and restoring these areas through practical, well-planned management keeps them functioning for the long run. POTESTA's scientists and engineers provide wetland delineation, assessment, and permitting services, and design and carry out conservation, enhancement, and restoration projects that build and improve wildlife habitat.

WETLAND PLANNING, DESIGNING, & PERMITTING SERVICES

INVESTIGATION & DELINEATION

POTESTA's scientists perform wetland investigations and boundary mapping to help protect and improve wetland areas. During these surveys, the team looks for key indicators such as water patterns that sustain wetlands, soil types typical of wet environments, and native plants that support wildlife. When wetlands are identified, they are mapped accurately using the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and local guidelines. This clear picture helps guide practical steps to preserve and strengthen these valuable natural spaces.

PERMITTING

After wetlands are identified and delineated, POTESTA can prepare comprehensive permit application packages for activities such as filling or dredging these areas to support project needs. The USACE oversees wetland permitting under Section 404 of the Clean Water Act. Additionally, each state reviews and must approve these permits to ensure compliance with local water quality standards.

Our team maintains strong working relationships with both federal and state agencies in the region. We understand the specific data requirements and work closely with regulators to help streamline the review process and support timely permit approvals.

MITIGATION & DESIGN

Conservation, enhancement, and restoration efforts play a vital role in maintaining and improving wetland ecosystems. In some cases, these efforts may involve working with existing conservation programs or supporting funding that helps preserve and expand wetland areas. POTESTA can assist in developing proposals and working closely with state and federal agencies to gain support and approval for such initiatives.

When opportunities arise, we also design and implement projects to restore degraded wetlands or enhance existing habitats. Our engineers and biologists work together to develop realistic, affordable plans that support healthy ecosystems and wildlife. Once approved, we provide oversight during project implementation to ensure the successful establishment and long-term function of restored and enhanced wetlands.

POTESTA
Engineers and Environmental Consultants

HYDROLOGIC ENGINEERING

POTESTA's engineers apply hydrologic and hydraulic principles to design the water-management features essential for successful wetland restoration. Understanding how water interacts with soil, topography, and vegetation allows our team to establish the controlled hydrologic conditions needed for wetland functions to return and thrive. Proper hydrologic design not only prevents problems such as erosion or unintended flooding but also creates the foundation for a resilient, self-sustaining wetland environment.

HYDROLOGIC, GROUNDWATER, AND WATER-MANAGEMENT SERVICES

- **Groundwater Table Mapping**
- **Hydrological & Hydraulic Modeling**
- **Hydraulic Conductivity Testing**
- **Drainage System Design**
- **Flood Risk Assessment & Erosion Control**
- **Dewatering Design & Implementation**
- **Piezometer Installation & Monitoring**
- **Site Drainage Assessment**
- **Groundwater Flow Analysis & Modeling**
- **Seepage & Flow Net Analysis**
- **Design of Cutoff Walls / Impermeable Barriers**
- **Construction of Groundwater Barriers**

WVDNR — Meadow River WMA Wetlands Project (DNR2600000003)

POTESTA
Engineers and Environmental Consultants

REGULATORY COMPLIANCE

Beyond providing design services, POTESTA is uniquely equipped to deliver environmental consulting, an essential component for projects of this nature. Most projects carried out by POTESTA require regulatory assistance to ensure compliance with relevant regulations. Our group of engineers and environmental scientists collaborates to tackle intricate environmental issues, integrating them into the planning and construction of projects. It's essential to engage in early and ongoing communication with local municipalities, state agencies, environmental agencies, and other stakeholders to identify the specific permits required for the project. POTESTA possesses a comprehensive understanding of local regulations and experience coordinating with relevant authorities for a smooth permitting process.

NEPA-RELATED SERVICES

- Aesthetics
- Cumulative Impact Studies
- Floodplain Impacts
- Noise & Air Quality Analysis
- Endangered Species Consultation
- Historical & Archaeological Resources Consultation
- Biological Assessments/Surveys
- Phase I Environmental Assessment
- Risk Assessment
- Sampling/Remediation
- Stream & Wetland Delineation and Restoration
- Water Quality Studies

MITIGATION

- Stream Restoration Plans
- Construction Monitoring
- Post-Construction Monitoring & Reporting
- Wetland Mitigation — payment to bank/ fund, creation of wetland, or protection and/or enhancement of other wetland areas
- Re-Vegetation
- Stormwater Management — permeable surfaces and retention basins
- Erosion Control
- Invasive Species Management
- Cultural Resource Preservation
- Noise Reduction

POTESTA
Engineers and Environmental Consultants

ENVIRONMENTAL MONITORING

Biological monitoring is essential in wetland projects to help meet regulatory requirements, assess environmental conditions, and track the effectiveness of conservation efforts. Toxicological testing and biological surveys are often part of the permitting process, used as initial baseline data or to support agency discussions. These surveys can spot potential impacts, offer alternatives to permit conditions, or show that permitted or unpermitted activities haven't harmed wetland functions. They're also key for tracking progress and demonstrating the success of wetland restoration and improvement work. POTESTA's scientists have hands-on experience conducting these studies and provide reliable data and insights to support all stages of wetland projects.

BIOLOGICAL & TOXICOLOGICAL SURVEYS

- **Biological Surveys & Rapid Bioassessments**
- **Wetland Delineation & Remediation**
- **Variance Negotiations**
- **Environmental Risk Assessments**
- **Natural Resource Damage Assessments**
- **Toxicity Identification Evaluations**
- **Pilot-Scale Testing and Treatability Studies**
- **Statistical Analysis and Database Management**
- **Stream Remediation & Restoration**
- **Endangered Species Surveys**
- **Human Risk Assessments**
- **Industrial Site Remediation**
- **Toxicity Reduction Evaluations**
- **Exotic Species Control / Management**

WVDNR — Meadow River WMA Wetlands Project (DNR2600000003)

POTESTA
Engineers and Environmental Consultants

SURVEYING/MAPPING

POTESTA provides professional surveying services across the state and surrounding region. Our team includes licensed professional land surveyors and professional engineers with extensive experience in site development, geotechnical projects, roadway and bridge construction, utility installations, and landfill development. POTESTA has the capacity to operate three two-person surveying crews, delivering surveys and mapping that meet the National Map Accuracy Standards, American Congress on Surveying and Mapping Guidelines, National Society of Professional Surveyors Standards, and other applicable quality benchmarks. We are committed to precision, efficiency, and innovative solutions, delivering every project to the highest professional standards while addressing the unique needs of our clients.

PROFESSIONAL SERVICES

LAND AND BOUNDARY SURVEYS

- **Property Boundary Determination**
- **Lot Line Surveys**
- **Subdivision Surveys**
- **Easement & Right-of-Way Surveys**

TOPOGRAPHIC AND MAPPING SURVEYS

- **Topographic Surveys**
- **Contour Mapping**
- **GIS Mapping & Data Collection**
- **Aerial & Drone Surveys (utilize subcontractor)**

CONSTRUCTION & ENGINEERING SURVEYS

- **Construction Staking/Layout for Roads, Buildings, Utilities**
- **As-Built Surveys**
- **Infrastructure Alignment & Grading Surveys**
- **Bridge & Roadway Layout Surveys**

GEOTECHNICAL & ENVIRONMENTAL SURVEYS

- **Site Development Surveys**
- **Environmental Site Assessments (mapping for wetlands, floodplains)**
- **Landfill & Remediation Surveys**
- **Geotechnical Monitoring & Surveys**

POTESTA
Engineers and Environmental Consultants

PROFESSIONAL SERVICES

UTILITY & INFRASTRUCTURE SURVEYS

- **Water, Sewer, & Stormwater Surveys**
- **Utility Location & Mapping**
- **Pipeline & Transmission Line Surveys**

SPECIALITY SURVEYS

- **Subsurface Utility Engineering (utilize subcontractor)**
- **Hydrographic & Bathymetric Surveys**
- **Volumetric Surveys**
- **Monitoring Surveys**

SURVEY DATA SERVICES

- **CAD Drafting and Survey Plan Preparation**
- **GIS Data Analysis & Mapping**
- **Digital Terrain Models & 3D Modeling**

POTESTA employs advanced surveying and design technology, including Total Station instruments, Trimble R-8 GNSS, RTK GPS systems, AutoCAD, Autodesk Land Desktop, and Autodesk Civil 3D software, to provide precise surveying, mapping, and engineering solutions. This technology enables accurate data collection and efficient project design, producing reliable deliverables that meet or exceed professional standards.

POTESTA's CADD department leverages the latest drafting and design software, along with advanced computer hardware, to maintain the high levels of productivity that clients expect. Using Autodesk Civil 3D and other industry-leading tools, we efficiently prepare, revise, and manipulate drawings and engineering data. Survey data is fully integrated to develop accurate topographic maps and detailed 3D models of project sites, enhancing planning, design, and visualization.

Our team's expertise ensures that every project is executed with precision, attention to detail, and a commitment to quality outcomes.

WVDNR — Meadow River WMA Wetlands Project (DNR2600000003)

POTESTA
Engineers and Environmental Consultants

CONSTRUCTION PHASE SERVICES

Support services during the engineering construction phase include essential activities that ensure the smooth execution of projects. POTESTA offers construction monitoring and administration services to help clients meet regulatory and contractual requirements. We ensure that contractor activities align with design specifications and act as an extension of clients' staff, providing comprehensive support throughout the construction process. These support services are crucial to ensuring the successful completion of projects on time, within budget, and to the required quality standards.

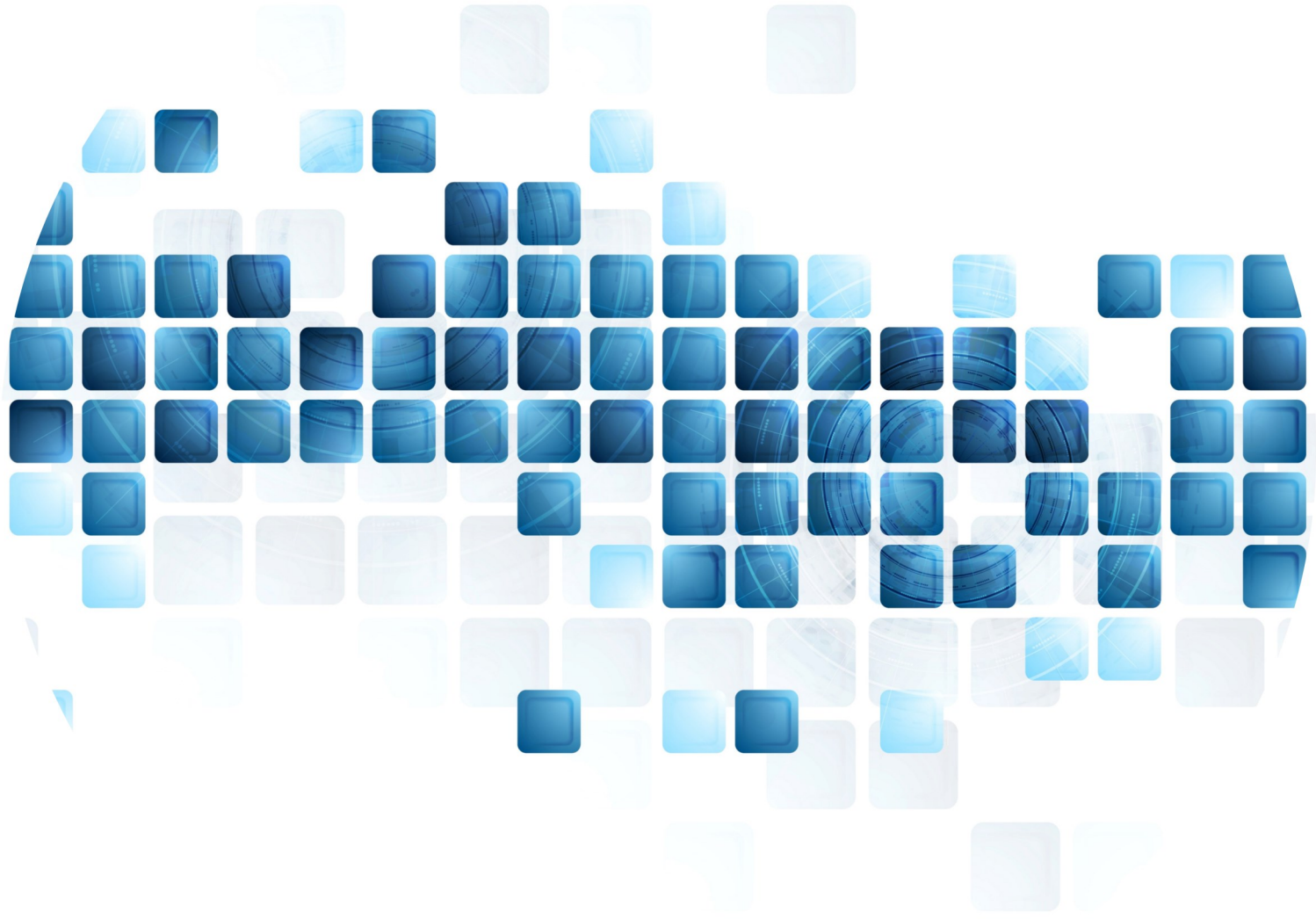
CONSTRUCTION OBSERVATION

- **Construction Oversight — full-time construction monitoring to ensure compliance with design specifications, safety regulations, and quality standards.**
- **Quality Assurance/Quality Control — conducting tests and inspections on construction materials, inspections and identification of deficiencies in construction work, document control, regulatory compliance, and subcontractor oversight.**
- **Documentation & Record-Keeping — maintain comprehensive records of construction activities, inspections, tests, and approvals for future reference and compliance purposes.**
- **Environmental Compliance — ensure construction activities adhere to environmental regulations and minimize impact on surrounding ecosystems.**

CONSTRUCTION ADMINISTRATION

- **Project Management — coordinate all aspects of construction phase including scheduling, budgeting, and resource allocation. Attend pre-construction conference, progress meetings, and as-needed meetings. Prepare weekly reports summarizing construction activities.**
- **Progress Monitoring & Reporting — tracking construction progress to identify any potential delays, and provide regular updates to client.**
- **Contract Administration — manage contracts, change orders, and claims resolutions throughout the construction process. Issue written clarifications or interpretations of the requirements of the contract documents, including issuance of additional specifications and drawings and Certificate of Substantial Completion, as typically required by the contract documents.**
- **Contractor Management — review contractor work plan, progress schedule, shop drawing/sample submittal schedule, and schedule of values. Evaluate and recommend payment for contractor invoices (Applications for Payment). Review and approve/deny substitutes and "or equal" items.**

STAFFING CAPABILITIES



POTESTA
Engineers and Environmental Consultants

POTESTA
Engineers and Environmental Consultants

PROPOSED STAFFING PLAN

WEST VIRGINIA DNR

DANA L. BURNS, PE, PS
Principal-in-Charge — 46 Yrs.

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

RONALD R. POTESTA
Principal-in-Charge — 42 Yrs.

Directs day-to-day operations and management of environmental and support staff.

JESSICA L. YEAGER
Project Manager—29 Yrs.

Project activities perform under his direction and maintains schedule and budget.

ASSESSMENT / HYDROLOGY & HYDRAULICS / DESIGN / WATER MODELING / E&S CONTROL

Mark Kiser, PE, LRS – 41 Yrs.
Kyle Stollings, PE – 41 Yrs.
Jarrett Smith, PE – 22 Yrs.
Paul Maggard, PE – 25 Yrs.
Matt McLane – 29 Yrs.
Claire McDonald, EIT – 2 Yr.
Alex Keenan, EIT – 6 Yrs.
Daniel Boyles, EIT – 5 Yrs.
Tim Rice, EIT – 42 Yrs.
Chad Griffith, PE – 20 Yrs.
Mark Sankoff, PE, PS – 41 Yrs.
Terence Moran, PE – 37 Yrs.
Bob Bragg, PE – 27 Yrs.
Robert Ammirato, PE – 21 Yrs.
Bill Cox – 14 Yrs.
Everett Mulkeen, PE – 12 Yrs.
Tim Ball, PE – 45 Yrs.
Joseph Dinkel – 14 Yrs.
Derek Rader – 4 Yrs.
Ahmet Oruc – 2 Yrs.

WETLANDS / PERMITTING / COMPLIANCE / HABITAT ASSESSMENT / ENVIRONMENTAL MONITORING

Jessica Yeager – 29 Yrs.
Timothy Ferguson – 17 Yrs.
Dan Miller, PhD – 46 Yrs.
Christina Parsons – 25 Yrs.
Leah Creathers – 18 Yrs.
Justin Collins – 3 Yrs.

GRADING PLANS / SOILS / GEOTECHNICAL

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

MAPPING/CADD

Chip Haden (GIS) – 14 Yrs.
Scott Bolyard – 33 Yrs.
Anthony Friend – 27 Yrs.
Michael Sankoff – 34 Yrs.
Brian Leedy – 23 Yrs.
Russ Lester – 34 Yrs.
Joe Martin – 30 Yrs.
Chuck Bird – 31 Yrs.
Charles Mosholder – 44 Yrs.
David Foster – 11 Yrs.
Austin Davis – 2 Yrs.

CONSTRUCTION MONITORING

Robert Lamm – 23 Yrs.
Paul Kinzer – 26 Yrs.
Charles Shaffer – 22 Yrs.
Russ Harper – 16 Yrs.
Carl Hickman – 45 Yrs.
Anthony Fragale – 46 Yrs.
Francis Hyre – 42 Yrs.
Gabe Sankoff – 2 Yrs.

SURVEYING

Victor Dawson, PS – 41 Yrs.
Ryan Bennett, PS – 10 Yrs.
Rusty Hunter – 42 Yrs.
Tyler Aboytes – 9 Yrs.
Ryan Pettry – 2 Yrs.
Stephan Sayles – 2 Yrs.
Shymeik Leftwich – 1 Yr.

POTESTA
Engineers and Environmental Consultants

KEY PERSONNEL

Appendix A contains resumes and licenses of key personnel.

Principal-in-Charge — Dana L. Burns, PE, PS, President

With more than 46 years of experience, Mr. Burns brings deep expertise in civil, geotechnical, environmental, as well as hydrological and hydraulic engineering. He has led the development of site plans for municipal, commercial, residential, and industrial projects, designed critical utility, transportation, and water resource infrastructure, and conducted geotechnical assessments and reclamation of unstable sites. His work also includes hydraulic modeling, stormwater management design, navigating complex permitting processes, and collaborating closely with funding agencies. Currently, Mr. Burns oversees the engineering division's daily operations, directing staff coordination, training, business development, and the overall supervision of both technical and support teams.

Principal-in-Charge — Ronald R. Potesta, Chief Executive Officer

Brings extensive experience with federal environmental regulations, statutory frameworks, and environmental guidance. His expertise includes managing agency interactions and reviewing regulatory requirements and recommendations. Mr. Potesta is a former Director and Deputy Director of the West Virginia Department of Natural Resources, where he oversaw environmental regulatory programs, wildlife management, and law enforcement. He currently serves as Chairman of the Ohio River Valley Water Sanitation Commission and a member of the Board of Directors for the West Virginia Land and Mineral Owners Association. Additionally, he is the Immediate Past Chairman of the Board of Trustees for the West Virginia Nature Conservancy.

Project Manager—Jessica L. Yeager, Senior Scientist

With 29 years of experience as an aquatic biologist and toxicologist, Ms. Yeager specializes in assessing the impacts of human activities on aquatic communities. Her expertise includes reviewing and preparing environmental assessments, biological assessments, wetland delineation, creation, and mitigation plans, as well as securing environmental permits. Skilled in integrating GIS into project development, she has managed projects involving coordination and consultation with Threatened and Endangered species and the State Historic Preservation Office. Ms. Yeager also provides clients with guidance on the Endangered Species Act, the Clean Water Act, and the National Environmental Policy Act.

Timothy R. Ferguson, Senior Scientist

With extensive experience in environmental compliance and permitting, he has served as Project Manager for numerous environmental projects. He specializes in stream and wetland identification and delineation, mitigation development and planning, and obtaining permits from agencies such as the USACE, West Virginia Department of Environmental Protection, WVDNR, West Virginia State Historic Preservation Office, United States Fish & Wildlife Service, and the United States Environmental Protection Agency. His strong understanding of regulatory processes ensures projects move efficiently through the permitting stages, while maintaining compliance with all applicable environmental regulations.

D. Mark Kiser, PE, LRS, Chief Engineer

With over 41 years of extensive experience in civil and environmental engineering, Mr. Kiser has a diverse background that spans stormwater management, site development, utility extensions, street and roadway construction, regulatory compliance, and environmental permitting. His expertise in stormwater management and complex grading directly informs the design of berms and other water management structures, ensuring effective control of surface runoff, erosion prevention, and site drainage. His work has taken him across various local jurisdictions in West Virginia, where he has adeptly navigated local ordinances and codes.

Jarrett M. Smith, PE, Senior Engineer

Mr. Smith brings over 22 years of experience in stormwater management, geotechnical engineering, hydrology and hydraulics, and civil/site design. His extensive expertise in the design and analysis of stormwater management systems and facilities directly supports the development of water management structures such as detention basins, retention ponds, berms, swales, and conveyance systems. With a strong emphasis on hydraulic evaluations and hydrogeologic investigations, he ensures that these structures are both effective and resilient in managing surface and subsurface water flows. His comprehensive understanding of site conditions enhances his ability to deliver technically sound, constructible, and environmentally compliant designs. He routinely applies this expertise to grading, erosion and sediment control, and earthwork balance evaluations to optimize site layout, stability, and long-term performance.

PROJECT APPROACH

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GOALS & OBJECTIVES

LOCATION

Meadow River Wildlife Management Area (WMA) encompasses approximately 2,385 acres of river bottomland along the Meadow River, primarily consisting of wetland habitats in Greenbrier County, West Virginia. It is part of one of the largest wetland complexes in the Central Appalachians, known as the Meadow River Wetlands or Meadow River Complex. This ecologically rich area supports diverse wildlife, including waterfowl, woodcock, and various game and non-game species.

BACKGROUND

The Meadow River WMA is owned by the West Virginia Division of Natural Resources (WVDNR) and the West Virginia Division of Highways (WVDOH). It is managed by the WVDNR's Wildlife Resources Section. POTESTA is intimately familiar with this Meadow River WMA Wetlands Project and the vision for creating a wetland within the existing Meadow River WMA. We submitted our qualifications for a solicitation in 2022 and consulted with WVDNR in 2024 for engineering design services to establish a wetland area. This included installation of low-profile berms with water management devices in two cells to restore forested wetlands and enhance waterfowl habitat at Meadow River WMA. The professional services sought shall include evaluation, design, permitting, production of construction plans and specifications, and providing construction phase services. POTESTA will tailor and adjust the scope of services as needed to align with project budget constraints and specific agency requirements, ensuring efficient and compliant project delivery.

GOAL/OBJECTIVE 1: REVIEW SITE CONDITIONS AND EVALUATE FEASIBILITY TO DETERMINE A PLAN

As mentioned, POTESTA has been involved with previous engineering and environmental consulting on this project. At that time, POTESTA acquired the wetland delineation and conceptual plan for the Meadow River WMA Wetland Project performed by Allstar Ecology in 2019. Files included wetland data forms, photos, and shape files. POTESTA's key steps to review site conditions and evaluate the feasibility include:

- **Perform a thorough review of the files from Allstar Ecology and any other available information.**
- **Visit the site to observe current conditions as wetlands can change over time due to natural succession, hydrology shifts, land use changes, or disturbances. Confirm if the delineated boundaries and wetland indicators (soil, vegetation, hydrology) remain accurate.**
- **If significant changes are observed or if the WVDNR or other agency requires, update the wetland delineation to reflect current conditions, following current protocols (e.g., USACE 1987 Wetlands Delineation Manual or regional supplements).**
- **Assess current and historical hydrology data to determine if the site has sufficient water inputs (surface water, groundwater) to sustain wetland conditions.**
- **Confirm that soils still show hydric characteristics and assess existing vegetation to understand habitat suitability and restoration potential.**
- **Identify potential physical, legal, or environmental constraints, such as invasive species, existing land use, access, or contamination that could impact wetland creation.**

GOAL/OBJECTIVE 2: SERVICES TO DESIGN & PERMIT

POTESTA will utilize the data collected during the first goal/objective to perform preliminary engineering and planning, a topographic survey, site mapping development, final design, construction documents, specifications, and permitting, based on Allstar's provided conceptual plan. POTESTA is prepared to use this information to develop a design and specifications that require minimal revisions and changes. The conceptual plan includes two proposed berms: an upper berm measuring 1,200 feet and a lower berm measuring 700 feet. Berms will be approximately 2 to 3 feet high and will include water management structures, such as AgriDrain and/or pipes with valves, to allow for the retention and drainage of water held behind the berms. The approximate area within the limits of disturbance is estimated to be 13.1 acres. The potential inundated area at capacity is estimated at 6.63 acres. Temporary wetland impacts were estimated at 2.52 acres. Permanent wetland impacts were estimated at 1.18 acres. The potential wetland creation was estimated at 3.3 acres. If WVDNR desires, POTESTA can develop an updated conceptual plan to meet current needs and objectives.

POTESTA's scope of services for the design and permitting phase include:

- **A survey of the area within the approximate outside limits of disturbance as depicted on the conceptual plan will be completed to generate topographic base mapping to be used for design and plan development.**
- **During the survey, POTESTA will survey a profile corresponding to the planned locations of the upper and lower berms.**
- **Survey control points will be established at the site for use by the construction contractor.**
- **Survey results will be used to create a base map for design and plan development.**
- **Attempt to import the Allstar's shape files into our developed base mapping to be used in permitting and design.**
- **Design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form generally following the information shown on the approved conceptual plan.**
- **Preparation and submission of permit applications to confirm that the project avoids or properly manages impacts to wetlands, streams, water quality, stormwater, floodplain areas, threatened and endangered species, and any historic or cultural resources.**
- **Additional studies may be requested from the regulatory agencies.**

GOAL/OBJECTIVE 3: CONSTRUCTION CONTRACT DOCUMENTS & ADMINISTRATION SERVICES

POTESTA will provide construction administration services, including assigning an engineer involved in the overall project design to attend the on-site pre-bid conference and pre-construction meeting with the contractor, as well as conducting periodic site visits during construction with associated office support.

PROJECT MANAGEMENT

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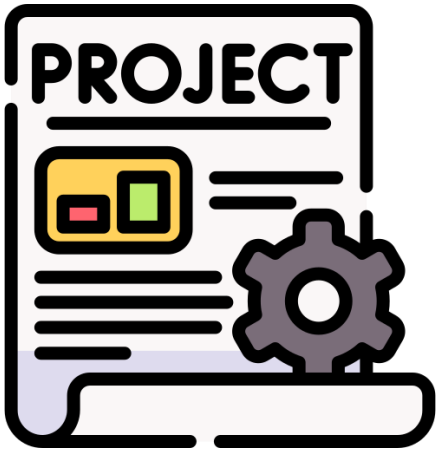
KEY PILLARS OF PROJECT SUCCESS

DRIVING PROJECT SUCCESS

A remarkable 85% of our projects are derived from repeat clients, underscoring our commitment to delivering exceptional results. POTESTA follows these critical success factors for each new project:

- **Establishing clear, mutually agreed-upon goals with the client.**
- **Development of a concise and actionable project plan.**
- **Implementation of proactive risk management throughout the project lifecycle.**
- **Scope management is a continuous process, making sure work remains within defined boundaries while accommodating necessary adjustments.**



COMMUNICATION EXCELLENCE

POTESTA believes clear and efficient communication is the key to a successful project:

- **Communicate early and often to keep all stakeholders informed and aligned throughout the project.**
- **Collaborate on mutual work scope development to clearly define expectations and deliverables.**
- **Conduct a comprehensive startup meeting, including a site visit, to understand project conditions and client needs.**
- **Work as an extension of your staff, fully integrating with your team to support your success.**
- **Focus on meeting your objectives exactly how you want them achieved, with flexibility and responsiveness.**
- **Provide weekly project updates to ensure transparency and timely communication throughout the project lifecycle.**

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PROJECT PERFORMANCE

SCHEDULE CONTROL

POTESTA has a proven track record of successfully meeting tight project deadlines and achieving key milestones on schedule. The Project Manager holds primary responsibility for managing and controlling the project timeline, assuring that all tasks are executed efficiently and coordinated effectively.

- **At the start of the project, the Project Manager evaluates the schedule requirements in relation to the anticipated scope of work to determine a realistic plan for meeting deadlines.**
- **Progress is reviewed on a weekly basis and compared to the approved schedule, with regular updates provided to the Principal-in-Charge.**
- **If needed, the Principal-in-Charge can reallocate staff to support schedule adherence.**
- **Should unexpected issues arise that may impact the timeline, the Project Manager will promptly coordinate with the client to develop a mutually agreeable adjustment to the schedule or work plan.**

COST CONTROL

POTESTA takes pride in delivering innovative and efficient engineering design packages that maximize our clients' budgets, ensuring more of their funds are allocated to actual construction rather than design fees. The Project Manager is responsible for monitoring the project budget and keeping the Principal-in-Charge updated on its status. The Project Manager also develops a work plan, outlining hourly rates and tasks necessary to complete the project.

- **Our cloud-based accounting system provides real-time tracking of project progress, including time and expenses, milestones, and vendor/subcontractor information.**
- **Monitor utility and development activity across the region.**
- **Stay current with material pricing trends.**
- **Provide adaptable designs to save time and reduce costs.**
- **Use real bid data for accurate cost estimates.**

REFERENCES

POTESTA
Engineers and Environmental Consultants

POTESTA
Engineers and Environmental Consultants

REFERENCES

MN8 ENERGY LLC

Erik Duncan, Senior Development Manager
1155 Avenue of the Americas, 27th Floor
New York, New York 10036
(412) 773-0026

Solar Energy Development

CITY OF SOUTH CHARLESTON

Rick Atkinson, City Manager
PO Box 8597
South Charleston, West Virginia 25303
(304) 744-5300

Park Place Development

EQT CORPORATION

Anthony Willard, Permitting Coordinator
625 Liberty Avenue, Suite 1700
Pittsburgh, Pennsylvania 15222
(304) 266-8688

Wetland Delineation for New Gas Line Network

CONTACT US

FOR MORE INFORMATION CONTACT:

Ronald R. Potesta, CEO
(304) 342-1400

PRIOR EXPERIENCE

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SOLAR ENERGY DEVELOPMENT

Confidential Company
West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by a confidential renewable energy company to provide environmental and engineering consulting services for various sites, ranging from 600 acres to over 3,000 acres. These sites include former mined properties, and the services cover the planning, design, permitting, and construction of solar and battery energy storage system development projects across West Virginia.

The scope of services for these projects includes:

- Subsurface geotechnical exploration study of the site.
- Visual examination and laboratory testing for the retrieved soil and rock samples.
- Development of a site plan for the project based on the final design plan/layout for the structures provided by the company including Site Grading Plan, Erosion and Sediment Control Plan, Utility Service Plan, and other miscellaneous details.
- Preparation of permit applications including Construction Storm Water National Pollutant Discharge Elimination System (NPDES) permit and the West Virginia Division of Highways (WVDOH) public right-of-way occupancy permit.
- Perform an ALTA/NSPS and boundary survey utilizing aerial, GPS, and conventional surveying methods.
- Engineering administration support (*i.e.*, bidding phase support, permitting/public comment response, and vendor responses).
- Environmental consulting including Phase I Environmental Site Assessment, Stream and Wetland Delineation, and environmental agency consultations.

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PIPELINE CONSTRUCTION ENGINEERING AND ENVIRONMENTAL CONSULTING SERVICES

Mountain Valley Pipeline
Virginia and West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Mountain Valley Pipeline (MVP) to provide a broad array of engineering and environmental consulting services for the construction of a 305-mile natural gas pipeline from northwestern West Virginia to southern Virginia, with approximately 196 miles in West Virginia.

POTESTA performed the following services:

- **Stormwater Permitting** – Review and development of Erosion & Sediment (E&S) Control Plans that meet requirements of the general permit and comply with the West Virginia Department of Environmental Protection (WVDEP) E&S Control Best Management Manual for both pipeline and associated upgrades to West Virginia Division of Highways (WVDOH) county roads. The Stormwater Pollution Prevention Plans (SWPPP) outlined the project specifics, provide adequate construction timelines for implementation of erosion and sediment control devices, and include training record and site inspection forms.

- **Floodplain Analyses and Permitting** – Projects located within the floodplain for temporary and permanent structures, pipeline crossings, soil stockpiles, equipment laydown yards, and aboveground structures. Floodplain analysis included obtaining and reviewing surveying information, development of calibrated, existing and proposed model conditions using HEC-RAS, and determination of what impact the proposed development would have during flood conditions. POTESTA prepared a Hydraulic Analysis Results report for submittal along with the floodplain permit application for review by the local floodplain coordinator. This report summarized the field efforts, hydraulic analysis, and results from the floodplain analysis.

- **Geotechnical Engineering** – Excavating and relocating a mine refuse fire in a coal refuse pile adjacent to the proposed pipeline alignment.

- **Individual Water Quality State 401 Certification (401 Certification)** – Quality assurance/quality control review of proposed impact data in the 401 Certification and a technical review for completeness of the application package, the pre-construction notification for the United States Army Corps of Engineers, and the West Virginia National Pollutant Discharge Elimination System (WVNPDES) Permit.

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- **Post-Permit Issuance** – Investigations required by MVP's US Army Corps of Engineers authorization in their permit's special conditions. POTESTA completed site visits at each of the projects' 1,000+ stream crossings in West Virginia and documented the pre-construction condition.

- **Construction Monitoring** – Completion of construction monitoring with twice weekly environmental inspections on the six construction spreads and four compressor sites in West Virginia. This work was completed in addition to the company's and the construction contractors' own environmental inspections as a third-party follow-up to help minimize the overall environmental effects of the project. The inspections played a substantial role in maintaining compliance during the wettest year on record in West Virginia.

  - Field Reviews
  - Agency Consultations
  - Inspector Meetings
  - Agency Inspector and Coordinating Environmental Field Inspections
  - Spill Inspection and Report
  - Stream/Wetland Crossing Documentation
  - Coordination of Potential Issue or Construction Delays

- **Additional Task**s – POTESTA also completed supplemental studies for MVP requested by regulatory agencies to provide more specific information for various locations along the project's path, including documentation of the substrate types in the river at each major river crossing.

ENVIRONMENTAL AUDITS

Mountain Valley Pipeline
Nicholas, Greenbrier, Summers, and Monroe Counties, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained to conduct environmental audits of stream and wetland crossings along a 67-mile pipeline segment. The environmental auditor was required to be present on-site before construction began at each crossing and remain until restoration activities were completed. Their role was to observe construction activities, focusing on minimizing environmental impacts and protecting aquatic ecosystems. The auditor completed preconstruction and postconstruction forms to evaluate the condition of the aquatic resources at each site before and after construction. Additionally, the auditor took photographs of the resources both before and after construction.

During construction, the environmental auditor documented activities within and near the water resource. The auditor tracked daily progress, noting how the resource was disturbed and how it was being protected throughout the construction process. This included observing the removal and stockpiling of topsoil and/or stream substrate in areas separated from other soils and outside the riparian corridor at the start of construction. The auditor also observed and documented the construction of bypass systems designed to divert water around the disturbed area, including the use of small- and large-scale dams and flumes.

The environmental auditor actively monitored the excavation (trenching) and removal of material, soil, and rock from the aquatic resource and adjacent riparian areas. This process involved heavy equipment and, at times, required hammering or blasting. Groundwater often infiltrated the trench and had to be pumped out into a dewatering structure, with discharge allowed only when the water was clear. These activities were documented daily, including the placement of pipe in the trench, welding, and other necessary preparations before the trench was filled. The environmental auditor also observed and recorded the placement of river weights as needed and the restoration of the site to its pre-construction contours.

In addition to observing and documenting the site, the environmental auditors collaborated with the site environmental inspector and foreman to identify potential environmental issues, including possible permit violations, to help protect aquatic resources. The auditors used checklists and alerted the on-site team when issues related to the checklist arose. They also participated in morning meetings and contributed to the environmental health and safety program.

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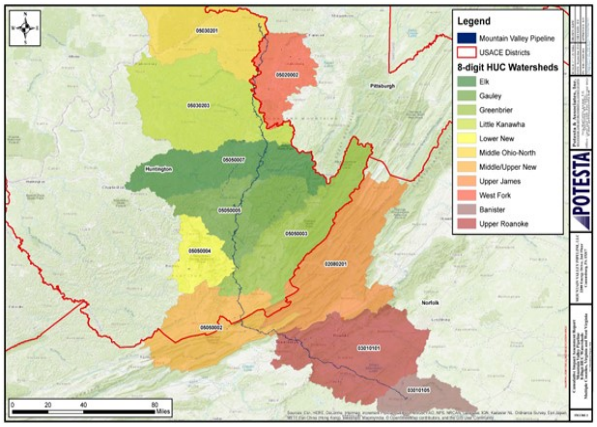
CUMULATIVE IMPACT EVALUATION

Mountain Valley Pipeline
West Virginia and Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Mountain Valley Pipeline to develop a cumulative impact evaluation of past, present, and reasonably foreseeable projects within the Hydrologic Unit Code (HUC)-12 watersheds in West Virginia and Virginia associated with the Mountain Valley Pipeline Project. The project encompassed 304 miles across 11 HUC-8 watersheds, with the analysis conducted at the HUC-12 level. The assessment included a thorough evaluation of water resources, hydric soils, and land use/land cover (LU/LC).



The aquatic resource evaluation involved calculating the stream miles in each watershed to determine the percentage of stream impacts. This was accomplished using digital elevation models, ArcGIS, and data collected during the project's delineation. The evaluation leveraged the existing delineations to assess the accuracy of the model in predicting streamlines within these watersheds. While the goal was to create streamlines that closely aligned with the delineations, most of the data runs did not extend to the extreme headwater reaches where small ephemeral drains were identified in the project's delineations. When attempts were made to extend the streamlines to these headwaters, the model distorted and splintered the streamlines unrealistically. Consequently, the modeling effort may not have included the final segments of ephemeral channels, where the flow transitions into swales and no longer exhibits distinct bed and bank features at the ridgelines within the delineated watersheds. As a result, the model likely underrepresents the full extent of these channels, leading to a slight overestimate of the cumulative impacts associated with the project.

ArcMap was the primary tool used to generate the necessary data for evaluating wetland impacts and identifying the presence of National Wetland Inventory (NWI) features within each watershed. Using files downloaded from the United States Fish and Wildlife Service (USFWS) and HUC-12 shapefiles, ArcMap tools were employed to create an intersection shapefile of the NWI and HUC-12 boundaries. These features were then dissolved to generate NWI categories based on HUC-12 attributes, including Freshwater Emergent Wetland, Freshwater Forested/Scrub Wetland, Freshwater Pond, Lake, Riverine, and others. Using ArcMap, the NWI acreage for each category was calculated for the HUC-12 watersheds. To assess the presence of NWI features within the project area, the NWI file was clipped to the project area boundary. The percentage of wetland impacts in each watershed was then determined.

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The evaluation of hydric soil impacts was also conducted, with a significant reliance on ArcGIS. Data for this assessment were obtained from the United States Department of Agriculture (USDA) National Resource Conservation Service (NRCS) Web Soil Survey site. To gather soil information, shapefiles were created for each HUC-12 watershed. These shapefiles were then uploaded to the NRCS Web Soil Survey site, which generated a soil shapefile and a detailed soil report for each HUC-12. Mapping for each watershed was developed using the NRCS-generated shapefiles. This process - creating a shapefile, uploading it to the NRCS Web Soil Survey, and generating both a shapefile and a soil report - was repeated for each HUC-12 watershed within the Project Area. This resulted in having data for hydric soils across the entire watershed, as well as data for hydric soils specifically within the project area and were used to calculate the total acres of impact.

To evaluate changes in LU/LC, POTESTA primarily relied on the National Land Cover Dataset, supplemented by significant additional data from other sources. This supplemental information was especially critical for forecasting future land use changes. Data on projects permitted since 2018 were gathered from various resources, including recently completed projects (past), ongoing projects (present), and pending or reasonably foreseeable future projects (planned).

Data sources included:

- West Virginia Department of Environmental Protection (WVDEP)
- United States Army Corps of Engineers Pittsburgh, Huntington, and Norfolk Districts
- West Virginia Division of Forestry
- WVDEP Division of Mining and Reclamation
- West Virginia Department of Transportation, Division of Highways
- West Virginia Division of Natural Resources – Office of Land and Streams
- Virginia Department of Environmental Quality
- Virginia Department of Transportation
- Virginia Marine Resources Commission
- Virginia Department of Forestry
- Virginia Department of Energy
- Various regional planning departments, county planning departments, and county floodplain coordinators

Freedom of Information Act requests were submitted, and county and regional planning agencies in each county across West Virginia and Virginia affected by the project were contacted directly. The cities of Salem and Roanoke were also contacted regarding their comprehensive plans and future development. Additionally, public service districts within each county crossed by the project were contacted. The collected information was then summarized and organized into several project categories to identify activities occurring within each 12-digit HUC watershed. After completing the data collection, the results were analyzed by the HUC-12 watershed for the entire project area.

COMPENSATORY MITIGATION AND STREAM RESTORATION

Morgantown Utility Board
Monongalia County, West Virginia

Potesta & Associates, Inc. (POTESTA) is working with the Morgantown Utility Board to produce compensatory mitigation for the 401 State Water Quality Certification and the Department of Army permit from the United States Army Corps of Engineers for the Cobun Creek No. 2 Reservoir and Dam. These agencies are requiring the Morgantown Utility Board to provide mitigation that is sufficient to offset the loss of aquatic resources that will occur as a result of dam construction in Cobun Creek, Mountain Run, and their tributaries located in Monongalia County, near Morgantown, West Virginia as required by the Clean Water Act.

Finding sufficient mitigation for large projects like the Cobun Creek No. 2 Dam and Reservoir is an integral component of the permitting process. While utilizing a mitigation bank or in-lieu fees is a mitigation option available for Clean Water Act permits, these methods of compensation can be extremely costly when impacts are more than just a few hundred feet. For the Morgantown Utility Board, the most preferable option for mitigation is Permittee responsible mitigation. This is a less costly endeavor if an appropriate mitigation site can be found.

Working with a local landowner, POTESTA identified a lake in Preston County, West Virginia, that due to dam safety requirements, must be removed. The site, which is in the Fike Run watershed, will provide a unique opportunity to couple a utility in need of mitigation with a landowner who has regulatory obligations that cannot be met alone.

Restoration in Fike Run will be unlike most restoration projects in West Virginia. While the project area is close to the headwaters in the Fike Run watershed, the stream types near

the project area are often low gradient. Restoration goals include the establishment of stream channels within the footprint of Appalachian Lake, as well as the development of an extensive wetland.

Restoration will be accomplished via a mixture of both active and passive methods. The proposed restoration plan will focus on the reestablishment of the natural flow regime of a low gradient system, restore the reservoir footprint as channel with appropriate floodplain and meander width ratio, address sediment release and transport concerns, and restoration of migration or fish passage. In addition to natural vegetation, floodplain seed mix, live stakes, and woody floodplain cuttings will be incorporated in the final restoration plan, as well as an invasive species management plan. Channel banks will either be stabilized with a suite of bioengineering techniques, or allowed to self-stabilize following exposure of the former floodplain and seedbank. Wetlands are expected to form within the restored pond areas by natural processes. It is expected that riparian zones and wetlands within the restored areas would consist of a mosaic of wetland community types including shallow and deep marsh, wet meadow, and potential future scrub shrub wetlands. Plant establishment may entail natural recruitment of plants represented in the "seed bank" contained in the sediments of each pond, coupled with the use of other plant establishment techniques. Such measures may include seeding, live-staking, containerized seedlings and potted trees and shrubs. Extensive use of these measures would enhance rapid community restoration and facilitate the establishment of optimum combinations of native floristic communities.

STREAM/WETLAND DELINEATION, PERMITTING, RESTORATION, AND POST CONSTRUCTION MONITORING AGENCY NEGOTIATIONS

Babst, Calland, Clements, and Zomnir, P.C.
Doddridge, Marshall, and Wetzel Counties, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Babst, Calland, Clements, and Zomnir, P.C., to forensically delineate and evaluate potential impacts to "waters of the United States" as per Order for Compliance (the Orders) from the United States Environmental Protection Agency (USEPA). These projects were located at multiple locations in Doddridge, Marshall, and Wetzel counties, West Virginia. The Orders from the USEPA indicated that discharges (into "waters of the U.S.") had occurred, and after-the-fact delineation of the locations was required. The work, completed without authorization from the United States Army Corps of Engineers (USACE), included the filling of wetlands and streams at well pads, impoundments, road crossings, and pipeline crossings.

POTESTA developed preliminary jurisdictional determination documents identifying potential impacts to stream and wetlands and worked with USEPA to negotiate impacts (jurisdiction). The alleged violations at more than half a dozen sites impacted approximately 13,000 linear feet of stream and 1.329 acres of wetlands. As part of a final delineation impact statement, POTESTA identified and classified aquatic resources based on pre- and post-construction conditions. The report included watershed data, rain and stream gauge records, soil information, spatial and 3D analyses, and historical aerial imagery to define jurisdictional limits and confirm current field conditions. Extensive fieldwork supported the verification of potential wetlands and stream features. POTESTA combined geospatial analysis, literature review, and professional expertise to develop defensible pre-construction configurations to support impact negotiations.

POTESTA also participated in several meetings with the USEPA to help develop the consent decree for the impact sites. Conceptual mitigation assessments were prepared concurrently to assist in final mitigation requirements. Impoundment removal cost estimates were generated so that a comparison could be made between all the mitigation options available (required by USEPA). As required, POTESTA provided multiple conceptual mitigation approaches for each project while negotiating

the final impact determination.

Once the Consent Decree was completed POTESTA developed restoration plans for seven sites in Wetzel and Marshall Counties, West Virginia. As part of this process POTESTA also evaluated several potential off-site mitigation sites throughout northern West Virginia. Three of the sites utilized mitigation banking, while the remaining four sites restored streams in their original location, as practicable. These efforts took several years and also required negotiations with USEPA.

Once restoration plans were approved by the USEPA, the restoration plans required permits. POTESTA completed individual 401 state water certification and United States Army Corps of Engineers individual 404 authorization applications as well as stormwater construction permits, dam safety authorization, stream activity permits, and consultation with other regulatory agencies. Construction activities could not be completed until these authorizations or consultations were obtained.

Construction at the four sites was completed in 2021, 2022, 2023, and 2024. In some instances heavy storms during construction resulted in project delays; however, each site is progressing with ongoing post construction monitoring currently in Years One through Four. The 2024 monitoring reports indicated that streams contained aquatic life and in most instances were highly stable. Banks were well vegetated and sites had riparian corridors with 100% cover. The sites have required few remedial measures and the primary post construction issue at these sites is control of invasive species. It is anticipated that these sites will meet their restoration endpoints well within the monitoring timeframe.

STREAM AND WETLAND DELINEATION – EXPANSION OF WIND FARM

Invenergy, LLC
Greenbrier County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Invenergy, LLC to provide professional environmental consulting services for the 22-turbine windmill expansion of the initial Beech Ridge project in Greenbrier County, West Virginia. POTESTA performed stream and wetland delineation for the Beech Ridge II Expansion (Beech Ridge II) facility, which was on approximately 500 acres and an additional 10 miles in length. The project expansion area consists of an actively managed forest with large acreages of past surface mine activities. Most of the project expansion will be in forested conditions along ridge tops. Project construction included graveling access roads, buried cables, and concrete foundations needed to support the turbines.

POTESTA compiled and reviewed the available information and data from the Natural Resources Conservation Service – County Soils Survey, U.S. Geological Survey 7.5-minute topographic quadrangles, National Wetlands Inventory Mapping, and aerial mapping before conducting the on-site inspection. POTESTA utilized the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region,* as necessary. During the site visit, a Trimble global positioning system (GPS) unit with sub-foot capabilities was used to locate the wetland and stream boundaries.

POTESTA's services included:

- Stream and wetland investigation and delineation of site (including evaluation of vegetation, soils, and hydrology).
- Flagging of identified jurisdictional wetlands for surveying and verification.
- Preparation of preliminary delineation map.
- Preparation of a report that included the location, classification, and size of jurisdictional wetlands identified, a description of vegetation, soils, and hydrology of potential wetland areas, and mapping depicting the boundaries of jurisdictional wetlands and streams.

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WETLAND DELINEATION AND PERMITTING FOR NATURAL GAS SITES

Antero Resources
Doddridge and Harrison Counties, West Virginia

Potesta & Associates, Inc. (POTESTA) visited each site and conducted evaluations to identify and delineate the boundaries of jurisdictional waters, including wetlands, located within the survey area. Evaluations were performed in accordance with methods described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987). POTESTA also utilized the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* for this project. POTESTA visited and delineated jurisdictional waters at approximately 50 sites in West Virginia.

Jurisdictional streams were delineated utilizing the "bed-and-bank" method, as well as the West Virginia Department of Environmental Protection's (WVDEP) October 1999 Memorandum, *Guidance for Delineation of Ephemeral/Intermittent Streams*. Ephemeral streams are defined as those that flow in direct response to precipitation, while intermittent streams flow for only a portion of the year. Perennial streams flow year round. During the site visit, a Trimble, sub-foot global positioning system (GPS) was used to locate the wetland and stream boundaries. This information was subsequently transferred to project mapping.

Available information and data regarding each site were compiled and reviewed prior to conducting onsite evaluations. The following resources were utilized during the investigation:

- Natural Resources Conservation Service – County Soil Surveys
- U.S. Geological Survey 7.5 Minute Topographic Quadrangles
- National Wetlands Inventory Mapping
- Aerial Mapping

Vegetation, soils, and hydrology at potential wetland areas on the property were evaluated and the resulting information recorded on data forms. Dominant vegetation of the canopy, understory, vines,

and herbaceous ground cover at potential wetland areas were identified and classified according to the *National List of Plant Species that Occur in Northeast Region*. Hydrologic characteristics were also observed and soil samples obtained with a sharp-shooter shovel at potential wetland areas. Soil samples were examined and described in accordance with the colors and alphanumeric notations found in Munsell Soil Color Charts (1990). Jurisdictional wetlands identified within the subject area were flagged in the field for surveying and verification purposes.

POTESTA prepared a Stream and Wetland Investigation and Delineation Report for each site. The report included the location, classification, and size of jurisdictional wetlands identified, and a description of vegetation, soils, and hydrology of potential wetland areas. GPS data was downloaded and imported into ArcGIS for development of mapping. Mapping, showing the boundaries of jurisdictional wetlands and streams, was provided for each delineation report so that it could be utilized for permitting purposes.

POTESTA compiled a list of permits/approvals believed to be necessary for the project. The permits or approvals necessary typically included:

- US Army Corps of Engineers (USACE) Permit, Section 404 Clean Water Act
- State of West Virginia, Water Quality Certification, Section 401 Clean Water Act
- West Virginia Public Land Corporation (PLC) approval, for Stream Bed Work
- Section 7 Consultation (T&E Species)
- Section 106 Consultation (Cultural Resources)

SOLAR ENERGY GENERATING FACILITY DEVELOPMENT

Confidential Company
Charles Town, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by a global renewable resource company to provide engineering, regulatory, and environmental consulting services for the development and construction of a 92.5-megawatt photovoltaic solar farm on an approximately 841-acre, six contiguous parcels in Jefferson County, West Virginia. The proposed project consists of rows of solar modules installed in arrays dispersed throughout the land. The project will have a substation connected to the existing 138-kilovolt overhead electrical transmission line passing through the southeast corner of the project area. The project will include internal access roads, commercial entrance(s), will be surrounded by security fencing and required zoning buffer, and stormwater management.

POTESTA's scope of services includes:

- Phase I Environmental Site Assessment Review and Update
- Spill Prevention Countermeasures and Control Plan
- Stream and Wetland Investigation and Delineation
- Permitting – Clean Water Act Section 404 Permit, West Virginia Department of Environmental Protection (WVDEP) 401 Water Quality Certification, WVDEP Construction Stormwater Permit, and local zoning, ordinances/regulations/associated permits
- National Environmental Policy Act Compliance
- Support for Public Service Commission of West Virginia Siting Certificate
- West Virginia Division of Natural Resources (WVDNR) Stream Activity Application
- WVDNR Natural Heritage Database Inquiry
- Pre-Construction ALTA/NSPS Land Title Survey
- Site Design Plan Application and Approval – grading, erosion and sediment control, stormwater management, utilities, and entrance design

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SOLAR FARM DEVELOPMENT

Confidential Company
Letart, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by a renewable energy developer to provide environmental consulting services to construct a solar farm with a single-axis tracker array layout in Mason County, West Virginia. POTESTA conducted a stream and wetland delineation and investigation on the total project area of interest (AOI) of 174.3 acres. POTESTA identified and delineated nine (9) streams and four (4) wetlands within the AOI. Two National Wetland Inventory (NWI) wetlands and one NWI stream were identified within the AOI. Based on the findings from the stream and wetland delineation and the proposed site design, if construction occurs within any of the delineated aquatic resources, permitting could be required and the necessary dredge and fill permits will be essential for development.

POTESTA's scope of services includes:

- Preliminary geospatial review by creating field mapping that included a digital elevation model, topographic information, satellite imagery, soil data, and NWI data.
- The preliminary jurisdictional determination for perennial reaches was made based on the "bed and bank" method.
- Utilized a Trimble GeoXH global positioning unit with sub-foot capabilities was utilized to mark the channel reaches.
- The sites were assessed for the presence of the following three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology.
- Streams in this document were assessed using bed and bank features and the presence of an ordinary high-water mark.
- Preliminary and geospatial assessments of the proposed site were made utilizing NWI data.
- Update of existing Wetland Delineation and Stream Identification Report.

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CONSULTING SERVICES FOR WIND FARM

PPM Atlantic Renewal Resources, LLC
Preston County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by PPM Atlantic Renewal Resources, LLC (PPM) to provide engineering and environmental consulting services for the construction of the North Briery Mountain Wind Project located northwest of Terra Alta, Preston County, West Virginia. POTESTA worked with PPM to obtain the Public Service Commission (PSC) Siting Certificate and other required permits for the construction of the 22-wind turbine energy generating facility.

POTESTA completed the following services:

- Site Plan Development – preliminary site engineering drawings based on 2-foot contour data and turbine sites including the development of alignments for the collection system, transmission interconnect, substation site layout, facility access roads, staging areas, etc.
- Reproduction of a 5-Mile Radius Map for PSC filing.
- Traffic Study – Average Daily Traffic (ADT) information for public roads located within a study area that encompasses a 5-mile radius of the proposed wind turbine locations for the pre-construction, construction, and post-construction phases of development. The ADT information is further broken down for public roads within a 1-mile radius of the proposed wind turbines for the pre-construction, construction, and post-construction phases of the project.
- Hydrology Study – hydrologic analysis for areas identified as having the potential to discharge increased peak flows during storm events as a result of the construction.
- Stream and Wetland Investigation and Delineation
- Infrastructure Study
- Land Use Assessment

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WETLAND RESTORATION

Freeland & Kauffman, Inc.
Frozencamp Wildlife Management Area, Jackson County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Freeland & Kauffman, Inc. to provide professional environmental consulting services for Wal-Mart Stores, Inc. for a new Supercenter facility in Ripley, West Virginia. The project required both a Department of Army permit from the United States Army Corps of Engineers and individual water quality State 401 certification from the West Virginia Department of Environmental Protection. POTESTA prepared a Compensatory Mitigation Plan for both stream and wetland impacts. The wetland mitigation was completed in the Frozencamp Wildlife Management Area (FCWMA).

POTESTA designed an approximate 2.5-acre emergent/scrub-shrub wetland east of Wiblin Lake. This was accomplished regrading and roughening the bottom of Wiblin Lake to lower the water table depth between approximately 6 and 18 inches to provide retention and sediment storage in the wetlands. Wetland sumps and swaths were developed to maximize habitat regimes and were fueled by neighboring tributaries that had their banks lowered in portions to allow water to escape during high flow events to feed the wetland area.

The wetland vegetative planting plan included *Cephalanthus occidentalis* (button bush), and *Alnus rugosa* (speckled alder) shrubs to be planted at a rate of approximately one stem for every 10 linear feet at random along the edges of the wetland swaths. Wetland seed mixes were comprised of natural occurring and fast establishing species including, but not limited to, *Elymus virginicus* (Virginia Wild Rye), *Carex vulpinoidea* (Fox Sedge), and *Juncus effusus* (Soft Rush) at a rate of 15 bulk pounds per acre. Upland planting plans were established using existing and surrounding site conditions. *Quercus bicolor* (swamp white oak) and *Quercus palustris* (pin oak) tree species were selected for the riparian corridor and planted with an on center spacing of 15 to 20 feet. An upland seed mix was established for the disturbed upland areas during construction and included separate species compositions based on the time of year. Upland seed mixes were applied at a rate of 9 bulk pounds per acre.

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ENVIRONMENTAL SERVICES FOR SOLAR FARM

Caden Energy
Mason County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Caden Energy to provide environmental consulting services associated with the construction of a 30-megawatt solar with a single-axis tracker array layout in Mason County, West Virginia. The Jesco Solar Farm site is in a mostly rural area, surrounded by undeveloped land, farmland, and widely spaced residential properties. The subject site was previously used as an agricultural farm and a portion of the site was utilized as a sand and gravel pit.

POTESTA performed the following services:

- Section 106 National Historic Preservation Act Consultation
- Section 7 Threatened and Endangered Species Act Consultation
- Phase I Environmental Site Assessment for acquisition of property
- Stream and Wetland Delineation

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CONSULTING SERVICES FOR WIND FARM

NedPower Mount Storm, LLC
Mount Storm, Grant County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by NedPower Mount Storm, LLC to provide environmental and engineering consulting services for the construction of 132 wind turbines with a two-megawatt capacity along 12 miles of ridgeline along the Allegheny Front just east of Mount Storm, West Virginia. POTESTA provided various services to support the initial project design and development of the 1,000-acre wind power generation farm including the turbine locations, access roads, staging areas, and transmission lines routes.

POTESTA's services included:

- Clean Water Act Permitting (including the USACE, WVDEP, and WVDNR)
- Compensatory Mitigation Plan
- Cultural Resource Consultation
- Engineering- Stormwater Runoff Calculations
- FAA Permitting
- Project Survey Support – Parcel Mapping
- Stream and Wetland Investigation and Delineation
- Threatened and Endangered Species Consultation and required studies
- West Virginia Public Service Commission Liaison Support

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WETLAND INVESTIGATION/DELINEATION

Renick Williams
Moorefield, Hardy County, West Virginia

Potesta & Associates, Inc. (POTESTA) conducted a wetland investigation/delineation to ascertain the presence and to delineate the boundaries of jurisdictional wetlands that may be present on the subject property located north of Moorefield, Hardy County, West Virginia. The subject property was approximately 27 acres in size.

The methods utilized in this investigation followed *United States Army Corps of Engineers' Wetlands Delineation Manual* (1987) for a routine onsite inspection. The project area and its boundaries were physically walked to determine vegetation change and soil saturation. Additionally, the wetland and upland areas are clearly distinct. The transect wetland determination method is typically used in determining wetland boundaries on tracts of land of this size. However, POTESTA used the routine method to more accurately determine the wetland boundaries.

Vegetation was identified in accordance with the taxonomic keys and nomenclature set forth in Strausbaugh and Core, *Flora of West Virginia* (1977) and classified using the United States Fish and Wildlife Service's *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)*.

Hydrological characteristics of the area were noted and recorded. Soil saturation was measured and documented where applicable. Soil samples were obtained using a sharp shooter shovel. Soil test pit locations were established and soil characteristics were recorded.

Approximately 18.11 acres of jurisdictional wetland were delineated on the subject property. The U. S. Army Corps of Engineers and the Natural Resource Conservation Agency reviewed and agreed with the delineation performed by POTESTA.

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SNOWCREEK WETLAND DELINEATION, MITIGATION PLAN, AND PERMITTING

SnowCreek Properties, LLC
Snoeshoe, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by SnowCreek Properties, LLC to conduct wetland and stream delineation services in conjunction with a proposed commercial development. POTESTA prepared a compensatory mitigation plan that included on-site stream restoration and established funding for a portion of the Knapps Creek Stream Restoration project with the Greenbrier Valley Conservation District. The compensatory stream mitigation consisted of approximately 1,000 linear feet of new stream channel and approximately 2,000 linear feet of localized tree and shrub plantings along the banks of the newly formed stream channel.

In addition, POTESTA prepared and applied for the necessary permits dealing with this type of project. This included Section (of the Clean Water Act) 404 and 401 Individual Permits from the US Army Corps of Engineers and West Virginia Department of Environmental Protection. SnowCreek Properties has received their permits.

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APPENDIX A

POTESTA

DANA L. BURNS, P.E., P.S.
President

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 the 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

Oversees the design and permitting of complex civil, environmental, geotechnical, and mining engineering projects. Expertise includes siting, design, and permitting of industrial and municipal waste disposal facilities; reclamation of abandoned mine lands; and development of comprehensive stormwater management plans and groundwater sampling programs. Conducts environmental and reclamation liability assessments and prepares site plans for commercial and industrial facilities, incorporating advanced hydrologic and hydraulic analyses. Provides expert witness testimony. Directs the engineering division, managing day-to-day operations of the headquarters and two branch offices, with responsibility for staffing, interoffice coordination, training, business development, and leadership of technical and support teams to ensure exceptional project delivery.

PROFESSIONAL EXPERIENCE

Municipal & Government Infrastructure

South Charleston Development Authority – Project Manager for the engineering and site design for the development of Park Place, a 500,000-square-foot retail, entertainment, and food/beverage development on a 38-acre former fly ash disposal and former manufacturing plant in South Charleston, West Virginia.

City of Charleston – Inspection and preparation of rehabilitation design for Parking Garage No. 1.

Tucker County Industrial Park – Principal-in-Charge for the design, which included water and sewer lines, stormwater management design, roadway design, pavement design, site grading plan, master plan, and geotechnical exploration/foundation recommendations.

Principal-in-Charge for site grading plans, stormwater management system, site surveying, roadway/parking lot design, wetland delineation/mitigation, and construction monitoring for the 400,000-square-foot Coldwater Creek distribution center in Parkersburg, West Virginia.

Town of Addison – Principal-in-Charge for the upgrade, repair, and extension of the existing failing stormwater collection system in Webster Springs, West Virginia. The project consists of 12,320 feet of 30-inch, 24-inch, and 12-inch storm sewer pipes with 90 drop inlets on multiple streets in the Town.

Glenville Utility Board – Principal-in-Charge for the design improvements to separate the stormwater system from the sanitary wastewater system to better manage street flooding and reduce infiltration and inflow in the sanitary system in Glenville, West Virginia. The stormwater line separation project involves the installation of approximately 1,600 linear feet of 30-, 24-, and 18-inch stormwater lines and 17 drop inlets.

Huntington Sanitary Board – Principal-in-Charge for the separation of portions of the local storm sewers from the combined sanitary sewer and installation of detention and infiltration structures to attenuate runoff of the pump to the Ohio River in Huntington, West Virginia. Design of two stormwater detention tanks, two pump stations, approximately 4,800 linear feet of new storm lines, and 3,200 linear feet of 24-inch force main.

Town of Marlinton – Principal-in-Charge for various improvements to the existing sanitary sewer/storm sewer collection system to reduce infiltration/inflow and improve existing poor drainage conditions in Marlinton, West Virginia. Conceptual map, funding assistance, development of Long-Term Control Plan, smoke testing and camera work, and preparation of a Preliminary Engineering Report.

West Virginia Division of Highways – Principal-in-Charge for the design and preparation of contract plans and supporting documents for the construction of a stormwater collection and drainage system in the Community of Rand, West Virginia. Design of 3,600 feet of new and replacement storm sewer, five new stormwater discharge outfalls to the Kanawha River, 2,500 feet of replacement sanitary sewer line (including 12 new manholes incidental to construction of storm sewers, and 1,200 feet of replacement street pavement. Environmental and construction permit applications and NEPA compliance evaluations.

West Virginia Division of Highways – Principal-in-Charge for the design and preparation of contract plans and related documents for the renovation of the Big Creek Bridge in Fayette County, West Virginia. Included design of structural concrete repairs and the installation of a 3- to 5-inch concrete cell liner.

City of Philippi – Principal-in-Charge for municipal water system upgrade project. Work included the design of two replacement booster stations, two new water storage tanks, new pumps for an existing booster station, a 1,500-foot water line extension, and telemetry systems. Drawings, specifications, and a cost estimate were prepared.

Tucker County Development Authority – Principal-in-Charge for the design of approximately 10,000 feet of water line and sewer line to serve an industrial park, including a lift station. Drawings, specifications, and a cost estimate were prepared. Also performed construction administration services.

West Virginia Bureau for Public Health – Principal-in-Charge for services associated with Source Water Assessment Protection Plans (SWAPP) for 38 public water systems throughout West Virginia. Services provided included windshield surveys to identify and locate (via GPS) potential contaminant sources (PCSs),

review of regulatory databases, entering data into the Access database, and preparation of summary reports.

City of Philippi – Principal-in-Charge for relocation of water lines due to proposed roadway. Relocation included approximately 4,000 feet of 1-inch to 12-inch diameter pipe, fire hydrants, meters, and valves. We prepared construction drawings, specifications, and quantities for the project.

West Virginia Department of Abandoned Mine Lands – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a six-mile water line extension, including fire protection. The project included a 90,000-gallon water tank, booster station, and pressure relief valves. The extension was tied into the Norton Harding Jimtown PSD System and served the town of Cassity in Randolph County.

West Virginia Department of Abandoned Mine Lands – 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.

West Virginia Department of Abandoned Mine Lands– 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, collection of water samples, review of water analysis data, preparation of conceptual designs and associated costs, and preparation of a summary report.

Huntington Sanitary Board – Principal-in-Charge for Master Agreement to provide engineering/environmental services related to the implementation of their Long-Term Control Plan, Wastewater Treatment Plant Modernization Plan, and Storm Water Management Utility Establishment/Operation.

Subsurface exploration, evaluation, and design of remedial measures for landslides:

- Soldier beam and lagging retaining walls
- Gabion walls
- Grade/drain/compact in-place
- Geo-grid reinforcement with grade/drain/compact in-place

Elk Valley Public Service District – Principal-in-Charge for the repair of embankment failures resulting from a flood event in Kanawha County:

- Hazel Dive Slip
- Reynolds Avenue Slip
- Heizer Trucking Slip

West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands – Principal-in-Charge for a landslide involving an abandoned mine land site in Williamson, West Virginia:

- Geotechnical exploration.
- Design of a 480-foot-long soldier beam and lagging retaining wall with tiebacks to support loose mine spoil backfill along the edge of a previously mined area with steep terrain.
- The project was required to protect an existing 125-bed nursing home facility.

Principal-in-Charge for multiple slip evaluations and repairs near residential housing structures, including surveying and construction observation:

- Travelers Insurance
- Private Owner
- City of Huntington, WV
- Town of Granville, WV
- City of Charleston, WV
- City of Morgantown, WV

Huntington Sanitary Board – Principal-in-Charge to maintain the sanitary sewage pipeline and remediation of a 90-foot-tall landslide caused by a damaged sanitary line in Huntington, West Virginia.

Huntington Municipal Development Authority – Remediation of a 4-acre (150 feet tall) landslide at Kinetic Park in Huntington, West Virginia.

West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands – Principal-in-Charge for the remediation of two landslides and acid mine drainage discharged from an abandoned deep mine in Harrison County, West Virginia.

Design and permitting of new landfills and development of cell closure plans.

Municipal Landfills –

- West Virginia Solid Waste Management Board/Monongalia County Sanitary Landfill – Morgantown, WV
- North Folk Landfill – Wheeling, West Virginia
- Disposal Service, Inc. Landfill – Hurricane, WV
- Sycamore Landfill, Inc. – Hurricane, WV
- City of Charleston Landfill – Charleston, WV
- Mingo County Landfill – Mingo County, WV
- Omar Landfill – Omar, WV
- Pocahontas County Landfill – Marlinton, WV
- HAM Sanitary Landfill – Peterstown, WV
- Kanawha- Western Landfill – Cross Lanes, WV
- S&S Landfill – West Milford, WV
- Brooke County Landfill – Brooke County, WV
- Wetzel County Landfill – Wetzel County, WV
- WVDEP's Landfill Closure Assistance Program
  - Montgomery Sanitary Landfill – Montgomery, WV
  - Wyoming County Sanitary Landfill – Pineville, WV
  - Jackson County Sanitary Landfill – Ripley, WV
  - City of Moundsville Landfill – Charleston, WV

West Virginia Division of Highways – Multiple open-ended agreements for various engineering and environmental consulting services.

WV Division of Highways – Managed environmental permitting, surveying, and design of four-lane 1.25-mile North Bridgeport Connector Road from Interstate 79 Jerry Dove Interchange to Benedum Airport in Bridgeport, West Virginia.

WV Division of Highways – Managed geotechnical, environmental, right-of-way, and survey work performed as a sub-consultant for various projects:

- King Coal Highway (section near Pineville, WV)
- Sharon Heights Connector
- Eldora and Enterprise Connector
- Dundon Bridge
- Martha Truss Bridge
- Martha Concrete Girder Bridge
- Upgrade of three bridges on Interstate 81
- Corridor H (section near Kerns, WV)
- Corridor D (section near Washington, WV)

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, the West Virginia Division of Environmental Protection, the Virginia Abandoned Mine Lands, and the Ohio Department of Natural Resources.

Solar Development

Berkshire Hathaway Energy Renewables, LLC—Principal-in-Charge for the construction of stormwater permitting for the development of 600 acres of solar farms in Ravenswood and coordinating with WVDEP for the development of a phased approach to the permitting process.

Confidential global renewable resources company—management of engineering tasks for the construction of an approximately 800-acre and 92.5-megawatt (MW) solar farm facility in the Northern Panhandle. Scope of services included topographic and boundary surveying, site layout, stormwater design, and environmental permitting, including local, state, and federal permitting.

City of Charleston – Hydrologic and hydraulic analyses of South Ruffner Watershed. The project analyzed various storm events and presented conceptual recommendations to mitigate their effects.

U.S. Army Corps of Engineers, Jacksonville District – Determination of watershed areas along the Suwannee River Basin.

Principal-in-charge for the Coalfields Industrial Site Survey performed for the West Virginia Development Office. The study identified and evaluated more than 1,000 former and current mining sites for potential industrial use. McDowell County was one of six included in the study. The study considered accessibility, utility status, distance of required extensions, topography, site size, and other relevant factors.

West Virginia Division of Highways – Coordination of Environmental Impact Statement for Route 19 upgrade from Summersville to Interstate 79 in Braxton County and New River Parkway from Sandstone Falls on I-64 to near Athens on I-77.

The State of West Virginia

STATE OF WEST VIRGINIA · MONTANI SEMPER LIBERI · JUNE 20 1863

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting.

Know Ye That **The State Board of Registration for Professional Engineers,** *of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of*

Dana L. Burns

Does, In Pursuance of Authority Vested In It *by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a*

REGISTERED PROFESSIONAL ENGINEER

Registration Number 9859

To Hold *and use such title in the practice of his profession, subject to the conditions prescribed by law.*

Given *under the hand and the Seal of the Board at the Capitol in the City of Charleston, this* 17th *day of* Sept. *in the year of our Lord One Thousand Nine Hundred and Eighty-Five and of the State, the One Hundred Twenty-Second*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

By

Secretary

Robert B. Scott President

RONALD R. POTESTA
President

EDUCATION

M.S. Economics – Mineral Economics, Econometrics, and Microeconomics
West Virginia University

B.S. Business Administration
West Virginia University

EMPLOYMENT HISTORY

1997-present	Potesta & Associates, Inc.
1989-1997	Environmental and Engineering Consulting Company
1984-1988	West Virginia Department of Natural Resources
1981-1984	West Virginia Coal Development Authority

SERVICE ON BOARDS AND COMMISSIONS

- Past Chairman and current Commissioner, Ohio River Valley Water Sanitation Commission
- Past Chairman and current Member, Board of Trustees, The West Virginia Nature Conservancy
- Member of the West Virginia Land & Mineral Owners Board of Directors
- Past Chairman, The Greater Kanawha Valley Foundation

AREAS OF SPECIALIZATION

Federal and environmental regulations, statutory schemes, and environmental guidance. Directs environmental compliance and environmental remediation departments including the day-to-day operation of three branch offices concerning staffing, coordination, training, business development, and overall management of technical and support staff.

PROFESSIONAL EXPERIENCE

Prior to Forming Potesta & Associates, Inc.

President of an Environmental and Engineering Consulting Company – Formed in 1989 and under his guidance, the company grew into a full-service environmental consulting, design, and construction company with a staff of over 50 professional and support personnel.

Director of the West Virginia Department of Natural Resources – Supervision of Water Resource and Waste Management Division, Land and Real Estate Office, Office of Regulatory Affairs, Conservation, Education, Litter Control, Public Information Office, and Wonderful West Virginia Magazine. He also served as Chairman of the State Emergency Response Commission and the Title III organization mandated by the federal Superfund Amendments and Reauthorization Act.

Deputy Director of the West Virginia Department of Natural Resources – Responsible for overseeing environmental regulatory programs described under the Director's position and supervising programs associated with the West Virginia Surface Coal Mining and Reclamation Act.

Marketing Director of the West Virginia Coal Development Authority – Responsible for promoting West Virginia coal in domestic and export markets requiring expertise in coal reserves, coal quality, transportation networks, and market demands.

Environmental Remediation

Principal-in-Charge and technical advisor for various types of environmental remediation projects:

- Asbestos inspections

- Environmental emergency response
- Environmental site assessment and remediation
- Groundwater

Environmental Compliance

Principal-in-Charge and technical advisor for various types of environmental compliance projects:

- Permitting
- Wetland delineation and remediation
- Biological surveys
- Risk assessments
- Habitat assessments
- Surface water modeling
- Water quality
- Endangered species consultation
- Oil and natural gas consulting
- Solar development consulting
- Stream restoration

JESSICA L. YEAGER
Senior Scientist

EDUCATION

M.S. Biology (Emphasis on 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 an environmental review or providing environmental permitting. Play a 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 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 waste load 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 prepared 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 a representative for the company in board hearings to address violations.

Risk Assessment

Completed large-scale risk assessment in watersheds in Kentucky, West Virginia, and Virginia 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, specialized sediment sampling which included both physical and chemical characterizations. These projects have required large-scale data integration and 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 that required a supplemental EIS; several large-scale mining operations whose alternatives included various mining methodologies (underground mining, high wall mining, etc.) as well as post-mining land uses. Prepared and submitted environmental assessments for federal regulatory agencies as a third-party contractor. Prepared, reviewed, and commented on Draft Environmental Impact Statements for various federal agencies as a 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.

Benthic

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.

TIMOTHY R. FERGUSON
Senior Scientist

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 permits, 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

Invenergy, LLC – Stream and wetland delineation for the construction of an approximate 124-turbine wind farm in Greenbrier County, West Virginia.

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 fieldwork 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 processes 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 to construct 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, 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 about the 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 the 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 the operation of GPS equipment.

Solar Development

Confidential global renewable resources company—topographic and boundary surveying, site layout, stormwater design, and environmental permitting including local, state, and federal permitting for the construction of an approximate 800-acre and 92.5-megawatt (MW) solar farm facility in the Northern Panhandle.

Confidential regional renewable energy development company—wetland delineation and stream identification for 174.3 acres of a proposed solar farm in the western part of the state.

Confidential international renewable energy corporation—concept plan (including the conceptual layout of the site) and local zone permitting of 461 acres for a solar farm located in the Eastern Panhandle.

Oil and Gas

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

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

Managed field crews performing environmental inspections of 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 for energy generation projects.

D. MARK KISER, P.E., L.R.S.

Chief Engineer

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, 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

Stormwater Management

Developed stormwater management plans, including calculation of peak runoff rates, storm volumes, and design of stormwater management devices, including culverts, ditches, sumps, ponds, principal pipe spillways, and emergency spillways, for the following projects:

- Site development projects including commercial, retail, and industrial sites ranging from ¼ acre to more than 100 acres.
- Abandoned mine lands reclamation projects, including landslides, refuse piles, slurry ponds, and subsidence control projects.
- Commercial and industrial waste landfill projects.
- Roadway design projects.
- Other projects involving the disturbance of the ground surface.

Stormwater Drainage Plans – Site development projects including pre- and post-development discharges, design of sediment control devices, preparation of stormwater general permit application, and consulting for numerous construction projects in West Virginia.

Stormwater Evaluation – Evaluation of stormwater drainage system (culverts and channels) to alleviate flooding problems for a church in Kanawha County, West Virginia. The project included computer modeling to identify culvert capacities and to identify repair options.

Expert Witness:

- Retained for the plaintiff damaged as a result of flooding caused by a lack of maintenance at a culvert system in Westmoreland, Wayne County, West Virginia.
- Retained to support a property owner damaged as

a result of flooding caused by downstream obstructions. Reviewed regulatory agency files, conducted site inspections, evaluated possible remedial measures, and provided support in anticipation of litigation.
- Retained for plaintiff damaged as a result of flooding from upstream construction. Visited the site to observe problem areas, reviewed construction practices/procedures, reviewed regulatory permits, and provided testimony as to the cause of flooding.

Civil/Site Design

Ridgeline, Inc./Cabela's – Retained by the developer and Cabela's to provide civil engineering design services for a new Cabela's store in Charleston, West Virginia:

- ALTA survey
- Subsurface exploration
- Grading plan including balanced cut and fill for the building pad, parking fields, and access roads.
- Stormwater collection system design, including curb inlets, catch basins, and culverts.
- Pavement design.
- Utility extension designs including sanitary sewer, potable water, fire service, natural gas, underground electric, underground telephone, and underground cable television.
- Permitting services
- Support for local approvals, including approval from Charleston Municipal Planning Commission as a Development of Significant Impact and a building permit to allow construction to begin.
- MM-109 permit to allow for connection of the store's new roadway with the existing public roadway.

South Charleston Development Authority – Project Manager for the engineering and site design for the development of Park Place, a 500,000-square-foot retail, entertainment, and food/beverage development on a 38-acre former fly ash disposal and former manufacturing plant in South Charleston, West Virginia.

- Topographic mapping, including aerial photography
- Geotechnical engineering for the characterization of fly ash material and natural soils and evaluation of consolidation of the fly ash for structural fill.
- Developed a plan to remove 900,000 cubic yards of soil and rock from a borrow site to use as fill for the development.
- Permitting, including landfill/National Pollutant Discharge Elimination System permit, construction stormwater permits, and West Virginia Dam Safety permit.
- Design and construction of new emergency spillway, sanitary sewer, storm sewer, water, gas, communications, electric, and lighting.
- Drainage and roadway design.
- Construction phase services include assistance with contractor bidding of the project, evaluation of bids, and construction monitoring.

ZMM Architects & Engineers – Design Engineer for a new 300,000 square-foot consolidated laboratory facility on a 10.5-acre site within the West Virginia Regional Technology Park in South Charleston, West Virginia.

Fieldcrest Subdivision – Project manager/engineer for the development of a nine-lot subdivision in Charleston, West Virginia. Design and permitting/regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater, electric, telephone, cable, and natural gas. Preparation of drawings/specifications for necessary governmental agency approvals and for solicitation of bids. Inspection and certification of completed sanitary sewer system.

Connell Pointe Subdivision – Project manager/engineer for development of an eleven-lot subdivision in Charleston, West Virginia. Design and permitting and regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, natural gas service, stormwater, electric, telephone, and cable. Preparation of drawings/specifications for governmental agency approvals and for solicitation of bids. Inspection and certification for completed sanitary sewer systems.

Conner Drive Townhouses – Project manager/engineer for the development of 13 townhouse lots just outside of Charleston, West Virginia. Planning, surveying, design, and regulatory approvals for infrastructure, including new street, stormwater management system, sanitary sewer main, water main, electric, natural gas, telephone, and cable.

Gettysburg Subdivision – Project manager/engineer for an 18-lot subdivision located in Kanawha County, West Virginia. Design, surveying, and regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater management system, electric, natural gas, telephone, and cable. Preparation of drawings/specifications for solicitation of bids. Inspection and certification of the sanitary sewer collection system and pump station.

Yorktowne Subdivision – Project engineer for development and construction phase services for a 50-lot subdivision in Charleston, West Virginia. Design of streets, lots, stormwater management systems, sanitary sewer mains and pump stations, water mains, underground electric, natural gas, telephone, and cable.

City of Charleston – Feasibility study for the replacement of the CSX Ramp in Charleston, West Virginia.

Villages at Coolfont – Project manager for a project in Morgan County, West Virginia, which included planning, engineering, and permitting associated with developing a second home community on 1.000 acres near Berkeley Springs, West Virginia. Project included:

- Potable water supply source (wells), treatment plant, storage, and distribution system
- 0.44 MGD MBR wastewater treatment plant and sanitary sewer collection system
- Community roadways and storm sewer systems
- Detailed plans for the water and wastewater treatment plants and the distribution allocation system serving the first 124 homes
- Permits were obtained for the water and wastewater plants

Suncrest Subdivision – Project engineer for the development of a subdivision in Charleston, West Virginia. The project included engineering and permitting for a new residential subdivision, including roadway, underground electric, telephone, cable, water, sanitary sewer, and stormwater. The sanitary sewer system was designed, constructed, and monitored under the terms of an alternate mainline extension agreement with the Charleston Sanitary Board.

Business and Industrial Development Corporation – Preparation of Utility Extension and Roadway Paving Plans for Southridge Centre - Phase 2 area. The project included the preparation of bidding/construction drawings to provide natural gas, water, sanitary sewer, telephone, and cable television serving four commercial lots and a 50-lot proposed subdivision. All utilities were underground. The length of the project was approximately ½ mile. The project also included roadway paving and stormwater drainage.

Mixed-Use Industrial Park – Development of a conceptual development plan for a mixed-use industrial park. The evaluation included developing preliminary alignments for two access roadways, including earthwork, drainage, subbase, and paving, with preliminary cost estimates. The total length of the road was over 5 miles. The evaluation also included a preliminary layout of water and sewer service for a proposed 400-acre development.

Utility Relocation Plans – Required for site development, waterline, and sewer construction projects. Projects included determining utility locations through records review, utility contacts, and surveying. Designs were prepared, including locations, details, and pavement replacement. The design also included obtaining approvals from the West Virginia Division of Highways and the owners of the utilities.

Government Infrastructure

West Virginia Division of Environmental Protection (WVDEP) Abandoned Mine Lands (AML) Reclamation – Project engineer/project manager for open-ended 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 for numerous projects.

WVDEP-AML – Project Manager for the Emergency Program projects throughout West Virginia, including:

- Marmet (McGrew) Subsidence
- Leivasy (Dorsey) Subsidence
- Ragland (Mounts) Landslide
- Montgomery Emergency

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, collection of water samples, review of water analysis data, preparation of conceptual designs and associated costs, and preparation of a summary report.

West Virginia Division of Highways (WVDOH) – Environmental Assessment for a 1.25-mile proposed four-lane divided highway in Bridgeport, West Virginia.

WVDOH – Environmental Impact Statement (EIS) for proposed Route 19 upgrade from Summersville, West Virginia, to Interstate 79 in Braxton County, West Virginia. The project included the evaluation of three alternatives over approximately 25 miles. Responsibilities included hazardous waste section collection of general data used by other scientists, field reviews, and participation in public meetings.

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a six-mile water line extension, including fire protection. Included in the project were a 90,000-gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served the town of Cassity in Randolph County.
Design for waterline extension projects, including preparation of construction drawings, specifications, and engineer's cost estimates for WVDEP- AML.

- Cassity Fork Waterline
- Beaver Creek Waterline Extension
- Godby Branch Waterline Extension

West Virginia Department of Environmental Protection – Design, permitting, and construction monitoring associated with a 138,000-gallon double containment storage tank, duplex pump station, and force main piping related to the closure of the Jackson County Sanitary Landfill near Ripley, West Virginia.

The State of West Virginia

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That **The State Board of Registration for Professional Engineers**, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

David M. Kiser

Does, In Pursuance of Authority Vested In It

by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number 10779

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.

Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 15th day of March in the year of our Lord One Thousand Nine Hundred and Ninety and of the State the One Hundred Twenty-sixth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

By

Secretary Kenneth H. Means

President Robert B. Scott

JARRETT M. SMITH, P.E.
Senior Engineer

EDUCATION

B.S. Civil Engineering, 2002
West Virginia University Institute of Technology

A.S. General Science, 2000
West Virginia University

EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.
2001-2002 WV Dept of Transportation District 3-Design/Field Inspector

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia

SERVICE ON BOARDS AND COMMISSIONS

WV Society of Professional Engineers Board Member

AREAS OF SPECIALIZATION

Management and oversight of civil engineering projects with services related to surveying, geotechnical exploration, planning, design, permitting, and construction monitoring. Project categories include oil and gas pipeline permitting, oil and gas well pads, residential, commercial, and industrial development, stormwater management facilities, and solid waste landfills.

PROFESSIONAL EXPERIENCE

Flood Studies/Stormwater Management

Floodplain Management – Tasks included hydraulic modeling of watersheds for existing and proposed conditions using HEC-RAS and HEC-HMS to determine flood levels and their impact on residents' properties, oversight of surveying and mapping, and development. The project's scope included fill within the Special Flood Hazard Areas (SFHA), residential and commercial development within SFHA, obtaining the original computer model of floodplain data from the United States Army Corps of Engineers (USACE), and coordination with the local floodplain manager, FEMA, and USACE—preparation of permit application packages for FEMA's LOMA, CLOMR-F, and LOMR application submittals.

- Pison Development – Mineral Manor, Knollview Village Apartments, Willow Tree Apartments, Crestview Apartments
- Copper Beech – townhouse development project
- Jo's Globe Distribution – expansion project
- Blue Ridge Builders – Cheat Landing Development
- Hamlin United Methodist Church – Revised Floodway project
- Columbia Pipeline Group – Clendenin Low Water Crossing

Stormwater Management Design – Tasks include hydrological analysis, hydraulic evaluations of open- and closed-channel flow systems, storm sewer design, velocity-dissipation analysis and design, stormwater retention/detention design, water-quality analysis and design, and sediment-control structure design. Programs utilized during projects included Haestad Method Programs and SedCad Software.

- Echo, Inc. – Tupper's Creek site development
- Pison Development – six projects
- Kenna Ridge Business Park
- Hurricane Market Place
- Woodstock – commercial site development
- Green Eagle – three projects
- O-N Mineral – process pond
- RJ Recycling, LLC – Riverside Yard sediment/oil control ponds
- Dunlap Builders, Inc. – West Run Student Housing project

The State of West Virginia

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come Greeting

"Know Ye" That **The State Board of Registration for Professional Engineers** of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Jarrett M. Smith

DOES IN PURSUANCE OF AUTHORITY VESTED IN IT by law hereby certify that he having submitted satisfactory evidence of his ability and experience is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number 17537

"To Hold" and use such title in the practice of his profession, subject to the conditions prescribed by law.

Given under the hand of the Seal of the Board at the Capitol in the City of Charleston, This 20th day of December in the year of our Lord 2007 and of the State the One Hundred Forty-Fourth

Members of the Board