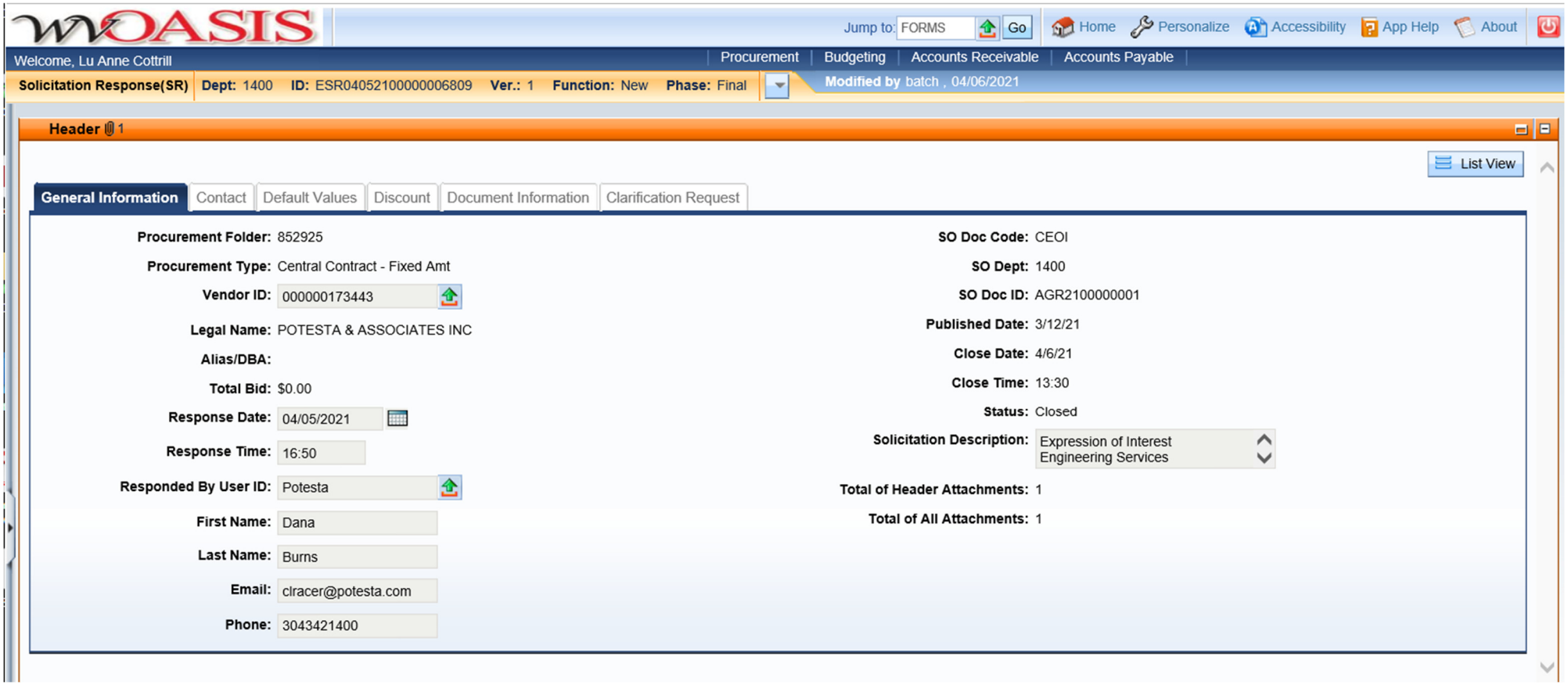
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency 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.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Home
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About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 1400 ID: ESR04052100000006809 Ver.: 1 Function: New Phase: Final
Modified by batch , 04/06/2021
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List View
General Information
Contact
Default Values
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Document Information
Clarification Request
Procurement Folder: 852925
Procurement Type: Central Contract - Fixed Amt
Vendor ID: 000000173443
Legal Name: POTESTA & ASSOCIATES INC
Alias/DBA:
Total Bid: $0.00
Response Date: 04/05/2021
Response Time: 16:50
Responded By User ID: Potesta
First Name: Dana
Last Name: Burns
Email: clracer@potesta.com
Phone: 3043421400
SO Doc Code: CEOI
SO Dept: 1400
SO Doc ID: AGR2100000001
Published Date: 3/12/21
Close Date: 4/6/21
Close Time: 13:30
Status: Closed
Solicitation Description: Expression of Interest Engineering Services
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:	852925
Solicitation Description:	Expression of Interest Engineering Services
Proc Type:	Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2021-04-06 13:30	SR 1400 ESR04052100000006809	1

VENDOR

000000173443
POTESTA & ASSOCIATES INC

Solicitation Number: CEOI 1400 AGR2100000001

Total Bid: 0 **Response Date:** 2021-04-05 **Response Time:** 16:50:19

Comments:

FOR INFORMATION CONTACT THE BUYER
Jessica S Chambers
(304) 558-0246
jessica.s.chambers@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	Engineering Services				

Comm Code	Manufacturer	Specification	Model #
81000000			

Commodity Line Comments: Statement of Qualifications submitted for Contract Number: CEOI 1400 AGR2100000001

Extended Description:

Engineering Services

STATEMENT OF QUALIFICATIONS

PREPARED FOR: West Virginia Department of Agriculture

Engineering Services Guthrie Agricultural Center Expansion

POTESTA
Engineers and Environmental Consultants

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

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

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

Project Number: 0101-21-0117

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Appendix

STATEMENT OF QUALIFICATIONS

EXECUTIVE SUMMARY

Potesta & Associates, Inc. (POTESTA) is pleased with the opportunity to provide engineering services to West Virginia Department of Agriculture (Agency) for facility planning, access, and expansion at the Guthrie Agricultural Center located at Gus R. Douglass Lane, Charleston, West Virginia. As a leader in engineering design services with a diverse portfolio, POTESTA understands growth leads to expansion and expansion leads to opportunities. The Agency serves an invaluable role in the state of West Virginia to protect plant, animal and human health and the State's food supply.

POTESTA understands professional services to be provided for project include:

- **Evaluate current and potential routes—**ingress/egress, traffic flow, access points (including security), and parking based on current facility operations and planned future expansion.
- **Develop recommendations for solutions—**facility roads, access points, and overall facility expansion and evaluate adjacent properties (including survey and mapping) that may be integral to those solutions.
- **Design alternative routes—**ingress/egress, secure access points, and parking improvements to support future facility operations.
- **Assist with bid evaluation and provide oversight and inspection services—**facility road, traffic flow/ access, and parking improvements.

POTESTA successfully completed a similar project for Marshall University Graduate College campus in South Charleston, West Virginia. Access to the school from Kanawha Turnpike was difficult because the Turnpike is one-way eastbound. Further expansion of classes at the college necessitated development of better access into the college campus. After a study of several alternatives, the recommended route called for changing Kanawha Turnpike to two-way traffic flow at the existing access road into the college.

POTESTA has assembled a team that has historically served state agencies on numerous projects around the State of West Virginia. In fact, our staff has 150+ years' experience working on contracts with the State of West Virginia and POTESTA currently maintains 10 master agreements with the WVDOH:

- Engineering for roadway, bridge, and misc
- Non-traditional transportation projects
- Surveying for highway, bridge and misc
- Engineering related to materials, control, soils, and testing division
- District-specific slide inspection services
- Cultural resource services
- Railroad, bridge, and misc
- Asbestos inspection and sampling
- Natural resource investigations surveys
- NEPA compliance services

Our team is excited about the opportunity to serve the Agency on this project. POTESTA's large, experienced staff allows us to respond quickly, be flexible, and provide the opportunity for high level input from in-house experts on complex multi-disciplinary projects, such as site development, infrastructure design, and roadway engineering for the expansion project at Guthrie Agricultural Center. Our project management staff has managed hundreds of projects and understands what it takes to bring ideas to fruition through cost-effective and often innovative designs. We take pride in our ability to work with our clients from the conceptual idea through the construction process, which is the most critical part of the project. We have worked on numerous large and small engineering projects throughout the mid-Atlantic region.

STATEMENT OF QUALIFICATIONS

CORPORATE PROFILE

HISTORY

POTESTA was founded in 1997 as a full service engineering and environmental consulting firm headquartered in Charleston, West Virginia. We have now expanded to a diverse staff of 74 experienced engineers, scientists, and support personnel with branch offices in Morgantown, West Virginia, and Winchester, Virginia. Our clients include K-12 schools/colleges/universities; local, state and federal agencies; mining, manufacturing and chemical companies; utility companies; waste management companies; land developers; attorneys; financial institutions; insurance companies; construction companies; and architects.

PROFESSIONAL SERVICES

- Air Permitting
- Biological and Toxicological
- CADD/GIS
- Civil Engineering and Design
- Construction Monitoring
- Environmental Site Assessment
- Geotechnical Engineering
- Groundwater
- Hydrology and Hydraulics
- Landfills and Solid Waste
- Litigation Support
- Mining
- Occupational Safety and Health
- Oil and Natural Gas Consulting
- Permitting
- Remediation
- Roadway Engineering
- Sampling
- Site Design
- Storage Tanks
- Surveying and Mapping
- Water and Wastewater
- Water Quality
- Wetlands

LEADERSHIP

Our firm is managed by two principals driving POTESTA forward with their experience and emphasis on exceeding expectations. Ronald R. Potesta, President, has served as the Director and Deputy Director of West Virginia's Department of Natural Resources (WVDNR) which, during his tenure housed all of the environmental regulatory programs. The agency at that time encompassed state environmental regulatory programs, wildlife management and law enforcement. Dana L. Burns, P.E., Vice President, has more than 42 years' experience with civil, geotechnical, mining and environmental engineering projects. Mr. Burns, P.S., P.E., has managed numerous multi-discipline projects and understands the importance of client communication and the internal coordination of various disciplines on a project. He has been Principal-in-Charge on the numerous projects POTESTA has completed for Marshall University.


Ronald R. Potesta


Dana L. Burns, P.E., P.S.

POTESTA's staff is committed to delivering innovative, cost-effective solutions to meet our client's complex requirements. The firm's environmental department consists of biologists, geologists, chemists, environmental scientists and environmental engineers, many with advanced degrees (Masters and Ph.D. level). POTESTA's engineering department includes civil, geological, geotechnical, environmental, mining and mechanical engineers. Our registered professional engineers are supported by a capable team of engineers, designers, and surveyors.

POTESTA focuses on each project with pride to provide the client with every reason to return.

TECHNICAL EXPERTISE

CIVIL ENGINEERING/SITE DESIGN

POTESTA's engineering staff has a broad background related to the vast field of civil engineering, including utility/ infrastructure design, roadway design, development of grading plans, and storm water management. Our diverse staff of engineers, geologists, and scientists is routinely involved in these types of projects and work to support the project teams assigned to these projects on a daily basis to achieve a completed project that meets the client's expectations.

Once a project has been determined feasible through the preliminary planning stages, POTESTA's design professionals work to complete preliminary and final design plans. Frequent communication is made with the client and other design professionals to review the completed activities and obtain input for the design process.

Preliminary Engineering Services

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations
- Foundation Recommendations
- Surveying
- GIS Mapping
- Utility Planning
- Earthwork Evaluations
- Vehicular and Pedestrian Circulation
- Ingress/Egress
- Opinion of Probable Costs/Engineer's Construction Cost Estimate

Design Services

- Geometric Site Layout
- Vehicular and Pedestrian Circulation
- Grading and Drainage Plans, Including Excavation and Fill Optimization
- Access Road Design
- Utility Design
- Hydraulic Structure Design
- Water and Sewer Design
- Earth Retaining Structures Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications, and Contract Document Preparation

POTESTA has a significant body of work in site design for residential, commercial and industrial clients. We have assisted numerous developers and development agencies with the creation of business industrial parks throughout West Virginia, and have been part of design teams for elementary, secondary and collegiate projects primarily associated with new building construction, including site access, parking and traffic flow.

TECHNICAL EXPERTISE

ROADWAY ENGINEERING

Roadway engineering and design to develop construction and right-of-way plans requires a wide range of expertise and a complete and thorough knowledge of the West Virginia Division of Highways' (WVDOH) standards, specifications and approval process. POTESTA offers extensive expertise in civil, environmental and geotechnical engineering; hydrology; and hydraulic design. POTESTA has provided numerous roadway designs for WVDOH projects, access roadways for industrial parks, educational institutions, commercial businesses and residential developments, as well as new roadways, relocation and modifications of existing roadways to widen or incorporate turning lanes and other improvements. POTESTA's geotechnical engineers have provided subsurface explorations and recommendations required for highway design for in-house projects, as subconsultant to other engineering firms and directly to the WVDOH. Our staff is particularly experienced in projects funded by WVDOH Industrial Access Road Grant Program.

POTESTA's in-house engineering, environmental and surveying staff is capable of providing a full range of services required for highway and roadway engineering and design.

These services include:

- Project conception
- Environmental assessment and NEPA compliance
- Permitting
- Geotechnical Explorations and Recommendations
- Surveying
- Geometric Layout
- Relocation of Utilities
- Preparation of Construction and Right-of-way Plans and Specifications
- Construction Stakeout
- Construction Monitoring
- Traffic/Parking

TECHNICAL EXPERTISE

GEOTECHNICAL ENGINEERING

POTESTA engineers and geologists have extensive experience related to the geotechnical engineering and geological disciplines. These areas include subsurface explorations, monitoring well and piezometer installations, foundation design recommendations, slope stability analysis, retaining walls, and remedial designs as they relate to construction, mining, waste disposal, environmental remediation, and other projects.

POTESTA can provide field engineers and geologists who are knowledgeable using the latest technologies to assist in collecting and analyzing samples. Our knowledge of the proper procedures and familiarity with local conditions allows office and field personnel to adjust the exploration plan if unanticipated field conditions are found.

Subsurface Explorations

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

Slope Stability Analysis and Remedial Design

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

Foundation Design Recommendations

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

TECHNICAL EXPERTISE

SURVEYING

POTESTA proposes to utilize our own survey crews for work on this project. POTESTA will perform all of the surveying required for this project using in-house personnel. We have three survey crews and the capability to add a fourth crew, if necessary. Our surveyors have worked on numerous site development, roadway and bridge construction, utility construction, and landfill development projects. POTESTA's surveyors use state-of-the-art equipment such as total station instruments, Trimble R-8 Glonass, RTK GPS Systems, AutoCAD, Autodesk Land Desktop and Autodesk Civil 3D design software, computer hardware for data management, and a Hewlett Packard color ink jet plotter.

POTESTA is equipped with modern surveying instruments allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field to office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products.

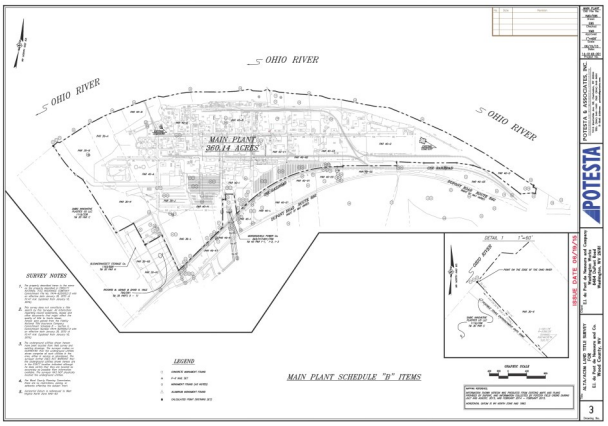
Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography. If necessary, POTESTA will provide the necessary surveying required for establishing ground control for aerial mapping in conjunction with our aerial mapping subcontractor. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.

Surveys and mapping are completed to the standards as outlined by the National Map Standards as well as other applicable quality standards.

CADD

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

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



TECHNICAL EXPERTISE

CONSTRUCTION OBSERVATION/ADMINISTRATION

POTESTA provides construction monitoring and construction administration services to assist clients in achieving regulatory and contractual compliance, to document that contractor activities are in compliance with design requirements, and to serve as an extension of clients' staff. POTESTA can provide full-time or part-time field services utilizing one or more engineers or technicians.

Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA can assist clients in observation of construction activities and documenting compliance.

POTESTA's construction observation and administration personnel are experienced with varying types of construction, geotechnical, and environmental projects, including adherence to specifications, sampling/testing, pay quantity verification, and dispute resolution. We have successfully completed many projects from start to finish. POTESTA is experienced with quality assurance and quality control monitoring associated with earthwork and construction projects.

Construction Contract Administration Services

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

TECHNICAL EXPERTISE

REGULATORY CONTRACTS—WEST VIRGINIA DIVISION OF HIGHWAYS

Engineering Services for Roadway, Bridge, and Miscellaneous Highway-Related Projects

Consulting services for statewide engineering services including preliminary engineering studies, alternative delivery projects studies, traffic studies, and engineering services required for preparation of contract plans and related documents for various locations throughout the State for roadway, bridge, or miscellaneous projects. Currently working on design and preparation of contract plans and related documents for Big Creek Bridge Renovation in Fayette County, West Virginia.

Non-Traditional Transportation Projects

Consulting services for non-traditional transportation projects including federal aid funded projects for the Transportation Alternatives and Recreational Trails programs as well as similar state funded projects. Several projects are in progress including, design and preparation of contract plans and related documents for the replacement and construction for 3,000 linear feet of concrete sidewalk in Rupert, West Virginia.

Surveying for Highway, Bridge, and Miscellaneous Projects

Consulting services for all types of surveying including, conventional, GPS, remote sensing, hydraulic and hydrology, as well as Subsurface Utility at various locations throughout the State for highway, bridge, or miscellaneous projects.

Engineering Service Related to Materials, Control, Soils, and Testing Division

Consulting services to provide engineering services for testing for the Materials, Control, Soils and Testing Division. Primary services include, bridge deck surveys, smoothness evaluations, seismic testing, ground penetrating radar, etc. at located to be designated by WVDOH.

Natural Resource Investigations Surveys

Consulting services to be utilized to provide natural resource services for compliance with Endangered Species Act, USACE guidelines, and related requirements pertaining to roadway and bridge projects in West Virginia. Areas of work required for the natural resource services will include, but not be limited to; stream and wetland studies, state and federal listed endangered species investigations, non-listed species surveys and biological surveys, other related services and the preparation of the reports and related documents that are associated with this type of work.

TECHNICAL EXPERTISE

REGULATORY CONTRACTS—WEST VIRGINIA DIVISION OF HIGHWAYS

District-Specific Inspection Services

Consulting services to perform project management, quality assurance, documentation services, and related duties as required on various slide repair construction projects for all 10 Districts of the State. Currently working on multiple projects, including Cameron Ridge and North Fork.

Cultural Resource Services

Consulting services for cultural resource services throughout West Virginia. Areas of work required for the services include, Section 106 consultation, documentation, and related work for archeological surveys, evaluations and any potential mitigation, evaluation for Nation Register eligibility and data recovery for historical and archaeological resources.

Railroad, Bridge, and Miscellaneous Railroad Projects

Consulting services to provide engineering services for railroad, railroad bridge, and miscellaneous railroad projects. Work generally consists of structural inspections, preparation of contract plans and related documents.

Asbestos Inspection and Sampling

Consulting services for inspection, sampling and reports, preparation of contract plans and related documents for asbestos removal, project air monitoring, and related services as requested.

NEPA Compliance Services

Consulting services for NEPA services throughout West Virginia. Areas of work required for the NEPA services will include preparation of programmatic categorical exclusions, categorical exclusions, environmental assessments, environmental impact statements, reevaluations of NEPA documents, Section 4F analysis, section 6F analysis, Section 106, Section 7 of the Endangered Species Act, noise and air quality analysis, related surveys and related documents.

STATEMENT OF QUALIFICATIONS

SIMILAR PROJECT TYPES

Client	Project	Description
Marshall University **South Charleston, WV**	Campus Parking and Vehicle Circulation	• Development of several alternatives for more onsite parking and improvement of the horizontal road alignment • Preparation of cost opinions for construction of the various alternatives
Marshall University **South Charleston, WV**	Campus Access Improvement	• Initial review of the most feasible route for entering the college and to consider new access routes along with the existing route • Design of upgrade of 1/2 mile of Kanawha Turnpike from one-way eastbound to two-way traffic to serve as the main entrance • Preparation of construction drawings for the additional lane and necessary islands and signage at the campus' entry
ZMM, Inc. **Bradshaw, WV**	Four New Schools (WV Route and County Route 5/6 Relocation Design)	• Site design and engineering for new elementary school and new high school • Geotechnical engineering • Surveying • Design of the relocation of WV Route 80 and County Route 5/6 • RW-3 plans with property takes • Utility relocations • Roadway design along with maintenance of traffic plans • Develop traffic flow patterns, bus loops, and parking lots • Floodplain modeling
Hardy County Rural Development Authority **Baker, WV**	Baker Business Park Industrial Access Road	• Permit, design, and construct an industrial access road form Corridor H to the Baker Business Park and the addition of deceleration lanes on the Corridor • Conceptual layout, drainage analysis, geometric design and layout of proposed roadways, intersection layout and details, temporary maintenance of traffic plans, E&S Control Plans, and signage and pavement marking plans
BBL Carlton, LLC **Charleston, WV**	Route 61 (MacCorkle Avenue) Modification and Main Entrance Roadway Design	• Survey, design, permit preparation and construction document preparation for a new access road and modification to MacCorkle Avenue (WV Route 61)
FedEx **Charleston, WV**	Access/Turning Lanes	• Evaluation of access/turning movements
Starbucks **Morgantown, WV**	Turning Lane/New Exit	• Design of turning lane/new exit on University Avenue
City of Morgantown **Morgantown, WV**	Sidewalks for North and Grove Streets	• Surveying and engineering services for sidewalk along North and Grove Streets • 1,400 feet of roadway and included widening portions of the street to the width of a standard 2 lane street and the construction of a sidewalk along the streets

SIMILAR PROJECT TYPES

Client	Project	Description
Appalachian Hotel **Kingwood, WV**	Access from Main Road	• Design of a new access from main road
Shiloh Development **Monongalia County, WV**	New Access and Upgrade of County Road	• Design of new (2nd) access road and upgrade of county road
Upshur County Development Authority **Upshur County, WV**	Interchange Access Request and Modification of Entrance	• Evaluate/design entrance for interchange access request and modify entrance to National Guard Facility in Buckhannon, WV
Various Schools **West Virginia**	Traffic flow patterns, Bus Loops and Parking Lots	• Iaeger Elementary School—Iaeger, WV • Sissonville Middle School—Sissonville, WV • Trap Hill Middle School—Trap Hill, WV
Associated Architects, Inc. **Glenville, WV**	Glenville State University Convocation Center	• Design of a 500+ space parking lot, travel lanes, site entrances, and corresponding pavement sections • Site utility survey • Subsurface geotechnical exploration • Site grading plan • Design of water and sewer lines • Development of stormwater management system
Hino Motors Manufacturing U.S.A. **(former Coldwater Creek Distribution Center)** **Parkersburg, WV**	Upgrade to Manufacturing Operation Facility	• Services for Hino Motors ⇒ Design of parking area for 2,500 trucks prior to shipment to customers ⇒ Permitting ⇒ Design for wastewater treatment system and de-ionized water treatment system • Services for Coldwater Creek ⇒ Site grading and drainage plan including interior site access roads/drives and combined parking areas to provide space for 1,300 vehicles ⇒ Stormwater collection, conveyance, and detention structures
Roane County Development Authority **Roane County, WV**	Access Road from CR 29 to Industrial Park	• Surveying mapping • Right-of-way plans • Roadway design • Traffic maintenance plans • Signing and pavement markings • Erosion and sediment control plans
West Virginia Regional Technology Park Corporation **Kanawha County, WV**	Land Use Study and Land Use Plan	• Land use study/plan for undeveloped 167-acre portion of property • Development included three phases including showing access roads, developable areas, green space and other features.
Tucker County Development Authority **Davis, WV**	Tucker County Industrial Park	• Construction documents for the all infrastructure improvements for new 162-acre industrial park along WV Route 93 • Develop utility extensions and design of 2,000-foot access road

SIMILAR PROJECT TYPES

Client	Project	Description
R.J. Ankrom Associates **Huntington, WV**	Surveying for Campus Master Plan (Marshall University)	• Preparation of topographic map to be used in development of a master plan for the Marshall University Huntington campus • Survey shows the location of existing structures, including buildings, walks, trees, roadways, and utilities
Double C Enterprises/ Jackson County Development Authority **Kenna, WV**	Business Park-65 Acre Development	• Preparation of site development plan • Performed permitting, geotechnical design, and construction survey stakeout services • Preparation of access roadway plans for the business park entrance
Cross Development **Jefferson County, WV**	Dollar General Store	• Topographical and as-built surveying services • Site design and layout • Design of commercial entrances • Stormwater management/NPDES permitting
Carl M. Freeman Communities **Berkeley County, WV**	Villages at Coolfont–Redevelopment	• Phase I ESA • ALTA boundary and property survey of 997 acres • Assessment of facility's sanitary sewer wastewater treatment plant • Design for potable water and wastewater treatment facilities • Design of 300 gallon per minute potable water treatment plant • Design of water storage and distribution system • Design and permitting for 440,000 gallon per day membrane bioreactor wastewater treatment plant • Permitting for development of new lake and upgrades to existing lake • Roadway and stormwater management plans
Blue Ridge Development Group	Villages at Cheat Landing	• Design of storm sewer • Sediment and Erosion Control Plans • Design of two stream crossings • Roadway grading • Hydrology analysis • Utility coordination • Wetland and stream delineation • Permitting • Traffic Impact Analysis and design of turn lanes • Survey plats
Parkersburg/Wood County Area Development Corporation **Parkersburg, WV**	Industrial Park	• Development of industrial site and access road • Site development plans for Luigino's Inc. and 2/3 mile long access road • Wetland delineation and mitigation plan • Overall site grading and drainage plans
Stonerise Healthcare **Charleston, WV**	Eastbrook Addition	• Site development services for approximately 38,000 sq. ft. addition to the existing Eastbrook facility • Design of box culvert and 120-foot segmental retaining wall • Design of new ambulance entrance • Evaluation of the sanitary line

SIMILAR PROJECT TYPES

Client	Project	Description
Edgewood Summit **Charleston, WV**	Assisted Living Addition	• Hydrology recommendations to minimize impact of increased runoff • Geotechnical exploration and design recommendations • Surveying and construction layout for layout of the building foundations, site grades, access roads, and utility services
Cabela's **Charleston, WV**	Retail Store	• Civil engineering design services for 80,000 sq. ft. building, over 400 parking spaces, 3 entrances from public and private roadways, a plaza area across the front of the store, RV park area with sewage dump station, dog kennel area, and landscaping • ALTA survey • Subsurface exploration • Grading plan for building pad, parking fields, and access roads • Stormwater collection system • Pavement design • Utility extension designs • Permitting
Wolf Run Mining Company **Harrison County, WV**	Roadway Upgrade of County Route 31 (Jarvisville Road)	• Design services and specifications for the approximate 3.6-mile County Route 31 Jarvisville Road upgrade • Determination of right-of-way and identifying obvious utilities within the right-of-way • Surveying roadway cross sections • Preparation of construction plans and documents to allow widening and general upgrading of County Route 31 • Design for realignments of portions of the existing roadway • Preparing 404/401 and West Virginia Public Land Corporation permits for the construction of a CONSPAN bridge replacement
Elkins Rehabilitation and Care Center **Elkins, WV**	Rehabilitation Addition	• Civil engineering design for additional rehabilitation and patient care facilities (10,000 sq. ft.), exterior walkways and entrances, and a parking lot • Surveying • Civil site design drawing included grading plan for the building site, entrance/roadway design, patio and pedestrian access design, ADA compliant sidewalk ramp and crosswalk design
Pray Construction Company **Elkins, WV**	Citizens Bank Drive-Thru Addition	• Topographic mapping and site surveys to general construction-level design drawings including a site grading plan, demolition plan, E&S Control Plan, stormwater plan and supplementary detail drawings • Determine final building pad (drive-thru) elevations

STAFFING PLAN

PROJECT TEAM ORGANIZATION

Services will be performed at POTESTA's Charleston, West Virginia office. We can pull from our Morgantown, West Virginia office for additional support as necessary. We stand ready to commit the personnel and resources required to complete this project in a timely, technically sound, and cost-efficient manner.

- Included are 13 registered professional engineers (P.E.s), 5 registered professional licensed land surveyors (P.S.s), 5 Licensed Remediation Specialists (L.R.S.) 8 West Virginia Transportation Engineering Technicians and one Ph.D. whose specialties include aquatic biology and water quality.
- Low turnover means interacting with the same POTESTA staff—combined experience over 370 years and supported by a capable team of engineers, scientists, designers, and surveyors.
- Current workload is such that we can immediately provide construction technicians, engineers, CADD designers, and survey crews to work on this project—POTESTA's large staff size will allow us to work on this project on an accelerated schedule, if necessary.

DEPARTMENT OF AGRICULTURE

PRINCIPAL-IN-CHARGE

Dana Burns, P.E., P.S.—42 Yrs.

PROJECT MANAGER

Chris Grose, L.R.S.—31 Yrs.

CIVIL DESIGN/ PLANNING

Mark Kiser, P.E., L.R.S.—36 Yrs.
Jarrett Smith, P.E.—19 Yrs.
Tim Rice, EIT – 42 Yrs.
Jordan Beard—6 Yrs.
Chad Griffith, P.E.—16 Yrs.
Everett Mulkeen, P.E.—7 Yrs.
Kyle Stollings, P.E., P.S.—40 Yrs.
Alex Keenan—2 Yrs.
Daniel Boyles—1 Yr.

MAPPING/CADD/GIS

Scott Bolyard—29 Yrs.
Michael Sankoff—33 Yrs.
Brian Leedy—24 Yrs.
Russ Lester—31 Yrs.
Joe Martin—27 Yrs.
Charles Haden—10 Yrs.

GEOTECHNICAL

Chris Grose, L.R.S.—31 Yrs.
Peter Potesta—9 Yrs.
David Sharp, P.E.—26 Yrs.
Jeremi Stawovy, E.I.T.—11 Yrs.

SURVEYING

Victor Dawson, P.S.—39 Yrs.
E. Brad Starkey—32 Yrs.
Rusty Hunter—39 Yrs.
Ryan Bennett—7 Yrs.
Tyler Aboytes—6 Yrs.

CONSTRUCTION MONITORING

Robert Lamm—22 Yrs.
Charles Shaffer—28 Yrs.
Bill Cox—22 Yrs.
Mike Whitman—30 Yrs.
Charles Bird—11 Yrs.
Paul Kinzer—33 Yrs.

STAFFING PLAN

KEY SENIOR PROJECT TEAM

Appendix A includes resumes of proposed key personnel and associated staff certifications.

Mr. Dana Burns, P.E., P.S., Vice President, is highly experienced in civil, geotechnical and environmental engineering and related projects including highways, industrial access roads, school access roads, surface mine design and permitting, sealing portals, regrading refuse, highwall regrading, site assessments, mine fires, preliminary feasibility evaluations, detailed design, and preparation of construction drawings, specifications, and bid documents.

Mr. Christopher A. Grose, L.R.S., Senior Engineering Associate at POTESTA, has degrees in civil engineering and geological engineering and experienced in geological/geotechnical explorations, surface and subsurface hydrology and hydrogeology, and foundation design. Mr. Grose's experience includes the design and evaluation of geotechnical explorations related to earth retention structures, slope stability and engineered fill construction.

Mr. D. Mark Kiser, P.E., Chief Engineer, has civil engineering experience ranging from utility extensions, replacement repairs, street and roadway construction, stormwater management, regulatory permitting and compliance, environmental compliance and permitting. Mr. Kiser has worked within many local jurisdictions to meet various local ordinances and codes. Mr. Kiser routinely serves clients in a project manager role and supervises other POTESTA professional staff and support personnel. Mr. Kiser is focused on client satisfaction and providing expert advice to assist clients.

Mr. W. Kyle Stollings, P.E, P.S., Senior Engineer, is experienced in mining and civil engineering, surveying, and Public Works construction and administration. Mr. Stollings' experience ranges from underground coal mining, to broad spectrum urban engineering/construction/administration as City Engineer in Charleston, WV, to WV Division of Highways project engineering/construction, to over ten years as the WVDOH, Director of Maintenance Division, working statewide in Maintenance and Operations Management including disaster recovery working with FEMA (snow, flood, fire), oversight of over 6,800 bridges, approximately 36,000 miles of roadway, materials and services contracts, heavy haul permits, public and media relations, interaction with state and federal agencies, legislators, and Congressional Representatives.

Mr. David B. Sharp, P.E., Senior Engineer and Branch Manager for POTESTA's Morgantown office, is experienced in civil and environmental projects, with an emphasis in the geotechnical engineering. Responsibilities have included projects involving civil/site design, geotechnical design, solid waste management facility design including geosynthetic applications, hydrologic and hydraulic design, transportation/highway projects including geotechnical and right-of-way plans, and municipal water and wastewater projects.

Mr. Victor Dawson, P.S., **Surveying Supervisor,** has extensive surveying experience in performing and managing field surveys. His experience includes ground control surveys; field editing of topographic mapping; stakeout of borings, reference points, and right of ways; creation of topographic mapping from field survey; utility locations; as built and record surveys; flood elevation surveys; ALTA surveys; boundary surveys; and other related items. Mr. Dawson has been involved in the majority of WVDOH roadway and bridge survey projects on which POTESTA has provided surveying services.

Mr. Robert W. Lamm, Senior Technician, has over 20 years of quality assurance/quality control construction monitoring for both public and private construction. Mr. Lamm is one of the eight West Virginia Engineering Technicians, since 2002. Experience includes landslide/slip repair for various clients, including EPA superfund sites, gas utilities, public utility companies, and insurance claim sites. DOH experience includes contractor's QAQC on I-64 widening project, five bridges and I-81 Dry Run exit as a consultant inspector to DOH in District 1. Currently working as QA/QC Inspector for BBL Carlton on DOH design-build for Mason County Headquarters Project in District 1.

ADDITIONAL REQUIREMENTS

DOCUMENTS

Appendix B contains an Addendum Acknowledgement, Evidence of Insurance, Interested Party Disclosure, signed bid page, signed certification and signature page, and Purchasing Affidavit.

REFERENCES

BOONE COUNTY PUBLIC SERVICE DISTRICT
Toby Waller, Chairman
(304) 369-2622

HARDY COUNTY RURAL DEVELOPMENT AUTHORITY
Mallie J. Combs, Executive Director
(304) 530-3047

UPSHUR COUNTY DEVELOPMENT AUTHORITY
Rob Hinton
(304) 472-1757

Appendix A

DANA L. BURNS, P.E., P.S.
Vice 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 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 AFFLIATIONS

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

AREAS OF SPECIALIZATION

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

PROFESSIONAL EXPERIENCE

Civil/Site Design

Utility extension, site grading plans, stormwater management, roadway design, and permitting for site development:

- Residential subdivisions
- Commercial developments

University of Charleston – Principal-in-Charge for the following projects:

- Development of topographic mapping of campus
- Evaluation of storm sewer system
- Civil site services – UC Pharmacy School, New Hall, Middle Hall, and Brotherton Hall
- Design of new campus entrance roadway

Marshall University – Principal-in-Charge for the following projects:

- 400 bed housing project
- Biotechnology Center
- Fifth Avenue parking and 6th Avenue parking facility
- Jomie Jazz Center
- Childcare Center
- Mid-Ohio Valley Center
- Campus landscape master use plan
- Campus improvements project
- MU Graduate College South Charleston campus
- Student Center and Henderson Center
- Bookstore addition
- University Heights

Glenville State University – Principal-in-Charge for the following projects:

- Student Residence Hall
- Athletic Convocation Center and Forestry/Survey Class Center

West Virginia University – Principal-in-Charge for a sidewalk repair project located near Allen Hall on the Evansdale Campus in Morgantown, West Virginia.

The Villages at Coolfont – Principal-in-Charge to provide environmental and engineering consulting services for the redevelopment of the Coolfont Recreation property in Morgan County, West Virginia to create a second home community with high-end amenities:

- Phase I Environmental Site Assessment
- American Land Title Association (ALTA) boundary and property survey of 997 acres
- Completed an assessment of the facility's sanitary sewer wastewater treatment plant to facilitate acquisition of the property.
- Participated in week long planning charette with client, land planners, and other design consultants to assess characteristics of property, identify opportunities and constraints, obtain input from local residents and businesses, and develop design guidelines.
- Land use plan including 1,300 homes, a village center, spa, expansion of an existing lake, a proposed second lake, walking/hiking/biking trails, and the necessary infrastructure.
- Civil engineering design for potable water and wastewater treatment facilities.
- Selected source well locations, drilled 3 source test wells, and completed field testing and permitting.
- Designed 300 gallon per minute potable water treatment plant.
- Designed 2- 316,000-gallon water storage tanks and 75,000 LF of distribution system.
- Completed the design and permitting for a 448,000-gallon per day membrane bioreactor wastewater treatment plant, including the design of a 70,000 LF collection system.
- Assisted with permitting required for the development of the new lake and upgrades/expansion of the existing lake (included were Section 404 individual permit and Section 401 water quality certification).
- Prepared roadway and stormwater management plans, including typical pavement sections, road profiles, geometric layout plan, culvert and drop inlet sizing, drainage conveyance pipe and channel profiles, and miscellaneous stormwater management details.

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.

Principal-in-Charge for the civil/site design for the new Sissonville Middle School in Kanawha County, West Virginia. Project included site grading plan with more than 230,000 cubic yards of earthwork to obtain 20 acres of level ground for a 74,000-square foot school, football field, soccer field, baseball field, access roadways, and parking areas. Project included utility designs for water service and sanitary and sewer. Stormwater collection systems and erosion and sediment control plan/permit completed.

Principal-in-Charge for civil/site design for new Riverview High School and Bradshaw Elementary School in McDowell County, West Virginia. Project included 2,500 linear feet of relocated WV Route 80, relocation of 1,200 feet of Oozley Branch, and site work (grading, stormwater drainage, geotechnical recommendations, sanitary sewer, water, and electrical services) to serve the two schools. Project design included site survey, geotechnical exploration, foundation recommendations, design of excavation slopes, layout of schools, parking areas and athletic fields, utility design, roadway relocations plans, and stream relocations plans. Responsible for the design and preparation of contract bid documents (specifications and drawings) for civil/site work. POTESTA served as a subconsultant to ZMM on this project.

Principal-in-Charge for civil/site design and permitting associated with the construction of three synthetic fuel pellet plants in McDowell County, Nicholas County, and Kanawha County, West Virginia. Project included developing synthetic fuel manufacturing facilities on inactive surface mining sites. Services included subsurface exploration, foundation recommendations, grading plans, stormwater management plans, preparation of permit applications, and construction monitoring for site grading and foundation construction. The McDowell County site included a water source study to identify and select water sources for the manufacturing process. The three plants had a construction cost of $25 million. Project was a design/build arrangement with POTESTA working directly for the owner.

Carmeuse Lime & Stone – Principal-in-Charge of engineering and environmental services for the expansion of current quarry operations at Winchester quarry in Winchester, Virginia. The expansion includes the addition of two new vertical lime kilns and associated equipment, increasing their current aggregate crushing operation, and expanding their rail system to allow for increased shipping of product.

- Design included grading, stormwater management, and an access road crossing for a rail loop encircling the lime kilns and aggregate crushing areas with rail spurs for loading and unloading of product to connect to two mainline rail carriers.
- The total project track length consists of approximately 29,000 linear feet of rail.
- The design of the rail expansion includes trackside ditches, culverts, stormwater management systems, gas line relocations and crossings, rail crossings, and internal plant roadways, as well as grading for the expanded aggregate plant and lime kilns.
- Additional designs included civil/site services for a new office building and design of the sanitary water treatment system for this building.
- Acquired the necessary approvals to construct this project, such as approvals from local planning and zoning, inspections, health departments, and state governments such as Virginia Department of Transportation, Department of Environmental Quality (DEQ) and Department of Mining and Mineral Extraction (DMME).
- Conducted wetland delineations, developed reports, and completed applications to the Norfolk District (Northern Virginia field office) of the United States Army Corps of Engineers (USACE).

Development of specifications for a sand mound treatment system in the U.S. Air Training Center near Pittsburgh, Pennsylvania.

Water Lines, Water Storage Tanks, and Water Treatment Plants

New extensions and replacement of existing lines:

- Cassity Fork Water Supply Extension Project – Randolph County, WV (Project Manager)
- Godby Branch Water Supply Extension Project – Logan County, WV (Project Manager)
- Beaver Creek Water Supply Extension – Upshur County, WV (Project Manager)

- Buff Creek/Trace Fork – Putnam County, WV (Principal-in-Charge)
- Route 60 – Putnam County, WV (Principal-in-Charge)
- Boone County PSD numerous extensions – Boone County, WV (Principal-in-Charge)

West Virginia American Water Company – Principal-in-Charge for construction administration/monitoring for Poca River Water Line Extension Project, Cabell County Water Line Extension Project, Contract No. 7, Spite Road Water Line Extension Project, and Fisher Ridge Water Line Extension Project. Work included construction monitoring, preparation of weekly reports, review of contractor submittals, review of contractor invoices, and preparation of records drawings for 100,000+ linear feet of water line extensions.

City of Philippi – Principal-in-Charge for municipal water system upgrade project. Work included 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.

West Virginia American Water Company – Principal-in-Charge for Residuals Handling Facility project at the 32 MGD Kanawha Valley Water Treatment Plant, including coordination design consultant. Design included sludge pumping station, 950,000-gallon reinforced concrete gravity thickener, two belt filter presses, chemical feed systems, plate settler, and associated control and piping. Work included preparing design concept, surveying, subsurface exploration, preparation of drawings, specifications, cost estimate and permit applications, conductance of pre-bid public relations meeting, evaluation of bids, construction observation, review of contractor submittals, review of change order requests, and review of contractor invoices.

West Virginia American Water Company – Principal-in-Charge for evaluation of Town of Pineville water treatment plant and water distribution system, including observation of system during site visit, records review, discussions with regulatory officials, and issuance of findings in a report.

Tucker County Development Authority – Principal-in-Charge for 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 (PCS's), review of regulatory databases, entering data into 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. Prepared construction drawings, specifications, and quantities.

West Virginia American Water Company – Principal-in-Charge for hydraulic analysis for water supply extensions (total of 23 miles) in Cabell County, West Virginia, including line sizing and design of booster station and PRVs.

Management of design, permitting, and construction monitoring of more than 40 miles of new waterline serving rural communities in southern West Virginia.

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 six-mile water line extension including fire protection. Project included 90,000-gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served 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, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

Sewer Lines and WWTPs

Washington County Industrial Development Agency – Design of a holding tank and ventilation system vault near Houston, Pennsylvania.

West Virginia American Water Company – Principal-in-Charge for evaluation of wastewater collections systems and treatment plants for two municipalities (Oak Hill and White Sulphur Springs) in West Virginia. Included were site visits to observe system, discussions with system operators and regulatory officials, records review, compilation of DMR data and issuance of findings in reports.

Geotechnical

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

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

Plasma Processing Corporation – Management of subsurface exploration and preparation of soils report near Ravenswood, West Virginia.

West Virginia University – Principal-in-Charge for the following projects:

- WVU Intermodal Parking Garage on the Medical Center Campus – geotechnical and civil engineering
- WVU Engineering Building – geotechnical evaluation

Principal-in-Charge for Williamson Landslide Project involving an abandoned mine land site. Geotechnical exploration and design of 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. Project was required to protect an existing 125-bed nursing home facility.

Landfills/Solid Waste/Waste Disposal

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

Industrial Solid Waste (Fly Ash, Bottom Ash, Scrubber Sludge) –

- Mobay Hazardous Waste Landfill – Natrium, WV
- American Cyanamid (4 projects) – Willow Island, WV
- Client confidential – Parkersburg, WV
- Monsanto Company (multiple projects) – Nitro, WV
- Harrison Power Station – Haywood, WV
- Fort Martin Power Station – Morgantown, WV
- Mount Storm Power Station – Mount Storm, WV
- Keystone Power Station – Elderton, PA
- New Castle Power Station – New Castle, PA
- Conemaugh Power Station – New Florence, PA
- Alcoa Corporation – Newsburg, IN
- Portsmouth Power Station – Portsmouth, VA
- F.B. Culley Power Station – Newburgh, IN
- Hatfield Power Station – Masontown, PA
- Armstrong Power Station – Armstrong County, PA
- Cheswick Power Station – Springdale, PA

Design, permitting, economic analyses, and preparation of construction bid documents for coal ash/refuse sites including HDPE and PVC liner systems:

- Virginia Electric and Power Company
  - Portsmouth Power Station ash pond to dry fill conversion project
  - Mount Storm Interim Ash Site
- Pennsylvania Electric Company

  - Keystone Coal Ash/Coal Refuse Site
- Allegheny Power Station
  - Hatfield Ash Site

WVDEP Office of Waste Management – Development construction drawings, technical specifications, contractor's bid sheet and engineer's cost estimate for closure of Montgomery Sanitary Landfill. Work included leachate collection system, cap and double walled leachate tank.

WVDEP Office of Waste Management – Development of construction drawings, technical specifications, contractor's bid sheet, and engineer's cost estimate for final closure of the Wyoming County Landfill. Work included site assessment, double walled leachate tank, pump station, and connection of leachate line to Center Public Service District sanitary sewer.

WVDEP Office of Waste Management – Development of interim closure plans including leachate collection system, adequacy of groundwater monitoring wells and soil cover for the Jackson County Landfill and the City of Moundsville Landfill.

WV Solid Waste Management Board's Monongalia County Sanitary Landfill – Management of three liner expansions, borrow area determination, minor permit modifications, 1.6 MG double-lined leachate pond design, construction monitoring, and investigation of future alternatives.

Disposal Services, Inc. – Evaluation of landfill expansion and leachate minimization. Preparation of permit application for Phase I Cell 3 and Phase II including drawings, specifications, and CQA manual. Preparation of construction drawings for Phase I Cell 3 Stage I and management of construction monitoring. Preparation of erosion and sedimentation control plan, soldier beam and lagging retaining wall, gabion basket retaining wall, and assistance on FERC permit to relocate gas line in Hurricane, West Virginia.

S&S Landfill – Preparation of Landfill Expansion Revisions, permit revisions, and permit negotiation. Detailed review of hydrogeology and groundwater flow regime. Management of QA/QC for landfill expansion including clay/synthetic liner system, double walled leachate tank, sedimentation pond, drainage channels, and associated facilities in Harrison County, West Virginia.

Pocahontas County Solid Waste Authority – Management of miscellaneous services including preliminary closure plan, evaluation of leachate treatment alternatives, repair of tear in synthetic liner, preparation of annual reports, and surveying for Pocahontas County Landfill in Marlinton, West Virginia.

Kanawha County Solid Waste Authority – Investigation of potential landfill fire at Kanawha Western Landfill. Detailed geologic and hydrologic studies, monitoring well installation, and preparation of associated sections of landfill permits.

- North Fork Landfill – Wheeling, WV
- Sycamore Landfill – Hurricane, WV

Rhone-Poulenc Ag Company – Management of non-hazardous industrial landfill design project involving design report, technical specifications, construction drawings, QA/QC manual, operation manual, permit application, and environmental assessment. Included meetings with EPA Region 3 and WV Division of Natural Resources. Also, three site selection studies. Complete geologic and hydrogeologic investigations including installation of monitoring wells.

Tennessee Valley Authority – Economic analyses of wet versus dry disposal processes, including conveyor belts, trucks, and sluicing by pipe for fly ash and bottom ash.

Pennsylvania Electric Company – Evaluation of natural and synthetic liner systems for coal ash/coal refuse sites. Preparation of permit applications for the New Castle ash site and Mitchell scrubber sludge disposal site:

- Pennsylvania Power Company
- Allegheny Power System

Coordinator of the compilation of data for a RCRA Part B permit application for a hazardous waste transfer facility in Parkersburg, West Virginia including SPCC plan.

Sludge sampling programs at the Institute, West Virginia plant of Union Carbide Corporation and the Tri-State Terminal of Ashland Petroleum Company.

Siting studies, including environmental impacts and economic analyses, for industrial waste and coal ash/refuse sites:

- Peabody Coal Company – slurry impoundment

- Rhone Poulenc Ag Company – 3 sites for industrial landfill
- Virginia Electric and Power Company – Mt. Storm Power Station
- Southern Indiana Gas and Electric Company – 4 sites at F.B. Culley Station
- Aloca Generating Corporation – 7 sites at Warrick Station

American Cyanamid Company – Management of QA/QC monitoring program for the first RCRA industrial waste impoundment in EPA Region 3. Composite liner system consisted of 3-foot soil-bentonite liner and two 60-mil HDPE synthetic liners separated by HDPE drainage net. Provided on-site testing laboratory. Daily and weekly project reports were provided. Prepared summary report and necessary "certifications" for submittal to WV Division of Natural Resources and EPA in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring program for a stormwater retention basin consisting of 3' soil bentonite liner with concrete overlay. Daily, weekly, and project summary reports were prepared in Willow Island, West Virginia.

American Cyanamid Company – Preparation of plans, specifications, and permit application for the closure of an industrial waste disposal site. The capping system included geogrid to assist in supporting the overlying HDPE liner and soil cap in Willow Island, West Virginia.
Electric Power Research Institute – Preparation of the Coal Ash Disposal Manual and various manuals for the High Volume/Low Technology Fly Ash Utilization Program.
Electric Power Research Institute – Development of a computer program that provides a detailed cost estimate for a coal ash disposal area.

Rhone Poulenc Ag Company – Evaluation of settling characteristics for an emergency fly ash disposal pond and design of associated modifications at a plant in Institute, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for a closure of a 3-acre hazardous waste disposal area with sludge stabilization and an HDPE cap. Provided an on-site testing laboratory, daily and weekly project reports, a summary report, and agency required certifications in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for the stabilization and capping of 10-acre hazardous waste equalization basin in Willow Island, West Virginia.

Rhone Poulenc Ag Company – Sampling/sounding of two basins containing sludge from secondary biological treatment of industrial wastewater and subsequent determination of sludge quantities.

Development of alternative truck transportation cost schemes:

- Industrial and Hazardous Waste Management Study – Allegheny County, PA
- Holcomb, KA Power Station – Sunflower Electric Cooperative
- Portsmouth Station remote ash structural fill – Virginia Electric and Power Company

Roadway Design

Principal-in-Charge for design of new entrance roadway to the University of Charleston and the utility extension, surveying, and general civil engineering for a 440-bed dormitory. Project was a design/build.

West Virginia Divisions of Highways – Inspection of bridge and highway construction.

Managed numerous industrial access roads. Roadways were designed for the private sector. Design was coordinated with and approved by the West Virginia Division of Highways and roadways were accepted into the state transportation system.

- ZMM Architects – Relocation of State Route 80 for construction of new elementary and high schools at Bradshaw in McDowell County, WV
- Jackson County Development Authority and Double C Enterprises – Industrial park access road and County Route upgrade in Kenna, WV
- Roane County Economic Development Authority – National Industrial Lumber access road in Amma, WV
- Tucker County Development Authority – Tucker County Industrial Park access road in Davis, WV
- Wood County Development Authority – Luigino's access road in Parkersburg, WV
- University of Charleston – Design of new entrance road to University of Charleston and redesign of

MacCorkle Avenue (State Route 61) intersection/turn lanes in Charleston, WV
- N-Visions Architects – Entrance road, bus loop, and emergency exit roadway for new Sissonville Middle School in Sissonville, WV
- Entrance road and bus loop for Trap Hill Middle School in Raleigh County, WV

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 under open-end agreements for:

- Landslides and slope stability projects
- Surveying
- Asbestos services

WV Division of Highways – Managed geotechnical, environmental, right-of-way, and survey work performed as a subconsultant 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)

Oil and Gas

Columbia Gas Transmission Corporation – Management of consulting services for environmental report preparation and FERC permit applications for various natural gas pipeline projects.

Principal-in-Charge of well pad design, access road layout, landslide remediation design, evaluation of water supply sources and distribution systems, design of water treatment systems, impoundment design, stormwater management plans, permitting, AST inspections, surveying, and SPCC Plans for various major gas clients in the Marcellus and Utica formations.

- Stone Energy
- EQT
- Chesapeake
- Gastar
- NiSource

Storage Tanks

Principal-in-Charge of the registration, preparation of spill prevention response plans, and inspection of aboveground storages tanks (ASTs) for over 500 ASTs for numerous clients, including:

- NiSource
- Rubberlite
- CI Thornburg
- Tetra Technologies
- CAMC
- Interstate Hardwood
- Central Supply

Closure of aboveground storage tanks, including preparation of documentation for regulatory agency and sample acquisition and analyses:

- Rhone-Poulenc Ag Company – Institute, WV
- American Cyanamid Company – Willow Island, WV

Investigation of contamination from underground storage tanks and hydrocarbon spills. Included preparation of necessary regulatory forms, sample acquisition and analyses, and meeting with regulatory agency.

- West Virginia Division of Natural Resources – various projects under Master Agreement
- Goldman Associates
- Vandalia Mining Company
- Marshall University

Mining

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

Principal-in-Charge on numerous Independent Third-Party Audits at sites for various coal producers. Independent Third-Party Reviews of mines/complexes were undertaken with a thorough review to assess compliance of the operation to various federal statues and equivalent to state laws. Specific areas of review included are generally determined by the needs of the client or the requirements of governmental agencies and have included an assessment of the client's compliance with the following:

- Clean Air Act
- Clean Water Act
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substance Control Act
- Comprehensive Environmental Response, Compensation and Liability Act
- Emergency Planning and Community Right to Know Act
- Federal Insectide, Fungicide and Rodenticide Act
- Oil Pollution Act
- Mine Safety and Health Administration
- Surface Mining and Reclamation Act
- National Pollution Discharge Elimination System
- Others as required

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 West Virginia Division of Energy, West Virginia Division of Environmental Protection, Virginia Abandoned Mine Lands, and Ohio Department of Natural Resources and include the following:

- Duncan Hill Subsidence
- Beckley Subsidence
- Jonben (Haga) Subsidence
- Holden (Padgett) Subsidence
- Gray and Iaquinta Subsidence
- St. John's Road Subsidence
- Route 19/28 Subsidence
- Mt. Hope Subsidence
- Huffman Street Subsidence
- Morgantown Airport Drainage/Subsidence
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Cheyenne Sales Company Reclamation
- Little Whitestick Refuse
- Crany Mine Dump
- Morgan Mine Fire
- MacArthur Phase 2 Subsidence
- Lake Lynn Complex
- MacArthur Mine Subsidence
- East Lynn II
- Flipping Hollow Complex
- Sundial (Hatfield) Refuse Piles
- Mill Creek Refuse Pile
- John's Branch Coal Refuse Dam
- Jessop Highway #10
- Lando (Edwards) Drainage
- Taylorville (Cantrell) Drainage
- Borderland (Matney) Portals
- Peach Ridge Complex
- Measle Fork Refuse
- Georges Creek Portals
- Putney Impoundment
- Kopperston (John's Branch) Refuse Emergency
- Marmet (Wells Drive) Landslide Emergency
- Marmet (Clark) Drainage
- Pringle Run #2
- Mountain Run Refuse and Portals
- Fairmont East Mine Drainage
- May Portal (Virginia Abandoned Mine Lands)
- Williamson (Hatfield) Landslide
- Georges Creek (Lucas) Rockslide
- Rachel Refuse
- Grass Run Refuse
- Allen Sheridan Hazardous Facility (asbestos)
- Elk City- Century- Volga Phase I/II Water Study
- Camp Mohonegan Regrade
- Comfort Run Coal Company (asbestos)
- Allen AMD
- Cora Mine Drainage No. II
- Covey Creek Mine Fire
- Vivian Refuse Pile
- Summerlee Refuse Pile (won 1996 southern reclamation award)
- Kimball Refuse Pile (won 1995 southern reclamation award)
- Hampden (Smith) Landslide
- Bear Run Refuse (won 1994 Ducks Unlimited award)
- Charleston (Ratcliffe) Landslide
- Garrison Complex
- Mulberry Fork (Stover) Landslide
- Courtright Highwall
- Belle Landslide
- Minden Drilling
- Kitchen/Gibson Landslide
- High Coal Tipple

- Omar Refuse Pile (won reclamation of the year award)
- Logan Drainage
- Switzer Adams/Robinson Drainage
- Follansbee Drainage
- Hawkins AMD
- Vargo Drainage
- Duck Creek Landslide
- Kistler Mine Fire
- Turner Douglas Complex
- Buffalo Creek No. 5 Refuse
- Dawmont Mine Facility
- Helen (Lewis) Refuse
- Upshur 10/15 Drainage
- Webster County Water Studies
- Iaeger Water Feasibility Study
- Burnwell, Standard, and Collinsdale Water Line Extension
- Clay-Roane PSD Water Feasibility Study
- Burnsville PSD Water Feasibility Study
- Brandonville/Pisgah Water Feasibility Study
- Cuzzart/4-H Water Feasibility Study
- Hudson/Mt. Nebo Water Feasibility Study
- Phase I Water Studies Brooke and Fayette Counties
  - Gauley River PSD – Belva
  - Hammond PSD – Wellsburg
  - New Haven Chamber of Commerce – Hico
- Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln, and Logan Counties)
- Godby Branch Phase II Water Study
- Madison Street Portals/Fairview Route 218 Portals
- Putnam County Phase I Water Studies
  - Heizer Creek
  - Manila Creek
- Boone County Phase I Water Studies
  - Jeffrey Area – Jeffery, Hewett Creek, Seacoal
  - Ottawa Area – Ottawa, Greenview, Missouri Fork, Meadow Fork, Aleshire Branch, Dent Fork, Mike's Fork
- Phase II Water Feasibility Studies
  - Logan County – Cow Creek, Crooked Creek, Upper Rum Creek
- Phase I Water Studies for Logan County
  - Pecks Mill – Godby Heights Communities
  - Cow Creek – Sarah Ann – Crystal Blocks Communities
  - Upper Rum Creek Community
  - Clothier Community
  - Crooked Creek Community
  - Godby Branch
  - Whitman Creek – Holden Project
- Beaver Creek Waterline Extension: Phase II Water Project
- Cassity Fork Water Supply Extension: Phase II Water Project

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

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

Management of fly ash utilization permits for various coal companies:

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

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

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

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

NPDES Industrial/Municipal Permitting

Completed National Pollutant Discharge Elimination System (NPDES) renewal permitting and associated agency negotiations for several facilities.

Plasma Processing Corporation – Management of numerous projects in Ravenswood, West Virginia including:

- Subsurface exploration and preparation of soils report
- NPDES Permit
- Development of sampling program for Plasma to follow in obtaining samples for NPDES Stormwater Analyses
- Development of hazardous waste operations manual
- Acquisition of WV Air Pollution Commission permits
- Environmental audit of facility operations

Hydrology and Hydraulics

City of Charleston – Hydrologic and hydraulic analyses of South Ruffner Watershed. Project analyzed various storm events and presented conceptual recommendations to reduce effects of these storms.

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

Groundwater

Dilley's Mill – Principal-in-Charge for review of regional groundwater information for a summer Boy Scout camp facility to locate and construct a replacement drinking water well for the facility. Responsibilities included the development and review of existing facility usage, determination of the location and depth of the proposed water well and design of the well to meet with the requirements of the State of West Virginia Department of Health standards. Design of sewage collection system and synthetic lined sewage treatment lagoon including permitting.

Groundwater sampling programs:

- Herr's Island – Urban Redevelopment Authority of Pittsburgh
- Robertshaw Controls in New Stanton, PA
- New Castle Power Station
- Pennsylvania Power Company
- Portsmouth Power Station
- Virginia Electric and Power Company
- Rhone Poulenc Ag Company – Institute, WV

Management of pump tests:

- Peabody Coal Company – Bim, WV
- Southern Ohio Coal Company – Meigs County, OH
- Rhone-Poulenc Ag Company – Institute, WV

Rhone Poulenc Ag Company – Development of specification manual for conducting soil and groundwater sampling programs. Manual detailed decontamination methods and proper handling/disposal methods in Institute, West Virginia.

Air Pollution/Air Services

Principal-in-Charge for internal and external methane gas monitoring at nursing home facility in Boone County, West Virginia.

Urban Redevelopment Authority of Pittsburgh – Preliminary and detailed air pollution modeling for Pittsburgh's convention center complex and for the Washington Heights development.

Eastern Associated Coal Corporation – Management of certified emission statements for 11 coal preparation plants and air emission inventories for 8 coal preparation plants for submittal to the West Virginia Office of Air Quality.

Nicholson Construction Company – Operation permit from West Virginia Air Pollution Control Commission for cement/grout portable batch plant for mine subsidence control project in Follansbee, West Virginia.

Stream/Wetland Delineation, Permitting and Mitigation

Columbia Gas Transmission Corporation – Management of stream stabilization and restoration plan for segment of East Fork of Queer Creek in Hocking County, Ohio.

Environmental Assessments/Impact Statements

Management of numerous environmental assessments for property transactions:

- Arch Coal – Multiple WV Tracts ESA (60,500 acres)
- Massey Coal Services – Red Cedar Surface Mine (850 acres)
- Duke Energy – Chicopee Environmental Audit (6,000 acres)

- Pittston Coal Management Group – Phase I ESA (6,000 acres)
- Massey Coal Co. – Hampton Site, Spruce Laurel (130 acres)
- Eastern Associated/Peabody Coal – Phase I ESA (1,035 acres)
- Eastern Associated Coal – Environmental Due Diligence for Active and Closed Operations in KY and WV (100,000 acres)
- Peabody Coal – Multi-state Environmental Audit in WY, CO, NM, AZ, Western KY, IN, IL (250,000+ acres)
- Peabody Coal – Environmental Due Diligence for Properties in IL and IN (150,000+ acres)
- AMVEST Mineral Services – Phase I ESA (8,000 acres)
- Peabody Energy Corp. – Phase I ESA on Putnam Property (1,036 acres)
- Arch Coal – Environmental Compliance Audit in KY, WV, and VA (150,000+ acres)
- Massey – Consolidated Coal Co. Holden Complex (5,500 acres)
- Massey – Environmental/Reclamation Liability Assessment for Northland Resources (150 acres)
- Peabody Coal – Phase I ESA for Imperial Coal and Turner Properties (5,400 acres)
- Peabody Group – Environmental/Reclamation Liabilities for Kanawha Eagle, LLC Permits in Boone and Kanawha Counties, WV (350 acres)

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

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.

CHRISTOPHER A. GROSE, L.R.S.

Senior Engineering Associate

EDUCATION

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

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

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATIONS

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

PROFESSIONAL AFFILIATIONS

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

AREAS OF SPECIALIZATION

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

PROFESSIONAL EXPERIENCE

Civil/Site Design

Civil/Site design included slope stability of both cut and fill slopes in soil and rock for various well production pads in northeastern West Virginia associated with natural gas production in the Marcellus well field. Work consisted of the management of a design engineering team including ground survey crews to development site topographic base mapping, coordination with client regarding land ownership, access roadway alignments, site drainage control, and number/location of production wells. Additional work also included gathering and midstream transmission pipeline locations. The scope of services for these projects also included the preparation of permit documents and attachments for submittal to the WV Department of Environmental Protection-Office of Oil and Gas.

- Stone Energy Corporation
  - Higgins East pad and road
  - Higgins West pad and road
  - Conley Well pad, road, and access bridge
  - Mills-Wetzel No. 3 pad and road
  - Hunter/Pethel well pad
  - Talkington-nice pad and road
  - Bowyers well pad and road
- Viking Oil & Gas
  - United Disciples of Christ well pad

Geotechnical

Completion of numerous subsurface exploration studies for active soil slope landslide failures associated with the development of natural gas production well pads and access roads. Work included the layout, surveying, and logging of subsurface borings to determine the depth and extent of the slope failures. Following collection of soil/rock samples, materials were tested for characteristic and strength properties. Following testing efforts, the failed slopes were modeled using computer-based slope stability deign models to determine a stabile configuration including the addition of rock buttresses, toe keys, underdrains, mid-slope keys, etc. Final stabilization plans were then prepared for the client allowing bidding and selection of a repair and stabilization contractor to perform the work.

- Stone Energy Corporation
  - Mills-Wetzel No. 2 well pad landslide repair
  - Potoczny well pad landslide repair
  - Mills-Wetzel access road landslide repair
  - Pribble Tank landslide repair
  - Haines Branch pipeline landslide repair
- Columbia Pipeline Group (TransCanada Pipeline)
  - SM8 pipeline landslide repair
  - SM80 Loop pipeline landslide repair
- Chesapeake Energy Corporation – R. Baker well pad landslide causation study
- TransEnergy Corporation – Dewhurst well pad landslide repair
- Reserve Oil & Gas – Reed No. 1 well pad access road landslide repair

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

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

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

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

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

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

conjunction with the initial roadway construction. This coupled with the lack of maintenance and presence of deteriorated drainage culverts likely contributed to the slope failure. The initial installation of this fill material was determined through an extensive study of the historic topographic mapping of the area.

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

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

Stone Energy Pribble Tank – Work included the exploration and study of a failed soil/weathered rock slope which was loaded through the placement of fill near the top of the slope to provide adequate area for the construction of 2- 2,400,000-gallon water storage tanks in New Martinsville, West Virginia. Shortly following the installation of the tanks, a large section of the hillside failed leaving one of the tank foundation partially unsupported. Following the subsurface exploration and drilling work, a stabilization plan was developed which included the removal of the failed soil mass (>50,000 CY) followed by the replacement of compacted soil material behind a large toe key and buttress. The repair also included surface diversion drainage ditches and numerous bond benches along the underlying rock line which were fitted with under drains to collected subsurface seepage.

NiSource/Columbia Gas Pipeline Group SM-80 Loop Gas Transmission Line – Development of a subsurface exploration and drilling plan to determine the extent and depth of a soil and weathered rock slope failure which threatened the performance and stability of a 30-inch high pressure natural gas transmission line in Kanawha County, West Virginia. The slide location was remote and situated along a steep hillside. The stabilization plan recommended the use of soil nail technology due to the remote location and rather inaccessible nature of the location. This repair and stabilization technique allowed for the in-situ repair of the failed slope without extensive excavation and backfill which was deemed difficult and would have required more land disturbance resulting in additional slope stability concerns.

EQT Rockport #7244 Natural Gas Storage Well Pad – Project involved the assessment and repair recommendations for a section of failed fill slope immediately below existing and active natural gas storage well near the community of Rockport in Jackson County, West Virginia. The failed slope was caused by improper surface drainage control along the pad and access road. The stabilization plan included the excavation and removal of the failed slope following "shut-in" of the storage well. The upper failure scarp was situated immediately adjacent the well head which was protected during the stabilization work. Following installation of a rock toe buttress and key way, the failed soil material was amended using lime to reduce the moisture content which was required to achieve the recommended in place density during placement and compaction. Following the regrading effort, the slope was trimmed and seeded followed by the grading a several diversion and collection ditched to control runoff from the upper portion of the hillside below the well pad.

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

Greer Industries Cheat River Quarry Haulroad – Project included the development of stabilization and repair recommendations for a failed soil slope which impacted a critical haulroad utilized by the quarry operator to move raw shot rock material from the quarry to the crusher at the aggregate plant in Rowlesburg, West Virginia. The landslide occurred because of the failure of a cross drainage culvert in the haulroad. The failed soil mass was removed to the underlying bedrock and following installation of a stone toe buttress and toe key, the material was blended with aggregate material from the plant and placed in compacted lifts. The underlying rock surface was excavated to result in a series of "bond benches" allowing for the installation of underdrains below the compacted fill to collect groundwater and seepage from the underlying rock. This prevented saturation of the fill material.

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

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

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

Rhone Poulenc Ag Company – Subsurface sample collection, resistivity measurements, explosivity measurements, and decontamination procedures for an organic contamination study at Institute, West Virginia.

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

Roadway Design

Geotechnical engineer for various bridge and highway projects including:

- North Bridgeport Bypass
- McDowell County Schools
- Corridor H
- Dundon Bridge
- Sulphur Springs Bridge Replacement
- Smith Creek Bridge
- Martha Truss Bridge
- Martha Concrete Girder Bridge Replacement
- Dry Run Interchange
- I-81 Upgrade
- Platinum Drive
- Kenna Ridge Business Industrial Park/Access Road

Hardy County Rural Development Authority – Engineering services for the study, design, and preparation of construction contract plans, related documents, and construction oversight services for an industrial access road for the Baker Business Park District.

Roane County Development Authority – Site development construction documents for National Industrial Wholesale Lumber located in Roane County's industrial park.

ZMM – Site design and engineering for a new elementary school and new high school in Bradshaw, West Virginia on the site of an existing elementary school.

West Virginia Department of Highways – Evaluation of subsurface conditions including both soil and rock to provide geotechnical recommendations related to potential bridge abutment foundation systems near Martinsburg, West Virginia. Alternatives included both shallow and deep foundations. Deep foundations were required at several abutments due to voids encountered in limestone bedrock.

Abandoned Mine Lands

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

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

WVDEP Abandoned Mine Lands and Reclamation – Subsurface investigation, surveying, and design for reclamation of a large coal refuse pile and two mine entries for Vivian Refuse Pile AML Project in Vivian, West Virginia. Plans, specifications, cost estimate, coal refuse reprocessing evaluation, and supporting documents for regrading over 150,000 cubic yards of refuse, surface water control, mine seals, and riprap toe protection were completed.

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

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

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

Oil and Gas

Columbia Gas Transmission Corporation – Design of stream relocation plans including preparation and coordination of applicable environmental permits. The relocation was required due to an adjacent gas pipeline near the stream.

Columbia Gas Transmission Corporation – Preparation of several spill prevention control and countermeasure plans for gas storage well sites in Pennsylvania and West Virginia.

Mining

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

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

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

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

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

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

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

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

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

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

Landfills/Solid Waste/Waste Disposal

WVDEP Closure Assistance Program – Design of final landfill closure for abandoned solid waste facility. Design included diversion and collection channels, cap design, leachate collection system, and 150,000-gallon leachate storage tank in Montgomery, West Virginia.

American Cyanamid – Engineering design for the closure of a chemical waste landfill in Parkersburg, West Virginia. Completion of a settlement analysis to determine the expected consolidation of waste during dewatering. Cover design incorporated a composite liner system with synthetic drains. The cap utilized synthetic reinforcement to minimize consolidation-induced stresses on the synthetic liner.

West Virginia Department of Environmental Protection – Responsible for the development and design of several interim or maintenance related items associated with drainage at the Monongalia County Landfill in Morgantown, West Virginia. Included the design and upgrade of both new and existing channels, diversions to berms to minimize surface water infiltration and minimizing the amount of leachate generation.

American Cyanamid – Permit completion for closure of a chemical sludge impoundment near Parkersburg, West Virginia. Analysis of existing monitoring well configuration.

Design, management, and project oversight during construction for the closure of a 7-acre biological sludge pond in Nitro, West Virginia. Preliminary design studies included the completion of batch tests to evaluate stabilization materials. Also handled the development and submittal of several permits associated with the project including erosion and sediment control plan, Army Corps of Engineers permit, and a wetlands investigation and nationwide 404 permit.

Development of closure design for a 14-acre inactive waste water treatment pond in Nitro, West Virginia. Responsibilities included evaluation of sludge stabilization technologies, types of reagent and mixing ratios to achieve the required in-place strengths. Conducted contractor interviews with the owner, as well as providing assistance to the owner during preparation of the construction contract. During construction, conducted weekly safety meetings on-site with the contractor. This project was also expanded to provide stabilization of a 1.5-acre digester basin adjacent to 14-acre pond. The original contract was extended to cover stabilization of this pond. Stabilization efforts included submittal of an Army Corps of Engineers' nationwide permit to stabilize the bank of the Kanawha River and application of a West Virginia NPDES General Stormwater Construction Permit.

North Fork Landfill – Permit completion for a new municipal landfill, including design and construction of monitoring wells to monitor several aquifers in Wheeling, West Virginia.

Sycamore Landfill – Part I permit completion, design, and implementation of a drilling program, including evaluation of an existing monitoring well configuration. Testing of existing site soils for sources of suitable liner material.

Rhone Poulenc Ag Company – Completion of several Part I Solid Waste Facility permits including the design and implementation of drilling programs, formal geological studies, hydrogeological analysis of proposed sites, and locations and development of upgradient and downgradient groundwater monitoring wells. Design, construction, and development of seven monitoring wells for a proposed 13-acre industrial waste disposal facility near Institute, West Virginia.

Storage Tanks

West Virginia Division of Natural Resources – Underground storage tank contamination study in Jesse, West Virginia. Delineation of a subsurface hydrocarbon contamination plume as well as possible flow direction to determine potential receptors.

Groundwater

Operation and maintenance of several groundwater remediation systems including pump and treat and sparge systems for a large chemical manufacturer in Nitro, West Virginia. The pump and treat technology is designed to recover kerosene in one instance and TCE in another. Both systems are safety oriented and are fully automatic. The sparge system is a study/field test to determine the impact that oxygen injection will have on the degradation of phenolic compounds existing in the groundwater.

Columbia Gas Transmission Corporation – Evaluation of numerous groundwater monitoring wells to determine the direction of migration and the feasibility of utilizing them in a planned pump and treat recovery system. The site was an active compressor facility located in Eastern Kentucky.

Design and completion of several geological and hydrologic investigations to determine nature and direction of groundwater flow associated with proposed limestone quarry sites in Nitro, West Virginia. The sites were all associated with Karst terrain and dual permeability systems and primarily fractured flow regimes. Studies included the deployment of drilling equipment to install groundwater monitoring wells.

Measurement of stratified in-site permeability of rock strata in NX boreholes in Hurricane, West Virginia. The permeability measurements were reviewed and evaluated to develop groundwater monitoring systems associated with both existing and proposed municipal landfill disposal facilities.

Rhone Poulenc Ag Company – Analysis and study of elevated levels or organic constituents and elevated pH values in existing monitoring wells. Study to determine if well construction techniques or development procedures contributed to the presence of these constituents.

Dilley's Mill – Review of regional groundwater information for a summer Boy Scout camp facility to locate and construct a replacement drinking water well for the facility. Responsibilities included the development and review of existing facility usage, determination of the location and depth of the proposed water well and design of the well to meet with the requirements of the State of West Virginia Department of Health standards.

Union Carbide Corporation – Design and completion of several monitoring wells to monitor an abandoned fly ash disposal area. Included hydrologic analysis of site geology to determine major aquifers present in the area.

Completion of several groundwater contamination studies in West Virginia. Contaminants included diesel fuel, gasoline, chlorobenzene and benzene. Studies included field exploration utilizing various methods including air and mud rotary drilling. Responsible for the setup, calibration, and analysis of groundwater computer models to lend insight into the flow regimes and dispersion characteristics of the potentially affected areas.

Preparation of Phase I, II, and III water studies throughout the state of West Virginia for the West Virginia Division of Environmental Protection, AML section. Work items included interview of area residents to determine major quality and quantity problems, field and records research to determine the location of known pre-law mining activity, which could potentially affect groundwater quality, collection of groundwater samples, and design of water distribution facilities.

ESAs (Phase I and II)

Responsible for the design and implementation of drilling and sampling programs for several Phase I and Phase II environmental assessments.

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

Chief Engineer, Licensed Remediation Specialist

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

PROFESSIONAL EXPERIENCE

Civil/ Site Design

Ridgeline, Inc./Cabela's – Retained by 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 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.

Fieldcrest Subdivision – Project manager/engineer for 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/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 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 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

Project engineer for development of Suncrest Subdivision in Charleston, West Virginia. Project included engineering and permitting for a new residential subdivision including roadway, underground electric, telephone, cable, water, sanitary sewer and storm water. 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. Project included 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.

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

Plasma Processing Corporation – Preparation of permit to construct and site development plan for a secondary aluminum processing facility startup in Jackson County, West Virginia.

Utility relocation plans required for site development, waterline, and sewer construction projects. Projects included determination of utility locations by records review, utility contacts, and surveying. Designs were prepared including locations, details, and pavement replacement. Design also included obtaining approvals from West Virginia Division of Highways and the owners of the utilities.

Abandoned Mine Lands

West Virginia Division of Environmental Protection Abandoned Mine Lands (WVDEP AML) Reclamation – Project engineer/project manager for open-end contract from 1988 through 1995. Continued after 1995 with AML projects for WVDEP AML including reclamation

designs, preparation of plans, specifications, bid documents, and permitting. Projects included:

- Duncan Hill No. 1 and No. 2 Subsidence
- Urso Subsidence
- Jonben Subsidence
- Doug Gray Subsidence
- Turner Douglas Complex
- Omar Refuse Piles (project won reclamation of the year award)
- Bear Run Refuse (project won 1994 Ducks Unlimited award)
- Kimble Refuse Pile (project won 1995 southern reclamation award)
- Vivian Refuse Pile
- Summerlee Refuse Pile
- Godby Branch Water Extension
- Williamson (Elias) Landslide
- Lefthand Fork Burning Refuse
- Belle Landslide
- Harris Acid Mine Drainage
- Numerous Phase I and Phase II Water Quality Studies/Survey
- Williamson (Hatfield) Landslide
- Taylorville (Cantrell) Drainage
- Sundial Refuse
- Sundial (Hatfield) Refuse Piles
- St. John's Road Subsidence
- Rachel Refuse
- Putney Impoundment
- Pringle Run No. 2
- Peach Ridge Complex
- Mountain Run Refuse and Portals
- Mill Creek Refuse Pile
- Measle Fork Refuse
- Marmet (Wells Drive) Landslide
- Marmet (Clark) Drainage
- MacArthur Mine Subsidence
- MacArthur Phase 2 Subsidence
- Little Whitestick Refuse
- Lando (Edwards) Drainage
- Kopperston (John's Branch) Refuse
- John's Branch Coal Refuse Dam (Kopperston)
- Jessop Highway #10
- High Coal Tipple
- Harris AMD
- Gray and Iaquinta Subsidence
- Grass Run Refuse
- Godby Branch Waterline Extension
- Georges Creek Portals
- Georges Creek (Lucas) Rockslide
- Garrison Complex
- Flipping Hollow Complex
- Fairmont East Mine Drainage
- East Lynn II
- Crany Mine Dump
- Courtright Highwall
- Cora Mine Drainage No. II
- Charleston (Ratcliffe) Landslide
- Cassity Fork Waterline Extension
- Camp Mohonegan Regrade
- Buffalo Creek No. 5 Refuse
- Borderland (Matney) Portals
- Beckley Subsidence
- Allen AMD

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

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

Subsurface investigation, surveying coal refuse reprocessing evaluation and report, and design of reclamation plan to stabilize and approximately 15-acre refuse pile at Buffalo Creek No. 5 in Marion County, West Virginia. Developed plans, specifications, cost estimate, and calculations brief for drainage control and regrading plan.

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

Subsurface investigation, surveying, coal refuse reprocessing evaluation, water quality monitoring, and design of a reclamation plan for a coal refuse pile, unreclaimed highwalls, and slurry and water treatment

ponds in Lewis County, West Virginia. Plans, specifications, cost estimates, and calculations brief were completed for the project.

Environmental Assessments/Impact Statements

Rhone-Poulenc AG Company – Management and oversight of environmental assessment to identify any liabilities or soil/water degradation for a proposed industrial solid waste landfill. Investigation included drilling, sampling, monitoring well sampling, site reconnaissance, and historic records research to establish baseline soils and groundwater conditions. Results presented in a report.

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

West Virginia Division of Highways – Environmental Impact Statement (EIS) for proposed Route 19 upgrade from Summersville, West Virginia to Interstate 79 in Braxton County, West Virginia. Project included evaluation of three alternatives over approximately 25-mile length. Responsibilities included hazardous waste section collection of general data used by other scientists, field reviews, and public meeting participation.

Assessment of environmental and reclamation liabilities associated with over 40 surface mine permits in western Virginia. Evaluation included PCB concerns, reclamation costs, underground and aboveground storage tanks, and acid mine drainage.

Massey Coal Service, Inc. – Assessment of environmental liabilities associated with a large tract of property including over 25 permitted mines and a coal preparation plant. Investigation included a review of permits and requirements, past environmental compliance record, walkover of each site, and development of estimated reclamation costs for each site. Report prepared to document results of the liability assessment.

Completion of environmental assessments and a preliminary design report for two inactive commercial solid waste disposal landfills located in Kanawha and Wyoming County, West Virginia. The environmental assessment included completion of a groundwater user's survey for residents located within ½_mile of each facility, drilling shallow groundwater monitoring wells to monitor flow along the soil/bedrock interface downgradient of each landfill, an extensive geotechnical soils/rock investigation, assessment of each facilities compliance with the solid waste management rules, and developing recommendations for a preliminary closure plan.

Mining

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

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

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

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

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

Landfills/Solid Waste/Waste Disposal

DuPont Washington Works – Project Manager responsible for design, preparation of construction documents, and construction documents, and construction

quality assurance monitoring for a 6.2-acre expansion of a piggyback of a leachate collection system at an industrial waste landfill.

Eastern Environmental Services, Inc. – Project engineer/project manager for finalizing a permit application for the S&S Landfill near Clarksburg, West Virginia. Components of the plan included a detailed staging and closure plan to comply with sediment control and leachate storage requirements. Successfully represented the landfill in a permit appeal hearing before the Water Resources Board. Prepared two construction/bid packages for constructing the initial 10 acres of the landfill.

Cytec Industries – Quality assurance/quality control monitoring for closure of a 10-acre SWMU containing biological treatment sludge. The contents of the basin were stabilized by mechanical mixing. Activities included supervision of testing, data evaluation, and a revised interim grading and drainage plan. Report and certification provided for WVDEP-OWM.

Cytec Industries – Closure plan and permit application for closure of a 5-acre industrial waste landfill. Steep slopes over a portion of the landfill necessitated the design of an innovative cap system and leachate collection system. Project also included closure and capping of a small pit containing tar residue.

Responsible for detailed hydrogeologic investigation and preparation of a major portion of the WVDEP Part A Solid Waste Disposal Permit Application for the Northfork Landfill near Wheeling, West Virginia. Project included field reconnaissance and mapping of existing site conditions, rock corings, test pits, laboratory analysis of soils for potential construction materials, installation of four monitoring wells, and the corresponding analysis and evaluation of data for completing the Part A Application.

Responsible for hydrogeologic investigation and preparation of the WVDEP Part A Solid Waste Disposal Permit Application for the Sycamore Scenic Landfill in Putnam County, West Virginia. Work included coring, test pit, and laboratory analysis of soils; review of existing groundwater data; and analysis and evaluation of data for completing the Part A Application.

Project Manager responsible for construction quality assurance monitoring for three landfill expansions at Brooke County Sanitary Landfill, including 6.5 acres of composite liner.

Project Manager responsible for construction quality assurance monitoring for 0.8-acre composite liner expansion at Wetzel County Landfill.

Project Manager/Project Engineer for design of composite liner system expansion, design and construction quality assurance for a 2-acre final landfill cap, and design of a new access road serving Pocahontas County Landfill.

Chambers Development Company – Preparation of solid waste disposal permit applications for the Monroeville Landfill, Monroeville, Pennsylvania, and the Southern Alleghenies Landfill, Cambria County, Pennsylvania, both of which include a double synthetic liner system combined with a drainage net leak detection system to conform to Pennsylvania DER regulations.

Project manager/engineer for the West Virginia Division of Environmental Protection's landfill closure assistance program for 1997 through 2002. Responsible for conceptual design, field investigation, construction drawings, specifications, permit applications, etc., for the following projects:

- Wyoming County Landfill
- Jackson County Landfill
- Kanawha Western Landfill
- Monongalia County Sanitary Landfill
- Fayette County Landfill
- Fleming Sanitary Landfill

QA/QC monitoring oversight for a municipal waste landfill in Tazwell County, Virginia.

Design; preparation of drawings, technical specifications, and contract/bid documents; construction monitoring; air monitoring; sludge sampling and analysis; review and approval of a detailed health and safety plan; permitting; and other miscellaneous engineering services for the stabilization and closure of a 3-acre sludge basin and a 1-acre sludge pond. The project included management of a pilot-scale demonstration, procurement of stabilization reagents from multiple providers, and development of an adjacent soil borrow area.

Design; preparation of drawings, technical specifications, contractor’s bid sheet, engineer’s cost estimate, contract, and cap acceptability evaluation; evaluation of contractor

bids, and construction monitoring associated with the capping and closure of a 2.5-acre cell of an industrial waste landfill facility. Cap included a multi-layer geocomposite system to minimize infiltration and the production and leachate to improve the areas groundwater quality.

Final design and preparation of construction drawings, detailed technical specifications, and engineer's construction cost estimate for the construction of a 1.9-million-gallon double-lined pond and 5 acres of a landfill liner system. This project included development of an ultimate facility layout plan, a two-year detailed development plan, and construction monitoring. Project also included negotiations with regulatory agency to obtain approval of the permit.

Response to regulatory agency review comments and redesign of a pond liner system and piggyback landfill liner system for a 20-acre landfill in West Virginia.

DuPont Environmental Remediation Services – Consulting regarding the design of a final cover/cap for an industrial waste landfill located in West Virginia.

West Virginia Public Service Commission – Site reconnaissance, development of alternative capping/closure systems, and preparation of engineer's cost estimates for the closure of two West Virginia municipal waste landfills in support of rate making testimony and hearings.

American Cyanamid Company – Project manager/engineer for independent quality assurance/quality control monitoring associated with closure of a three-acre SWMU consisting of a waste impoundment. Project included construction of an earthen buttress to improve slope stability, in-place waste stabilization using fly ash and kiln dust, and construction of a RCRA cap. Responsible for field design revisions to overcome problems, conformance testing, and preparation of certifications and a summary report. Project included sampling and analysis of raw and stabilized sludge.

American Cyanamid Company – Coordination of field activities associated with construction monitoring and laboratory testing for RCRA hazardous waste impoundment (the first permitted and constructed in EPA Region III) in Willow Island, West Virginia, including earth moving, construction of a soil-bentonite liner, monitoring of three, sealed double-ring infiltrometers, and construction of an HDPE double-lined impoundment.

Pennsylvania Electric Company – Field (construction) monitoring for development of a residual waste landfill including compaction testing for heavy earth moving, synthetic (PVC) liner installation, concrete testing, and other miscellaneous testing.

Virginia Power Company – Consultant for site development and construction of a fly ash disposal facility including a review of site operations, developing a maintenance program, compaction testing and review, and problem shooting.

Rhone-Poulenc Ag Company – Design and permitting for a proposed industrial solid waste landfill. Project included complete hydrogeologic evaluation including several borings and installation of seven monitoring wells; documentation of soils, geology, water quality and hydrogeology; detailed site design of leachate ponds, liner system, storm water collection system, access road, and capping/closure system. Multi-volume permit application prepared including Operations Manual, Quality Assurance/Quality Control Plan, Technical Specifications, Permit Application, and Design Drawings.

Rhone-Poulenc Ag Company – Leachate Minimization Study for a RCRA Hazardous Waste Landfill. Project included assessment of existing landfill operation and recommendations to reduce quantity of contaminated runoff from over 8 million gallons per year (MGY) to between 2 and 3 MGY. Detailed staging and operating plan, storm water management plan, and cost estimates prepared.

American Cyanamid Company – Closure plan and permit application for closure of a three-acre surface impoundment containing sludge and tar. Stability concerns for an existing embankment containing the waste lead to the development of a lightweight cap. Subsurface investigation and field surveying completed. Closure application as required by the West Virginia Division of Environmental Protection provided.

Soundings and sampling of three basins containing sludge. Two basins contained sludge from secondary biological treatment of industrial wastewater. One basin contained petroleum product sludges. Sludge quantities determined from soundings and cross sections prepared.

Samples obtained for laboratory analysis to characterize wastes.

- Rhone-Poulenc Ag Company
- Ashland Petroleum Company

Monongalia County Sanitary Landfill – Engineer responsible for expansions, planning, and upgrades for the Monongalia County Sanitary Landfill from 1990 through 1992. Activities included:

- Three expansions (seven acres total) of the landfill liner and leachate collection system, including grading, groundwater collection drains, landfill liner system and leachate drains, protective cover, and surface drainage control
- Construction monitoring
- Certification of landfill expansions
- Construction of a 1.6-million-gallon leachate storage basin, including clay liner, double synthetic liner, synthetic drainage layer, protective cover, and drainage control devices
- Annual landfill volume reports, including surveyed cross sections
- Two borrow area investigations to identify clay liner sources
- Feasibility study for expansion and continued operation of the facility
- Final closure plan for the facility including a multi-layered cap and drainage control plan

Rhone-Poulenc AG Company – Evaluation of an emergency fly ash pond for a chemical plant in Institute, West Virginia. Recommendations, including conceptual design drawings and an engineer's cost estimate, to increase the settling efficiency of the pond. Special design elements, including a polymer feed system, submerged manifold pipe, splitter dike, and an overflow weir.

Hampton-Clarke, Inc. – Project Manager for Independent Quality Assurance Testing (IQAT) services for removal of contaminated soils and placing clean soil backfill at the site of a former cullet pile disposal area.

Stormwater

Expert witness for plaintiff damaged as a result of flooding caused by lack of maintenance at a culvert system in Westoreland, Wayne County, West Virginia.

Stormwater drainage plans for 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.

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

Expert 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.

Expert witness for plaintiff damaged as a result of flooding from upstream construction. Visited site to observe problem areas, reviewed construction practices/procedures, reviewed regulatory permits, and provided testimony as to the cause of flooding.

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.

Water Lines, Water Storage Tanks, and Water Treatment Plants

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

Design for waterline extension projects including preparation of construction drawings, specifications, and engineer's cost estimates for the West Virginia Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation.

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

Design, preparation of construction drawings, preparation of permit applications, and other related activities for the construction of waterline projects. Line sizes ranged from 16 inches to 2 inches. Materials of construction included polyvinyl chloride and ductile iron pipe. Drawings included planimetric maps, topographic maps, and aerial photograph formats to depict proposed construction. Permit applications included Bureau of Public Health, Public lands Corporation Stream Activity Permits, Division of Highways Occupancy Permits, and General Storm Water NPDES Construction.

- Cabell County 2000 Project, 23 miles of new waterline construction, West Virginia American Water Company (WVAWC)
- Poca River Road Waterline Extension, 13 miles of new waterline construction, WVAWC
- Route 60 Contract 3 Waterline Extension, 3 miles of new waterline construction, WVAWC
- Buff Creek/Trace Fork Waterline Extension, 6 miles of new waterline construction, WVAWC
- Route 60 Contract 4 Waterline Extension, 2 miles of new waterline construction, WVAWC
- Yorktowne Subdivision, 3,000 linear feet of waterline serving a 50-lot subdivision.

ESAs (Phase I and II)

Numerous Phase I Environmental Site Assessments including reclamation liability assessments for mining and industrial properties in West Virginia and Kentucky. Projects typically focused on solid waste disposal practices, potential acid mine drainage discharges, underground storage tank status, areas of hydrocarbon soil contamination, PCB transformer concerns, and other environmental liabilities.

Phase II environmental site assessment for an abandoned mining complex located in Fayette County, West Virginia. The new owners wished to identify any liabilities and determine approximate clean-up costs for negotiations with the previous owners. The areas evaluated included two aerial tram head houses, a drum storage area, truck maintenance garage, mine machinery repair shop, two commercial properties, a lamp house, and other storage areas. Numerous areas of petroleum hydrocarbon contamination were identified, and the extent of contamination documented. An on-site laboratory was used to expedite testing and establishing the boundary of areas requiring remediation. The results of the investigation were summarized in a report, including a detailed description of sampling and laboratory analysis methods, drawings showing sample locations, laboratory results, estimated volumes of contaminated soils, and recommendations for cleanup.

West Virginia Regional Jail and Correctional Facility Authority – Phase I Environmental Site Assessment to document potential liability for a tract being considered for a regional jail site in Kanawha County, West Virginia. Activities included historic records search, interviews, site reconnaissance and preparation of a report documenting the findings.

DiMucci Development – Phase I Environmental Site Assessment for property proposed for development as a strip mall.

The Multicare Companies, Inc. – Completion of eight Phase I Environmental Site Assessments for nursing and rehabilitation care facilities in West Virginia.

Virginia Electric Power Company – Assistance with site design and engineer's construction cost estimate for the remedial design of a CERCLIS waste disposal facility.

Phase I environmental site assessments for feedstock recovery sites associated with three coal-based synthetic fuel manufacturing plants. The feedstock recovery sites included numerous coal waste slurry impoundments, dry refuse piles, and mixed refuse disposal areas. Assessments focused on potential acid mine drainage problems, former waste disposal areas, and other mining-related environmental liabilities. A report was prepared detailing the findings for each site.

Storage Tanks

Columbia Gas Transmission – Project manager for completion of over 350 AST Registrations, Inspections/Certifications, and site-specific Spill Prevention Response Plans for 40 facilities.

- Followed the Aboveground Storage Tank Act §22-30 Title 47 Interpretive Rule Series 62 and the Draft Emergency Rule additionally conferring with the West Virginia Department of Environmental Protection (WVDEP) to establish accurate classification and compliance.
- Met all regulatory deadlines.
- Reviewed comprehensive electronic documentation comprising of completed inspection sheets, photographs, detailed deficiencies.
- Provided recommendations and schedule for abatement for deficient secondary containment structures.

Rhone-Poulenc AG Company – Geotechnical and environmental investigation for two proposed above-ground reinforced concrete tanks to serve as secondary wastewater treatment unit. Investigation included soil drilling, sampling, laboratory analysis for engineering properties, and analysis for contamination. Field survey completed to locate existing structures. Report prepared outlining soils/geology, environmental concerns and foundation recommendations.

Closure of 13 aboveground RCRA storage tanks. Closure services included review of agency approved closure plan to determine compliance items, visual inspection of tank interiors and earthen containment berm areas, review of rinsate analyses, review of soils testing analysis from berm areas, and preparation of closure documentation and certification.

- Rhone-Poulenc AG Company
- American Cyanamid Company

Cannelton, Inc. – Abandoned underground storage tank investigation including sampling of tank contents, geoprobe investigation, and field and laboratory analysis of soil samples.

Sewer Lines and WWTPs

Project manager/project engineer for the Fleming Landfill Sanitary Sewer Extension project in Kanawha County, West Virginia. Project included design, permitting, construction monitoring, and certification of 9,900 linear feet of gravity and force main sanitary sewer, a new duplex pump station, and rehabilitation/upgrade of an existing pump station. The construction contract was over $1 million. The completed sewer extension was turned over from the West Virginia Department of Environmental Protection to the Sissonville Public Service District for ownership and operations.
Project engineer for sanitary sewer system including 8-inch gravity sewer, pump station, and force main sewer serving the Gettysburg Subdivision in Charleston, West Virginia. Project included an alternate mainline extension agreement with Charleston Sanitary Board, construction monitoring, surveying, road design and subdivision plans.

Project manager/engineer for an industrial wastewater sewer extension. Project included design engineering, permitting, and construction monitoring associated with a 5 million gallon, double-lined storage impoundment, duplex pump station with 70 horsepower pumps, and 5,200 linear feet of force main sewer in Monongalia County, West Virginia.

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

Oil and Gas

Columbia Gas Transmission Corp – Project Manager for in-house consulting services provided for environmental reports and permit applications for natural gas pipeline transmission projects.

Columbia Gas Transmission – Field reconnaissance of approximately 16 miles of pipeline route, preparation of erosion and sediment control measures, and preparation of stream crossing permits for the NJET project.

Spill Prevention, Control & Countermeasure Plans

Union Carbide Corporation, South Charleston Plant – Audit of chemical manufacturing plant to determine compliance with the facility Spill Prevention Control and Countermeasures (SPCC) plan. Project included review of SPCC plan prepared by facility staff, on-site inspection of over 50 storage areas to ascertain compliance with the SPCC plan and pertinent regulations, preparation of a list of observed deficiencies, and certification of the SPCC plan by a professional engineer.

Stream/Wetland Delineation, Permitting, and Mitigation

Columbia Gas Transmission Corp – Design of stream stabilization and restoration plan for a section of East Fork of Queer Creek in Hocking County, Ohio. Project included obtaining 401/404 certification and preparation of a detailed construction plan.

W. KYLE STOLLINGS, P.E., P.S.

Senior Engineer

EDUCATION

AASHTO National Transportation Leadership Institute, 2010
Indiana University

B.S. Civil Engineering, 1989
West Virginia Institute of Technology

B.S. Engineering of Mines, 1980
West Virginia University

EMPLOYMENT HISTORY

2018-Present	Potesta & Associates, Inc.
2018	TRC Companies, Incorporated
1999-2017	West Virginia Department of Transportation, Division of Highways
1998-1999	Engineering Design Group
1989-1998	City of Charleston, West Virginia
1987-1989	Self-Employed – Mining and Construction
1986-1987	Peabody Coal Company
1983-1986	Self-Employed – Mining Consultant
1980-1983	ARMCO, Inc.

PROFESSIONAL REGISTRATIONS

- Professional Engineer – West Virginia
- Professional Surveyor – West Virginia

AREAS OF SPECIALIZATION

Mining and civil engineering, surveying and Public Works construction and administration. Experience in underground coal mining, broad spectrum urban engineering/construction/administration, highways project engineering/construction, disaster recovery, public and media relations, and interaction with state and federal agencies, legislators, and Congressional Representatives.

PROFESSIONAL EXPERIENCE

Roadway Design

West Virginia Department of Transportation, Division of Highways – Division Director for the oversight of policy and procedures and the Maintenance Management System for DOH Operations and Maintenance. Management of several administrative sections and associated programs with approximately 50 staff:

- Bridge Evaluation Section - Primary work is administering the National Bridge Inspection Standards (NBIS) Program including oversight of the District Bridge Departments' compliance. Implemented an inspection QA/QC program that FHWA recommends to other DOT Bridge Programs. Implemented InspectTech database software for inspection reporting. Implemented Element Level inspection and reporting. Oversize Hauling Permit Unit for heavy trucks.
- Asset Management Section
- WVDOH Pavement Management System
- Transportation Asset Management Plan – Assisted with scoping through consultant selection, scope includes development of a Bridge Asset Management System.
- Resource Management Section - Procurement contracts, Encroachment Permits and Bonds administration and database.
- Operations Section: Buildings and Grounds Program, Core Maintenance Program, Disaster Recovery Coordination (FEMA and FHWA-ER), Oil and Gas Policy and Bond Agreements working two engineers and two clerical staff to monitor well drilling and pipeline activities.
- WVDOH Oil and Gas Policy – assisted the State Highway Engineer in writing and interpreting policy and rules for managing oil and gas industry activities on the state highway system.
- WVDOH Voting Member of the AASHTO Subcommittee on Maintenance, 2013-2017
- WVDOH representative on the Clear Roads Winter Maintenance Research Group 2011-2015
- WVDOH representative on AASHTO Snow and Ice Cooperative Program (SICOP) 2016-2017

West Virginia Department of Transportation, Division of Highways, Engineering Division – Regional Project Manager working with DOH Districts 1, 2, and 3 monitored design project scope, schedules, and budgets. Reviewed plans for construction means and methods before PS&E.

West Virginia Department of Transportation, Division of Highways, Engineering Division, Technical Section, Hydraulics and Section 404 Permit Unit – Unit Leader to supervise the creation and staffing of this new unit to

upgrade DOH compliance with the Clean Water Act, NEPA, Sections 404 and 401 Permitting and other environmental regulations while providing technical resources for hydraulic evaluations and design of stream and wetland mitigation projects. Scoped and supervised the first stage of a complete update of the DOH Hydraulics and Drainage Manual.

West Virginia Department of Transportation, Division of Highways, Engineering Division, Technical Section – Construction Troubleshooter working with the DOH Contract Administration Division on construction and fabrication problems with latitude to expedite solutions. As Hydraulics Engineer, justified the creation of a Hydraulics and Permit Unit within the Technical Section.

As City Engineer for the City of Charleston:

- Managed office of 5 - 8 staff with 2 engineers and $4 to $17 Million annually in project development and construction: landslides, drainage, city landfill, roads and streets, bridges, parks, parking buildings and other urban infrastructure.
- Conceived the design that allowed the City to build and keep a solid waste landfill that is still operating. At construction in 1993, this was the largest public works project in City history at an initial construction cost of approximately 17 million dollars.

Coordinated daily assignments and inspection services of 12-14 inspectors in the construction of four bridges and approximately 14.5 miles of Limited Access Highway for US 35 Design-Build Upgrades Projects in Putnam and Mason Counties, West Virginia.

- Reviewed and approved Inspector's Daily Reports
- Regular field review of work in progress
- Frequently provided interpretation of WVDOH Standard Specifications and Project Plans for the inspectors and contractors
- Made recommendations for plan changes and improvements.

Mining

Mine surveying, mine construction, boundary surveying, and residential construction.

Peabody Coal Company – Section foreman on Robinhood No. 9 Mine in Twilight, West Virginia. Supervised coal production crews and underground construction and general labor crews.

Mine surveying, mapping, and permitting for small mining operations across four counties in West Virginia.

ARMCO, Inc.:

- Section Foreman – Sundial No. 10A and Hardwood Mine
- Industrial Engineer – Sundial Subdivision (500 employees producing 1,000,000 plus clean tons per year)
- Supervised coal production crews and underground construction and general labor crews.
- Longwall, continuous miner sections, mainline track haulage, conveyor haulage, and battery haulage

DAVID B. SHARP, P.E.

Branch Manager/Senior Engineer

EDUCATION

M.S. Civil Engineering, 1995
West Virginia University

B.S. Civil Engineering, 1993
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia, Virginia, Ohio

PROFESSIONAL CERTIFICATIONS

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

AREAS OF SPECIALIZATION

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

PROFESSIONAL EXPERIENCE

Geotechnical

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

- MedExpress Administrative Office – Morgantown, WV
- Chemours Fire Station – Washington, WV
- Camp Dawson Two New Buildings – Kingwood, WV
- Dental Spa – Morgantown, WV
- Marshall University Baseball Stadium – Huntington, WV
- Citizen's Bank – Buckhannon, WV
- Miners & Merchants Bank – Davis, WV
- Davis & Elkins College Myles Center Addition – Elkins, WV
- Buzz Foods Addition – Charleston, WV
- Solvay Wastewater Treatment Plant Clarifier – Marietta, OH
- Black Oak Office Building – Morgantown, WV
- Davis & Elkins College Harper McNeeley Waterproofing – Elkins, WV
- Family Dollar Store – Berkeley Springs, WV
- Rubbermaid Distribution Center Addition – Winchester, VA
- WVU Transportation Center/Parking Garage – Morgantown, WV
- 4 West Water Treatment Plant – Greene County, PA
- CA Ventures (9 story student housing building) – Morgantown, WV
- Copper Beech Student Housing (included 31 buildings, parking areas, and 11,250 linear feet of retaining walls) – Morgantown, WV
- Sunnyside Commons Student Housing (included three multi-story buildings, parking, and 43,000 sq. ft. of retaining walls) – Morgantown, WV
- WVU Engineering Building East Addition – Morgantown, WV
- Potomac State College Admissions Building Addition – Mineral County, WV

- Glenville State College Health & Sciences Building – Gilmer County, WV
- Glenville State College Residence Hall – Gilmer County, WV
- Christy Street Office Building – Morgantown, WV
- Harry Green Nissan Dealership Building Addition – Harrison County, WV
- Elkins Dodge Dealership – Randolph County, WV
- Sam's Club Fueling Station – Clarksburg, WV
- Wal-Mart Fueling Station – Connellsville, PA
- Cheat Lake Elementary School Building Addition – Monongalia County, WV
- Churchhill Village Housing Project – Monongalia County, WV
- R.E. Michel HVAC Commercial Building – Monongalia County, WV
- ICM Islamic Center – Morgantown, WV
- Catlettsburg Refining Company – Alkylation and Wastewater Control Room – Catlettsburg, KY
- WVARNG Camp Dawson Fueling System – Kingwood, WV
- MEPCO Dock Expansion Project – Morgantown, WV
- West Run Student Housing (includes 16 buildings, parking areas, and 50,000 sq. ft. of retaining walls) – Morgantown, WV
- Fairmont Federal Credit Union – Bridgeport, WV
- Morgantown Waterfront Marina – Morgantown, WV
- Residence Inn – Morgantown, WV
- Suncrest Executive Office Plaza and Parking and Garage – Morgantown, WV
- WVU Research Park – Morgantown, WV
- View at the Park Apartment Complex – Morgantown, WV
- Marriott Hotel – Morgantown, WV
- Bucks Tavern – Morgantown, WV
- Stouts Run United Methodist Church Addition – Parkersburg, WV
- Fairfield Inn Hotel – Fairmont, WV
- Wendy's Restaurant – Morgantown, WV
- Sunoco Service Station – Robinson Township, PA
- St. Stephen Baptist Church – Morgantown, WV
- Islamic Center – South Charleston, WV
- Oak Hill Public Library – Oak Hill, OH
- Westside High School – Oceana, WV
- WVARNG Readiness Center – Summersville, WV
- Student Housing Facility, Parking Garage, Library/Information Center, Student Center Addition, Jomie Jazz Center, and Child Care Center for Marshall University – Huntington, WV
- U.S. Equipment Distributors – Huntington, WV
- PC WV #2 and #3 – Pace Carbon Fuels – Summersville and Eckman, WV
- WVU Luxury Box for Mountaineer Field – Morgantown, WV
- Marshall University Mid-Ohio Valley Center – Point Pleasant, WV
- Arbor Terrace Assisted Living Facility – Charleston and Huntington, WV
- Pocahontas County PSD Wastewater Treatment Plant – Snowshoe, WV
- Pt. Marion Water Tank Replacement – Pt. Marion, PA
- Monongalia General Hospital and Access Road – Morgantown, WV
- Kasson Elementary/Middle School Repair Project – Kasson, WV
- North Marion Vocational/Technical Center School Repair Projects – Marion County, WV
- Monongalia County Public Office Building – Morgantown, WV
- Numerous Cell Phone Towers in WV, PA, and MD
- Numerous Natural Gas Compressor Stations Pads and Additions:
  - EQT – Logansport Compressor Station Addition – Wetzel County, WV
  - EQT – Plasma Compressor Station Pad – Monroe County, OH
  - EQT – Corona Compressor Station Pad – Wetzel County, WV
  - EQT – Gemini Compressor Station – Geotechnical Feasibility – Marion County, WV
  - EQT – Gemini Interconnect Pad – Marion County, WV
  - Basic Systems, Inc. – Waynesburg Compressor Station Addition – Greene County, PA
  - Basic Systems, Inc. – Gettysburg Compressor Station Addition – Adams County, PA
  - Basic Systems, Inc. – Greencastle Compressor Station Addition – Franklin County, PA
  - Basic Systems, Inc. – Files Creek Compressor Station Addition – Randolph County, WV
  - Basic Systems, Inc. – Smithfield Compressor Station Addition – Wetzel County, WV
  - Dominion Transmission – Crayne Compressor Station – Green County, PA
- Numerous Marcellus Well Pad Sites – Northern WV:
  - Stone Energy – Mills Wetzel #3 Well Pad – Wetzel County, WV
  - Stone Energy – Conley Well Pad – Wetzel County, WV
  - Stone Energy – Langmyer Pad – Wetzel County, WV
  - Mountaineer Keystone – Mackey-Wolfe Well Pad – Barbour County, WV
  - Chesapeake Energy – Rayle Coal Co. Well Pad – Ohio County, Wv

- Numerous Residential Geotechnical Projects – Charleston and Morgantown, WV
- Geotechnical Recommendations for Natural Gas Transmission Lines including Horizontal Directional Drilling Projects:
  - EQT Midstream – H-310 Coal Refuse Area – Monroe County, OH
  - EQT Midstream – Harrison County HDD – Harrison County, WV
  - EQT Midstream – Ohio River HDD – Wetzel County, WV and Monroe County, OH

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

- Kinetic Park Landslide Repair – Huntington, WV
- Morgantown Parking Authority Armory Lot Retaining Wall – Morgantown, WV
- Bowser Street Landslide Repair – Town of Granville – Monongalia County, WV
- Marshall Portal Access Road Landslide Repair – Greene County, PA
- Weekley Well Pad Landslide Repair – Wetzel County, WV
- Shupbach Ridge Road Landslide Repair – Wetzel County, WV
- Mills Wetzel #2 Well Pad Landslide Repair – Wetzel County, WV
- Mills Wetzel #2 Road Landslide Repair – Wetzel County, WV
- Potts Well Pad Landslide Repair (2 separate landslides) – Wetzel County, WV
- Haynes Branch Gas Line Landslide Repair – Wetzel County, WV
- Decker's Creek Mine Stockpile Area Landslide Repair – Preston County, WV
- Wentz Freshwater Impoundment Embankment Stability Repair – Barbour County, WV
- Columbia Gas Transmission – Well #7331 Slide Repair – Elkview, WV
- Cline Tower Landslide – Winfield, WV
- Wellford Tower Landslide – Clendenin, WV
- Massie Ridge Tower Landslide – Camp Creek, WV
- Fisher Landslide – Elkview, WV
- Kennawa Landslide – Charleston, WV
- Burlew Landslide – Charleston, WV
- Lee Landslide – South Charleston, WV
- Fairmont North Tower Landslide – Fairmont, WV
- 6th Street Tower Landslide – Huntington, WV
- Joyce Landslide – Chesapeake, OH
- WVAML Tuppers Creek Emergency Landslide – Tuppers Creek, WV
- Schmidt Landslide – Gallipolis, OH
- Disposal Service, Inc. Landslide – Hurricane, WV
- Wellston High School Landslide Repair – Wellston, OH
- Pribble Tank Landslide Repair – New Martinsville, WV
- Potokczny Well Pad Landslide Repair – Marion County, WV
- Ridgepoint Landslide Repair – Morgantown, WV

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

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

Expert Witness

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

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

- Paul Solem v. Highlands of the Potomac, LLC – Falling Waters, West Virginia – Shuman, McCuskey & Slicer, PLLC – CC-02-2018-C-408
- Counts v. City of Charleston, et al. – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 15-C-2169
- Huggins v. AAA Mobile Homes of New Martinsville et. al. – Pullin, Fowler, Flanagan, Brown & Poe, PLLC – Civil Action No. 14-C-60 – New Martinsville, Wetzel County, West Virginia
- The Board of Education of the County of Logan, West Virginia a/k/a Logan County Board of Education v. Triad Engineering, Inc. – Bowles Rice McDavid Graff & Love – Civil Action No. 17-C-11

Civil/Site Design

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

- Appalachian Hotel – Kingwood, WV
- Davis & Elkins College Plaza Improvement – Elkins, WV
- Citizen's Bank – Buckhannon, WV
- Citizen's Bank – Elkins, WV
- Miners & Merchants Bank – Davis, WV
- Dental Spa – Morgantown, WV
- University Place Parking Garage – Morgantown, WV
- Sunnyside Commons Student Housing Project (included 5 multi-story buildings, 268 parking spaces, and 43,000 sq. ft. of retaining walls) – Morgantown, WV
- Coombs Farm Residential Development – Morgantown, WV
- Morgan Point Residential Subdivision – Morgantown, WV
- Town of Granville Boat Ramp Project – Granville, WV
- West Run Student Housing (1,000 bed student housing Project) – Morgantown, WV
- Copper Beech Student Housing (1,000 bed student housing project) – Morgantown, WV
- Summit at Cheat Lake Residential Development – Morgantown, WV
- Summit at Greystone Residential Development – Morgantown, WV
- Sleepy Hollow Residential Development – Morgantown, WV
- Shiloh Residential Development – Morgantown, WV
- Summerfield Residential Development – Morgantown, WV
- Mayfield Estates Residential Development – Morgantown, WV
- Cheat Landing Residential Development – Morgantown, WV
- Churchill Village Complex – Morgantown, WV
- Trinity Christian School Football Field – Morgantown, WV
- Morgantown Technical Services Industrial Expansion – Mt. Morris, PA
- WVU Beechhurst Parking Lot – Morgantown, WV
- Numerous Marcellus Well Pad Sites for Various Clients – Northern WV

Construction Monitoring

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

- Sunnyside Commons Student Housing Project – Morgantown, WV
- Family Dollar Store – Smithfield, PA
- University Place Parking Garage – Morgantown, WV
- Church Hill Village Housing Project – Morgantown, WV
- Mills Wetzel #3 Well Pad – Wetzel County, WV
- Shupbach Ridge Road Landslide Repair – Wetzel County, WV
- Potts Landslide Repairs – Wetzel County, WV
- Pribble Tank Landslide Repair – Wetzel County, WV
- Potokczny Landslide Repair – Marion County, WV

- Tucker County Industrial Park – Tucker County, WV
- Pocahontas County Landfill Cell 3 Expansion – Pocahontas County, WV
- Disposal Services Landfill Expansion Area – Hurricane, WV
- Platinum Drive Urban Connector Landslide Repair – Bridgeport, WV
- Trinity Christian School Football Field – Morgantown, WV
- Kasson Elementary/Middle School Pyrite Remediation Project – Barbour County, WV
- City of Philippi Water Improvement Project – Barbour County, WV
- Mackey Wolfe Well Pad – Barbour County, WV
- Morgantown Technical Services Expansion – Mt. Morris, WV
- Lakin Correctional Center – Wood County, WV
- Western Regional Jail – Cabell County, WV
- Merrick Creek Farm Commercial Development – Cabell County, WV

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

Sewer Lines and WWTPs

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

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

Water Lines, Water Storage Tanks, and Water Treatment Plants

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

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

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

VICTOR M. DAWSON, P.S.
Professional Surveyor

EDUCATION

A.S. Land Surveying
Glenville State College

EMPLOYMENT HISTORY

1998-Present	Potesta & Associates, Inc.
1993-1998	Dunn Engineers
1988-1993	Woolpert Consultants
1986-1988	W. K. Dickson and Company
1986	Clary-Miller and Associates
1985-1986	William F. Knight Land Surveying
1984-1985	Morris Exploration Company
1983-1984	William F. Knight Land Surveying
1981-1983	Columbia Gas Transmission Company

PROFESSIONAL REGISTRATIONS

Registered Land Surveyor – North Carolina, South Carolina, and West Virginia

PROFESSIONAL AFFILIATIONS

- North Carolina Society of Land Surveyors
- South Carolina Society of Land Surveyors
- American Congress on Surveying and Mapping
- West Virginia Society of Professional Surveyors, Board of Directors, Greater Kanawha Valley Chapter, 2012-present

AREAS OF SPECIALIZATION

Expert Witness/Case Preparation, Accident Surveys, ground control, construction stakeout, topographic mapping, boundary and property surveys including ALTA/NSPS surveys, As-built drawings, and quantity measurements. Related areas include courthouse research, location/verification of utilities, preparation of right-of-way plans, and verification of property owners.

PROFESSIONAL EXPERIENCE

Surveying

Transportation:

- Merritt's Creek Connector Road, WVDOT – Preliminary route survey of four-lane roadway. Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, stake proposed centerline, tie to properties, set and reference construction control points in Barboursville, West Virginia.
- Benton's Ferry Bridge Replacement, WVDOH – Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Fairmont, West Virginia.
- Corridor H, WVDOH, Section 16 – Project Manager for route/location/design survey in Elkins, West Virginia.
- Tablers Station, WVDOH – Project Manager/Crew Chief for route/location/design survey in Berkeley County, West Virginia.
- North Bridgeport Connector Road, WVDOH – Crew Chief/Project Manager for work that included GPS control survey of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points, courthouse research, property owner questionnaires in North Bridgeport, West Virginia.
- Corridor H, WVDOH, Section 15 – Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Elkins, West Virginia.

- Corridor D, WVDOH, Martown Section – Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Parkersburg, West Virginia.
- Martha Truss Bridge Replacement, WVDOH – Crew Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Milton, West Virginia.
- Martha Girder Bridge Replacement, WVDOH – Crew Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Milton, West Virginia.
- Smith Bridge – Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Wetzel County, West Virginia.
- Opaquen Bridge, WVDOH – Project Manager for work included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Wetzel County, West Virginia.
- King Coal Highway, WVDOH – Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Mingo County, West Virginia.
- Sharon Heights Connector Road, WVDOH – Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Mingo County, West Virginia.
- Kanawha Turnpike, WVDOH, Charleston – Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Charleston, West Virginia.
- East Huntington Bridge, WVDOH – Crew Chief/Surveying Supervisor for work that included annual bridge inspection survey of cable stay bridge over the Ohio River in Huntington, West Virginia.
- Corridor H, WVDOT, Section 16 – Project Manager/Crew Chief for preliminary route/design survey in Elkins, West Virginia.
- VDOT – Route 265 in Danville, Virginia.
- NCDOT – NC 218 hydraulics in Wilkesboro, North Carolina.
- NCDOT – B-1277 Bridge hydraulics in Marion, North Carolina.
- NCDOT – NC 1318 Bridge in Taylorsville, North Carolina.
- NCDOT – Charlotte Outerloop Drainage in Charlotte, North Carolina.
- NCDOT – NC 90 Drainage in Charlotte, North Carolina.
- Crew Chief for Sardis Monroe Intersection Widening in Charlotte, North Carolina.
- WVDOT – Crew Chief for Corridor G in Charleston, West Virginia.
- Florida DOT – Crew Chief for Dame's Point Bridge in Jacksonville, Florida.
- Corps of Engineers – Crew Chief/Quality Control Representative for St. George Harbor in St. George Island, Alaska.

Ground Control:

- Peabody Coal – Project Manager for ground control for 20 square miles of mapping in Putnam and Mason Counties, West Virginia.
- Crew Chief/Project Manager for Belmont Community Development in Charlotte, North Carolina.
- Crew Chief/Project Manager for Asheville Regional Airport in Asheville, North Carolina.
- Lenoir Rhyne College – Crew Chief for aerial photo control in Hickory, North Carolina.
- Crew Chief for Wilkinson Boulevard aerial photo control in Charlotte, West Virginia.
- Crew Chief for Park Road aerial photo control in Charlotte, North Carolina.
- Crew Chief for Beatties Ford Road aerial photo control in Charlotte, North Carolina.
- Crew Chief/Project Manager for Freedom Park aerial photo control in Charlotte, North Carolina.
- Crew Chief for ERM Ground Control Survey in Aberdeen, North Carolina.

Utilities:

- Cogentrix Energy – Surveying Supervisor for work included GPS control survey of project area, boundary survey of 292 acres, topographic survey of 177 acres for site construction, courthouse research in Marshall County, West Virginia.
- Big Sandy Peaker Plant, Constellation Power – Crew Chief/Surveying Supervisor for work that included GPS control survey of project area, boundary and topographic of 42 acres, boundary and route survey for 1 mile of transmission lines, construction stakeout in Cabell County, West Virginia.
- Paintsville Power Plant, Energy Services – Survey Supervisor for work that included control and topographic survey of a 180-acre site for proposed power plant in Paintsville, Kentucky.
- Greenbrier Pipeline, Dominion – Survey Supervisor for work that included control and preliminary route survey of a 264-mile pipeline running from Corton, West Virginia to Raleigh, North Carolina.
- Upshur County Power Plant, Dominion – Survey Supervisor for work that included control survey and construction survey of a 170-acre power plant in Upshur County, West Virginia.
- Nextel - Crew Chief/Survey Supervisor for cellular telephone tower sites for work that included courthouse research, boundary and topographic survey for 86 tower locations in West Virginia, Kentucky, and Ohio.
- Crew Chief/Project Manager for Little Sugar Creek Channel Improvements in Mecklenburg County, North Carolina.
- Crew Chief/Project Manager for Charlotte Stormwater Management in Charlotte, North Carolina.
- Crew Chief for Boy Scout Camp in Mecklenburg County, North Carolina.
- Crew Chief for Manchester Creek HEC Study for Rock Hill, South Carolina.
- Crew Chief Thermoco-Welco Water and Sewer in Kings Mountain, North Carolina.
- Crew Chief for proposed sewer route survey in Spencer, North Carolina.
- Moores Chapel, McIntyre East and West Plant Road, Hampton Park, Charlotte-Mecklenburg Utility Department in Charlotte, North Carolina.
- Crew Chief for Charlotte-Mecklenburg Utility Department in Charlotte, North Carolina.
- West Virginia American Water Company – Crew Chief/Survey supervisor for boundary survey for 180 water tank sites throughout West Virginia.
- Crew Chief for Chester Waterline Extension in Chester, South Carolina.
- Crew Chief for Lancaster Sewer Extension in Lancaster, South Carolina.
- Crew Chief for Marshville Sewer in Marshville, North Carolina.
- Crew Chief for Sewer Route Survey for Norwood in Norwood, North Carolina.
- Crew Chief for Lenoir Water and Sewer Extension in Lenoir, North Carolina.
- Crew Chief for Kings Mountain Route 75 Waterline Extension in Kings Mountain, North Carolina.
- Project Manager for route survey/seismic survey for SM-80 gas pipeline in Cross Lanes, West Virginia

Office, Business, Industrial:

- Walmart – Construction layout for parking, roadways, curb and gutter, and utilities for new store in Barboursville, West Virginia.
- River Ridge – Construction layout for new church building, parking and utilities in Charleston, West Virginia.
- National Lumber Plant – Chief/Survey Supervisor for boundary and topographic survey, construction stakeout for plant site in Roane County, West Virginia.
- Buckskin Council Boy Scout Camp, Boys Scouts of America – Survey Supervisor for topographic survey and construction stakeout for new water and sewer system in Pocahontas County, West Virginia.
- Hampton-Clarke, Philips Lighting Company – Crew Chief/Survey Supervisor for boundary and topographic survey, construction stakeout for cullet pile of hazardous waste site in Fairmont, West Virginia.
- BIDCO – Boundary and topographic survey for several parcels in the development, also stakeout of spec building and parking lots in Kanawha County, West Virginia.
- Crew Chief for Bojangles on Sam Furr Road in Charlotte, North Carolina.
- Crew Chief/Project Manager for Lowe's of Pineville, North Carolina.
- Crew Chief/Project Manager for Firestone Fibers and Textiles in Kings Mountain, North Carolina.
- Crew Chief/Project Manager for Rural Hills in Mecklenburg County, North Carolina.

- Crew Chief/Project Manager for Huntersville Business Park in Huntersville, North Carolina.
- Crew Chief for TransWest Office Building in Charlotte, North Carolina.
- Crew Chief/Project Manager for Chatham Properties in Charlotte, North Carolina.
- Crew Chief/Project Manager for WTVI Transmitter Tower in Charlotte, North Carolina.
- Crew Chief/Project Manager for Greenbrier Business Park in Charlotte, North Carolina.
- Crew Chief/Project Manager for Dickerson Carolina, Inc. in Charlotte, North Carolina.
- Crew Chief for Oakboro Industrial Park in Oakboro, North Carolina.
- Crew Chief for Baxter Medical Warehouse in Charlotte, North Carolina.
- Crew Chief/Project Manager in TechPark Business Center in Rock Hill, South Carolina.
- Crew Chief for Coffey Creek II and III in Charlotte, North Carolina.
- Crew Chief for Red Fez Club in Lake Wylie, South Carolina.
- Crew Chief for Hickory Grove Business Park in Charlotte, North Carolina.
- Crew Chief for Minit Lube in Charlotte, North Carolina.
- Crew Chief for Crescent Gateway in Belmont, North Carolina.
- Crew Chief for Roto Rooter in Charlotte, North Carolina.

Construction Stakeout:

- Charleston Federal Building – Crew Chief/Project Manager for staked foundation, anchor bolts, interior and exterior wall lines in Charleston, West Virginia.
- Courthouse Parking Building – Crew Chief for staked foundation and wall lines in Charleston, West Virginia.

Boundary & ALTA/NSPS Surveys:

- E.I. DuPont – Project Manager of all property owned by E.I. DuPont in the state of West Virginia totaling over 3, 927 acres.
- Coolfont Resort – Project Manager for boundary survey on 920 acres in Morgan County, West Virginia.
- Pison Development – Crew Chief/Project Manager for ALTA survey and construction layout for six housing developments in Kanawha, Mason, Randolph, and Ritchie Counties, West Virginia.
- Charleston Housing Authority – Crew Chief/Project Manager for ALTA survey for 4 housing projects located in City of Charleston in Kanawha County, West Virginia.
- Emmanuel Baptist Church – Crew Chief/Project Manager for church in Charleston, West Virginia.
- Coldwater Creek – Crew Chief/Project Manager for ALTA survey of 38-acre distribution site in Mineral Wells, Wood County, West Virginia.
- Big Sandy Peaker Plant, Constellation Energy – Crew Chief/Project Manager ALTA survey of 42-acre plant site and 1 mile of transmission lines in Cabell County, West Virginia.

Expert Witness/Case Preparation/Accident Surveys:

- Flowe Construction v. Woolpett Consultants – Rutherford County Airport in Rutherford, North Carolina.
- Sizemore v. Carte – Boundary dispute in Clay County, West Virginia.
- Boundary dispute for case preparation over placement of gas well in Putnam County, West Virginia.
- Columbia Gas – Case preparation over a gas release and spill from a gas storage well in Sissonville, West Virginia.
- Boundary location settlement to determine location of property line due to a tree falling resulting in death in Nicholas County, West Virginia.
- Three-dimensional survey of a pallet crusher and survey a piece of machinery and surrounding structures in a case resulting in a loss of legs in Parkersburg, Wood County, West Virginia.
- Conducted boundary survey and mapping for court documents over a disputed right-of-way through a piece of property to an adjoining tract in Pinch, West Virginia.
- Three-dimensional survey of Huntington Bank parking garage to help determine cause of building collapse resulting in multiple deaths.

Hazardous Waste/Disposal Facilities:

- Winfield ACF Site, ACF/Corps of Engineers – Work included boundary, topographic, construction layout and sample point layout of 15 acres along the Kanawha River. This project had over 12,000 sample

points laid out on a 3' grid in Winfield, West Virginia.

- Fike/Artel Superfund Site, DeMaximus – Surveying Supervisor for work that included boundary, topographic and sample layout for the cleanup and monitoring of the Fike/Artel Site and surrounding properties in Nitro, West Virginia.
- Phillips Lighting, Fairmont Site, Hampton Clark – Surveying Supervisor for work that included boundary, topographic, structure location and sample layout of the Phillips Lighting glass collect pile and surrounding areas along the Monongahela River in Fairmont, West Virginia.
- Poor Charlie and Company, Riverside Site; Poor Charlie, Sattes Site; Poor Charlie, Cramer Metals Site – Surveying Supervisor for work that included boundary, topographic, location and boring stakeout of various VERA sites and adjoining properties in Glasgow, Nitro and Parkersburg, West Virginia.
- Elkem Metals Disposal Facility, Elkem Metals – Surveying Supervisor for work that included control network, boundary, topographic surveys, and yearly volume reports in Alloy, West Virginia.
- Solutia – Surveying Supervisor for work that included boundary, topographic and location Surveys for various projects, disposal facility caps, charcoal filtering systems, and monitoring well control network throughout the site and adjoining properties in Nitro, West Virginia.
- Nicholas County Landfill – Surveying Supervisor for work included control network, boundary and topographic surveys for expansion of cells and yearly volume reports in Summersville, West Virginia.
- Pocahontas County Landfill – Surveying Supervisor for work that included control network, boundary and topographic surveys for expansion cells and yearly volume reports in Pocahontas County Landfill in Pocahontas County, West Virginia.
- Fleming Landfill, WVDEP – Surveyor Supervisor for work that included boundary and topographic surveys, along with control network and baseline stakeout for landfill closure in Sissonville, West Virginia.
- Cunard Landfill, WVDEP – Survey Supervisor for work that included topographic and construction layout for landfill closure in Fayetteville, West Virginia.
- City of Charleston Landfill – Construction layout for new waste cells in Charleston, West Virginia.
- Putnam County Landfill – Construction layout for new waste cells in Hurricane, West Virginia.
- Berkeley County Landfill – Crew Chief/Project Manager for construction layout for closure.
- Hampshire County Landfill – Crew Chief/Project Manager for construction layout for closure.
- Mingo County Landfill, J & B Contracting – Survey Supervisor for work that included topographic and construction layout for landfill closure in Mingo County, West Virginia.
- Mercer County Landfill, Jimmy Dunn – Survey Supervisor for work that included topographic and construction layout for landfill closure in Mercer County, West Virginia.

Parks and Recreation:

- Crew Chief/Project Manager for Freedom Park in Charlotte, North Carolina.
- Crew Chief/Project Manager for Mallard Creek Park in Charlotte, North Carolina.
- Crew Chief for York Park in York, South Carolina.
- Crew Chief for Hargett Park in Rock Hill, South Carolina.
- Crew Chief for York Road Renaissance Park in Charlotte, North Carolina.
- Crew Chief for Lockrain Subdivision and Golf Course in Orange Park, Florida.
- Crew Chief for Amelia Island Golf Course in Amelia Island, Florida.

Aviation:

- Yeager Airport – Stake out P.A.P.I. lights for Runway 15 in Charleston, West Virginia.
- Summersville Airport – Crew Chief/Project Manager for topographic and tree location for glide path in Summersville, West Virginia.
- Rutherford County Airport – Rutherford, North Carolina.
- Seymour Johnson Air Force Base – Goldsboro, North Carolina.
- Statesville Regional Airport – Statesville, North Carolina.
- Asheville Regional Airport – Asheville, North Carolina.
- Anderson County Airport – Anderson County, South Carolina.

Motel:

- Crew Chief for Knights Inn Motels in Statesville, Asheville, Gastonia, and Charlotte, North Carolina.

- Crew Chief for Fairfield Inn Motel in Charlotte, North Carolina.

Coal Mines:

Kanawha Eagle Mine – Crew Chief/Survey Supervisor for work that included topographic and construction staking of refuse impoundments, drainage runoff ponds, and stake clearing limits of new mine face in Kanawha County, West Virginia.

Housing and Subdivision:

Yorktowne Subdivision – Crew Chief/Survey Supervisor for work that included boundary survey of exterior tract, construction stakeout of roads and utilities, stake boundaries of lots in Kanawha County, West Virginia.

The Pointe at Northgate – Project Manager for topographic and construction layout for subdivision.

Crew Chief/Project Manager for Woodside Falls Subdivision in Pineville, North Carolina.

Stonegate Subdivision – Crew Chief/Survey Supervisor for work that included boundary survey of exterior tract, construction stakeout of roads and utilities, stake boundaries of lots in Putnam County, West Virginia.

Crew Chief/Project Manager for Amberwood Subdivision in Charlotte, North Carolina.

Crew Chief for Thompson Plantation in Charlotte, North Carolina.

Crew Chief for Wells Crossing Apartments in Orange Park, Florida.

Crew Chief for Park Lake Apartments in Charlotte, North Carolina.

Crew Chief for Lakes of Mayport Apartments in Mayport, Florida.

Crew Chief for Cross Creek Apartments in Charlotte, North Carolina.

Military:

Crew Chief for Seymour Johnson Air Force Base, United States Air Force in Goldsboro, North Carolina.

St. George Harbor, U.S. Corps of Engineers –Contractor Quality Control Representative in St. George Island, Alaska.

Crew Chief for Camp Butner, United States Army in Durham, North Carolina.

Streetscapes:

Crew Chief for Idlewild Road in Charlotte, North Carolina.

Crew Chief/Project Manager for Florida Street in Charleston, West Virginia.

Crew Chief for Streetscape Mapping Project in Charlotte, North Carolina.

Crew Chief for Rock Hill Gateway in Rock Hill, South Carolina.

Crew Chief for boundary/topographic plans for Crescent Gateway Project in Belmont, North Carolina.

Colleges/Universities/Schools:

University of Charleston – Crew Chief/Survey Supervisor for work that included boundary survey of several parcels of land for student housing and parking lot in Charleston, West Virginia.

Marshall University – Survey Supervisor for work that included boundary and location survey of research complex in Charleston, West Virginia.

Marshall University – Crew Chief/Survey Supervisor for work that included courthouse research, boundary and topographic survey of several city blocks for student housing and parking buildings in Huntington, West Virginia.

University of Charleston – Crew Chief/Project Manager for stakeout of new pharmacy school building in Charleston, West Virginia.

Blackwell Field – Crew Chief/Project Manager for stakeout of sports complex for University of Charleston in Charleston, West Virginia.

Ivydale Elementary School – Crew Chief/Project Manager for boundary survey for disputed property line in Clay, West Virginia.

Big Otter Elementary School – Crew Chief/Project Manager for boundary survey for new school in Clay County, West Virginia.

Landfills/Abandoned Mine Lands:

WVDEP AML – Crew Chief/Project Manager for control/topographic survey for Sundial Project.

Jackson County Landfill – Crew Chief/Project Manager for work that included GPS control survey, boundary and topographic survey, construction stakeout for landfill closure in Jackson County, West Virginia.

Nicholas County Landfill – Survey Supervisor for work that included boundary and topographic surveys for biannually reports in Nicholas County Landfill in Nicholas County, West Virginia.

Pocahontas County Landfill – Survey Supervisor for work that included boundary and topographic surveys for biannual reports and construction stakeout in Pocahontas County, West Virginia.

Mercer County Landfill – Crew Chief/Survey Supervisor for work that included GPS control survey, boundary and topographic survey, construction stakeout for landfill closure in Mercer County, West Virginia.

ROBERT W. LAMM, JR.
Senior Technician

EDUCATION

A.S. Transportation Engineering Technician
Fairmont State College, 2002

Charleston High School, 1989
WVWEA O&M Short School

EMPLOYMENT HISTORY

2003-Present	Potesta & Associates, Inc.
2002	CTL Engineering, Inc.
2000-2001	Site-Blauvelt Engineers
1998-2000	Triad Engineering, Inc.
1989-1998	Kroger Company

PROFESSIONAL CERTIFICATION

- Certified Technician by the West Virginia Transportation Engineering Technician and Bridge Safety Inspector Certification Board
- WVDOH Compaction Inspector
- WVDOH Concrete Technician
- WVDOH Concrete Inspector
- WVDOH Asphalt Technician
- WVDOH Aggregate Inspector
- ACI Concrete Technician Grade 1

TRAINING AND RELEVANT COURSEWORK

March 2019 – Site Manager – Introduction for Consultants

AREAS OF SPECIALIZATION

Quality Assurance/Quality Control (QA/QC) construction monitoring for both public and private construction, including observation/evaluation for bearing capacity, foundation, water and sewer line construction, pre- and post-blast, reinforcement locations, concrete and asphalt drilling, structural steel and footing, wall and slab.

Sampling and testing of materials, including soils and concrete. Lab work includes standard proctors, gradations, 200 washes, sieves, liquid and plastic limits, moistures, hydrometers, soil classification, sample logging, and compressive strength testing. Testing includes:

- Nuclear density
- Compaction testing of soil, stone and asphalt
- One-point proctor determinations
- Sand cone density tests
- Concrete/grout testing and cylinder/cube fabrication.

PROFESSIONAL EXPERIENCE

Construction Monitoring

Landslide repairs to protect well pads, including compaction testing, placement of fill, underdrains, dump rock gutters, bench drains, and rock toe keys:

- Columbia- Rockport
- Stone Energy- Potoczny

Stone Energy – Compaction testing, fill placement for well pads and access roads for Mill Wetzel No. 3.

Columbia Natural Gas – Concrete testing for remedial measures for a landslide at Clendenin compressor station in Clendenin, West Virginia.

Basic Systems – Geotechnical drilling for Columbia Gas Seneca Rocks compressor station in Seneca Rocks, West Virginia.

TransCanada – Compaction testing and concrete testing for piers and foundation for building foundation at Clendenin compressor station in Clendenin, West Virginia.

West Virginia American Water – Resident Project Representative (RPR) and QA/QC for sludge treatment facility at the Kanawha Valley Water Treatment Plant. Tasks included observation and testing for concrete, soil, block, steel, and utilities.

Buckskin Council of Boy Scouts of America – Steel inspection for the new headquarters facility of Buckskin Council in Charleston, West Virginia.

West Virginia Division of Highways (WVDOH) – QA/QC and testing for compaction of soil, stone, and asphalt at the Gilmer County Maintenance Garage.

Lakin Correctional Center – QA/QC and testing for soil, concrete, asphalt, and utilities at the multi-security female correctional facility in West Columbia, West Virginia.

WVDOH – Consultant Inspector to West Virginia WVDOH overseeing work and progress of contractors to assure that projects meet WVDOH specifications. Duties included preparing daily reports, documentation of payable quantities of completed items (e.g., 200 LF of 24" RCP @ $5/LF = $1,000), contractor progress, time and material monitoring of additional work not included in the contract, file maintenance, receiving documents, attending meetings and maintaining public safety, as well as field inspection. Projects included Dry Run Bridge job and I-64 Institute to Dunbar project (including four bridges).

Western Regional Jail and Correctional Facility– QA/QC and testing of concrete at one of the largest jails in the state of West Virginia located in Barboursville.

Fleming Landfill – RPR for installation of approximately 6,225 feet of 8-inch gravity line, 43 manholes (both less and greater than 8 feet in depth), a new pump station, and 3,500 feet of 4-inch force main the Sewer Line Project in Kanawha County, West Virginia. Construction included installation of an 8-inch HDPE effluent line and flow metering manhole to convey leachate from the Fleming Landfill to the local PSD, upgrade an existing pump station to handle the increased demand, and abandonment of an outdated pump station and force main.

West Virginia-American Water Company – RPR for Residuals project serving as a liaison to contractor and monitoring work for owner and engineer. Work included receiving materials, reviewing submittals and progress payments, drafting and issuing change orders, and preparing daily logs summarizing construction. Construction work included installation of sludge pumping station, 1,000,000-gallon concrete gravity thickener, plate settler, two 2.2-meter belt filter presses, chemical feed systems and conveyors, and a building to house equipment. Included was monitoring of pipe installation (e.g. backfill placement, pressure testing) for 25 different subsurface piping systems.

RPR for installation of approximately 9,000 linear feet of water line, a booster station, and a water storage tank at a coal mine complex in Logan County, West Virginia. Maintained daily logs of construction activities, verified pay requests, served as liaison with client, and developed record drawings.

RPR for installation of approximately 14,000 feet of 8-inch water line for the Fisher Ridge Phase II waterline extension in Putnam County, West Virginia. Maintained daily logs of construction activities, verified pay requests, served as liaison with client, and developed record drawings.

RPR for installation of approximately 11,000 feet of 8-inch, 6-inch, and 2-inch water line for the Mifflin-Sharples waterline extension in Logan County, West Virginia. Included were upgrades to existing water line, a railroad crossing, and connections to the existing Logan County Public Service District Sharples system. Maintained daily logs of construction activities, verified pay requests, served as a liaison with client, and developed record drawings.

3M – Project Field Superintendent for West Virginia Turnpike 3M striping contract for the last four years. Oversees the striping and legend work for the 87-mile toll road. As Field Superintendent, verifies the materials, quantity and quality control. Coordinates work of the contractor with WVDOH, West Virginia Turnpike and West Virginia State Police. Handles all communications between the parties.

RPR for installation of approximately 3,700 feet of 12-inch and 8-inch HDPE subsurface effluent piping system. Tasks included verifying that bedding and backfill compaction requirements were met, along with requirements for pressure testing of installed pipeline and vacuum testing of manholes. Also, maintained daily logs of construction activities, informed client of progress and/or complications and developed record drawings.

Kokosing/Frucon – Field technician testing soil and concrete for Marmet Lock and Dam project, including supervising Soils Lab. Field duties included job site documentation, sampling and testing of materials. Conducted nuclear density tests, sand cone density tests, one-point proctor determinations, concrete/grout testing and cylinder/cube fabrication.

Completed the following types of inspections:

- Asphalt placement and compaction
- Clearing and grubbing
- Concrete
- Fill placement and backfill
- Free draining base trench
- MSE wall
- Pipe installation backfill and testing
- Piling
- Structure demolition

- Subgrade placement and compaction
- Superstructure steel
- Traffic control

Inspected and tested asphalt placement, concrete placement, soil and aggregate compaction.

Conducted core drilling, jobsite documentation, lab work, density tests, operating nuclear density gauges, fabricating concrete cylinders and conducting roller passes on stone.

Yeager Airport – Concrete experience includes inspection and testing of concrete treated base (CTB) and Rapid Set Concrete in Charleston, WV.

Drilling experience includes logging split spoons and rock core samples, pumping water and reclaiming drill sites.

Civil/Site Design

Work experience includes various site development projects including placement of water, sewer, gas, electrical and storm water utilities associated with development.

Surveying

Assisted with surveying projects, running levels, conducting right-of-way surveys, locating utilities, houses, buildings and driveways on plans, searching property deeds and will books, setting property and centerline stakes, TBMs and hard points. Also worked as a rodman.

Appendix B

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: AEOI 0310 DNR2100000001

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

04-05-2021

Date

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

POTE&AS-01 JNGUYEN

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/8/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Ames & Gough 8300 Greensboro Drive Suite 980 McLean, VA 22102	PHONE (A/C, No, Ext): (703) 827-2277	FAX (A/C, No): (703) 827-2279
	E-MAIL ADDRESS: admin@amesgough.com	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Potesta & Associates, Inc. 7012 MacCorkle Avenue, SE Charleston, WV 25304	INSURER A : Valley Forge Insurance Company A(XV)	20508
	INSURER B : Continental Insurance Company A(XV)	35289
	INSURER C : National Fire Insurance Company of Hartford A(XV)	20478
	INSURER D : Evanston Insurance Company	35378
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			6057035330	3/7/2021	3/7/2022	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
	X Contractual Liab.						MED EXP (Any one person)	$ 15,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$ 1,000,000
	X POLICY PRO-JECT LOC						GENERAL AGGREGATE	$ 2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
A	AUTOMOBILE LIABILITY			6057035327	3/7/2021	3/7/2022	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR			6057035358	3/7/2021	3/7/2022	EACH OCCURRENCE	$ 9,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 9,000,000
	DED X RETENTION $ 10,000							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N	N / A		6057035344	3/7/2021	3/7/2022	X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
D	Professional Liab.			MKLV7PL0004586	3/7/2021	3/7/2022	Per Claim/Aggregate	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Pollution Liability is included in the Professional Liability policy and shares the limits per the policy terms and conditions.

CERTIFICATE HOLDER

EVIDENCE OF COVERAGE

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

(Required by *W. Va. Code* § 6D-1-2)

Name of Contracting Business Entity: Potesta & Associates, Inc.

Address: 7012 MacCorkle Avenue, SE, Charleston, WV 25304

Name of Authorized Agent: Dana L. Burns **Address:** 7012 MacCorkle Avenue, SE, Charleston, WV 25304

Contract Number: CEOI 1400 AGR2100000001 **Contract Description:** Engineering Services Guthrie Agricultural Center Expansion

Governmental agency awarding contract: West Virginia Department of Agriculture

☐ **Check here if this is a Supplemental Disclosure**

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below *(attach additional pages if necessary)*:

1. **Subcontractors or other entities performing work or service under the Contract**
   ☐ Check here if none, otherwise list entity/individual names below.

2. **Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**
   ☐ Check here if none, otherwise list entity/individual names below.
   Ronald R. Potesta
   Dana L. Burns

3. **Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**
   ☐ Check here if none, otherwise list entity/individual names below.

Signature: Dana L. Burns Date Signed: 04-05-2021

Notary Verification

State of West Virginia, County of Kanawha:

I, Dana L. Burns, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 5th day of April, 2021.

Rhonda L. Henson
Notary Public's Signature

To be completed by State Agency:

Date Received by state agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

OFFICIAL SEAL
Rhonda L. Henson
Notary Public
State of West Virginia
My Commission Expires
February 14, 2024
[illegible]
Charleston, WV 25312

Revised March 6, 2019

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:	852925	**Reason for Modification:**
Doc Description:	Expression of Interest Engineering Services	
Proc Type:	Central Contract - Fixed Amt	

Date Issued	Solicitation Closes	Solicitation No	Version
2021-03-12	2021-04-06 13:30	CEOI 1400 AGR2100000001	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code:

Vendor Name : Potesta & Associates, Inc.

Address : 7012

Street : MacCorkle Avenue, SE

City : Charleston

State : West Virginia **Country :** United States **Zip :** 25304

Principal Contact : Dana L. Burns, P.E., P.S.

Vendor Contact Phone: 304-342-1400 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Jessica S Chambers
(304) 558-0246
jessica.s.chambers@wv.gov

Vendor Signature X Dana L. Burns **FEIN#** 31-1509066 **DATE** April 6, 2021

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

ADDITIONAL INFORMATION

The Acquisitions and Contract Administration Section of the Purchasing Division ("Purchasing Division") is soliciting Expression(s) of Interest ("EOI" or "Bids") for West Virginia Department of Agriculture ("Agency"), from qualified firms to provide architectural/ engineering services ("Vendors") as defined herein.

INVOICE TO	SHIP TO
AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV 25305-0173 US	AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 217 GUS R DOUGLAS LN, BLDG 2 RM 106 CHARLESTON WV 25312 US

Line	Comm Ln Desc	Qty	Unit Issue
1	Engineering Services		

Comm Code	Manufacturer	Specification	Model #
81000000			

Extended Description:
Engineering Services

SCHEDULE OF EVENTS

Line	Event	Event Date
1	TECHNICAL QUESTION DEADLINE	2021-03-30

	Document Phase	Document Description	Page 3
AGR2100000001	Final	Expression of Interest Engineering Services	

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.

Dana L. Burns
(Name, Title)

Dana L. Burns, P.E., P.S., Vice President
(Printed Name and Title)

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

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

dlburns@potesta.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation 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 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 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.

Potesta & Associates, Inc.
(Company)

Dana L. Burns Dana L. Burns, P.E., P.S., Vice President
(Authorized Signature) (Representative Name, Title)

Dana L. Burns, P.E., P.S., Vice President
(Printed Name and Title of Authorized Representative)

04-05-2021
(Date)

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

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Potesta & Associates, Inc.

Authorized Signature: Dana L. Burns Date: 04-05-2021

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 5 day of April, 2021.

My Commission expires February 14, 2024.

AFFIX SEAL HERE

OFFICIAL SEAL
Rhonda L. Henson
Notary Public
State of West Virginia
My Commission Expires
February 14, 2024
1978 Wolf Pen Drive
Charleston, WV 25312

NOTARY PUBLIC _____