



EXPRESSION OF INTEREST



Cedar Lakes Dam Restoration/Food Distribution Warehouse
Slope Stabilization Project
WEST VIRGINIA DEPARTMENT OF AGRICULTURE
Jackson County, West Virginia

CEOI 1400 AGR1800000001

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WV Purchasing Division



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MORGANTOWN

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Morgantown, WV 26508
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West Virginia Department of Agriculture

KENT LEONHARDT, COMMISSIONER



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Expression of Interest

EXECUTIVE SUMMARY

The West Virginia Department of Agriculture (Agency) is seeking architectural/engineering services for the "Cedar Lakes Dam Restoration and Food Distribution Warehouse Slope Stabilization Project" located near Ripley, in Jackson County, West Virginia.

PROJECT A

Improvements and/or repairs are necessary at the No. 1 Dam and No. 2 Dam to comply with the current West Virginia Dam Control and Safety Act, Dam Safety Rule, and the WV DEP Compliance Order, as portions of both dams, including impact basins, spillways, and outlet work, have deteriorated over time. The rehabilitation is necessary to maintain the present level of flood control benefits, comply with current safety standards and in some instances provide water supply and recreational opportunities.



PROJECT B

A slip has also developed on the Agency's Food Distribution Program warehouse and has the potential of impacting the foundation of the warehouse. Geotechnical engineering is required for slip mitigation and repair.

Potesta & Associates, Inc. (POTESTA) is well qualified to assist the Agency with dam-related engineering and geotechnical engineering projects. Our engineers (civil, geotechnical and hydrologists), surveyors, designers, and construction inspectors are familiar with Dam Safety guidelines, slope failure remediation, and requirements pertaining to construction, modification, and compliance. POTESTA's experienced staff can perform all of the anticipated engineering tasks required for the projects in-house. In addition to the geotechnical engineering services, POTESTA is exceptionally well-positioned to offer environmental consulting and regulatory permitting services, which will be necessary for these types of projects.



Mr. Patrick Taylor, PE of POTESTA conducted a site visit to the Cedar Lakes Conference Center in 2015 to view both dam sites. Mr. Taylor also discussed the regulation status of both impoundments with Mr. Brian Long of the West Virginia Department of Environmental Protection (WVDEP), Dam Safety. Dam Inspection Reports completed by Civil Tech Engineering in 2015 for Dam No. 1 and Dam No. 2 have been reviewed, as well as the various plans, reports, and applications dating back to 1951. A proposal was developed for Director of Cedar Lakes at the time, Mr. Adam Canter, to certify the dams as a Class 2 Impoundments. For the current projects, the scope of the repairs will be developed upon award of the contract, however POTESTA has the ability to complete every facet of the project from beginning to end, from the preliminary study through final design and construction observation/management.

POTESTA's staff of geotechnical professionals have extensive experience with the assessment and design of landslide repair and restoration. POTESTA completes numerous projects annually for a varied array of clients including field assessment, subsurface exploration, laboratory testing, and preparation of construction documents related to the repair and restoration of failed soil and rock slopes. Landslide failures are common

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throughout West Virginia and POTESTA's approach to the effective and economic remediation of these failed slopes have incorporated many varied approaches, which are driven by the site conditions, current/future uses, and proximity of the failure to critical infrastructure. Restoration designs have included excavation and reconstruction of the slope with engineered backfill, installation of underdrains, toe-key construction, stone buttress installation, retaining wall design/construction, soil stabilization, etc. Causation of soil instability is highly variable and POTESTA's approach with these projects begin with a thorough understanding of the client's site needs to provide an economic solution for the repair and long-term performance of the recommended stabilization solution. POTESTA's experienced geotechnical staff utilize field information gathered during the initial exploration and study of the site to evaluate potential stabilization efforts and engineering approaches using computer modeling of the slope to prepare final recommendations for the slope repair. This approach considers available materials, equipment, and the long-term use of the site in order to offer the most economical approach to the repair.

POTESTA project staff and engineers have been working on numerous repairs and construction projects related directly to the extensive damages resulting from the June 2016 flooding event.

POTESTA was retained by Elk Valley PSD for the study, design, and preparation of construction contract plans, related documents, and construction oversight services for the repair and remediation of a section of Elk River bank which failed as a result of the June 2016 flooding event. The slope failure broke a section of sanitary sewer gravity main which provided service to the Elk Middle School as well as the community of Clendenin. POTESTA performed a field survey of the landslide area, prepared designs and contract documents for a temporary pump station and forcemain to re-establish the connection, worked with Elk Valley PSD and FEMA officials on funding alternatives and developed remedial grading plans for the backfill and stabilization of the failed riverbank.



POTESTA has experience working the state agency, West Virginia Division of Highways, for repair and stabilization of three separate sections of WWSR 4, which were undercut and washed out during the June 2016 flooding event. The project was completed for Orders Construction Company and CDM Smith under and emergency design/build contract. POTESTA's services included the completion of a subsurface exploration, evaluation of subsurface soil and rock conditions, and the development of geotechnical design recommendations for the installation of two sections of soldier beam and lagging retaining walls as well as the sizing and foundation design for a new structural box culvert to replace a failed and washed out section of culvert under WSR 4 at a third location.



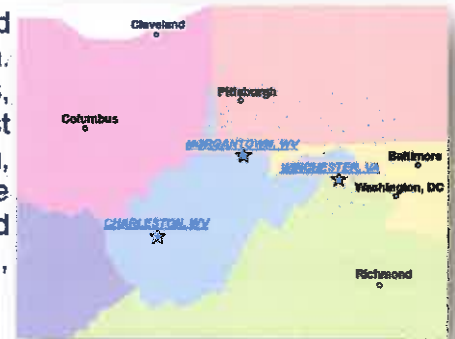
We look forward to serving the Agency and we are committed to provide quality service, rapid response, project completion which exceed your expectations for services performed under these projects. We believe the track record of our professionals demonstrates our ability and experience.

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CORPORATE SUMMARY

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 81 experienced engineers, scientists, and support personnel with branch offices in Morgantown, West Virginia, and Winchester, Virginia. Our clients include mining, manufacturing and chemical companies; utility companies; waste management companies; K-12 schools/colleges/universities; land developers; attorneys; financial institutions; insurance companies; local, state and federal agencies; construction companies and architects.



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

STAFF PROFILE

POTESTA's staff is committed to delivering innovative, cost-effective solutions to meet our client's complex requirements.

Total Staff: 81

10	Admin/Accounting	4	Geotechnical Engineers
1	Aqua Culturist	1	GIS Specialist
2	Aquatic Ecologists	1	Horticulturalist
6	Biologists	1	Information Technologist
7	CADD	1	Mechanical Engineers
16	Civil Engineers	2	Mining Engineers
1	Economist	7	Surveyors
5	Environmental Scientists	11	Technicians
2	Fish & Wildlife Specialists	1	Toxicologist
1	Geologists	1	Health and Safety



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CORPORATE SUMMARY

MANAGEMENT AND PERSONNEL EXPERIENCE

Our firm is managed by two principals driving POTESTA forward with their experience and emphasis on exceeding expectations. **Ronald R. Potesta, President**, is a former Director of the West Virginia Division of Natural Resources during a period when the agency had over 700 full-time employees and supervised several offices, including Regulatory Affairs. **Dana L. Burns, P.E., Vice President**, has more than 40 years experience with civil, geotechnical, mining, and environmental engineering projects.

POTESTA has a team of qualified engineers, scientists, and support personnel and will work under Project Manager, **Christopher Grose, L.R.S.** Mr. Grose has over 26 years experience in 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. Mr. Grose has worked on similar projects involving dam impoundment design and regulation assessment, as well as landslide repair and remedial design. He will be responsible for the geotechnical and geological aspects of the failed slope repair, in addition to the investigations for and the design and construction of potential repairs of the dams, as well as the review and assessment of the existing dams to gain regulatory compliance for both dams with the WV Dam Control and Safety Act.



Ronald R. Potesta



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

Certification	Number of Employees	Breakdown by Employee
Professional Engineers (PE)	14	Robert Ammirato (WV) Dana Burns (WV, IL) Chad Griffith (WV) Mark Kiser (WV, SC) Joe Knechtel (VA, WV) Sam Ludlow (WV) Terry Moran (WV, VA) Everett Mulkeen (WV) Mark Sankoff (WV) Angela Pugh (WV) Dave Sharp (WV, OH, PA, KY, MD) Jarrett Smith (WV) Pat Taylor (WV) Patrick Ward (WV)
Engineering Interns (EIT)	2	Tim Rice Jeremi Stawovy
Professional Surveyors (PS)	3	Dana Burns (WV) Victor Dawson (WV, NC, SC) Mark Sankoff (WV)
Surveyor-in-Training (SIT)	2	Ryan Bennett Brad Starkey
WV Licensed Remediation Specialists (LRS)	5	Mindy Armstead Dave Corsaro Chris Grose Mark Kiser Dennis Litwinowicz

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QUALIFICATIONS



Civil engineering is an area of particular expertise at POTESTA. Our engineering staff has a broad background related to civil engineering disciplines, such as development of grading plans, stormwater management, water/wastewater treatment, utility/infrastructure design and dam/impoundment design. POTESTA takes pride in our ability to provide our clients with innovative and concise engineering design packages that will allow more of the client's money to be spent on actual construction rather than engineering design fees. Our capabilities for dam design, rehabilitation, and modification services include:

- **Surveying Services** – Includes mapping development, location of existing infrastructure, property acquisitions or transfers (i.e., right-of-ways), construction layout, measurement of construction quantities, etc. Surveys completed by POTESTA are performed by or under the direction of a one of our three licensed professional surveyors.
- **Geotechnical Services** – Includes subsurface explorations, foundation design recommendations, slope stability analysis, and retaining wall design. POTESTA field engineers and geologists are familiar with the latest technologies to assist in the collection and analysis of soil and rock samples. Our knowledge of the proper procedures and familiarity with local conditions allow office and field personnel to adjust the investigation if any unanticipated field conditions are encountered.
- **Hydraulic and Hydrologic Analysis** – Includes pond and dam design, floodplain management, dam break analysis, stormwater management, rainfall and flow data collection, and hydrology surveys, etc. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner.
- **Sediment Removal (Dredging)** – Includes field reconnaissance, dredging plan, water quality monitoring, permitting, sediment disposal design, and construction management. The key component to the successful implementation of any dredging project is to establish a cost-effective operation that addresses the needs and avoids/minimizes adverse impacts to environmental resources.
- **Construction Contract Administration** – Includes survey layout, construction management, construction monitoring, record drawings and preparation, and bid evaluation assistance. POTESTA maintains a database with bidding results from recent construction projects. This information allows our designers to develop accurate estimates of probable construction costs based on recent bids from local contractors. We pride ourselves on the accuracy of our cost estimates to be within an acceptable range of actual bid results obtained for projects. We routinely provide resident project representatives (RPRs) during construction to serve as the “eyes and ears” on behalf of the Owner to document the progress of the Contractor, observe and document the construction activities, and prepare record drawings.
- **Permitting** – Includes environmental site assessment, environmental impact statements, stormwater management permits, wetland delineation and mitigation permits, groundwater protection plans, spill prevention, control and countermeasure plans, floodplain management studies and permits, and emergency action. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner.



Additional information on the primary service areas for this project is included in **Appendix A**.

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PROJECT MANAGEMENT PLAN



POTESTA has prepared a project approach to meet the goals and objectives of the Cedar Lakes Dam Restoration (Project A) and the Food Distribution Warehouse Slope Stabilization (Project B).

PROJECT A

- Physical inspection of both dams.
- Geotechnical and hydrologic/hydraulic analysis to determine whether each dam meets current federal and state requirements.
- If the current requirements are met, POTESTA, on behalf of Cedar Lakes, can apply for a Certificate of Approval from the WVDEP, Dam Safety.
- If the dam(s) do not comply with the current federal or state requirements, POTESTA will evaluate the required modifications, including the associated estimated cost, to bring the dams into compliance.
- Upon approval of Cedar Lakes, POTESTA would complete design drawings and technical specifications for the required modifications. Once the WVDEP, Dam Safety approves the design drawings and technical specifications, the construction of the modifications would commence.
- After the construction of the modifications to get the dam(s) into compliance, POTESTA, on behalf of Cedar Lakes, would apply for the certificate of approvals.

Scope of the Services:

- **Information Review**—design drawings, correspondence, previous inspections, etc.
- **Field Evaluation**—overall condition of the dams, in-field determination of the slopes of the embankments of each dam
- **Letter Report**—summarizing inspection of each dam, including the spillways
- **Compliance Evaluation**—determine whether each dam meets the requirements of the Dam Control Act
- **Design Upgrades**—if dam does not meet the requirements, design upgrades to meet those requirements



PROJECT MANAGEMENT PLAN



PROJECT B

- **Development of Scope of Services**—POTESTA will work with the Agency to develop a successful cost-effective approach to the project. This will include an initial meeting with the Agency to establish requirements and expectations, and conduct a preliminary site visit for the proposed project.
- **Subsurface Evaluation**—POTESTA will develop a recommended exploration program for the Agency's review and approval. Supplemental information from the local area is obtained from readily available sources to assist the engineer or geologist. POTESTA will mobilize a drilling crew to the site which is capable of drilling within the constraints of the boring locations. Miss Utility of West Virginia will be notified, and known utilities will be located. POTESTA has several relationships with drilling subcontractors, such as D.L. Martin for surface and subsurface explorations. The firms we utilize are capable of providing drilling and sampling in unconsolidated and consolidated formations.
- **Laboratory Testing**—POTESTA will provide field engineers and geologists who are knowledgeable using the latest technologies to assist in collecting and analyzing samples and POTESTA will send to an appropriate testing facility to determine soil/rock classification and strength.
- **Recommendations Report and Construction Drawings**—The results obtained from the subsurface exploration and laboratory testing work will be utilized to develop an approach to repair and stabilize the section of failed slope which will be recommended in a written recommendations report to the agency. This report will include boring logs with a visual description of the materials encountered and methods of sample collection utilized during the drilling operations, as well as the soils testing results. The test results will be summarized as per sample location and type of test. The results obtained from the completed stability analysis will also be presented to aid in the overall design of the regraded slope. Following a meeting with agency officials to review the report findings, POTESTA will begin preparing the construction documents for the slope repair work. These documents may include site plans, general details, cross sections, and notes to relate the intent and overall slope stabilization construction approach. Base mapping and existing conditions will be prepared on these plans from site specific survey information collected by POTESTA survey field crews. The results obtained from the slope stability computer modeling effort will be utilized to prepare final construction documents relating the preferred final recommended approach to repair of the failed slope. The agency can then utilize these construction documents as a basis for a request for bids from several contractors in order to evaluate and ultimately issue a construction contract to the successful bidder to implement the stabilization approach.
- **Construction Observation and Management Services**—POTESTA can provide construction observation and construction management services to assist clients in achieving regulatory and contractual compliance, document that contractor activities are in compliance with design requirements, and serve as an extension of the Agency's staff. POTESTA can assist clients in observation of construction activities and documenting compliance for each of these projects. Our typical involvement in such projects includes:
 - ⇒ Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.
 - ⇒ Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.
 - ⇒ POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations

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PROJECT MANAGEMENT PLAN



PROJECT B

- ⇒ (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.
- ⇒ Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.
- ⇒ Preparation of summary of construction reports, including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.
- ⇒ Preparation of certifications as may be required.

SUBCONTRACTORS

- **D. L. Martin Construction & Excavating**—29 years in business providing drilling services and is located in Scott Depot, West Virginia.
- **Geo-Mechanics, Inc.**—Over 45 years in business providing laboratory testing and is located in Elizabeth, Pennsylvania.



Expression of Interest

SIMILAR EXPERIENCE (PROJECT A)



Examples of similar past dam-related projects completed by POTESTA include:

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks	Year/ Consultant Fee
Lake Washington	Wood County, WV	Dana Burns, P.E. <i>President</i> dlburns@potesta.com (304) 342-1400	Expert witness testimony/ determine impact to lake resulting from construction of US Route 50	<ul style="list-style-type: none"> Survey grid/soundings/sampling to obtain sludge samples Evaluated options to remove sediment and selected to dredge sediment volume Dewatering area to dry sludge 	2010/\$25,000
*Lake Siri	Morgan County, WV	Mark Kiser, P.E., L.R.S <i>Chief Engineer</i> dmkiser@potesta.com (304) 342-1400	Dam inspection/ prepare and submit dam inspection reports	<ul style="list-style-type: none"> FOIA request/file review Met with client representatives Visited the site to conduct visual observation to identify deficiencies and potential hazards Prepared and submitted dam inspection reports 	2012/\$4,000
*Piney Creek Dam	Surveyor, WV	Dana Burns, P.E. <i>President</i> dlburns@potesta.com (304) 342-1400	Construction of new dam/ design and oversee construction for new dam	<ul style="list-style-type: none"> Preliminary evaluation report Design of rock fill dam Preparation of permits Preparation of bidding documents Contract administration and construction monitoring services Quarterly inspections and reports required WVDEP 	2007/\$18,000
*Sleepy Hollow Subdivision Dam	Berkeley County, WV	Joe Knechtel, P.E. <i>Branch Manager</i> kjknechtel@potesta.com (540) 450-0180	Dam inspection/ prepare and submit dam inspection reports	<ul style="list-style-type: none"> FOIA request/file review Met with representatives Visited the site to conduct visual observation Prepared and submitted dam inspection reports 	2013/\$2,500
*Holz, Upper Ward, Lower Ward Impoundment	South Charleston, WV	Jarrett Smith, P.E. <i>Senior Engineer</i> jmsmith@potesta.com (304) 342-1400 Chris Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Variety of services	<ul style="list-style-type: none"> Annual/biannual inspections and professional engineer certification Preparation of permit modifications Regular updates to Monitoring and Emergency Warning Plan Letter reports to WVDEP Preparation of engineering plans for various projects Piezometer readings Surveying services Construction monitoring 	2010-ongoing/ \$110,000
Scott Lake-Privately Owned Dam	Randolph County, WV	Pat Taylor, P.E. <i>Senior Engineer</i> pataylor@potesta.com (304) 342-1400 Chris Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Dam break analysis	<ul style="list-style-type: none"> Floodplain coordinator contact/ site visit Review survey data to establish cross sections Hydraulic calculations Preparation of letter report 	2015/\$8,500

*Additional details in *Appendix B*.



Additional information can be found on our corporate website: www.potesta.com

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SIMILAR EXPERIENCE (PROJECT A)



Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks	Year/ Consultant Fee
*Pikewood Golf Course Irrigation Impoundment	Reedsville, WV	Dave Sharp, P.E. <i>Branch Manager</i> dsharp@potesta.com (304) 225-2245 Chris Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Severe sedimentation of lake	<ul style="list-style-type: none"> Field reconnaissance for dredging and disposal areas Complete Section 404 Permit Evaluate options for dredging Design of sediment disposal area Review and make recommendations on current old silt dam design 	2010/\$132,000
Morgantown Utility Board's Burroughs Run/Poponoe Run	Monongalia County, WV	Dave Sharp, P.E. <i>Branch Manager</i> dsharp@potesta.com (304) 225-2245	Ease flooding and stream bank erosion and reduce water quality degradation	<ul style="list-style-type: none"> Surveying services Ground survey features, visible property corners, and storm and sanitary inverts were gathered for storm and sewer layout information 	2011/\$15,000
LP Mineral, LLC	Marion and Monongalia Counties, WV	John R. Spencer <i>Chief Engineering Associate</i> jrs Spencer@potesta.com (304) 342-1400	Impoundment/Dam Inspections	<ul style="list-style-type: none"> Quarterly/annual drainage structure, spoil disposal area, and MSHA Impoundment inspections and professional engineer certification Preparation of new permit applications Preparation of permit modifications, renewals, and reissuance's Annual updates to Monitoring and Emergency Warning Plans Surveying services Monthly WVDEP water monitoring and reporting 	2010/\$12,000
*Kanawha Eagle Slurry Impoundment	Winifrede, WV	Dana Burns, P.E. <i>President</i> dburns@potesta.com (304) 342-1400	Permit modifications for existing coarse/fine coal refuse impoundment	<ul style="list-style-type: none"> Development of phasing plan for future development of the impoundment Stability analysis and future staging of the dam Regular updates to the hazard plan for facility Permit preparation 	2007/\$485,000

Lake Siri Dam
Morgan County, West Virginia

Expression of Interest

SIMILAR EXPERIENCE (PROJECT B)



Landslide-related projects completed by POTESTA include:

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks	Year/ Consultant Fee
*Giger Street Landslide	Huntington, WV	Chris A. Grose, LRS <i>Senior Engineering Associate</i> cagrose@potesta.com (304) 342-1400	Repair and stabilization design for a section of failed soil and weathered rock slope	<ul style="list-style-type: none"> Completed four subsurface borings Prepared regrading plans for stabilization of slope Prepared bid package Compaction testing and construction observation services 	2013/\$17,000
*Clendenin Compressor Station Landslide	Clendenin, WV	Chris A. Grose, LRS <i>Senior Engineering Associate</i> cagrose@potesta.com (304) 342-1400	Evaluate and design remedial measures for landslide	<ul style="list-style-type: none"> Surveying services Performed subsurface exploration Design of approximately 200-foot steel soldier beam and concrete lagging retaining wall Assisted with contract administration Construction observation services 	2003/\$7,500
*Bevins Landslide Emergency	Buchanan County, VA	Patrick A. Taylor, PE <i>Senior Engineer</i> pataylor@potesta.com (304) 342-1400	Engineering report, Construction plans and specifications, and material schedule for landslide	<ul style="list-style-type: none"> Stabilization/removal of a slide that occurred behind residence Removal and disposal of slide material Installation of temporary and permanent drainage control measures Upgrade of existing entrance roadway Installation of required erosion and sedimentation control measures 	2009/\$40,000
*Landslide Remediation/ Tank Repair	WV	Dave Sharp, PE <i>Branch Manager</i> dsharp@potesta.com (304) 225-2245	Landslide that resulted in a compromise to the structural integrity of a 2-million-gallon capacity water storage tank	<ul style="list-style-type: none"> Employing fill slope stabilization to the slip area Constructed an internal temporary secondary containment wall Repairing the damaged wall panels 	2011/\$185,000
*Residential Landslide Gordon Drive	Charleston, WV	Chris A. Grose, LRS <i>Senior Engineering Associate</i> cagrose@potesta.com (304) 342-1400	Slip behind a home (undermined and failed deck/portions of home's foundation exposed)	<ul style="list-style-type: none"> Topographic mapping Coordination and consulting with various groups/agencies Stabilized slope design and grading plan including cut/fill Construction observation 	2013/\$11,500
*Bowser Street Landslide Repair	Granville, WV	Dave Sharp, PE <i>Branch Manager</i> dsharp@potesta.com (304) 225-2245	Repair and stabilization design for a section of failed soil and weathered rock slope	<ul style="list-style-type: none"> Preliminary and continued surveying Five subsurface borings Design of engineered soil slope with rock toe key Erosion and sediment control plans Grading and drainage plans Condemnation hearings on property Coordinated with property owners Construction administration Construction monitoring 	2015/\$95,000

*Additional details in **Appendix B**.

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SIMILAR EXPERIENCE (PROJECT B)



Landslide-related projects completed by POTESTA include:

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks	Year/ Consultant Fee
*Fallam Drive Landslide Repair	Malden, WV	Chris A. Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Preparation of plan to fix a slip	<ul style="list-style-type: none"> • Topographic survey • Stabilized slope design • Prepared construction drawings • Subsurface exploration of two borings • Assisted with pre-bid meeting 	2016/\$13,800
*May Portal Home Landslide Maintenance	Buchanan County, VA	Patrick A. Taylor, PE Senior Engineer pataylor@potesta.com (304) 342-1400	Reestablish and stabilize a previously reclaimed deep mine portal site	<ul style="list-style-type: none"> • Prepared regrading plan and design • Designed drainage at the toe of the buttress and around residence • Restore other problem drainage structures • Assisted with contract bidding and evaluation of bids 	2007/\$25,000
*George's Creek (Lucas) Landslide Maintenance	Kanawha County, WV	D. Mark Kiser, PE, LRS Chief Engineer dmkiser@potesta.com (304-342-1400)	Geotechnical engineering services for a landslide related to historic mining activity	<ul style="list-style-type: none"> • Subsurface exploration • Topographic survey • Design of remedial measures including 25-foot high steel soldier beam and concrete lagging retaining wall with sloped, compacted backfill • Contract administration • Construction observation 	2003/\$55,000
*Taylorville (Ray) Landslide Emergency	Mingo County, WV	D. Mark Kiser, PE, LRS Chief Engineer dmkiser@potesta.com (304-342-1400)	Stabilization plan for a landslide project	<ul style="list-style-type: none"> • Topographic mapping • Stabilization plan to remove the landslide soils and backfill the area with a rock buttress • Prepared drawings, technical specifications, contractor's bid form, engineer's construction cost estimate, and calculations • Attended pre-bid and pre-construction conferences 	2009/\$14,800
*Williamson (Hatfield) Nursing Home Landslide Maintenance	Williamson, WV	Chris A. Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Geotechnical engineering services for landslide below parking lot of nursing home	<ul style="list-style-type: none"> • Subsurface exploration • Design of remedial measures, including 456-foot steel soldier beam and wood lagging retaining wall • Assisted with contract administration • Performed construction observation 	2003/\$130,000
*Grandview Slip Repair	Kanawha County, WV	Chris A. Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Geotechnical engineering services for slip	<ul style="list-style-type: none"> • Topographic mapping • Geotechnical exploration • Regraded soil slope design • Construction observation • Construction administration 	2014/\$21,500
*Bona Vista Slip Repair	Charleston, WV	Chris A. Grose, LRS Senior Engineering Associate cagrose@potesta.com (304) 342-1400	Geotechnical engineering services to repair a section of hillside	<ul style="list-style-type: none"> • Topographic mapping • Coordination with groups/agencies • Retaining wall design and grading plan • Construction observation • Construction administration 	2014/\$17,000

*Additional details in *Appendix B*.

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STATE CONTRACT EXPERIENCE



POTESTA has been working with the WVDEP, WVDOH, WVDOT, WVDHHR, and WVDNR since 1997 and Mr. Ronald R. Potesta, President of POTESTA and a former director of the West Virginia Department of Natural Resources, has the technical knowledge and expertise to be an asset on this project. Mr. Dana Burns, Vice President of POTESTA, has served as principal-in-charge or project manager on three open-end contracts for WVDEP, AML from 1986 through 1997 totaling over 65 projects. In addition, Mr. Burns has served as the principal-in-charge for numerous other WVDEP, AML projects since 2003. 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, including:

- **West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation:** Design and bidding phase services for reclamation for abandoned mine lands projects throughout West Virginia since 2002.
- **West Virginia Department of Environmental Protection, Office of Waste Management:** Design, bidding and construction phase services for 8 landfill repair and closure projects in both Northern and Southern West Virginia since 1997.
- **West Virginia Division of Highways (WVDOH), Engineering Division:** (a) Asbestos inspection sampling services and report preparation, and development of contract documents for asbestos removal and disposal projects throughout West Virginia since 2002, (b) open-end agreement with the WVDOH for two years to provide natural resource services for NEPA compliance, (c) master service agreements to provide engineering services related to highway, bridge, and miscellaneous projects, (d) two master service agreements to provide surveying services, (e) engineering services as part of design-build for 3 1/2 miles of the upgrade of Interstate 64 from 4 – 6 lanes, (f) geotechnical, surveying, and civil site design associated with widening Jefferson Road for 1 1/2 miles, and (g) maintenance of six year agreement to provide environmental assessment and remediation services.
- **West Virginia Division of Natural Resources:** Site grading, utilities, etc. for handicap accessible cabins and state parks, and restoration of 78 miles of North Bend Rail Trail.
- **West Virginia Department of Transportation, Materials Control, Soils and Testing Division:** Five-year agreement for geotechnical services throughout the State of West Virginia.
- **West Virginia Department of Health and Human Resources, Office of Environmental Health Services, Source Water Assessment and Protection Program:** Three contracts for Source Water Protection Plan services for 100+ communities throughout Southern, Northern, and Eastern West Virginia from 2002 to 2004 and 2009 to 2012.



North Bend Rail Trail



North Bridgeport Bypass

Expression of Interest

KEY PERSONNEL



POTESTA can provide all of the services required for this project in-house using existing staff. Our large, experienced staff allows us to respond quickly, provide flexibility, and will provide opportunity for high level input from our in-house experts on a project of this size and nature.

Mr. Dana L. Burns, P.E., Vice President at POTESTA, will serve as principal-in-charge for this project. Mr. Burns has served as the principal-in-charge for all of POTESTA's contracts for engineering services with the State of West Virginia, including those with the West Virginia Department of Transportation, West Virginia Department of Environmental Protection, West Virginia Department of Health and Human Resources, and WVDNR. As such, he understands the resources it takes to complete a project for the State of West Virginia, as well as the requirements of not just the purchasing agency but also those of the West Virginia Department of Administration. Mr. Burns' experience includes over 40 years of civil and environmental engineering and related projects including stormwater management plan and dredging construction projects.

Mr. Christopher A. Grose, L.R.S., Senior Engineering Associate at POTESTA, has degrees in civil engineering and geological engineering and has over 29 years of experience and will serve as Project Manager. His areas of expertise include 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. Grose has participated in the geotechnical explorations/evaluations for many projects for POTESTA.

Mr. David B. Sharp, P.E., Senior Engineer and Branch Manager for POTESTA's Morgantown office, has over 24 years experience 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. D. Mark Kiser, P.E., Chief Engineer, has over 34 years experience in civil engineering, with particular emphasis on design and construction administration. He has been involved in the evaluation, design, and construction of dozens of ponds and impoundments for surface mining operations, abandoned mine land (AML) reclamation projects, and industrial and municipal solid waste landfills. Activities relating to these projects have included embankment design, hydrologic and hydraulic analysis, principal and emergency spillway design, etc. Mr. Kiser has successfully managed various design and construction projects totaling tens of millions of dollars. He will serve as a "backup" project manager and will provide quality assurance/quality control via a "constructability" review.

Mr. Jarrett M. Smith, P.E., Senior Engineer, has over 16 years experience in civil engineering, with particular emphasis in geotechnical, hydrology/hydraulics and dam inspection, design and modifications. Mr. Smith is currently the Project Manager for an ongoing project to provide a variety of services on three DOW surface impoundments located in South Charleston, West Virginia. This work has included inspection, permit modifications, reports to the WVDEP Dam Safety Section, engineering plans, surveying, and construction monitoring.

Mr. Peter S. Potesta, Staff Engineer, has over seven years experience in geotechnical engineering with an emphasis in retaining wall design and analysis, landslide repair design, foundation recommendations, slope stability analysis, civil/site design, construction monitoring, and soil compaction testing.

POTESTA's project managers will be supported by a team of engineers, scientists, surveyors, hydrologists, geologist/hydrogeologists, biologists, CADD operators, and other support personnel from POTESTA's staff.

Expression of Interest

KEY PERSONNEL



Resumes of the key personnel are presented in *Appendix C*. Staff Certifications are in *Appendix D*.

KEY PERSONNEL CERTIFICATIONS AND EDUCATION

Key Personnel	Certification	Education
Dana L. Burns	Professional Engineer (PE), Professional Surveyor (PS)	M.S. Civil Engineering B.S. Civil Engineering
Christopher A. Grose	Licensed Remediation Specialist (LRS), HAZWOPER, Troxler Gauge	M.S. Geological Engineering B.S. Civil Engineering
David B. Sharp	Professional Engineer (PE), Troxler Gauge	M.S. Civil Engineering B.S. Civil Engineering
D. Mark Kiser	Professional Engineer (PE) and Licensed Remediation Specialist (LRS), HAZWOPER, Troxler Gauge	B.S. Civil Engineering
Jarrett M. Smith	Professional Engineer (PE)	B.S. Civil Engineering A.S. General Science
Peter S. Potesta	Troxler Gauge	B.S. Civil Engineering B.A. Environmental Geosciences



*Mingo Manor Nursing Home
Williamson, West Virginia*

MANAGEMENT PLAN



PROCEDURE FOR COMMUNICATION WITH OWNER

Mr. Dana Burns, P.E., as POTESTA's principal-in-charge he will be responsible for contract management (administration) and shall coordinate and direct all aspects of the project. Day-to-day project activities for this project will be performed under the direction of our project manager, Mr. Christopher A. Grose, L.R.S. **Mr. Grose will be the point of contact to allow clear communication with the Agency.** A written proposal, including a detailed scope of services and an associated manhour and cost estimate, will then be prepared and submitted to the Agency for review. The project manager will review the proposal with the Agency, including a task-by-task discussion of work items and the related costs. Upon the Agency's approval of the proposal, the project manager will arrange for the start of project activities. The principal-in-charge will provide the project manager the required staff necessary to complete the project activities, will review the project budget and schedule during performance of the project, and will provide a final QA/QC review of the documents prior to submittal to the Agency. The project manager will develop a detailed step-by-step project work plan so that the project activities are completed in a correct manner, within budget, and on time. POTESTA will be available to conduct weekly status reports which may include weekly meetings, memos, or telephone calls with the Agency's project manager as required.

STAFFING PLAN

POTESTA's proposed project organizational chart, including key staff is contained in **Appendix E**. Services will be performed at POTESTA's Charleston, West Virginia office. We stand ready to commit the personnel and resources required to complete this project in a timely, technically sound, and cost-efficient manner. POTESTA's large staff size will allow us to work on this project on an accelerated schedule if necessary.

REQUIRED DOCUMENTS

Appendix F contains the executed Disclosure of Interested Parties to Contracts, CEOI 1400 1800000001 Solicitation Form, Certification and Signature Page, Purchasing Affidavit, Addendum Acknowledgement Form.

PROJECT BUDGET CONTROL

The project manager will be responsible for monitoring the project budget and keeping the principal-in-charge informed of its status. The project manager will develop a work plan based on hourly rates and tasks to complete the project. POTESTA's staff enters time into POTESTA's InFocus accounting system on a daily and/or weekly basis. POTESTA's project manager can access InFocus at any time, thus allowing a real-time control of project costs.

PROJECT SCHEDULE CONTROL

Direct responsibility for schedule control lies with the project manager. Initially, the project manager will review schedule requirements to see how they can be achieved given the anticipated scope of work and develop a work plan. As the project progresses, the project manager will monitor progress and compare it with the established schedule on a weekly basis keeping the principal-in-charge aware of the schedule's status. In this manner, the principal-in-charge can make staff adjustments to allow the project manager to maintain the project schedule. If circumstances develop that could impact the project schedule, the project manager will contact the Agency's project manager to develop a mutually acceptable adjustment to the schedule and/or work plan.

Expression of Interest

INSURANCE REQUIREMENTS

We carry a full line of insurance coverage, including general liability, errors and omissions, and workers' compensation. We also have and follow a stringent internal quality control system designed to provide our clients with quality products. We believe the quality of our work is best exemplified by approximately 85 percent of our workload coming from repeat clients. We have won seven Gold Awards in the American Council of Engineering Companies – West Virginia Chapter's engineering excellence awards competition. In 2016, POTESTA was the recipient of the Safety Achievement Award from the Contractor's Association of West Virginia.



John Spencer, Safety Director

Client#: 1114489 POTESASS

ACORD. CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/03/2016

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 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 USI Ins Svcs C/L Charleston 1 Hillcrest Drive East Charleston, WV 25311 304 347-0811	CONTACT NAME Brenda Samples PHONE (A/C, No, Ext): 304-347-0668 FAX (A/C, No): 304-347-0806 EMAIL ADDRESS: brenda.samples@usi.biz														
INSURED Potesta & Associates, Inc. 7012 MacCorkle Avenue SE Charleston, WV 25304	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A : Travelers Indemnity Co. of Amer</td> <td>26666</td> </tr> <tr> <td>INSURER B : Travelers Property Cas. Co. of</td> <td>26674</td> </tr> <tr> <td>INSURER C : Farmington Casualty Company</td> <td>41483</td> </tr> <tr> <td>INSURER D : Lexington Insurance Company</td> <td>19437</td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Travelers Indemnity Co. of Amer	26666	INSURER B : Travelers Property Cas. Co. of	26674	INSURER C : Farmington Casualty Company	41483	INSURER D : Lexington Insurance Company	19437	INSURER E :		INSURER F :	
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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.

LINE	TYPE OF INSURANCE	ADDITIONAL INFORMATION	POLICY NUMBER	EFFECTIVE DATE (MM/DD/YYYY)	EXPIRATION DATE (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> BI/PPD GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER		6308476376	03/07/2016	03/07/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$300,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMPIOP AGG \$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		BA8G476339	03/07/2016	03/07/2017	COMBINED SINGLE LIMIT (Per accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		CUP8G476376	03/07/2016	03/07/2017	EACH OCCURRENCE \$9,000,000 AGGREGATE \$9,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/MEMBER EXCLUDED? Y/N (Mandatory in PA) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	UB8G568811	03/07/2016	03/07/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
D	Professional Pollution		028174822	03/07/2016	03/07/2017	\$5,000,000 \$5,000,000 \$25,000 Deductible

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Evidence of Coverage for operations usual to Engineers and Environmental Consultants.

CERTIFICATE HOLDER Potesta & Associates, Inc. 7012 MacCorkle Ave., SE Charleston, WV 25304	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
--	--

REFERENCES



POTESTA is providing references from past and current clients. Our references can attest to POTESTA's professionalism, experience and expertise, and ability to deliver engineering consulting services in an accurate, efficient, and cost-effective manner.

WEST VIRGINIA BUREAU FOR PUBLIC HEALTH

Office of Environmental Health Services
Mr. Scott Rodeheaver
350 Capitol Street, Room 313
Charleston, West Virginia 25301-3713
Phone: (304) 356-4270

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways
Mr. David E. Cramer, PE
State Capitol Complex
Building 5, Room 110
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0430
Phone: (304) 558-3505

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Nick Estes
601 57th Street, SE
Charleston, West Virginia 25304
Phone: (304) 926-0499

TRAVELERS INSURANCE

Mr. Braden Young
Post Office Box 171758
Baltimore, Maryland 21297
Phone: (443) 353-1083

ELK VALLEY PUBLIC SERVICE DISTRICT

Mr. Tim Chapman
100 Bream Drive
Elkview, West Virginia 25071
Phone: (304) 965-1676

CITY OF HUNTINGTON

Mr. Wesley Leek
1217 Adams Avenue
Huntington, West Virginia 25704
Phone: (304) 781-1912



POTESTA & ASSOCIATES, INC.

Civil Engineering and Design

Potesta & Associates, Inc. (POTESTA) helps clients evaluate and plan projects by completing the following types of preliminary evaluations and analyses.

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations Including Soil, Bedrock, and Groundwater Characterization
- Foundation Recommendations
- Monitoring Well Systems and Site Characterization Plans
- Boundary, Topographical and Photogrammetric Surveys
- Utility Planning
- Earthwork Evaluations Including Volume Analysis
- Opinion of Probable Costs/Engineer's Construction Cost Estimates

Once the project has been determined feasible, POTESTA's design professionals complete preliminary and final designs. Frequent communication is made with the client and any other design professionals to review completed activities and obtain input for the design process. Our goal is to provide our services to achieve or exceed our clients' expectations.

Our design services include:

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

POTESTA offers experienced environmental engineers and scientists to prepare applications for various environmental permits that may be required. These services include:

- Stormwater Management Permit/Erosion and Sediment Control Plans
- Office of Air Quality Permit to Construct
- Wetland Delineation and Permits
- National Pollutant Discharge Elimination System (NPDES) Permits
- Floodplain Management Permits
- Groundwater Protection Plans
- Spill Prevention, Control and Countermeasure Plans
- Environmental Site Assessments
- Environmental Impact Statements

POTESTA routinely provides professional services throughout construction of our projects. These services include survey layout, construction management, construction monitoring, record drawing preparation, and bid evaluation assistance.



POTESTA & ASSOCIATES, INC.

7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304

Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com

Regional Offices: Morgantown, WV and Winchester, VA

POTESTA & ASSOCIATES, INC.

Surveying and Mapping

Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions), ALTA surveys, control surveys, flood certificate surveys, well location surveys, construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse research, preparation of right-of-way plans, and verification of property owners. Potesta & Associates, Inc. (POTESTA) has licensed professional surveyors registered in West Virginia, North Carolina, South Carolina, Ohio, Virginia, and Pennsylvania. Their total combined surveying experience comes to well over 50 years.

POTESTA's surveyors use state-of-the-art equipment such as Topcon total stations, Trimble R-8 GNSS, and SMI data collectors with SMI software. Autodesk Civil 3D reduction and design software is used.

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. These products can be supplied to our clients in AutoCAD and/or Microstation format.

Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography.

POTESTA can provide the necessary surveying required for establishing ground control for aerial mapping. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.



Surveys completed by POTESTA are performed by or under the direction of a professional licensed surveyor. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.

Our staff is experienced in global positioning surveys (GPS). GPS equipment, Trimble R-8 GNSS, and existing base stations are among POTESTA's surveying tools. Based upon the site location and ultimate use of the survey information, a recommendation is made to the client as to whether or not traditional survey or GPS is most applicable to their project.



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Potesta & Associates, Inc.'s (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.

SUBSURFACE EXPLORATIONS

POTESTA's diverse staff of engineers and geologists is experienced in the many different facets of subsurface explorations. Our usual procedure is to attend an initial meeting with the client to establish requirements and expectations, conduct a preliminary site reconnaissance, and develop a recommended exploration program for your review and approval. Supplemental information from the local area is then obtained from readily available sources to assist the engineer or geologist in making final recommendations.



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.

Our staff is familiar with the following items which can be associated with subsurface exploration:

- Drilling and Rock Coring Techniques (augers, rotary bits, Geoprobe™, etc.)
- Sample Collection Methods (split spoons, shelly tubes, Geoprobe™ sleeves, etc.)
- Classification and Logging of Soil and Rock Samples
- Monitoring Well and Piezometer Installation

SLOPE STABILITY ANALYSIS AND REMEDIAL DESIGN

Slope stability is often a major concern during the design and construction phases of many projects, especially those located in the Appalachian terrain. POTESTA's engineers are familiar with the various methods utilized to predict slope stability and are capable of performing the related analyses. Slope stability is critical for many projects such as 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 can involve circular or sliding block methods, interface friction angles, and estimation of the strength parameters of the soil or rock. Slope stability analyses are performed on one of the most technologically advanced computer programs available and can be modified using site specific data.

POTESTA's engineers can also develop preventive measures during initial project design or recommendations to repair slope failures. Based upon the project circumstances, our engineers will consider various remedial measures such as regrading the site to obtain more suitable conditions, management of groundwater, and design of retaining structures. Our staff is familiar with a wide variety



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of retaining structures, including gabion baskets, soldier beam and lagging walls, sheet piles, reinforced concrete and reinforced earth slopes.



FOUNDATION DESIGN RECOMMENDATIONS

POTESTA's staff has experience with various types of foundations and will recommend the appropriate type of foundation given the anticipated application and site conditions. The different types of foundations with which our staff is familiar are spread and strip footings, steel piles, auger-cast concrete piles, drilled piers, and reinforced mats.

Preliminary foundation design recommendations and cost analyses are commonly performed during the initial phases of a project to assist in determining project feasibility. As project planning progresses, the preliminary alternatives will be revised into a final recommendation which can then be incorporated into the project's construction documents or developed as an independent package for presentation to the contractor.

The final recommendation can include construction drawings, technical specifications, recommendations for allowable bearing capacity, engineer's construction cost estimate, and contractor's bid sheet.



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POTESTA & ASSOCIATES, INC.

Hydrology and Hydraulics Design

Our engineers have extensive experience in the application of hydrology and hydraulic principles to the design of real world systems. These applications include:

- Drainage Structure Sizing
 - Stream Relocations
 - Culverts
 - Channels
- Pond and Dam Design
 - Sediment Ponds and Basins
 - Spillways
 - Design/Rehabilitation
 - Slurry Impoundments
 - Lagoons
 - Dams
- Detention and Retention Systems
 - Ponds
 - Pipes
 - Underground Bladders
- Stormwater Management System Design
- Floodplain Management Permits/Approval
- Floodway Studies
 - FEMA (Federal Emergency Management Agency)
 - NFIP (National Flood Insurance Program)
 - Flood Elevation Surveys/Certifications
 - Flood Routing
- Dam Break Analysis
- Hydrology Surveys
- Stream Gauging
- Rainfall and Flow Data Collection
- Stormwater Drainage System Design
- Pressure Pipe Systems
- Stream Restoration Plans
- Natural Stream Channel Design/Restoration
- Expert Witness Testimony

To complete these types of applications, our engineers, scientists, and surveyors work jointly to develop an effective and economical solution to your situation. Their analyses use widely accepted computer models.



Potesta & Associates, Inc. typically uses the following computer modeling programs:

- HEC-RAS
- HEC-HMS
- TR-20/TR-55
- StormCAD
- CulvertMaster
- FlowMaster
- PondPack
- CORMIX

We have provided these services to a wide variety of public and private sector clients. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner.



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Potesta & Associates, Inc. (POTESTA) provides construction monitoring and construction management 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. Our typical involvement in such projects includes:

- Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.
- Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.
- POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.
- Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.
- Preparation of summary of construction reports, including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.
- Preparation of certifications as may be required.



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Potesta & Associates, Inc. (POTESTA) offers its clients exceptional expertise and experience when it comes to the permitting process, including all phases of application preparation, negotiations, modifications, compliance and renewal at all levels of government. Our permit services cover air, mining (coal and quarries), water and waste disposal permits.

AIR

Our firm offers complete air permitting and consulting services to assist industry in complying with today's complex air quality regulations. Our staff has experience in identifying, characterizing and permitting air pollution sources for a variety of industries, including:

- Coating Operations
- Petroleum and Petrochemical Operations
- Chemical Manufacturing
- Manufacturing Facilities
- Mining
- Quarries
- Natural Gas Compressor Stations
- Electric Utilities

Our air quality experts have comprehensive knowledge of federal, state and local regulations, as well as experience in complex Title V applications. Our services include identification of potential air pollution sources, development of control strategies, preparation of permit applications, emissions inventories, compliance audits and regulatory liaison.

At both the state and federal levels, we help clients interpret and comply with air regulations, including the New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPS). We can suggest emissions control strategies to meet both current and anticipated regulations, including BACT, MACT and LAER.

MINING

In recent years, mining permits have become increasingly complex, requiring diverse expertise in mining techniques, engineering, environmental regulations, benthic studies, hydrogeology and hydrology. Our staff has broad experience in providing innovative solutions to various mining problems.



Although the objective of a permit application is to receive agency approval in a timely manner, the client does not benefit if the application does not allow for effective operations. We work with our clients to ensure that your operational needs are met while allowing for essential flexibility. Several members of our staff have mining industry experience, and they understand the requirements vital to an effective operation.

From the beginning of the permit process, POTESTA involves the reviewing agency to allow its concerns to be addressed prior to submittal of the application. Often, this reduces the amount of review comments and revisions which could slow the approval process. Our thorough knowledge of the various phases and requirements of the permitting process, coupled with our technical



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expertise, may facilitate the approval of permits that are operation based and thus more acceptable to you.

Our staff members have the knowledge and expertise to develop modification submittals that are timely and cost effective. We can also expedite permit renewal applications with minimal input from our busy clients.

WATER

The Clean Water Act regulates the discharge of pollutants into surface water through the National Pollutant Discharge Elimination System (NPDES). POTESTA has extensive experience in water permitting projects, including industrial and municipal wastewater and storm water discharges.

Perhaps the most important aspect of the permitting process is determining the approach most beneficial to the client. Our personnel are familiar with both state and federal permitting strategies and can provide capable guidance for appropriate and applicable permits for a project.

Our staff specializes in reviewing facility wastewater flows and recommending methods of minimizing or eliminating these discharges. Our knowledge of alternatives for wastewater management can save clients money and potential liability.

We can help the client decide which type of permit coverage is required for a given project. Also, with our thorough understanding of state and federal wastewater permitting, we have been able to renegotiate numerous draft permits to achieve more acceptable requirements.

POTESTA can prepare a draft NPDES permit for submission to the appropriate agency. This gives the client more input regarding the permit requirements. Our personnel are experienced in permit writing and will work closely with agency staff to ensure that the permit meets both regulatory requirements and the needs of our clients.

WASTE

POTESTA is highly knowledgeable of the challenges faced in receiving a permit to allow proper disposal and/or use of your waste products. Our staff has experience with municipal and industrial solid waste and construction demolition waste and hazardous waste. They have designed landfills, transfer stations, recycling facilities, closure plans and corrective action plans.

We have experience in:

- Bioremediation
- Resource Recovery
- Sludge Handling/Stabilization
- Utilization of Coal Combustion By-products
- Construction Monitoring/Management

Our staff of civil, geotechnical, environmental and mining engineers; geologists; hydrogeologists; biologists and surveyors strives to obtain the maximum flexibility for your facility, whether it is a new operation, the modification of an existing facility, or a permit renewal. Regulatory liaison assistance is a key component in our efforts.



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DAM INSPECTIONS FOR COOLFONT (LAKE SIRI) DAM

Coolfont Resort

Berkeley Springs, Morgan County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Coolfont Resort to perform a dam inspection for the Coolfont (Lake Siri) Dam near Berkeley Springs, Morgan County, West Virginia. Lake Siri is a large recreational lake at the Coolfont Resort. The Lake Siri Dam is an earth fill embankment that has dam height of approximately 23 feet and has a maximum capacity of 301 acre-feet that impounds Sir John Run, a tributary of the Potomac River.

POTESTA's services included:

- Submitted Freedom of Information Act (FOIA) request to the West Virginia Department of Environmental Protection Dam Safety Section (Dam Safety), and performed file reviews to obtain copies of past inspection reports, drawings and other pertinent information available in order to obtain a better understanding of the dam.
- Met with client's representatives familiar with the dam, to obtain additional information pertaining to the operation, maintenance, and history of the dam.
- Visited the site to conduct visual observation of the Dam's crest, upstream/downstream embankment slopes, abutment areas, and principal and emergency spillway structures to identify deficiencies and potential hazards.

POTESTA then prepared and submitted dam inspection reports in accordance with the Dam Safety Regulations. The report included visual observations made during the site visit, photographs, our opinions and conclusions relative to the condition of the dam, recommendations for correcting deficiencies and suggestions for future maintenance of the dam, and an engineer's certification statement.



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Project Abstract

PINEY CREEK DAM

Raleigh County Recreation Authority

Lake Fitzpatrick Park - Surveyor, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the Raleigh County Recreation Authority to design and oversee construction for a new dam on Piney Creek adjacent to Lake Fitzpatrick Park in Raleigh County, West Virginia. A previously existing dam on the creek had been washed out by flooding. The purpose of the dam on the creek was to impound water to an elevation which would allow flow from the creek to pass through an inlet pipe which fed nearby Lake Fitzpatrick. Lake Fitzpatrick has a very small water shed and therefore has difficulty maintaining normal pool elevation. When the original dam on Piney Creek washed out, the pool level subsequently dropped in Lake Fitzpatrick. The following is a list of services provided:

- ▶ Development of a preliminary evaluation report which provided several alternatives for methods of providing inflow to Lake Fitzpatrick.
- ▶ Design of a rock fill dam with a crest length of approximately 40 feet and an average height of 10 feet. The design included generating construction drawings and specifications.
- ▶ Preparation of permits including a Corps of Engineers 404 Nationwide permit and a Public Lands Corporation Stream Activity Permit.
- ▶ Preparation of bidding documents, including bid quantity list, conducted pre-bid meeting, and assisted the Raleigh County Development Authority with award of the successful bid.
- ▶ Contract administration and Construction Monitoring services.
- ▶ Quarterly inspections and reports required by WVDEP (also for both facilities).



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DAM INSPECTIONS FOR SLEEPY HOLLOW SUBDIVISION DAM

*Sleepy Hollow Lot Owner Association, Inc.
Berkeley County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Sleepy Hollow Lot Owner Association, Inc. to perform several dam inspection intervals for the Sleepy Hollow Dam located in the Sleepy Hollow Subdivision in Berkeley County, West Virginia. Sleepy Hollow Subdivision is a 73-unit family housing development. The Sleepy Hollow Subdivision Dam is an earth fill embankment that impounds Cherry Creek, a tributary of the Potomac River.



The dam is 42 feet tall, has a surface area at normal pool elevation of approximately 7.3 acres, and impounds a maximum water volume of 93.2 acre-feet.

POTESTA's services included:

- Submitted Freedom of Information Act (FOIA) request to the West Virginia Department of Environmental Protection Dam Safety Section (Dam Safety), and performed file reviews to obtain copies of past inspection reports, drawings and other pertinent information available in order to obtain a better understanding of the dam.
- Met with Sleepy Hollow Lot Owner Association, Inc. representatives familiar with the dam, to obtain additional information pertaining to the operation, maintenance, and history of the dam.
- Visited the site to conduct visual observation of the Dam's crest, upstream/downstream embankment slopes, abutment areas, and principal and emergency spillway structures to identify deficiencies and potential hazards.

POTESTA then prepared and submitted dam inspection reports in accordance with the Dam Safety Regulations that included visual observations made during the site visit, photographs, our opinions and conclusions relative to the condition of the dam, and an engineer's verification statement certification.



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HOLZ IMPOUNDMENT UPPER WARD IMPOUNDMENT LOWER WARD IMPOUNDMENT

*The Dow Chemical Company
South Charleston, West Virginia*

Potesta & Associates, Inc. (POTESTA) has been retained by The Dow Chemical Company (DOW) since 2005 to provide a variety of services on three DOW surface impoundments located in South Charleston, West Virginia. Lower Ward is reclaimed with a portion of the site currently used as a paved parking lot for the Kanawha Valley Community & Technical College. The Upper Ward Impoundment is a freshwater impoundment and the Holz Impoundment is utilized for fly ash disposal.

The following is a list of services provided by POTESTA:

- Annual/biannual inspections and professional engineer certification required by the West Virginia Department of Environmental Protection (WVDEP), Dam Safety Section.
- Preparation of permit modifications that are required as a result of changes required for the facility.
- Regular updates to the Monitoring and Emergency Warning Plan.
- Letter reports to the WVDEP, Dam Safety Section.
- Preparation of engineering plans for various projects, such as trash rack replacement, security systems, pipeline replacement and pipeline re-routing.
- Piezometer readings.
- Surveying services.
- Construction monitoring.



POTESTA has also provided DOW with other engineering, remediation, and environmental services. These include water and well sampling, soil/rubble risk assessment, geotechnical services, containment certifications, and pipeline permitting and design.



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POND #3 IRRIGATION IMPOUNDMENT

*Pikewood National Golf Course
Reedsville, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Pikewood National Golf Course to review the conditions of their irrigation impoundment as it pertained to the West Virginia Dam Safety Regulations. The impoundment was originally intended by its Owner to not meet the minimum requirements of a dam; however, after construction had been completed, it was determined that the height of the embankment plus the volume of storage did in fact qualify as a regulated dam according to the West Virginia Department of Environmental Protection (WVDEP). Pikewood asked POTESTA to provide the documentation and information necessary to meet the minimum standards and to obtain the necessary Dam Safety Permit from the agency.

POTESTA performed the following services to obtain approval from the WVDEP:

- POTESTA completed a subsurface exploration of the embankment. Soil samples were collected and piezometers installed to allow measurement of the phreatic surface. Laboratory testing was performed to determine the strength characteristics of the soil.
- A stability analysis was completed to determine that the minimum factors of safety were obtained for global stability.
- It was necessary to modify the emergency spillway to accommodate the necessary design storm; therefore, POTESTA performed hydraulic calculations to design a box culvert and associated spillway channel. The box culvert was necessary to allow for a road to cross the top of the embankment. Permanent synthetic lining was necessary in the channel due to the large velocities and shear strengths resulting from steep grades.
- POTESTA performed a dam break analysis of the structure to determine if downstream properties would be adversely impacted if a catastrophic failure were to occur.
- POTESTA developed a maintenance plan and inspection schedule for the impoundment.

After POTESTA completed their services, a dam safety permit application was assembled and submitted to the WVDEP, who reviewed and approved the impoundment as a certified Class 3 Dam. POTESTA continues to assist the Pikewood National Golf Course in meeting their inspection and maintenance requirements.



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GENERAL CONSULTING SERVICES

Kanawha Eagle, LLC
Winifrede, West Virginia

Kanawha Eagle, LLC operates a deep mine complex in eastern Kanawha County. Potesta & Associates, Inc. (POTESTA) has provided a wide variety of engineering services to assist in their day-to-day and long-term operations. Among the many services that have been provided are:

- Surveying.
- Design of new decant system including WVDEP and MSHA approvals.
- Redesign of Stages 6 and 7 of the slurry impoundment.
- Assistance with slurry injection permit.
- Compaction tests on the coarse coal refuse placement in both the slurry impoundment and the side hill embankment.
- Foundation recommendations for a new conveyor belt line and coal storage silos.
- Weekly inspections of the impoundment and preparation of quarterly reports.
- Performance of an environmental/reclamation liability assessment, including evaluation of abandoned mine lands (pre-1977 mining) on the property.
- Construction monitoring during rehabilitation of emergency spillway.
- Assistance with a permit modification including drainage calculations.
- Preparation and annual update of Emergency Response Plan.
- Modification of underdrain system.
- Ownership and control change for a river loadout.



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GIGER STREET LANDSLIDE REPAIR

*City of Huntington – Department of Public Works
Huntington, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the City of Huntington Department of Public Works (Huntington) to complete a subsurface exploration and to prepare a repair and stabilization design for a section of failed soil and weathered rock slope along Giger Street in Huntington, West Virginia. The failed slope was recently repaired but storm water runoff and erosion associated with an adjacent access road and sanitary sewer line break served to reactivate the failure. The slope failure was situated immediately upslope from a residential home limiting access to the site.



Following completion of four subsurface borings within and below the failed slope, POTESTA prepared regrading plans for the stabilization of the slope. The design included the installation of a series of surface diversion ditches along the top of the slope, as well as the installation of rock toe key and regraded slope with underdrains. POTESTA prepared a bid package for the project and worked with the Public Works director to advertise and receive bids for the project. Following issuance of a construction contractor, POTESTA provided compaction testing and construction observation services for the City of Huntington on the project.



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CLENDENIN COMPRESSOR STATION LANDSLIDE EVALUATION REPAIR

*Columbia Natural Gas
Clendenin, West Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by Columbia Natural Gas (Columbia) to evaluate and design remedial measures for a landslide at Columbia's Clendenin Compressor Station. The landslide was located adjacent to the office and maintenance building at the facility and threatened to damage the structure.

POTESTA provided surveying services to map the project area and performed a subsurface exploration to assist in evaluating the landslide condition. The remedial measures to correct the landslide area

included the design of an approximately 200-foot steel soldier beam and concrete lagging retaining wall. The retaining wall included a rock anchor tie-back system.

As part of the project, POTESTA assisted Columbia with contract administration and performed construction observation services during the construction phase of the project.



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BEVINS LANDSLIDE EMERGENCY

*Commonwealth of Virginia, Department of Mines, Minerals and Energy
Buchanan County, Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by the Commonwealth of Virginia, Department of Mines, Minerals and Energy, Abandoned Mine Land Program (DMME-AML) to provide professional engineering design services under the Small Purchase Procurement Program for Professional Services (09AML06). These services consisted of developing an engineering report, construction plans and specifications, and a material schedule for the Bevins Landslide Emergency Project in Buchanan County, Virginia.

The project consisted of:

- Stabilization/removal of a slide that occurred behind the Bevins residence.
- Removal and disposal of slide material that has already been deposited on the old mine bench.
- Installation of temporary and permanent drainage control measures.
- Upgrade of the existing entrance roadway onto the mine bench where the Bevins residence is located.
- Installation of required erosion and sedimentation control measures including revegetation of disturbed areas of the site.



POTESTA performed the surveying, subsurface exploration, and geotechnical design necessary to complete this project.



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EMERGENCY LANDSLIDE REMEDIATION/TANK REPAIR

Client Confidential
West Virginia

Potesta & Associates, Inc. (POTESTA) was contracted by a nationally reputable energy company to respond to a landslide that occurred and that resulted in a compromise to the structural integrity of a 2 million gallon capacity water storage tank. An identical tank within the confines of a bolted-steel secondary containment vessel was also at risk due to the slide. The West Virginia Department of Environmental Protection had approached our client and requested that the tanks be taken out of service until remedial actions had been performed.



Through the combination of rapid remedial actions and creative engineering, POTESTA was able to salvage the facility by taking the overhanging tank off-line, employing fill slope stabilization to the slip area, constructing an internal temporary secondary containment wall within the existing containment area, and repairing the damaged wall panels. All of this was done in an expedient manner (+/- 8 weeks), working through adverse environmental conditions without losing use of the inner tank.



The tank manufacturer was contacted and became a part of the decision process. By salvaging the facility, our client's losses were greatly reduced. Due to the rapid response and the ability for POTESTA engineers to remain on-site continually during the remediation and repair, ongoing operations that required water use from the inner tank were not compromised.

This project exemplifies the quality of engineers at POTESTA. We use creativity and superior management to be successful in all of our projects, be they large or small.



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RESIDENTIAL LANDSLIDE GORDON DRIVE

Jerry Ware

Charleston, Kanawha County, West Virginia



Potesta & Associates, Inc. (POTESTA) was retained by Mr. Jerry Ware to provide civil engineering design services for a slip that occurred directly behind his home along Gordon Drive in Charleston, West Virginia. The slide caused a raised deck that was attached to the residence to become undermined and fail, as well as exposing portions of the home's foundation. A large rock toe key was utilized to gain stability and support off the underlying bedrock surface prior to the regrading. The failed material was removed and conditioned before being placed back in compacted lifts which extended to the final grades proposed in POTESTA's design.

- **Surveying** – Topographic mapping of the slide area. This mapping was utilized to design a globally stable slope.
- **Coordination and Consulting with Various Groups/Agencies** – Working with the City of Charleston Engineering Department, Charleston Sanitary Board, and coordination with landowner(s). Also, coordinated with qualified contractor(s) to provide competitive cost to the landowner.
- **Civil Site Design and Construction Documents** – Stabilized slope design and grading plan including cut/fill for the construction site and construction documents.
 - Construction Detail Drawings – Site plan and profile, rock toe key design detail, underdrains and groundwater control, and erosion and sediment control details.
- **Construction Observation** – On-site inspection and materials testing (compaction, concrete, etc.).



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BOWSER STREET LANDSLIDE REPAIR

*Town of Granville
Granville, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Granville (Granville) to complete a subsurface exploration and to prepare a repair and stabilization design for a section of failed soil and weathered rock slope along Bowser Street in Granville, West Virginia. The slope failure was situated immediately down slope from a residential home limiting access to the site. POTESTA completed the following tasks in accomplishing the repair:

- Preliminary and continued surveying to establish limits of disturbance and property boundaries, as well as verify quantities during construction.
- Five subsurface borings were completed above, below, and within the slope in order to examine soil conditions and bedrock location.
- Cost-effective analysis on various possible solutions.
- Design of an engineered soil slope with a rock toe key at the base of the slip.
- Erosion and sediment control plans.
- Grading and drainage plans.
- Participated in condemnation hearings on select property.
- Coordinated with property owners.
- Construction administration (i.e., preparing a bid package and working with the town to receive bids and select contractor for the project).
- Construction monitoring, including bearing capacity and compaction testing.



Slide Before Repair



During Construction of Repair



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FALLAM DRIVE LANDSLIDE REPAIR

*Travelers Insurance
Malden, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Travelers Insurance (Travelers) to complete a subsurface exploration and preparation of plans to fix a slip along Fallam Drive in Malden, West Virginia. A water line owned by West Virginia American Water ruptured along Fallam Drive, which resulted in a section of river bank just below Fallam Drive to fail.



POTESTA completed a topographic survey to result in mapping of the failed area and local utilities. This mapping was utilized in the final stabilized slope design and to prepare construction drawings. POTESTA completed a subsurface exploration which involved the advancement of two borings to identify the type of soils along the failed riverbank. Once the final construction plans were prepared, POTESTA assisted Travelers with the pre-bid meeting and provided a list of contractors POTESTA had worked with in the past to bid on the project. Once the contractor was awarded the job, the slope repair construction work was completed within three days.



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MAY PORTAL HOME LANDSLIDE MAINTENANCE

*Virginia Department of Mines, Minerals & Energy
Abandoned Mine Land Unit
Buchanan County, Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Virginia Department of Mines, Minerals & Energy – Abandoned Mine Lands (VAAML) to reestablish and stabilize a previously reclaimed deep mine portal site in Buchanan County, Virginia. The previous project included stabilization of a localized slide area, backfill and reclamation of the existing highwall, and construction of wet seals in the existing portals.



A slide area had developed above and within the limits of the highwall backfill material previously placed at the portal site. There were also reports that the riprap material used as the toe buttress provided habitat for snakes which were often seen at or near the existing residence. During heavy rainfall events, an existing ditch located near the toe of a previously reclaimed slope reached capacity and overflowed across the lawn areas of the adjacent residence. Riprap was also displaced in the primary riprap-lined drainage conveyance channel. There was also no defined ditch to convey mine discharge water from the wet mine seal area.



POTESTA prepared a regrading plan and design to re-stabilize the failed section of slide, including installing a new grouted riprap buttress, designing drainage at the toe of the buttress and around the existing residence, and restoring other problem drainage structures and areas that were installed as part of the original reclamation project. This work required the construction of a fence to protect the existing well house and adjacent occupied residence located on the site.

As part of the project, POTESTA assisted the VAAML with the contract bidding and evaluation of bids.



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GEORGE'S CREEK (LUCAS) LANDSLIDE MAINTENANCE

*West Virginia Department of Environmental
Protection - Office of Abandoned Mine Lands
Kanawha County, West Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by the West Virginia Department of Environmental Protection - Office of Abandoned Mine Lands (WVDEP) to evaluate and perform geotechnical engineering services for a landslide related to historic mining activity which was threatening a nearby residential structure.

A portion of the existing hillside immediately adjacent to the rear of the residential structure was excavated prior to construction of the structure to a near vertical slope exposing weathered shale and a coal seam near the slope's base. The exposed coal seam was determined to be the No. 2 Gas seam which was reportedly mined in the 1950s. Some drainage was noted flowing from the coal seam and the resulting water was conveyed through a nearby culvert to Georges Creek. Attempts were made by WVDEP to excavate loose rock and soil from the hillside in an effort to improve stability of the slope. Following this initial work, the slope continued to slough with periodic small slides and slope movement believed to be caused by continued subsidence of the underground mine works.

POTESTA performed a subsurface exploration to assist in evaluating the landslide condition, including the type and condition of the rock located in the slope, as well as the attitude, thickness and condition of the underlying coal seam. POTESTA survey crews also completed a topographic survey of the affected area including the surrounding residential structure, drains and wooded hillside. The remedial measures to correct the landslide area included the design of a 25-foot high steel soldier beam and concrete lagging retaining wall with sloped, compacted backfill constructed from on-site materials.



The retaining wall design required the application of a rock anchor tie-back system due to mine voids existing at the base of the hillside slope that were encountered during the subsurface exploration.

As part of the project, POTESTA assisted the WVDEP with contract administration and performed construction observation services during the construction phase.



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TAYLORVILLE (RAY) LANDSLIDE EMERGENCY

*West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands
Mingo County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVDEP) to develop a stabilization plan for a landslide project at Taylorville, Mingo County, West Virginia. Following a period of heavy precipitation, a landslide occurred on a steep hillside behind a mobile home. The landslide pushed the mobile home off its foundation and destroyed a one-room extension along the rear of the mobile home.



POTESTA surveyed the landslide area to develop topographic mapping, prepared a stabilization plan to remove the landslide soils and backfill the area with a rock buttress. The stabilization plan also included an underdrain at the base of the rock buttress to convey drainage to the Taylorville (Cantrell) project drainage system. The plan called for 2,000 cubic yards of unclassified excavation, 1,750 cubic yards of shot rock backfill (buttress construction), 200 cubic yards of soil cover, and 400 feet of underdrain.

POTESTA prepared drawings, technical specifications, contractor's bid form, engineer's construction cost estimate, and calculations brief for the project. POTESTA also attended the pre-bid and pre-construction conferences to assist WVDEP with the project.



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WILLIAMSON (HATFIELD) NURSING HOME LANDSLIDE MAINTENANCE

*West Virginia Department of Environmental
Protection - Office of Abandoned Mine Lands
Williamson, West Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by the West Virginia Department of Environmental Protection - Office of Abandoned Mine Lands (WVDEP) to evaluate and perform geotechnical engineering services for a landslide below the parking lot of the Mingo Manor Nursing Home and above the Hatfield residence. The project area was the site of a former WVDEP reclamation project 15 years earlier. The previous project included regrading of the mine spoil that had been formerly disposed of in this area, as well as drainage improvements.

A landslide occurred in the hillside threatening damage to the residence at the base of the hillside, as well as causing damage to the nursing home parking lot at the top of the hillside and potentially threatening damage to structures at the nursing home facility.

POTESTA performed a subsurface exploration to assist in evaluating the landslide condition. The remedial measures to correct the landslide area included the design of a 456-foot steel soldier beam and wood lagging retaining wall. The retaining wall included a rock anchor tie-back system to minimize the potential for additional settlement of the nursing home parking lot area and potential future damage to the structures within the nursing home facility.

As part of the project, POTESTA assisted the WVDEP with contract administration and performed construction observation services during the construction phase of the project.



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BONA VISTA DRIVE SLIP REPAIR SOLDIER BEAM & LAGGING RETAINING WALL

*Travelers Insurance/City of Charleston
Charleston, Kanawha County, West Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by Travelers Insurance to provide civil engineering design services to repair a section of hillside below Bona Vista Drive in Charleston, West Virginia. This project included a subsurface exploration study, engineering design, and a global stability evaluation of the failed slope in a residential neighborhood. The slide was caused by a water main break beneath the paved Bona Vista Drive. The slope stabilization method involved the installation of a soldier beam and lagging retaining wall located in the area of the scarp just off the edge of

the road. The remaining failed slope material below the wall was removed and replaced with compacted soil backfill.

- **Surveying** – Topographic mapping of the project area.
- **Coordination and Consulting with Various Groups/Agencies** – Working with the City of Charleston's Engineering Department, coordination with landowner(s) and utility providers in the area. Also, attendance of pre-bid and pre-construction meetings to assist the client in bid review and decision making.
- **Civil Site Design and Construction Documents** – Retaining wall design and grading plan including cut/fill for the construction site, and construction documents.
 - Construction Detail Drawings – Site plan and profile, retaining wall section and profile, pavement plan and detail, and erosion and sediment control details.
 - Bid Documents – Preparation of bid tables, contract documents, and review of contractors' bids.
- **Construction Observation/Administration** – Various services during the construction phase including schedule coordination between client and contractor(s), and on-site inspection and materials testing (compaction, concrete, etc.).



POTESTA & ASSOCIATES, INC.

Charleston, WV • Morgantown, WV • Winchester, VA

Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com

GRANDVIEW SLIP REPAIR

*City of Charleston
Kanawha County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the City of Charleston to provide civil engineering design services for a slip that occurred on Charleston, West Virginia's Westside. This project involved a geotechnical assessment and development of regrading construction plans for the repair of a failed 50-foot tall section of a soil slope below Grandview Drive in Charleston, West



Virginia. The slope failure occurred between two adjacent residential structures and encompassed a sanitary sewer main, as well as storm drainage pipe. 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 bedrock surface and included the installation of a shot rock toe buttress which was installed along a natural topographic bench near the toe. Following the completion of the slope repair, the affected utilities were installed either below or outside the limits of the regraded slide area.

- **Surveying** – Topographic mapping of the project area.
- **Geotechnical Exploration** was completed to determine the extent of the failed soil mass, as well as determine the depth of the underlying bedrock.
- **Civil Site Design and Construction Documents** – Regraded soil slope design with grading plan including cut/fill for the construction site.
 - Construction Detail Drawings – Site plan and profile, cross-section profiles, rock toe key detail, and erosion and sediment control details.
- **Construction Observation/Administration** – Various services during the construction phase including schedule coordination between client and contractor, and on-site inspection and soil density testing.



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EDUCATION

M.S. Civil Engineering, 1979
West Virginia University

B.S. Civil Engineering, 1978
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

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

PROFESSIONAL CERTIFICATIONS

40-Hour Health and Safety Training

SERVICE ON BOARDS AND COMMISSIONS

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

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

PROFESSIONAL AFFILIATIONS

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

AREAS OF SPECIALIZATION

Management of design and permitting of civil, environmental, geotechnical, and mining engineering projects. Siting, 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.

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.

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)

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.

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 design models to determine a stable 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.

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

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 an existing hilltop. The resulting material was placed or wasted in series of three side hill fills 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 as several of the structures. Work included an extensive review of several years of case records provided for the case including a review of existing utility maintenance records, historic climatologic data, river stage information and depositional testimony from many of the affected parties. A summary of 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 collect 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 insitu 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 as a result 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.

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 of 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.



EDUCATION

- M.S. Civil Engineering, 1995
West Virginia University
- B.S. Civil Engineering, 1993
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

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

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.

- 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. Michael HVAC Commercial Building – Monongalia County, WV

- West Run Student Housing (including 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. Stephens 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
- Monongalia General Hospital Expansion and Access Road – Morgantown, WV
- Kasson Elementary/Middle School Repair Project – Kasson, WV
- North Marion Vocational/Technical Center School Repair Project, 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 in Wetzel County, WV
 - EQT – Plasma Compressor Station Pad in Monroe County, OH
 - EQT – Corona Compressor Station Pad in Wetzel County, WV
 - EQT – Gemini Compressor Station Geotechnical Feasibility in Marion County, WV
 - EQT – Gemini Interconnect Pad in Marion County, WV
 - Basic Systems, Inc. – Waynesburg Compressor Station Addition in Greene County, PA
 - Basic Systems, Inc. – Gettysburg Compressor Station Addition in Adams County, PA
 - Basic Systems, Inc. – Greencastle Compressor Station Addition in Franklin County, PA
 - Basic Systems, Inc. – Files Creek Compressor Station Addition in Randolph County, WV
 - Basic Systems, Inc. – Smithfield Compressor Station Addition in Wetzel County, WV
 - Dominion Transmission – Crayne Compressor Station in Greene County, PA
- Numerous Marcellus Well Pad Sites – Northern WV
 - Stone Energy – Mills Wetzel #3 Well Pad in Wetzel County, WV
 - Stone Energy – Conley Well Pad in Wetzel County, WV
 - Stone Energy - Langmyer Pad in Wetzel County, WV
 - Mountaineer Keystone – Mackey-Wolfe Well Pad in Barbour County, WV
 - Chesapeake Energy – Rayle Coal Co. Well Pad in Ohio County, WV
 - Chesapeake Energy – Sew Trust Well Pad in Ohio County, WV
- Numerous residential geotechnical projects in Charleston and Morgantown, WV
- Geotechnical Recommendations for Natural Gas Transmission Lines including Horizontal Directional Drilling projects
 - EQT Midstream H-310 Coal Refuse Area in Monroe County, OH
 - EQT Midstream, Harrison County HDD in Harrison County, WV
 - EQT Midstream, Ohio River HDD in 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:

- 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 Tupper's Creek Emergency Landslide – Tupper's 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 & 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 Replacement – Roane County, WV

Expert Witness

Served as an 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.

- JKLM Energy, LLC et. al. vs. Big Level Wind, LLC, John Hancock Life Insurance et. al. Court of Common Places of Potter County, Pennsylvania No. 86 CD 2017 – Construction, geotech and civil site design associated with gas well pads.
- Wilkins, Scott v. R&R Holdings, Civil Action 15-c-295 – Flooding and drainage
- Larry Rine, et al. v. Chesapeake Appalachia, LLC. Robinson & McElwee, Civil Action No. 5:11-CV-4 – Landslide on Natural Gas Well Pad
- Bisacca v. Pennsylvania Department of Transportation. Thomas J. Dempsey, Attorney at Law – Earthwork Construction Practices
- Sven Verlinden and Lisa Verlinden v. Morgantown Utility Board, et al. Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-573, Combined Sewer Flooding
- Russell D. Kitchen and Suzanne G. Kitchen v.

- Morganton Utility Board. Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-745, Combined Sewer Flooding
- Darin O. Arnold and Sarif J. Arnold v. Morgantown Utility Board. Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-749, Combined Sewer Flooding
- Rider v. Fairmont Homes, LLC., Flaherty, Sensabaugh & Bonasso, PLLC – Claim No. 1012802, Landslide and Residential Construction Issues
- 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
- L.J.H., Inc. v. Quadruple S. Farms, LLC and Four-S-Development, Bowles Rice LLP – Civil Action No. 09-C-438, Rockfall and Commercial Construction Practices
- Mingo County Airport Authority Claim Against Appalachian Paving & Aggregate, Inc., Robinson McElwee, PLLC – Earthwork and Construction Related Issues
- Colaianni Construction, Inc. Claim for Cost Recovery Against Koker Drilling at the Wetzel County Hospital, Wellness Center Addition, Spillman, 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
- Stan-Corp. v. Scott Properties, LLC. et al., Bowles Rice LLC – Landslide Impacting Roadway and Property
- Stephen C. Fish et al. v. McCloy Construction et al., Bowles Rice, LLP – Civil Action 03-C-3050, Structure Foundation Settlement
- Industrial Machine v. American Geotech. Bowles Rice, LLP – Civil Case 02-C-115, Subsurface Exploration and Geotechnical Design
- Pell, Robert K., et al. v. SAMOA, LLC, et al., Claim No.010510386236: - Drainage Related Claim
- 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, compressive 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

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.:

- 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, West Virginia
- 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.

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.

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.

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.

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.



EDUCATION

- B.S. Civil Engineering, 2002
West Virginia University Institute of Technology
- A.S. General Science, 2000
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia

SERVICE ON BOARDS AND COMMISSIONS

WV Society of Professional Engineers Board Member

AREAS OF SPECIALIZATION

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

Project responsibilities include civil site design, hydrologic and hydraulic design, grading plans, water line plans, sewer line plans, roadway layout, utility design, and development of technical specifications, preliminary cost estimates, schedule and budget tracking.

PROFESSIONAL EXPERIENCE

Civil/Site Design

Development of grading plans, cut/fill analysis, utility design/layout, engineer's cost estimates, preparation of permit applications, consulting with clients, architects, regulatory agencies, and municipalities. Detailed design, preparation of construction drawings, technical specifications, cost estimate, contractor's bid documents, review and recommendation of contractor's bids, and review of shop drawings.

- West Virginia Water Development Authority Office
- Pison Development – 10 apartment complex projects
- Double C Enterprise – Kenna Ridge Business Park
- Tricor Development – Hurricane Market Place Parcels A and B
- Green Eagle Development – four residential site development projects
- Ervin Development – Woodstock commercial site development project
- MDG Development – Oakland subdivision
- Tucker County Industrial Park – water and sewer line expansion
- ZMM – Bradshaw High School project
- Dunlap Builders – West Run Student Housing
- Allegheny Energy Supply's Fort Martin Power Station – fly ash landfill expansion project

Flood Studies/Stormwater Management

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

AECOM – Subsurface exploration to result in geotechnical engineering design recommendations for the planned Marshall University (Marshall) Indoor Athletic Facility at Marshall University in Huntington, West Virginia. This indoor practice facility is located to the east of the existing Marshall stadium on a 6-acre tract of land which is situated near 3rd Avenue. This project consisted of a new indoor practice facility and integrated masonry office and classroom structure which will house the sports medicine department.

Huntington Sanitary Board, North Edgemont Road Landslide – Completed subsurface exploration, installation of six inclinometers to monitor the slope stability and overall movement of the slope, laboratory test/inclinometer data evaluation, as well as worked with the Huntington Sanitary Board and community to evaluate possible stabilization options.

Basic Systems- Numerous geotechnical evaluations on Columbia Gas and TransCanada compressor stations related to station upgrades in West Virginia, Ohio, Pennsylvania, and Virginia:

- Files Creek Compressor Station
- Crawford Compressor Station
- Loudoun Compressor Station
- Lost River Compressor Station
- Cleveland Compressor Station
- Elk River Compressor Station
- Nineveh Compressor Station
- Strasburg Compressor Station
- Waynesburg Compressor Station
- Seneca Rocks Compressor Station
- Chantilly Compressor Station
- Smithfield Compressor Station
- Greencastle Compressor Station
- Gettysburg Compressor Station

Cross Development- Numerous geotechnical foundation design reports for Dollar General Stores throughout West Virginia:

- Beverly Dollar General
- Varney Dollar General
- Burlington Dollar General
- Hinton Dollar General
- Smithers Dollar General
- Slansville Dollar General
- Quiet Dell Dollar General
- Wilkenson Dollar General
- Danville Dollar General
- Lerona Dollar General
- Gallipolis Dollar General
- Walker Dollar General
- Ghent Dollar General
- Keyser Dollar General
- Lookout Dollar General
- Salt Rock Dollar General
- Dixie Dollar General



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting.

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

Dana L. Burns

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

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

REGISTERED PROFESSIONAL ENGINEER

Registration Number 9859

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



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston this 11th day of Sept. in the year of our Lord One Thousand Nine Hundred and Eighty Five and of the State the One Hundred Twenty-Second

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Secretary

By Robert S. Scott President

Frank Gaddy

Walter P. Johnson

Kenneth H. Means

The State of West Virginia



THE STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come: Greeting.

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

David B. Sharp

DAVID B. SHARP, ENGINEER, OR ARCHITECTURE, VISITED US BY

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

REGISTERED PROFESSIONAL ENGINEER

Registration Number 14187

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



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

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

[Handwritten signatures]

[Handwritten signature]

[Handwritten signature]



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

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

David M. Kiser

Does, IN PURSUANCE OF AUTHORITY VESTED IN IT

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

REGISTERED PROFESSIONAL ENGINEER

Registration Number 10779

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



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

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Handwritten signature of Kenneth H. Means

Secretary Kenneth H. Means

By

Handwritten signature of Frank Saddy

President Frank Saddy



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come Greeting
"Know Ye" That The State Board of Registration for Professional Engineers
of the State of West Virginia, reposing special confidence in
the Intelligence, Integrity and Discretion of

Jarrett M. Smith

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

REGISTERED PROFESSIONAL ENGINEER

Registration Number 17537

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



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

Members of the Board

James D. Thomas Jr.

Richard E. Dlyna

Blayne S. Stja

William E. Piersen

[Signature]

OF AGRICULTURE D CONFERENCE CENTER

Regulatory Principal-in-Charge
Ronald Potesta – 37 Yrs.

anager
29 Yrs.

valuations
- 22 Yrs.
- 38 Yrs.
7 Yrs.

onitoring
20 Yrs.
13 Yrs.
Yrs.
26 Yrs.
9 Yrs.
3 Yrs.

Environmental/Permitting
Karri Rogers – 16 Yrs.
Charles Haden – 8 Yrs.
Jessica Yeager – 24 Yrs.
Tim Ferguson – 12 Yrs.
Lisa Burgess – 30 Yrs.
Christina Parsons – 22 Yrs.
Daniel Miller, PhD – 40 Yrs.
David Corsaro – 21 Yrs.
Leah Creathers – 14 Yrs.

CAD Designers
Scott Bolyard – 25 Yrs.
Michael Sankoff – 31 Yrs.
Brian Leedy – 18 Yrs.
Chuck Bird – 25 Yrs.
Russ Lester – 29 Yrs.
Joe Martin – 26 Yrs.

West Virginia Ethics Commission
Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Contracting Business Entity: Potesta & Associates, Inc. Address: 7012 MacCorkle Avenue, SE
Charleston, WV 25304

Authorized Agent: Ronald R. Potesta Address: Same as Above

Contract Number: CEOI 1400 AGRI1800000001 Contract Description: Cedar Lakes Dam Restoration/Food Warehouse Slope Stabilization

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.

Test Boring Services and GeoMechanics

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.

Ron Potesta
Dana 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: 

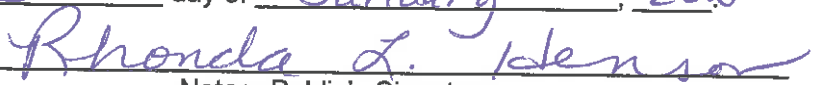
Date Signed: 1/31/18

Notary Verification

State of West Virginia, County of Kanawha

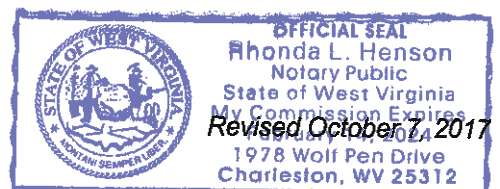
I, Ronald R. Potesta, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 31st day of January, 2018


Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____
Date submitted to Ethics Commission: _____
Governmental agency submitting Disclosure: _____





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

State of West Virginia
 Centralized Expression of Interest
 02 – Architect/Engr

Proc Folder: 405455

Doc Description: Addendum 01, WV Department of Agriculture

Proc Type: Central Contract - Fixed Amt


Date Issued	Solicitation Closes	Solicitation No	Version
2018-01-22	2018-02-01 13:30:00	CEOI 1400 AGR1800000001	2

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

VENDOR
 Vendor Name, Address and Telephone Number:

 Potesta & Associates, Inc,
 7012 MacCorkle Avenue, SE
 Charleston, WV 25304

FOR INFORMATION CONTACT THE BUYER
 Guy Nisbet
 (304) 558-2596
 guy.l.nisbet@wv.gov

Signature X  FEIN # 31-1509066 DATE 1/31/18

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

ADDITIONAL INFORMATION:

Addendum

Addendum No.01 issued to publish and distribute the attached information to the vendor community.

Expression of Interest
(Cedar Lakes Dam Restoration/Food Warehouse Slope Stabilization Project)

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, West Virginia Department of Agriculture from qualified firms to provide architectural/engineering services for the "Cedar Lakes Dam Restoration and Food Warehouse Slope Stabilization Project" per the Expression of Interest, and the Terms and Conditions as attached hereto.

INVOICE TO	SHIP TO
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV25305-0173 US	AUTHORIZED RECEIVER 304-558-3200 AGRICULTURE DEPARTMENT OF EXECUTIVE DIVISION 217 GUS R DOUGLAS LN, BLDG 1 RM 100 CHARLESTON WV 25312 US

Line	Comm Ln Desc	Qty	Unit Issue
1	Engineering Services		

Comm Code	Manufacturer	Specification	Model #
81000000			


Extended Description :
Engineering Services

AGR1800000001	Document Phase Final	Document Description Addendum 01, WV Department of Agriculture	Page 3 of 3
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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.



 (Name, Title)
 Ronald R. Potesta, 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)



(Authorized Signature) (Representative Name, Title)

Ronald R. Potesta, President
(Printed Name and Title of Authorized Representative)

1/31/18
(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 OTHER 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 exceeds 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:  Date: 1/31/18

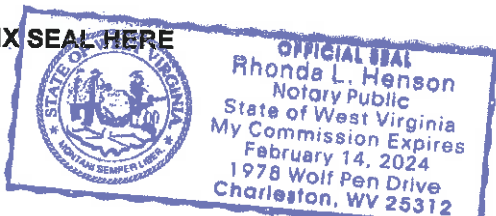
State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 31st day of January, 2018.

My Commission expires Feb. 14, 2024.

AFFIX SEAL HERE



NOTARY PUBLIC



**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

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

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

Potesta & Associates, Inc.

Company

Authorized Signature

Date

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