

ORIGINAL

EXPRESSION OF INTEREST

*Architectural and Engineering Services
Cacapon Resort State Park's Upper and Lower Dams and
Conaway Run Wildlife Management Area Dam Repairs
Solicitation No. CEOI 0310 DNR1600000011*



Prepared for:

**West Virginia Division of Natural Resources
Division of Natural Resources Parks & Recreation – PEM Section
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POTESTA

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1.0 INTRODUCTION

Potesta & Associates, Inc. (POTESTA) is pleased with the opportunity to present this Statement of Qualifications to the West Virginia Division of Natural Resources, Parks & Recreation – PEM Section (DNR) to provide necessary engineering and other related professional services to design and provide construction contract administration services for the repairs necessary to bring Cacapon Resort State Park Upper and Lower Dams and Conaway Wildlife Management Area Dam in compliance with DEP Dam Safety Requirements. We understand required services may include, but not limited to, review with the owner existing plans and conditions, as well as park operating procedures and determine a plan that meets all objectives and can be implemented with minimal disruptions to daily operations; construction design in accordance with all state, federal and local regulations that pertain to the proposed project, while executing the project within the project budget; preparation of bidding and contracting documents; participation in the evaluation of bids received; monitoring and observation construction activities on a periodic basis to insure compliance with plans and specifications; and obtaining necessary environmental permits.



1.1 Corporate Overview

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 more than 100 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; colleges/universities; land developers; attorneys; financial institutions; insurance companies; local, state and federal agencies; construction companies and architects.

POTESTA's staff is committed to delivering innovative, cost-effective solutions to meet our client's complex requirements. The firm's environmental department consists of biologists, geologists, chemists, environmental scientists and environmental engineers, many with advanced degrees (Masters and Ph.D. level). POTESTA's engineering department includes civil, geotechnical, environmental, mining and mechanical engineers. Our registered professional engineers have over 300 years experience among them and are supported by a capable team of engineers, designers, and surveyors.

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 and Dana L. Burns, P.E., Vice President of Engineering, has more than 30 years experience with civil, geotechnical, mining, and environmental engineering projects.

2.0 QUALIFICATIONS AND EXPERIENCE

POTESTA is ready to commit our experienced staff to provide WVDNR all of the services required to bring the Cacapon Resort State Park and Conaway Run Wildlife Management Area dams in compliance with current DEP dam safety projects. In addition to the engineering services, POTESTA is exceptionally well-positioned to offer environmental consulting and regulatory permitting services, which will be necessary for this project.



Quality is extremely important to POTESTA. We have won six "Gold Award in the American Council of Engineering Companies – West Virginia Section" engineering excellence awards competition and approximately 80 percent of our work is from repeat clients; we believe this attests to our commitment for a quality project.

2.1 Civil Engineering

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 prides 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.

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. Frequent communication will be made with the WVDNR and other design professionals to review the completed activities and obtain input for the design process. The following design services for dam-related projects that are routinely completed for clients at POTESTA 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. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.
- **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, rainflow 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. POTESTA will also assist the WVDNR with the bidding of the project, review of the bids, review of pay applications, and requests by the Contractor such as change order requests and requests to substitute equivalent products.

- **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. POTESTA has successfully completed multiple projects that required West Virginia Public Lands Corporations (PCL) permits, Dam Safety permits, construction stormwater permits in addition to WVDEP 401 water quality certification, and wetland permits issued by The U.S Army Corps of Engineers (COE) under Section 404 of the Clean Water Act.

Service briefs of relevant service areas are included in **Appendix A**.

2.2 Similar Project Experience

Following is a brief description of projects we have selected to further demonstrate our abilities with respect to multi-disciplined projects, client budgets, and meeting our client’s goals and construction timeline:

* *Additional details are included in project abstracts in Appendix B.*

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks
Lake Washington	Wood County, West Virginia	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
*Lake Siri	Morgan County, West Virginia	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

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks
*Piney Creek Dam	Surveyor, West Virginia	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
*Sleepy Hollow Subdivision Dam	Berkeley County, West Virginia	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
*Holz, Upper Ward, Lower Ward Impoundments	South Charleston, West Virginia	Jarrett Smith, P.E. <i>Senior Engineer</i> jmsmith@potesta.com (304) 342-1400	Retained since 2005 to provide a 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
Scott Lake-Privately Owned Dam	Randolph County, West Virginia	Pat Taylor, P.E. <i>Senior Engineer</i> pataylor@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
*Pikewood Golf Course Irrigation Impoundment	Reedsville, West Virginia	Dave Sharp, P.E. <i>Branch Manager</i> dsharp@potesta.com (304) 225-2245	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

Project Name	Location of Project	Project Manager	Type of Project/ Goal	Tasks
Morgantown Utility Board's Burroughs Run/Poponoe Run	Monongalia County, West Virginia	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
LP Mineral, LLC	Marion and Monongalia Counties, West Virginia	John R. Spencer <i>Chief Engineering Associate</i> jrspencer@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
*Kanawha Eagle Slurry Impoundment	Winifrede, West Virginia	Dana Burns, P.E. <i>President</i> dlburns@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

2.3 Experience with Regulatory Agencies

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 3½ miles of the upgrade of Interstate 64 from four to six lanes; (f) geotechnical, surveying and civil site design associated with widening Jefferson Road for 1½ 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.

3.0 PROJECT APPROACH

POTESTA has already conducted site visits to the Cacapon Resort State Park and Conaway Wildlife Management Area. Additionally, POTESTA has reviewed the Office of Dam Safety files both sites.

3.1 Cacapon Resort State Park Upper and Lower Dams



Our staff is experienced with soil compaction and concrete testing, preparation of daily field logs/weekly construction summary reports, pipe installation procedures, in-situ re-lining of leaking pipes, and the photographic documentation of construction. Based upon POTESTA's

understanding of the scope of services, we have outlined our typical approach to a successful completion of the project as follows:

- **Development of Scope of Services**

POTESTA will work with the WVDNR to develop a successful approach to the project. Input will also be considered from the WVDEP. From our understanding, the existing dams have construction plans completed and minor revisions may be necessary upon review. This project will also require permitting and construction contract administration.

- **Preliminary Engineering Study**

POTESTA will perform the preliminary engineering study based on the scope of services developed in conjunction with the WVDNR. The preliminary engineering study will review the completed construction plans for Cacapon Resort State Park and determine if any modifications are necessary. The results of the preliminary study will be presented to the WVDNR for review and comment on the proposed changes, if any. The preliminary study would include estimates of probable construction costs.

- **Construction Cost Estimate**

POTESTA will prepare a preliminary estimate of probable construction cost broken down by major work items. The preliminary estimate will be submitted with a draft submittal of the drawings and specifications. A final estimate of probable construction cost will be prepared and submitted with the draft drawings. The final estimate will be used for evaluation of project costs and subsequent contractor bids.

- **Permitting**

Several permits and/or permit modifications may be required for the proposed project. These may include a NPDES General Stormwater Permit, a modification to the facility's NPDES permit, West Virginia Department of Transportation Highway Occupancy Permit, Public Land Corporation Stream Activity Permit, US Army Corps of Engineers Nationwide Permit (NWP 12), and a West Virginia Department of Health Permit and a West Virginia Department of Environmental Protection Permit.

- **Bidding Documents Preparation/Bidding Assistance**

POTESTA will prepare a construction bid form and required bidding (i.e., contract) documents, and will assist the WVDNR in the appropriate procedures regarding advertisement and procurement of bids. POTESTA will also help present the project at public meetings, and assist with the pre-bid conference for contractors. Upon receipt of bids, POTESTA will aid the WVDNR in evaluation of the bids for cost, completeness and qualifications.

■ **Construction Administration/Observation**

After bid evaluation and contractor selection by the WVDNR, POTESA proposes to complete the following construction administration and observation tasks during construction. Our Winchester office is just minutes from Cacapon Resort State Park, allowing for timely, low-cost (no per diem or lodging expenses) construction observation. The scope of services described below is based in part on terms and requirements of the *Standard General Conditions of the Construction Contract*, prepared by the Engineers Joint Contract Documents Committee, which has been used for other projects and is assumed to be used as the basis of the contract between the WVDNR and the contractor.

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

- ◆ Review contractor invoices (i.e., Applications for Payment) and issue written recommendations for payment or denial.
- ◆ Issue Certificate of Substantial Completion to the WVDNR, as typically required by the contract documents.
- ◆ Provide record drawings showing “as-built” features.

3.2 Conaway Run Wildlife Management Area Dam

POTESTA visited the Conaway Wildlife Management Area Dam and made the following observations (see **Appendix C** for Photos 1-16):

1. Brush and small trees growing on the upstream face of the dam (Photos 1-5).
2. Small trees and brush growing on the side slopes of the emergency spillway (Photos 6-9).
3. Principal spillway trash rack leaning (Photo 10).
4. Erosion adjacent to principal spillway outlet (Photo 11).
5. Old slip along left side of emergency spillway (Photo 12).
6. Damp, moist area and some burrowing on top of dam embankment near interface of embankment and right abutment (looking downstream) (Photos 12-13).
7. Boat ramp erosion (Photos 14-16).

We would like to discuss these and other findings with you during our interview and take the following steps to complete the project:

- **Development of Services**

POTESTA will work with the WVDNR to develop a successful approach to the project. Input will also be considered from the WVDEP. From our understanding, the existing dam has no preliminary work completed and a full design, permitting, and construction contract administrations services are necessary.

- **Field Reconnaissance**

POTESTA will revisit the site and perform a field reconnaissance of the project area to identify environmental features and collect necessary field data for environmental permit applications. The approximate location of these features will be marked on a base map; such features could include, but are not limited to: streams, ponds, wetlands, waterbodies, major land use types, geologic hazards, threatened and endangered species, wildlife habitats, and businesses/residences.

- **Preliminary Engineering Study**

POTESTA will perform the preliminary engineering study based on the scope of services developed in conjunction with the WVDNR. The preliminary engineering study will assess

alternatives for design and construction of the proposed repairs to the Conaway Run Wildlife Management Area Dam. The results of the preliminary study will be presented to the WVDNR for review and comment on the proposed design alternatives. The preliminary study would include estimates of probable construction costs for the proposed construction alternatives.

- **Final Design and Specifications**

POTESTA will proceed with the final design and preparation of project specifications for the project once the WVDNR has reviewed the preliminary design and we have received comments on the same, and the necessary funding has been obtained. The design can be flexible and POTESTA will adjust the design accordingly as the situation and/or funding may dictate. Construction drawings and specifications will be prepared for regulatory and funding agency and the WVDNR's review and approval prior to advertisement and bidding.

- **Construction Cost Estimate**

Details are provided in Section 3.1.

- **Permitting**

Details are provided in Section 3.1.

- **Bidding Documents Preparation/Bidding Assistance**

Details are provided in Section 3.1.

- **Construction Administration/Observation**

Details are provided in Section 3.1.



4.0 STAFF QUALIFICATIONS AND EXPERIENCE

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.

POTESTA's headquarters is in close proximity to the Agency's South Charleston office which will facilitate immediate response to your needs and allow meetings to be attended within a minutes' notice. POTESTA emphasizes that we will make a priority commitment to this project and will utilize staff in all three offices for this project.

4.1 Experience, Qualifications, and Performance Data of Primary Staff

Primary staff POTEESTA commits to this contract is as follows:

Mr. Dana L. Burns, P.E., Vice President at POTEESTA, will serve as principal-in-charge for this project. Mr. Burns has served as the principal-in-charge for all of POTEESTA'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 West Virginia Division of Natural Resources. 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 35 years of civil and environmental engineering and related projects including stormwater management plan and dredging construction projects. In addition to providing technical guidance throughout the project, Mr. Burns will be responsible for maintaining the schedule for the project.

Mr. Ronald R. Potesta, President of POTEESTA, was Director of the WVDNR from 1985 through 1988. As Director, Mr. Potesta was responsible for environmental regulatory programs in West Virginia, including air, water, and waste. Mr. Potesta is a past Chairman and current Commissioner of the Ohio River Valley Water Sanitation Commission. He is also a past Chairman and current member of The Greater Kanawha Valley Foundation. Mr. Potesta is the past Chairman and current member of the Board of Trustees for the West Virginia Nature Conservancy and is on the Board of Directors for the Chemical Alliance Zone, the Mid-Atlantic Technology Research & Innovation Center, and the West Virginia Land and Mineral Owners Association. He will provide technical expertise on water quality issues.

Mr. Chris A. Grose, L.R.S., Senior Engineering Associate, will serve as Project Manager for Conaway Run Wildlife Management Area Dam project. He 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 sediment removal, stormwater management plans, and remedial design. He will be responsible for the geotechnical and geological aspects of the investigations for and the design and construction of the repairs of the dams, as well as the review and assessment of the existing dams.

Mr. Joe Knechtel, P.E., is the Branch Manager of the Winchester office and will serve as Project Manager for the Cacapon Resort State Park Upper and Lower Dams project. Mr. Knechtel has over 25 years of engineering experience with numerous industrial, commercial, agricultural and residential civil projects, which required design of erosion and sediment controls and stormwater management systems to meet water quantity and water quality needs in the Chesapeake Bay Watershed, specifically West Virginia counties of Jefferson, Berkeley and Morgan Counties, as well as northern and western Virginia. Mr. Knechtel has worked closely with clients and each governing and reviewing agency, such as the West Virginia Department of Environmental Protection (WVDEP) and the Virginia Stormwater Management Program (VSMP), in the

submittal/review process to address zoning and engineering issues for successful approval of each project.

Mr. D. Mark Kiser, P.E., has over 30 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.

The primary staff will be supported by a team of engineers, scientists, surveyors, hydrologists, geologist/hydrogeologists, biologists, CADD operators, and other support personnel from POTESTA’s staff. Included are project engineers such as Dave Sharp, P.E., Jarrett Smith, P.E., and Robert Ammirato, P.E., who have worked on numerous grading designs and completion of construction stormwater NPDES permits; Jason Gandee, an engineer who has extensive experience with hydrologic analysis and design of open channel structures; Mr. Mark Isabell, a mining engineer whom has worked on numerous projects involving earthwork, site drainage, pond design, calculations, plans and specifications and construction administration; Mr. Victor Dawson, P.L.S., who has worked on developing mapping or performing construction layout on projects dating back into the late 1980s; and POTESTA’s team of CADD Operators whom have also worked on State of West Virginia projects.

Resumes of primary staff members are included in **Appendix D**.

4.2 Proposed Staffing Plan

POTESTA’s principal-in-charge will be responsible for contract management (administration) and shall coordinate and direct all aspects of the project. The principal-in-charge will review the proposed project, assign a project manager, assemble a project team and appoint key staff to develop a proposed scope of work. The principal-in-charge and project manager will visit all of the sites with the Agency to review site conditions and the proposed services to be completed and guide the preparation of a detailed proposal and cost estimate. A written proposal, including a detailed scope of services and an associated man-hour 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. Day-to-day project activities for this project will be performed under the direction of our project manager. The project manager will develop a detailed step-by-step project work plan so that the project activities are completed in a correct manner, on budget, and

on time. They will also review work products at intermediate points and prior to project completion. They will conduct project status reports which may include weekly meetings, memos, or telephone calls with the Agency's project manager as required. The project manager will supervise the day to day work in progress, will coordinate with POTEESTA's subconsultants and subcontractors (e.g., geotechnical drilling and laboratory services) to provide necessary services, and review work products at intermediate points and prior to submittal to the Agency. POTEESTA will utilize the appropriate classification of staff to conduct activities required for the project. Our normal method of staffing projects is to assign a small project team with total responsibility for completion of the work to the client's satisfaction and budget. Where necessary, the team can draw on the expertise available within POTEESTA's large staff. POTEESTA offers a large staff with the efficiency and rates normally associated with a small firm.

POTEESTA's proposed project organization charts are contained in **Appendix E**.

4.3 Single Point of Contact

POTEESTA's Point of Contact for the Cacapon Resort State Park project will be Mr. Joe Knechtel, P.E., Manager of our Winchester office. The following is his contact information:

Address: Potesta & Associates, Inc.
15 South Braddock Street
Winchester, Virginia 22601
Phone: (540) 450-0180 Fax: (540) 450-0182
E-Mail: kjknechtel@potesta.com

POTEESTA's Point of Contact for the Conaway Run Wildlife Management Area project will be Mr. Chris Grose, L.R.S. The following is his contact information:

Address: Potesta & Associates, Inc.
7012 MacCorkle Avenue, SE
Charleston, West Virginia 25304
Phone: (304) 342-1400 Fax: (304) 343-9031
E-Mail: cagrose@potesta.com

4.4 Project Budget Control

The project manager will be responsible for monitoring the project budget and keeping the principal-in-charge informed of its status. POTEESTA's staff enters time into POTEESTA's Clearview InFocus computer software on a daily and/or weekly basis. POTEESTA's project managers can access InFocus at any time, thus allowing "real-time" control of project costs. In addition, field representatives routinely keep track of subcontractor costs on a daily basis. Thus we can, in effect, keep track of the total project costs on a weekly basis. Our subcontractors

commonly invoice at monthly intervals and there is seldom a discrepancy between our field representative's pay items and our subcontractor's invoice.

4.5 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. 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 make it impossible to maintain 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.

4.6 Quality Assurance/Quality Control

Submittals to the Agency will be reviewed and commented on by the project manager and the principal-in-charge prior to submittal to the Agency. Both the project managers and the principal-in-charge have worked on numerous State of West Virginia projects, and thus understand the level of detail and expectations for State government projects. POTESTA utilizes standardized Quality Assurance/Quality Control (QA/QC) practices such as consistency checks, color coding of checked copies/calculations, and review of method of measurements versus quantity tallies to insure QA/QC expectations are met.

5.0 REQUIRED DOCUMENTS

Appendix F contains the executed DNR160000011 Solicitation Form, Certification and Signature Page, Addendum Acknowledgement Form, Purchasing Affidavit, and Insurance Certificate.

6.0 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. References are included in **Appendix G**.

7.0 CLOSING

We look forward to continuing to serve the WVDNR and complete the design repairs necessary to bring Cacapon Resort State Park upper and lower dams and the Conaway Wildlife

Management Area's dam into compliance with the WVDEP. Our commitment is to provide quality service, rapid response and project completion, and to exceed your expectations for services performed under this project. We believe the track record of our professionals demonstrates our ability and commitment.

We look forward to an interview to better acquaint you with our capabilities and plan.

Respectfully submitted,

POTESTA & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Dana L. Burns".

Dana L. Burns, PE
Vice President

DLB:KJT





*Providing Innovative, Timely,
Cost-Effective Engineering and
Environmental Solutions*

ENGINEERING SERVICES

- **Civil, Chemical, Environmental, and Mining Engineering**
- **CADD Services**
- **Construction Monitoring**
- **Design of Slurry Impoundments and Refuse Disposal Sites**
- **Dewatering Plans**
- **Erosion and Sediment Control Plans**
- **Expert Witness and Litigation Support**
- **Feasibility Studies**
- **Flood Studies**
- **Geological Services**
- **Geotechnical Investigations and Foundation Design**
- **Hydrologic and Hydraulic Evaluations**
- **Impoundment Stabilization, Design and Monitoring**
- **Landscape Architecture**
- **Land Use and Natural Resource Planning**
- **Multi-Media Sampling (Air, Fly Ash, Rock, Soil, Water)**
- **Occupational Safety and Health**
- **Oil and Natural Gas Consulting**
- **Permitting**
- **Pre-Blast and Pre-Subsidence Surveys**
- **Preparation of Construction Drawings and Specifications**
- **Reclamation Design and Planning**
- **Reclamation Liability Assessments**
- **Regulatory Liaison Services**
- **Roadway Design**
- **Site Development Plans**
- **Slope Stability Analysis**
- **Solid, Industrial and Hazardous Waste Landfill Design, Permitting and Closures**
- **Spill, Prevention, Control and Countermeasures Plans**
- **Storage Tank Services**
- **Stormwater Management Plans**
- **Subsidence Investigations**
- **Subsurface Explorations**
- **Surveying and Mapping**
- **Waste Disposal Design**
- **Wastewater Treatment Plant Design**
- **Water and Sewer Line Design/Extensions**

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.



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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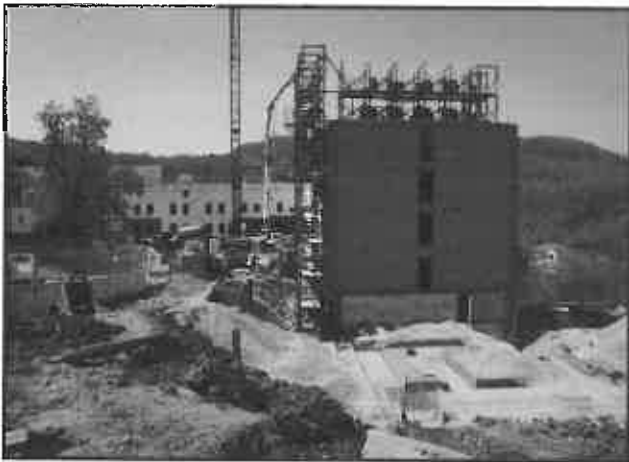
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Potesta & Associates, Inc.'s (POTESTA) engineers and geologists have extensive experience related to the geotechnical engineering and geological disciplines. These areas include subsurface explorations, monitoring well and piezometer installations, 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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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.



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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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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Project Abstract

NEW WEST HOLLOW IMPOUNDMENT

Kanawha Eagle Limited Liability Company

Winifrede, West Virginia

Potesta & Associates, Inc. (POTESTA) has provided a number of different services to Kanawha Eagle Limited Liability Company over the past three years. Kanawha Eagle operates a slurry impoundment and a coarse refuse side hill embankment with slurry cells. The following is a list of services provided:

- ▶ Development of new and/or revised staging plans for refuse disposal.
- ▶ Preparation of permit modifications that are required as a result of changes in the refuse disposal plans.
- ▶ Seven-day inspections at both refuse disposal facilities; required by MSHA.
- ▶ Annual certifications required by MSHA (for both facilities).
- ▶ Quarterly inspections and reports required by WVDEP (also for both facilities).
- ▶ Nuclear density testing of the coarse refuse used to construct the embankments.
- ▶ Decant pipeline design.
- ▶ Underdrain design.
- ▶ Construction monitoring.
- ▶ Surveying.
- ▶ Development and annual updating of the Monitoring and Emergency Warning Plan and Procedures.

POTESTA has also provided Kanawha Eagle with geotechnical services including exploratory drilling and foundation recommendations for a new refuse belt and two concrete silos.

POTESTA is currently preparing an Underground Injection Control permit (required by WVDEP, Office of Water Resources) for Kanawha Eagle so that they can dispose of slurry in an underground mine.



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Photo 1



Photo 2



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



Photo 3



Photo 4



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441

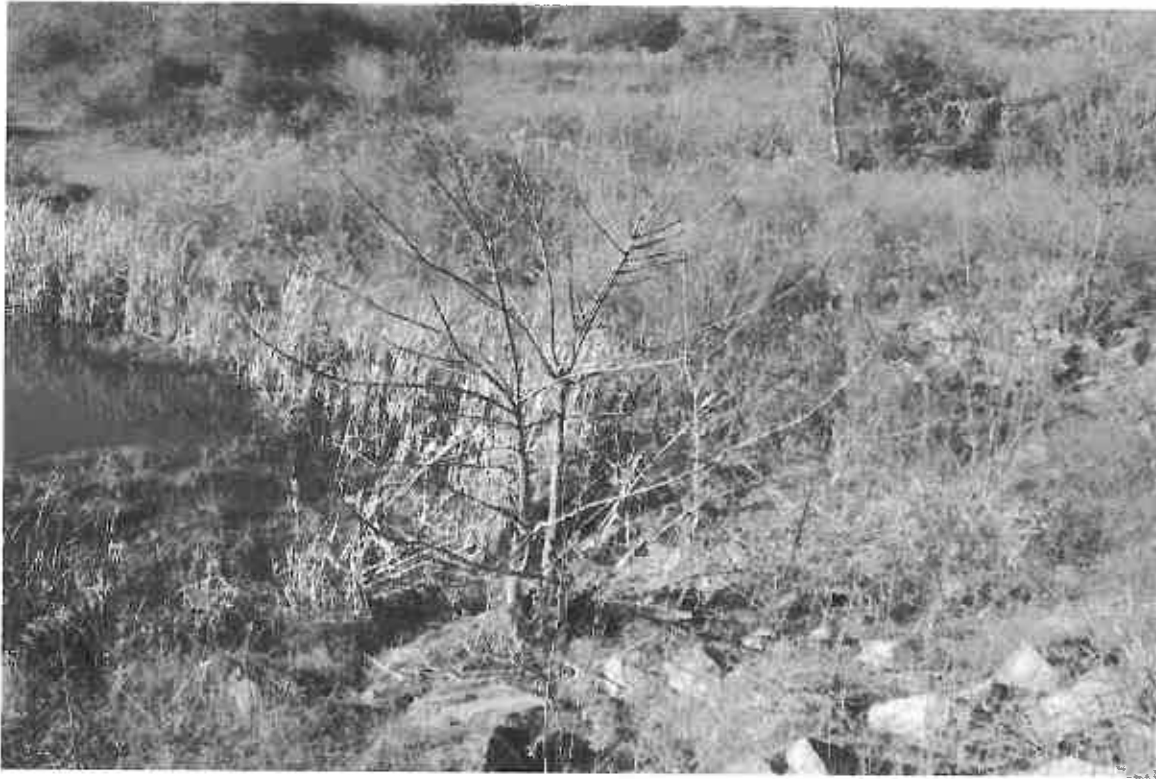


Photo 5



Photo 6



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



Photo 7



Photo 8



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Charleston, West Virginia 25304
Phone: (304) 342-1400
Fax: (304) 343-9031

APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



Photo 9



Photo 10



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



Photo 11



Photo 12



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APPENDIX C
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Project No. 0101-15-0441



Photo 13



Photo 14



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



Photo 15



Photo 16



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APPENDIX C
Conaway Run Wildlife Management Area Dam
Project No. 0101-15-0441



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

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.

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.

Regulatory Agency Experience

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

- Duncan Hill Subsidence
- Beckley Subsidence
- Jonben (Haga) Subsidence
- Holden (Padgett) Subsidence
- Gray and Iaquina Subsidence
- St. John's Road Subsidence
- Route 19/28 Subsidence
- Mt. Hope Subsidence
- Huffman Street Subsidence
- Morgantown Airport Drainage/Subsidence
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Cheyenne Sales Company Reclamation
- Little Whitestick Refuse
- Crany Mine Dump
- Morgan Mine Fire
- MacArthur Phase 2 Subsidence
- Lake Lynn Complex
- MacArthur Mine Subsidence
- East Lynn II
- Flipping Hollow Complex
- Sundial (Hatfield) Refuse Piles
- Mill Creek Refuse Pile
- John's Branch Coal Refuse Dam
- Jessop Highway #10

- Lando (Edwards) Drainage
 - Taylorville (Cantrell) Drainage
 - Borderland (Matney) Portals
 - Peach Ridge Complex
 - Measle Fork Refuse
 - Georges Creek Portals
 - Putney Impoundment
 - Kopperston (John's Branch) Refuse Emergency
 - Marmet (Wells Drive) Landslide Emergency
 - Marmet (Clark) Drainage
 - Pringle Run #2
 - Mountain Run Refuse and Portals
 - Fairmont East Mine Drainage
 - May Portal (Virginia AML)
 - Williamson (Hatfield) Landslide
 - Georges Creek (Lucas) Rockslide
 - Rachel Refuse
 - Grass Run Refuse
 - Allen Sheridan Hazardous Facility (asbestos)
 - Elk City- Century- Volga Phase I/II Water Study
 - Camp Mohonegan Regrade
 - Comfort Run Coal Company (asbestos)
 - Allen AMD
 - Cora Mine Drainage No. II
 - Covey Creek Mine Fire
 - Vivian Refuse Pile
 - Summerlee Refuse Pile (won 1996 southern reclamation award)
 - Kimball Refuse Pile (won 1995 southern reclamation award)
 - Hampden (Smith) Landslide
 - Bear Run Refuse (won 1994 Ducks Unlimited award)
 - Charleston (Ratcliffe) Landslide
 - Garrison Complex
 - Mulberry Fork (Stover) Landslide
 - Courtright Highwall
 - Belle Landslide
 - Minden Drilling
 - Kitchen/Gibson Landslide
 - High Coal Tipple
 - Omar Refuse Pile (won reclamation of the year award)
 - Logan Drainage
 - Switzer Adams/Robinson Drainage
 - Follansbee Drainage
 - Hawkins AMD
 - Vargo Drainage
 - Duck Creek Landslide
 - Kistler Mine Fire
 - Turner Douglas Complex
 - Buffalo Creek No. 5 Refuse
 - Dawmont Mine Facility
 - Helen (Lewis) Refuse
 - Upshur 10/15 Drainage
 - Webster County Water Studies
 - Jaeger Water Feasibility Study
 - Burnwell, Standard, and Collinsdale Water Line Extension
 - Clay-Roane PSD Water Feasibility Study
 - Burnsville PSD Water Feasibility Study
 - Brandonville/Pisgah Water Feasibility Study
 - Cuzzart/4-H Water Feasibility Study
 - Hudson/Mt. Nebo Water Feasibility Study
 - Phase I Water Studies Brooke and Fayette Counties
 - Gauley River PSD – Belva
 - Hammond PSD – Wellsburg
 - New Haven Chamber of Commerce – Hico
 - Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln, and Logan Counties)
 - Godby Branch Phase II Water Study
 - Madison Street Portals/Fairview Route 218 Portals
 - Putnam County Phase I Water Studies
 - Heizer Creek
 - Manila Creek
 - Boone County Phase I Water Studies
 - Jeffrey Area – Jeffery, Hewett Creek, Seacoal
 - Ottawa Area – Ottawa, Greenview, Missouri Fork, Meadow Fork, Aleshire Branch, Dent Fork, Mike's Fork
 - Phase II Water Feasibility Studies
 - Logan County -- Cow Creek, Crooked Creek, Upper Rum Creek
 - Phase I Water Studies for Logan County
 - Pecks Mill – Godby Heights Communities
 - Cow Creek – Sarah Ann – Crystal Blocks Communities
 - Upper Rum Creek Community
 - Clothier Community
 - Crooked Creek Community
 - Godby Branch
 - Whitman Creek – Holden Project
 - Beaver Creek Waterline Extension: Phase II Water Project
 - Cassity Fork Water Supply Extension: Phase II Water Project
- West Virginia Bureau for Public Health – Principal-in-Charge for services associated with Source Water Assessment Protection Plans (SWAPP) for 38 public water systems throughout West Virginia. Services provided included windshield surveys to identify and locate (via GPS) potential contaminant sources (PCS's), review of regulatory databases, entering data into Access database, and preparation of summary

reports.

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

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

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

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.

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

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

WVDEP Office of Waste Management – Development of

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

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

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)

Landfills/Solid Waste/Waste Disposal

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

Municipal Landfills –

- West Virginia Solid Waste Management Board/Monongalia County Sanitary Landfill – Morgantown, WV
- North Folk Landfill – Wheeling, West Virginia
- Disposal Service, Inc. Landfill – Hurricane, WV
- Sycamore Landfill, Inc. – Hurricane, WV
- City of Charleston Landfill – Charleston, WV
- Mingo County Landfill – Mingo County, WV
- Omar Landfill – Omar, WV

- Pocahontas County Landfill – Marlinton, WV
- HAM Sanitary Landfill – Peterstown, WV
- Kanawha- Western Landfill – Cross Lanes, WV
- S&S Landfill – West Milford, WV
- Brooke County Landfill – Brooke County, WV
- Wetzel County Landfill – Wetzel County, WV
- WVDEP's Landfill Closure Assistance Program
 - Montgomery Sanitary Landfill – Montgomery, WV
 - Wyoming County Sanitary Landfill – Pineville, WV
 - Jackson County Sanitary Landfill – Ripley, WV
 - City of Moundsville Landfill – Charleston, WV

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

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

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

- Virginia Electric and Power Company
 - Portsmouth Power Station ash pond to dry fill conversion project
 - Mount Storm Interim Ash Site
- Pennsylvania Electric Company
 - Keystone Coal Ash/Coal Refuse Site
- Allegheny Power Station
 - Hatfield Ash Site

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

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

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

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

Kanawha County Solid Waste Authority – Investigation of potential landfill fire at Kanawha Western Landfill.

Detailed geologic and hydrologic studies, monitoring well installation, and preparation of associated sections of landfill permits.

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

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

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

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

- Pennsylvania Power Company
- Allegheny Power System

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

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

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

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

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

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

American Cyanamid Company – Preparation of plans, specifications, and permit application for the closure of an industrial waste disposal site. The capping system

included geogrid to assist in supporting the overlying HDPE liner and soil cap in Willow Island, West Virginia. Electric Power Research Institute – Preparation of the Coal Ash Disposal Manual and various manuals for the High Volume/Low Technology Fly Ash Utilization Program.

Electric Power Research Institute – Development of a computer program that provides a detailed cost estimate for a coal ash disposal area.

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

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

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

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

Development of alternative truck transportation cost schemes:

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



EDUCATION

- M.S. Economics, concentration in Mineral Economics, Econometrics, and Micro Economics
West Virginia University
- B.S. Business Administration
West Virginia University

SERVICE ON BOARDS AND COMMISSIONS

Immediate Past Chairman and current Commissioner,
Ohio River Valley Water Sanitation Commission

Immediate Past Chairman, Board of Trustees, The West
Virginia Nature Conservancy

Chairman, National Institute for Chemical Studies

Board of Directors, Chemical Alliance Zone

Vice Chairman and Director, ORSANCO Educational
Foundation

Board of Directors, Greater Kanawha Valley Foundation

ADMINISTRATIVE EXPERIENCE

President of Potesta & Associates, Inc., a full-service engineering, design, and environmental consulting company with offices in Charleston and Morgantown, West Virginia, Cambridge, Ohio, and Winchester, Virginia. In this position, he guides the professional staff

of skilled engineers and scientists with his knowledge of federal and environmental regulatory and statutory schemes.

PROFESSIONAL EXPERIENCE

Prior to forming Potesta & Associates, Inc.

1989-1997 – President of an environmental and engineering consulting company, which he formed in 1989. Under his guidance, the company grew into a full-service environmental consulting, design, and construction company with a staff of over 50 professional and support personnel.

1985-1988 – Director of the West Virginia Department of Natural Resources, an agency with an annual budget of \$23 million and 700 full-time employees. The office of Director included supervision of Land and Real Estate Office, Office of Regulatory Affairs, Conservation, Education, and Litter Control, Public Information Office, and Wonderful West Virginia Magazine. He also served as Chairman on the State Emergency Response Commission and the Title III organization mandated by the federal Superfund Amendments and Reauthorization Act.

1984-1985 – Deputy Director of the West Virginia Department of Natural Resources, responsible for overseeing environmental regulatory programs described under Director's position and for the supervision of programs associated with the West Virginia Surface Coal Mining and Reclamation Act.

1981-1984 – Marketing Director of the West Virginia Coal Development Authority, responsible for promotion of West Virginia coal in both domestic and export markets requiring expertise in coal reserves, coal quality, transportation networks, and market demands.

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. 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

Geotechnical

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 contractors construction work efforts to prepare a well pad for the installation of a series of horizontal gas production wells in Marshall County, West Virginia. The work included the removal of soil and rock from and existing hilltop. The resulting material was placed or wasted in series of three side hill 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 a several of the structures. Work included an extensive review of several years of case records provided for the case including a review of existing utility maintenance records, historic climatologic data, river stage information and depositional testimony from many of the affected parties. A summary of profession opinion report was prepared describing a number of factors including lack of maintenance storm culverts in the area as well as an increase of saturation along the slope from the failed water main as the cause of the slide. It was determined that several of the structures were supported on previously placed fill material which was placed along the river bank in the early 1900's in conjunction with the initial roadway construction. This coupled with the lack of maintenance and presence of deteriorated drainage culverts likely contributed to the slope failure. The initial installation of this fill material was determined through an extensive study of the historic topographic mapping of the area.

Responsible for development of geotechnical and geological recommendations as well as development of stabilization designs for a number of failed soil/rock slopes in West Virginia. This work included initial site reconnaissance visits, development of a subsurface

exploration study and materials testing program, evaluation of stabilization alternatives, and construction plan preparation.

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

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

NiSource/Columbia Gas Pipeline Group SM-80 Loop Gas Transmission Line – Development of a subsurface exploration and drilling plan to determine the extent and depth of a soil and weathered rock slope failure which threatened the performance and stability of a 30-inch high pressure natural gas transmission line in Kanawha County, West Virginia. The slide location was remote and situated along a steep hillside. The stabilization plan recommended the use of soil nail technology due to the remote location and rather inaccessible nature of the location. This repair and stabilization technique allowed for the 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 require 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.

Regulatory Agency Experience

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

WVDEP Abandoned Mine Lands and Reclamation – Subsurface investigation to determine the extent of a landslide for Courtright Highwall AML Project in Bridgeport, West Virginia. Field surveying was completed to establish topographic mapping and control,

and subsequent design of landslide repair alternatives. Design ultimately selected included a reinforced slope using stabilizing grid. Landslide contained 400,000 cubic yards of material.

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

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

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

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

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

West Virginia Department of Highways – Evaluation of subsurface conditions including both soil and rock to provide geotechnical recommendations related to potential bridge abutment foundation systems near Martinsburg, West Virginia. Alternatives included both

shallow and deep foundations. Deep foundations were required at several abutments due to voids encountered in limestone bedrock.

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

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

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



EDUCATION

B.S. Civil Engineering, 1991
Pennsylvania State University

EMPLOYMENT HISTORY

2004- Present Potesta & Associates, Inc.
1993-2004 Advanced Asphalt Technologies, L.P.
1991-1993 Pennsylvania Transportation Institute
Pennsylvania State University
1990 Pennsylvania Department of
Transportation

PROFESSIONAL REGISTRATION

Professional Engineer – West Virginia
Professional Engineer – Virginia

ABSTRACTS, PRESENTATIONS, AND MANUSCRIPTS

Anderson, D.A., Antle, C.E., Knechtel, K., Lui, Y.,
Marasteanu, M., "Factors Affecting the Precision of the
Dynamic Shear Rheometer and Bending Beam
Rheometer," Mechanical Tests for Bituminous Materials,
Di Benedetto & Francken (eds) 1997

Knechtel, K., Aurilio, V., Harrigan, E., Chollar, B.,
"Rheological Analysis of Recovered Binders from the
FHWA ALF Rutting Experiment," Petersen Asphalt
Research Conference, Thirty-Fourth Annual Meeting.

AREAS OF SPECIALIZATION

Management, design, and permitting of civil and environmental projects. Experience in land development, storm water management, and regulatory issues with commercial and residential projects.

PROFESSIONAL EXPERIENCE

Civil/Site Design

Project Manager and engineer on developing residential subdivision and commercial site development plans in Berkeley County, West Virginia. Project included development of erosion and sediment controls, WVDEP and NPDES permitting, stormwater management facility and controls, WVDOH highway entrance design and permitting. Attended and represented client at public hearings for approval through the Morgan County Subdivision ordinance.

Project Manager/Engineer for numerous commercial site development projects in City of Winchester, Frederick County, Towns of Front Royal and Woodstock, Virginia. Develop site and parking layout, grading and geometry to meet county or city planning codes, International Building Codes (IBC), and American Disabilities Act (ADA) requirements, as well as develop landscaping and site lighting plans. Design turn lanes and entrances and roadway drainage to meet the Virginia Department of Transportation (VDOT) commercial entrance requirements. Designed stormwater management systems; including underground stormwater detention tanks and storm sewers. Designed Erosion and Sediment controls and plans and permitting through the Virginia Stormwater Management Program (VSMP). Design of water and sanitary sewer mains, force mains and laterals as well as sizing of grinder pumps.

Project Manager/Engineer for residential subdivision site development projects in Culpeper County, Virginia. Design subdivision layout, grading of site and design subdivision road, entrance and turn lanes and its drainage to meet VDOT requirements. Assist in drainfield design for local health department approval. Develop stormwater management and erosion and sediment controls and plans and acquire permitting through the Virginia Stormwater Management Program (VSMP).

Project Manager, developed conceptual plans and rezoning applications, and represented clients for successful rezoning of properties in Frederick County and Warren County, Virginia. Projects include development of environmental and traffic impact studies. Attended and represented clients at public hearings.

Project Manager and engineering designer of multiple commercial site developments plans in Morgan County, West Virginia. Plans developed for approval through the Commercial and Industrial Location Permitting Ordinance, Stormwater Management ordinance and Public Hearing as well as West Virginia Department of Environmental Protection (WVDEP), West Virginia Department of Highways (WVDOH) and local Soil and Water Conservation Districts. Plans included sites planning and layout, development of water and sewer laterals, stormwater management structures, and commercial entrances.

Project Manager, residential subdivision site development plan in Morgan County, West Virginia. Project included development sanitary sewer force main and collector system development of erosion and sediment controls and approval of Soil and Water Conservation Districts, WVDEP and NPDES permitting, stormwater management facility and controls, WVDOH highway entrance design and permitting. Attended and represented client at public hearings for approval through the Morgan County Subdivision ordinance.

Stormwater

Developed Stormwater Pollution Prevention Plans (SWPPP) and Groundwater Pollution Prevention Plans (GPP) for numerous construction sites in West Virginia for WVDEP and National Pollution Discharge Elimination System (NPDES) permitting. Also developed Stormwater Pollution Prevention Plans (SWPPP) for various industrial sites in Virginia.

ESAs (Phase I and II)

Performed Phase I Environmental Site Assessments, field reconnaissance and reporting on properties in West Virginia and Virginia.

Spill Prevention, Control & Countermeasure Plans

Developed and assisted in development of Spill Prevention Control and Countermeasure Plans (SPCC) for industrial sites, and quarries in Maryland and Virginia. Also conducted evaluations and certifications of secondary containment for aboveground petroleum storage tanks.

D. MARK KISER, P.E., L.R.S.
Chief Engineer, Licensed Remediation Specialist



EDUCATION

B.S. Civil Engineering, 1984
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATION

Professional Engineer – West Virginia
Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATION

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

SERVICE ON BOARDS AND COMMISSIONS

Commissioner – Sissonville Public Service District

AREAS OF SPECIALIZATION

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

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

PROFESSIONAL EXPERIENCE

Civil/ Site Design

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

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

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.

Regulatory Agency Experience

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

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

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

West Virginia Division of Environmental Protection Abandoned Mine Lands (WVDEP AML) Reclamation – Project engineer/project manager for open-end contract from 1988 through 1995. Responsible for conceptual design, permit applications, etc. for the following projects:

- Duncan Hill No. 1 and No. 2 Subsidence
- Urso Subsidence
- Jonben Subsidence
- Doug Gray Subsidence
- Turner Douglas Complex
- Omar Refuse Piles (project won reclamation of the year award)
- Bear Run Refuse (project won 1994 Ducks Unlimited award)
- Kimberly Refuse Pile (project won 1995 southern reclamation award)
- Vivian Refuse Pile
- Summerlee Refuse Pile
- Godby Branch Water Extension
- Williamson (Elias) Landslide
- Lefthand Fork Burning Refuse
- Belle Landslide
- Harris Acid Mine Drainage
- Numerous Phase I and Phase II Water Quality Studies/Survey

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid

sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

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

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

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

Subsurface investigation, surveying, coal refuse reprocessing evaluation, water quality monitoring, and design of a reclamation plan for a coal refuse pile, unreclaimed highwalls, and slurry and water treatment ponds in Lewis County, West Virginia. Plans, specifications, cost estimates, and calculations brief were completed for the project.

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.

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

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

Landfills/Solid Waste/Waste Disposal

Dupont Washington Works – Project Manager responsible for design, preparation of construction documents, and construction documents, and construction quality assurance monitoring for a 6.2-acre expansion of a piggyback of a leachate collection system at an industrial waste landfill.

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

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

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

Responsible for detailed hydrogeologic investigation and preparation of a major portion of the WVDEP Part A

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

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

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

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

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

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

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

Design; preparation of drawings, technical specifications, and contract/bid documents; construction monitoring; air monitoring; sludge sampling and analysis; review and approval of a detailed health and safety plan; permitting; and other miscellaneous engineering services for the stabilization and closure of a 3-acre sludge basin and a 1-acre sludge pond. The project included management of a

pilot-scale demonstration, procurement of stabilization reagents from multiple providers, and development of an adjacent soil borrow area.

Design; preparation of drawings, technical specifications, contractor's bid sheet, engineer's cost estimate, contract, and cap acceptability evaluation; evaluation of contractor bids, and construction monitoring associated with the capping and closure of a 2.5-acre cell of an industrial waste landfill facility. Cap included a multi-layer geocomposite system to minimize infiltration and the production and leachate to improve the areas groundwater quality.

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

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

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

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

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

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

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

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

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

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

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

by the West Virginia Division of Environmental Protection provided.

Soundings and sampling of three basins containing sludge. Two basins contained sludge from secondary biological treatment of industrial wastewater. One basin contained petroleum product sludges. Sludge quantities determined from soundings and cross sections prepared. Samples obtained for laboratory analysis to characterize wastes.

- Rhone-Poulenc Ag Company
- Ashland Petroleum Company

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

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

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

Cacapon Resort State Park
Upper and Lower Dams Project



Principal-in-Charge

Dana Burns, PE – 36 Years Experience

Technical Support QA/OC Review

D. Mark Kiser, PE – 31 Years Experience

Project Manager

Joe Knechtel, PE – 25 Years Experience

Technical Support Water Quality

Ronald Potesta – 34 Years Experience

Engineering

Field Reconnaissance, Site Characterization,
Design Engineering, Preparation of Construction
Documents, and Related Tasks

- Chris Grose, LRS – 26 Years Experience
- Terry Moran, PE – 26 Years Experience
- Jarrett Smith, PE – 14 Years Experience
- Jason Gandee – 11 Years Experience
- Robert Ammirato, PE – 15 Years Experience
- Patrick Taylor, PE – 23 Years Experience
- Mark Isabell – 9 Years Experience
- John Spencer – 34 Years Experience
- Jordan Beard – 1 Years Experience
- Jessica Boggs – 3 Years Experience
- Angela Pugh – 7 Years Experience

CADD Designers

- Michael Sankoff – 25 Years Experience
- Russ Lester – 26 Years Experience
- Brian Leedy – 19 Years Experience
- Joe Martin – 21 Years Experience
- Chuck Willis – 38 Years Experience
- Chuck Bird – 22 Years Experience

Construction Monitoring

- Robert Lamm – 17 Years Experience
- Gary Bridgette – 12 Years Experience
- Bill Cox – 17 Years Experience
- Paul Kinzer – 1 Years Experience
- Mike Whitman – 25 Years Experience

Clerical

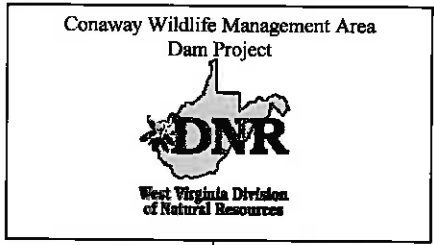
- Charlene Racer – 28 Years Experience
- Melissa High – 25 Years Experience
- Rhonda Henson – 33 Years Experience

Surveying

- Victor Dawson, PS – 34 Years Experience
- Brad Starkey – 27 Years Experience
- Charles Shaffer – 16 Years Experience
- Rusty Hunter – 33 Years Experience
- Howard Samples – 17 Years Experience
- Richard Smith – 3 Years Experience
- Greg Hodges – 20 Years Experience

Water Quality

- Mindy Armestead, PhD – 17 Years Experience
- Dan Miller, PhD – 36 Years Experience
- Lisa Burgess – 24 Years Experience
- Christina Parsons – 15 Years Experience
- Douglas Bowe – 26 Years Experience



Principal-in-Charge
Dana Burns, PE – 36 Years Experience

Technical Support QA/OC Review
D. Mark Kiser, PE – 31 Years Experience

Project Manager
Chris Grose, LRS – 26 Years Experience

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Ronald Potesta – 34 Years Experience

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Christina Parsons – 15 Years Experience
Douglas Bowe – 26 Years Experience





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: 159029

Doc Description: Addendum, repairs/compliance with DEP Dam Safety Requirement

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2015-11-20	2015-12-02 13:30:00	CEOI 0310 DNR1600000011	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
 (304) 342-1400

FOR INFORMATION CONTACT THE BUYER

Guy Nisbet
 (304) 558-2596
 guy.l.nisbet@wv.gov

Signature X *Dennis L. Burns* FEIN # 311509066 DATE December 1, 2015

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

ADDITIONAL INFORMATION:

Addendum

Addendum No. 1 Issued to publish and distribute the attached information to the vendor community.

Expression of Interest

The West Virginia Purchasing Division for the Agency, The West Virginia Division of Natural Resources (WVDNR) is soliciting CEOI responses from qualified firms to provide a contract to provide necessary engineering and other related professional services to design and provide construction contract administration services for the repairs necessary to bring Cacapon Resort State Park Upper and Lower Dams and well as Conaway Wildlife Management Area Dam in to compliance with DEP Dam Safety Requirements per the specifications and terms and conditions as attached.

INVOICE TO	SHIP TO
DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION 324 4TH AVE SOUTH CHARLESTON WV25305 US	STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS No City WV 99999 US

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering Services		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description :

VE services to design repairs necessary to bring Cacapon Resort State Park's upper and lower dams and the Conaway Wildlife Management Area's dam into compliance with DEP's Dam Safety Requirements.

DNR160000011	Document Phase Final	Document Description Addendum, repairs/compliance w ith DEP Dam Safety Requirement	Page 3 of 3
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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions



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: 159029

Doc Description: Dam repairs for compliance with DEP's Dam Safety Requirement

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2015-10-27	2015-12-02 13:30:00	CEOI 0310 DNR1600000011	1

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
 (304) 342-1400

FOR INFORMATION CONTACT THE BUYER

Guy Nisbet
 (304) 558-2596
 guy.l.nisbet@wv.gov

Signature X

Dane J. Burns

FEIN # 311509066

DATE December 1, 2015

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

ADDITIONAL INFORMATION:

Expression of Interest

The West Virginia Purchasing Division for the Agency, The West Virginia Division of Natural Resources (WVDNR) is soliciting CEOI responses from qualified firms to provide a contract to provide necessary engineering and other related professional services to design and provide construction contract administration services for the repairs necessary to bring Cacapon Resort State Park Upper and Lower Dams and well as Conaway Wildlife Management Area Dam in to compliance with DEP Dam Safety Requirements per the specifications and terms and conditions as attached.

INVOICE TO	SHIP TO
DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION 324 4TH AVE SOUTH CHARLESTON WV25305 US	STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS No City WV 99999 US

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering Services		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description :

A/E services to design repairs necessary to bring Cacapon Resort State Park's upper and lower dams and the Conaway Wildlife Management Area's dam into compliance with DEP's Dam Safety Requirements.

DNR160000011	Document Phase Final	Document Description Dam repairs for compliance with DEP's Dam Safety Requirement	Page 3 of 3
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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CEOI 0310 DNR1600000011

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

Dana L. Burns
Authorized Signature

December 1, 2015
Date

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

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Potesta & Associates, Inc.

(Company)

Dana L. Burns, PE / Vice President

(Authorized Signature) (Representative Name, Title)



(304) 342-1400 / (304) 343-9031 / December 1, 2015

(Phone Number) (Fax Number) (Date)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: 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 of 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 §61-6-3) 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: [Signature] Date: December 1, 2015

State of West Virginia

County of Kanawha, to-wit:

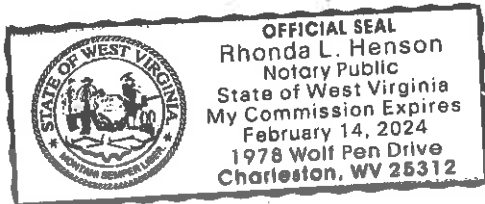
Taken, subscribed, and sworn to before me this 1st day of December, 2015.

My Commission expires February 14, 2024.

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/10/2015

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.

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.

Table with PRODUCER (USI Ins Svcs C/L Charleston) and CONTACT (Brenda Samples) information, and a table of INSURERS (A-F) including Hartford Casualty Insurance Com, Trumbull Insurance Company, and Catlin Specialty Insurance Comp.

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.

Main table listing coverages: A GENERAL LIABILITY, A AUTOMOBILE LIABILITY, A UMBRELLA LIAB, B WORKERS COMPENSATION AND EMPLOYERS' LIABILITY, and C Pollution Professional. Includes columns for INSR LTR, TYPE OF INSURANCE, POLICY NUMBER, POLICY EFF, POLICY EXP, and LIMITS.

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

CERTIFICATE HOLDER

CANCELLATION

Table containing CERTIFICATE HOLDER (Potesta & Associates, Inc.) and 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.)

LIST OF REFERENCES

*Architectural and Engineering Services
Cacapon Resort State Park's Upper and Lower Dams
Conaway Run Wildlife Management Area Dam Repairs
Solicitation No. CEOI 0310 DNR1600000011*

Mr. Scott Rodeheaver
West Virginia Bureau for Public Health
Office of Environmental Health Services
350 Capitol Street, Room 313
Charleston, West Virginia 25301-3713
Phone: (304) 356-4270
Fax: (304) 558-4322

Mr. David E. Cramer, PE
West Virginia Department of Transportation
Division of Highways
State Capitol Complex
Building 5, Room 110
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0430
Phone: (304) 558-3505
Fax: (304) 558-1004

Mr. Nick R. Estes
West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands and Reclamation
601 57th Street, SE
Charleston, West Virginia 25304
Phone: (304) 792-7250, Ext. 3310

Mr. Bryan Arthur
Contract Specialist
West Virginia Department of Environmental Protection
Division of Water and Waste Management
PO Box 38
French Creek, West Virginia 26218
Phone: (304) 924-6211
Fax: (304) 924-6781