# ORIGINAL EXPRESSION OF INTEREST

Architectural and Engineering Services
Pipestem Resort State Park
Cabin Area Wastewater Treatment Plant Replacement
Solicitation No. CEOI 0310 DNR1600000022





Prepared for:

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

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Project No. 0101-16-0190

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# TRANSMITTAL MEMO

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### **EXPRESSION OF INTEREST**

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### 1.0 INTRODUCTION

Potesta & Associates, Inc. (POTESTA) is pleased with the opportunity to present this Expression of Interest to the West Virginia Division of Natural Resources, Parks & Recreation – PEM Section (DNR) to provide necessary engineering and other related professional services to replace a wastewater treatment plant at Pipestem Resort State Park. We understand required services may include, but are not limited to, review existing plans and conditions, as well as the operation of the park; provide necessary services to design an effective and economical treatment system; and provide construction contract administration services for the project.



### 1.1 Corporate Overview

POTESTA was founded in 1997 as a full service engineering and environmental consulting 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 replace the wastewater treatment facility located at and serving the Pipestem Resort State Park Cabin Area. 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 Wastewater Engineering

POTESTA has 12 professional engineers on staff who can be dedicated to providing quality wastewater engineering services for the Pipestem Resort State Park Wastewater Plant Project. POTESTA has designed wastewater systems, designed major rehabilitation projects, reviewed developer plans for municipalities and public service districts, conducted flow monitoring, coordinated smoke testing (if necessary), and will work with the WVDNR to provide cost effective services. POTESTA will work with the WVDNR to visit similar systems to incorporate the best features, while avoiding deficiencies found with those systems.



POTESTA wastewater design services include, but are not limited to:

- Feasibility Studies
- Conceptual Design/Final Design
- Wastewater Minimization Studies
- Bidding and Construction
- Construction Monitoring
- Wastewater Audits

- Engineer's Cost Estimates
- Small Flows Design
- Sewage Collection and Treatment
- Permitting/Regulatory Liaison
- Wastewater Treatment Plant Design
- Sewer Line Extensions

- Storage Tank Design
- Flow Measurement
- Surveying/Mapping
- Sampling/Modeling
- CSO
- Remediation Systems

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 professional services for wastewater-related projects that are routinely completed throughout the construction of our projects include, but are not limited to:

- Surveying 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 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. POTESTA's geotechnical staff can evaluate the existing soil conditions, and determine the necessary construction methods so the improvements are constructed in a cost-efficient manner as specified.
- 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 NPDES stormwater construction registration, NEPA compliance, U.S. Army Corps of Engineers permit, Public Land Corporation stream activity permit, West Virginia Division of Highways occupancy permits, etc.
- 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.

Additional information regarding POTESTA's wastewater engineering, civil engineering design, computer- aided drafting and design, construction monitoring, hydrology and hydraulics design, mixing zone analysis, permitting, surveying/mapping, and geotechnical engineering, is included in **Appendix A**.

### 2.2 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.

### 2.3 Similar Past Projects

POTESTA's ongoing workload includes extensive work on sanitary sewer system projects. The following is a brief description of similar projects completed by POTESTA. Appendix B contains project abstracts of similar projects completed by POTESTA.

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

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
*West Virginia Division of Highways Wood County, WV	Terence Moran, P.E. tcmoran@potesta.com	Evaluation of WWTP	Evaluation of replacing the Mineral Wells Rest Area Wastewater Treatment Plant, including evaluating multiple options including using a lift station/force main to direct sewage to the Mineral Wells Public Service District.
Crosiers Sanitary Service, Inc. Fayette County, WV	Terence Moran, P.E. tcmoran@potesta.com	Design of new WWTP package	Permitting and design phase services for modular moving bed bioreactor/membrane filtration WWTP
North American River Runners Fayette County, WV	Terence Moran, P.E. tcmoran@potesta.com	Rehabilitation of WWTP	Design and permitting services for upgrade to package WWTP
*American Electric Power (AEP) Kanawha County, WV	Pat Taylor, P.E. pataylor@potesta.com	Design and permitting of WWTP	Evaluation of existing WWTP and design and permitting of a new peat moss WWTP facility for the London Locks Hydroelectric Plant.
*Charles Town Racing and Slots  Jefferson County, WV	Dana Burns, P.E. dlburns@potesta.com	Design and permitting of WWTP	Design and permitting of an initial capacity 250,000-gallon per day Sequence Batch Reactor (SBR) type WWTP (expandable to 375,000 gpd) for a gaming resort facility in Jefferson County, West Virginia.

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
*Huntington Sanitary Board Cabell County, WV	Pat Taylor, P.E. pataylor@potesta.com	Long-term improvement plan for sanitary board	General agreement with the Huntington Sanitary Board (HSB) to perform services related to their long-term improvement plan. Redesign of conversion of four ejector stations to submersible pump stations; design, bidding, and construction management of combined sewer replacement involving 3,000 LF of 24"-36" pipe; design of 54-inch HDPE force main; evaluation of the mixing zone for the wastewater treatment plant discharge; design of a new HDPE effluent line, diffuser, and air chamber.
Thom Hill Development  Jefferson County, WV	Dana Burns, P.E. dlburns@potesta.com	Design and permitting of WWTP	Design and permitting of a 50,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 225,000 gpd) for a residential development in Jefferson County, West Virginia. The design included approximately 5,180 linear feet of force main and gravity sanitary sewer collection line and a pump station.
Tackley Mill Development  Jefferson County, WV	Dana Burns, P.E. dlburns@potesta.com	Design and permitting of WWTP	Design and permitting of a 25,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 1,000,000 gpd) for a residential development in Jefferson County, West Virginia. The design included approximately 17,000 linear feet of force main effluent discharge line and a pump station.
*Berkeley Springs Development Morgan County, WV	Mark Kiser, P.E. dmkiser@potesta.com	Design and permitting of WWTP	Design and permitting of a 440,000-gallon per day membrane bioreactor type WWTP for a large residential development in Berkeley County, West Virginia. The design included over 18,000 feet of gravity sewer line with sizes ranging from 8-inch to 15-inch and 5,800 feet of 8-inch force main and 85 feet of 2-inch force main. POTESTA also provided design for a water treatment plant and water distribution system for the development.

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
*ECOLAB Berkeley County, WV	Terence Moran, P.E. temoran@potesta.com	Evaluation of pre-treatment WWTP	Evaluation and recommendations for the pretreatment of ECOLAB's effluent prior to discharge to the Berkeley County Public Service Sewer District's (BCPSSD) industrial wastewater treatment plant. The evaluation focused on bringing the effluent into compliance with permit limitations.
*West Virginia American Water Fayette County, WV	Terence Moran, P.E. tcmoran@potesta.com	Rehabilitation of WWTP	Evaluation of existing sanitary wastewater system and providing recommendations for areas of rehabilitation and improvement in O&M practices for the City of Oak Hill, West Virginia WWTP.
*CNX RCPC, LLC Monongalia County, West Virginia	Dave Sharp, P.E. dsharp@potesta.com	Evaluation of WWTP	Evaluation of Hunting Hills Residential Development Sanitary Sewer System.
*Salt Rock Sewer Public Service District Cabell County, WV	Terence Moran, P.E. tcmoran@potesta.com	Engineering for sewage systems	Conceptual engineering for on-site sewage systems for residents of Holiday Park. The treatment plant was failing and complaints had been filed with the West Virginia Public Service Commission.
*West Virginia American Water Greenbrier County, WV	Terence Moran, P.E. tcmoran@potesta.com	Evaluation of WWTP	Evaluation of sanitary wastewater system and providing recommendations for areas of rehabilitation and improvement in O&M practices for the Town of White Sulphur Springs, West Virginia WWTP.
*Old Standard Development Jefferson County, WV	Dana Burns, P.E. dlburns@potesta.com	Design and permitting of WWTP	Design and permitting of a 50,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 250,000 gpd) for a large residential development in Jefferson County, West Virginia. The design included nearly 10,000 linear feet of force main and gravity sanitary sewer collection line and two pump stations.
*Tucker County Development Authority Tucker County, WV	Dave Sharp, P.E. dsharp@potesta.com	New sewer line	Design, permitting, and construction administration/observation of approximately 8,000 linear feet of water line and 8,000 linear feet of sewer line to extend service from the Town of Davis to the new Tucker County Industrial Park.

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
*Pocahontas County Public Service District/Wastewater Management, Inc. Pocahontas County, WV	Dave Sharp, P.E. dsharp@potesta.com	Evaluation of sanitary sewer system	Evaluation of Hawthorn Loop Sanitary Sewer System, including observing pipe via CCTV, review previous engineering studies, identifying defects, and developing preliminary estimate of construction costs for rehabilitation.
*Boone County Public Service District Boone County, WV	Terence Moran, P.E. tcmoran@potesta.com	Rehabilitation of sanitary collection system sewer line	Provide design, permitting, bidding, and construction phase services for 3,700 feet of gravity sewer line replacement, and rehabilitation of two pump stations.
*Salt Rock Sewer Public Service District Cabell County, WV	Terence Moran, P.E. tcmoran@potesta.com	Odor control study	Odor control study mandated by the West Virginia Public Service Commission. Complaints arose after a proposed lift station site was modified to include a "headworks" facility.
*Town of Handley Kanawha County, WV	Pat Taylor, P.E. pataylor@potesta.com	Design and construction of sewer system	Provide design and construction phase services for rehabilitation of their 1980's sewer system.
*Boone County Public Service District Boone County, WV	Terence Moran, P.E. tcmoran@potesta.com	Design of WWTP	Design, permitting, bidding, and construction phase services for upgrade of the Danville Wastewater Treatment Plant.
*Steptoe & Johnson PLLC/Berkeley County Public Sewer Service District Berkeley County, WV	Terence Moran, P.E. tcmoran@potesta.com	Disinfection of WWTP	Provide an evaluation and subsequent affidavit regarding disinfection at Berkeley County Public Sewer Service District's Marlowe Town Center package wastewater treatment plant.
*Town of Ceredo Wayne County, WV	Terence Moran, P.E. tcmoran@potesta.com	Upgrade to sanitary sewer system	Design, permitting, and construction phase services for an upgrade to the sanitary sewer system. The design phase included identifying the need to upgrade piping sizes and pumping rates.
*Town of Ceredo Wayne County, WV	Terence Moran, P.E. tcmoran@potesta.com	Asset management plan	Prepare an Asset Management Plan that was required as part of a sanitary sewer system upgrade funded by the Clean Water State Revolving Fund.
*Carmeuse Lime & Stone Frederick County, VA	Joe Knechtel, P.E. kjknechtel@potesta.com	WWTP	Permitting, design, and construction oversight services for a wastewater treatment plant and a water treatment plant in Winchester, Virginia.

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
*ZMM, Inc.  McDowell County, WV	Mark Kiser, P.E. dmkiser@potesta.com	Collection system and upgrade to the existing vacuum collection system	Design, permitting, bidding, and certain construction phase services associated with a collection system associated with two new schools of the same site, and the associated upgrade of the Town of Bradshaw's existing vacuum collection system.
*Boy Scouts of America Pocahontas County, WV	Chris Grose cagrose@potesta.com	Replacement of sanitary sewer collection system and WWTP	Design of replacement sanitary sewer collection system and design of new sewage stabilization lagoon at Dilley's Mill Boy Scout Camp in Pocahontas County, West Virginia.
Private Individual Greenbrier County, WV	Dana Burns, P.E. dlburns@potesta.com	Replacement study for treatment plant	Design and preparation of drawings and cost estimate for replacement study for 25,000 gpd package treatment plant in Lewisburg, West Virginia.
*Timberwolf Development Corporation Kanawha County, WV	Mark Kiser, P.E. dmkiser@potesta.com	Design and construction of sanitary sewer systems	Design and construction observation of water supply and sanitary sewer systems for Yorketown Subdivision, Charleston, West Virginia.
Union Carbide Corporation Kanawha County, WV	Doug Bowe, P.E. dwbowe@potesta.com	Sewer line	Evaluated 300,000 linear feet of combined process/storm sewer water and designed a new system using a gravity and force main combination system for Union Carbide's South Charleston and Institute plants and their Technical Center, Charleston, West Virginia.
Cloverleaf Environmental Consulting Loudoun and Clarke Counties, VA	Joe Knechtel, P.E. kjknechtel@potesta.com	Repair of failed AOSS system	Design and permitting of 600 gpd multi-flow treatment and drip irrigation system (AOSS) for a repair of a failed residential conventional system in a rural, residential areas in Purcellville, Leesburg, and Berryville, Virginia.
Cloverleaf Environmental Consulting Clarke County, VA	Joe Knechtel, P.E. kjknechtel@potesta.com	Repair of failed AOSS system	Design and permitting of 450 gpd multi-flow treatment and drip irrigation system (AOSS) for a repair of a failed residential conventional system in a rural, residential areas in Bluemont, Virginia.

Project	Project Manager/Contact Information	Type of Project	Project Goals and Objectives
Summit at Cheat Lake Monongalia County, WV	Pat Taylor, P.E. pataylor@potesta.com	Design of sanitary sewer collection system	Design of a sanitary sewer collection system, incorporating 13,500 linear feet of 8-inch gravity sewer line, as well as 2,500 linear feet of 1.5-inch and 2-inch force main line from three pump stations.
US Customs & Border Protection Agency Jefferson County, WV	Joe Knechtel, P.E. kjknechtel@potesta.com	Design of WWTP	Feasibility study of "living tree" treatment plant, designed 50,000 gpd wastewater treatment plant with UV/aeration post treatment, designed gray water system, and prepared permit applications.

#### 2.4 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.

Client	Contact Name	Contact Number
Huntington Sanitary Board	Wes Leek, Executive Director	(304) 781-1912
Town of Handley	Essie Ford, Mayor	(304) 442-5100
Town of Ceredo	Otis Adkins, Mayor	(304) 453-1041
Boone County Public Service District	Nancy Shreve	(304) 369-2622
Salt Rock Sewer Public Service District	Ruby Griffith, General Manager	(304) 743-6945

### 3.0 STAFF QUALIFICATIONS AND EXPERIENCE

POTESTA has assembled a project team that is highly qualified and unprecedented in West Virginia for being able to complete wastewater projects. Our project management staff has managed hundreds of projects and understands what it takes to bring ideas to fruition through cost-effective and often innovative designs. We take pride in our ability to work with our clients from the conceptual idea through the construction process, which is the most critical part of the project.

Mr. Dana L. Burns, P.E., Vice President at POTESTA, will serve as principal-in-charge for this project. As such, he will direct POTESTA's staff, answer questions, address problems encountered and review the project budget. Mr. Burns has over 36 years of experience with civil and environmental engineering projects, including working on projects funded by Small Cities Block Grant, United States Department of Agriculture-Rural Utility Services (USDA-RUS),

AML, United States Department of Commerce - Economic Development Administration, West Virginia Infrastructure and Jobs Development Council, and others. This experience includes serving as a project manager for various sanitary sewer projects, industrial wastewater projects, water supply system extensions, water extension feasibility studies, and numerous West Virginia American Water projects. In addition to providing technical guidance throughout the project, Mr. Burns will be responsible for maintaining the schedule and budget for the project.

Mr. Terence C. Moran, P.E., will serve as project manager for this project. Mr. Moran has over 26 years of experience on civil engineering projects, with particular emphasis on water/wastewater projects. Mr. Moran has served as the project manager/project engineer for 100+ water/wastewater projects, including preliminary engineering, environmental assessments, funding applications, hydraulic analysis, booster and lift station design, storage tank design, line sizing, design of treatment systems, drawings, specifications, cost estimates, bid documents, "shop drawing" review, construction management and construction inspection. Mr. Moran has completed water/wastewater projects in Barbour, Boone, Brooke, Cabell, Fayette, Greenbrier, Hardy, Harrison, Jefferson, Kanawha, Lincoln, Logan, Monongalia, Morgan, Pocahontas, Nicholas, Preston, Putnam, Raleigh, Randolph, Tucker, Wyoming, and Upshur counties in West Virginia.

Mr. Mark A. Sankoff, P.E., has over 33 years of experience in civil engineering, with particular emphasis on water/wastewater projects. As the past Director of Engineering at West Virginia American Water, he served as project manager for numerous water projects, including the Kanawha County 2000 Water Project, installing over 100 miles of water main, six tanks and six boosters serving over 1,700 families. Mr. Sankoff's experience for sewer projects include the design and construction of sewer stations, pump stations, force mains, and sewer collection systems. He has also been responsible for the design, plans, specifications, regulatory approval, bidding and bond sale, and construction management of wastewater treatment plants.

Mr. Pat Taylor, P.E., has substantial experience with state regulatory and funding programs. Mr. Taylor will serve as a liaison with the West Virginia Infrastructure and Jobs Development Council, and the West Virginia Bureau for Public Health. Mr. Taylor was a manager at West Virginia's Bureau for Public Health. His responsibilities included managing of the West Virginia Drinking Water Treatment Revolving Fund (DWTRF), the state water and sewer construction permitting program and the capacity development program. He also sat on the West Virginia Infrastructure and Jobs Development Council, overseeing the Council's water technical committee, sitting on the sewer technical committee and also being a member of the council's funding committee. On a routine basis, Mr. Taylor worked with coordination of all funding agencies.

Mr. D. Mark Kiser, P.E., has over 31 years of experience in civil engineering, with particular emphasis on design and construction administration. He has served clients on many water and wastewater projects. Mr. Kiser will serve on an as needed technical basis for this project. Mr. Kiser has successfully managed various water and wastewater projects, including recent projects with a combined contract value in the millions of dollars. These projects included 180,000 feet of gravity and pressure piping systems.

POTESTA's proposed construction technicians include Robert Lamm and Mike Whitman. Mr. Lamm has extensive experience with construction observation for potable water systems as well as sanitary sewer and wastewater treatment facilities. Most recently he completed construction observation for a 14,000 LF water main replacement project in Kanawha County. Mr. Whitman has 25 years experience with public water and sewer construction project oversight.

The personnel listed above are available to work on this project immediately upon notice to proceed. Appendix C of this proposal includes resumes of key individuals who are anticipated to work on this project. Copies of staff certifications and degrees applicable are in Appendix D.

### 3.1 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 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 POTESTA'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. POTESTA 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. necessary, the team can draw on the expertise available within POTESTA's large staff. POTESTA offers a large staff with the efficiency and rates normally associated with a small firm.

POTESTA's proposed project organization chart is contained in Appendix E.

### 3.2 Communication with Owner

POTESTA's Point of Contact for the Pipestem Resort State Park Wastewater Plant Project will be Mr. Terence Moran, P.E., Senior Engineer. 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: tcmoran@potesta.com

Mr. Moran can send electronic communication weekly to update the WVDNR on the project status. 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. Mr. Moran can attend face-to-face meetings, as necessary.

#### 4.0 PROJECT APPROACH

Based upon POTESTA's understanding of the scope of services, we have outlined our typical approach to wastewater projects. This clear plan has been used in past projects that met the owner's and project budget, as well as the project constructed in the time allotted in the contract documents.

### 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 funding agency and WVDEP, if necessary. Items such as smoke testing and video recording of the system will be scheduled and performed.

### 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 sanitary sewer collection lines, treatment facility, and related appurtenances for the Pipestem Resort State Park WWTP. 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

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, POTESTA proposes to complete the following construction administration and observation tasks during construction. 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 POTESTA, such as the agreement, general conditions, supplementary conditions, specification special conditions, and engineering specifications.

- Review, meet, comment on and accept contractor's preliminary (and subsequent adjustments to) progress schedule, preliminary schedule of shop drawing and sample submittals, and preliminary schedule of values (for progress payments).
- Attend pre-construction conference.
- Review underground facilities not shown on contract documents to determine potential changes to contract documents.
- 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.

### 4.1 Project Budget Control

The project manager will be responsible for monitoring the project budget and keeping the principal-in-charge informed of its status. POTESTA's staff enters time into POTESTA's Clearview InFocus computer software on a daily and/or weekly basis. POTESTA'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.

### 4.2 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.

### 4.3 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 DNR1600000022 solicitation forms, certification and signature page, addendum acknowledgement form, purchasing affidavit and insurance certificate.

#### 6.0 CLOSING

We look forward to continuing to serve the WVDNR and complete the replacement wastewater plant for the Pipestem Resort State Park Cabin Area. 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.

L. Burns

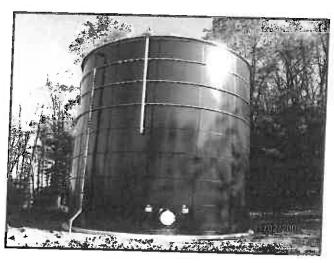
Dana L. Burns, PE

Vice President

DLB:KJT

# Water and Wastewater Engineering

Our professional staff is dedicated to providing quality engineering services for various types of water treatment and distribution systems, as well as wastewater management, collection and treatment systems. The following is a list of some of the services Potesta & Associates, Inc. is capable of providing:



### WATER AND WASTEWATER DESIGN

- Feasibility Studies
- Conceptual Design
- Final Design
- Bidding and Construction
- Construction Monitoring
- Wastewater Audits
- Wastewater Minimization Studies
- Engineer's Cost Estimates
- Small Flows Design (Traditional and Innovative Treatment Systems for Low Volume Flows)
- Sewage Collection and Treatment
- Water Treatment and Distribution
- Industrial Wastewater Treatment
- Wastewater Treatment Plant Design
- Water Treatment Plant Design
- Water and Sewer Line Extensions

- Remediation Systems
- Landfill Leachate Treatment
- Storage Tank Design
- Flow Measurement
- Surveying/GPS and Mapping
- Permitting and Regulatory Liaison
- Combined Sewer Overflow (CSO)
- Management, Sampling and Modeling

### STORMWATER MANAGEMENT

- Hydraulic Conveyance Structure Design (Culverts, Channels, Drop Inlets, Etc.)
- Stormwater Retention/Detention Pond Design
- Stormwater Pond Modeling
- Floodplain Identification and Management Strategies
- Hydrologic and Hydraulic Analysis and Evaluations and Modeling
- Construction Monitoring
- Surveying
- Permitting and Regulatory Liaison





# -Civil Engineering and Design

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

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

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

### Our design services include:

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

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

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

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





# Computer-Aided Drafting and Design

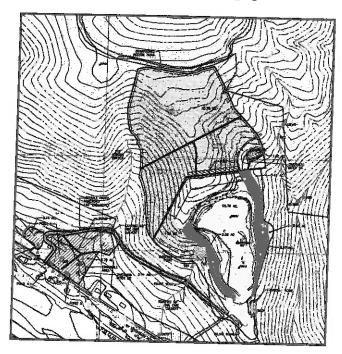
The Potesta & Associates, Inc. (POTESTA) computer-aided drafting and design (CADD) department provides state-of-the-art design and drafting services for in-house engineering and environmental consulting projects. We also provide personnel to clients who have a temporary need for additional drafting manpower. These services may be performed at your location or our office as required.

CADD department The utilizes the drafting/design software and computer hardware to maintain productivity at the high levels that clients demand and expect. We utilize the latest version in AutoCAD Civil 3D civil/survey design software to prepare, revise, and manipulate drawings and engineering data efficiently. Drawings and figures are produced using a Hewlett Packard 4000 and 5500 color ink jet plotters. POTESTA's experienced and trained professionals allow clients' projects and assignments to be completed rapidly and at reasonable cost.



### Our CADD services include:

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



# Construction Monitoring

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.





# - 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.



# Mixing Zone Analysis and Diffuser Design

Potesta & Associates, Inc. (POTESTA) has extensive experience in providing regulatory mixing zone analysis, as well as design and construction phase services for outfalls and diffusers. POTESTA can assist in every phase of the project from the data collection, modeling and conceptual design through final design, permitting, bidding, construction, and post-construction sampling and verification. Our projects proceed in an expedited manner to allow for compliance with permit deadlines. POTESTA's technical capabilities include:

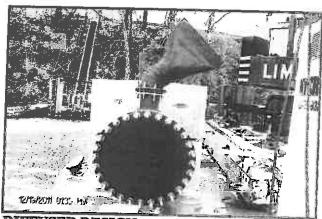
- Ambient and Effluent Data Collection
- Mixing Zone Modeling and Associated Studies
- Topographic Mapping, Including River Bottom
- Effluent Line/Diffuser Designs
- NPDES Permit Application/Section 404 Permits
- Wastewater Treatment Plant Designs
- Water Quality Assessments
- Environmental Impact Studies
- Construction Observation
- Mixing Zone Verifications



#### **MIXING ZONES**

Mixing zones are often used in discharge situations where effluent quality does not meet water quality standards. Diffuser projects generally start with an evaluation study followed by conceptual design using a mixing model. POTESTA has worked with pollutants such as metals and organic chemicals, as well as "narrative" type standards regarding visual discharges, etc. Mixing zone modeling is typically

completed at POTESTA using the Cornell Mixing Zone Expert System (CORMIX) and CORHYD softwares.



DIFFUSER DESIGN

POTESTA works closely with the client to identify cost-effective and appropriate diffuser designs. Common diffuser design goals include:

- Adequate Dilution and Velocity
- Ability to Discharge Peak Flow
- Equal Flow Distribution Among Ports
- Prevention of Sediment and Debris Intrusion
- Meeting Regulatory Standards

Once the design is complete, POTESTA works closely with state and federal regulatory agencies to prepare and gain approval for the necessary permit applications, such as NPDES and Section 404 permit applications.

POTESTA can perform construction observation of the installation of the diffuser for conformance to design requirements, including diver observation of the installed diffuser.

No matter the size or complexity of your water resource issue, POTESTA can help provide an integrated solution.



POTESTA & ASSOCIATES, INC.

7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304 Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com Regional Offices: Morgantown, WV and Winchester, VA

# Permitting Services

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



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.



# Surveying and Mapping

Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions), ALTA surveys, control surveys, flood certificate surveys, well location surveys, construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse preparation of right-of-way 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.



# — Geotechnical Engineering

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<sup>TM</sup>, etc.)
- Sample Collection Methods (split spoons, shelby tubes, Geoprobe<sup>TM</sup> 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



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.

# MINERAL WELLS REST AREA WASTEWATER TREATMENT PLANT

West Virginia Division of Highways Wood County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the West Virginia Division of Highways (WVDOH) to evaluate sewage disposal options for their rest area along Interstate 77 near Mineral Wells in Wood County, West Virginia. The rest area was being served by a 30-year old package wastewater treatment plant (WWTP); discharge was not consistently meeting National Pollutant Discharge Elimination System effluent limitations and the WWTP was difficult to maintain due to its age and lack of readily available spare parts.

The objective of the evaluation was to provide the WVDOH with an estimate of necessary capital and operation/maintenance costs and advantages/disadvantages, and provide POTESTA's recommendations to assist the WVDOH in the selection of an appropriate wastewater disposal option.

The following options were evaluated:

Option 1: Replace the existing WWTP with a recirculating sand filter.

Option 2: Pump the sewage to the Mineral Wells Public Service District.

Based on our evaluation, POTESTA recommended to the WVDOH that they should pipe the sewage to the Minerals Wells Public Service District.





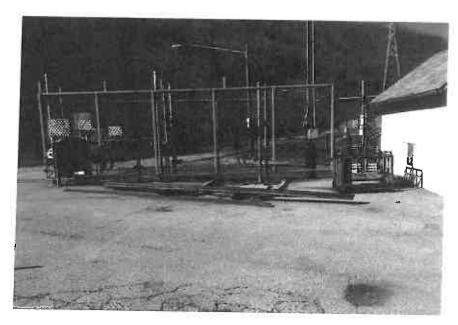
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## LONDON LOCKS HYDROELECTRIC PLANT

American Electric Power Company Kanawha County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by American Electric Power Company (AEP) in regards to replacing their existing wastewater treatment aeration package plant. POTESTA provided the following services.

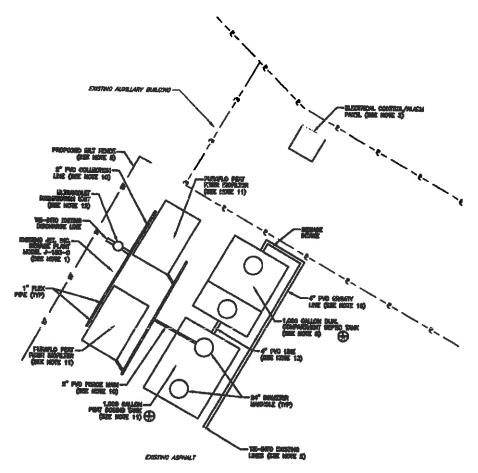
- Assisted AEP in the design and bidding and installing of a grinder pump station and force main to replace the package plant. The force main was to be located via boring under the existing railroad track and West Virginia Division of Highways' roadway. When the bids for the project were deemed excessive for the company, POTESTA continued to assist AEP.
- Evaluated wastewater options including: (1) installing a holding tank to store the wastewater from the London Locks electric generation plant which would then be hauled to the nearest public wastewater treatment facility; (2) installing modifications to the existing wastewater treatment facility in order to meet AEP's National Pollutant Discharge Elimination System (NPDES) Permit Discharge Limits; (3) replacing the existing wastewater treatment facility with a new plant in order to meet AEP's NPDES permit discharge limits; and (4) installing a leach field for treatment thereby not having and NPDES discharge point.
- Evaluated various types of aeration package plants and peat systems and recommended a peat system.



# LONDON LOCKS HYDROELECTRIC PLANT

Page 2

Designed the specifications for a peat wastewater treatment plant. POTESTA then assisted AEP in preparing the Major Modification Application to the existing Individual Industrial permit for submittal to the West Virginia Department of Environmental Protection (WVDEP) and provided general assistance during the WVDEP and Kanawha County Health Department permit review and approval process.



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# CHARLES TOWN RACES & SLOTS WASTEWATER TREATMENT PLANT (WWTP)

### Charles Town, Jefferson County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by PNGI Charles Town Gaming LLC to provide professional services for the design and permitting of a wastewater treatment plant (WWTP) in Jefferson County, West Virginia. The WWTP is to treat waste from the Charles Town Races & Slots race track and gaming resort. The facility is required due to the race track's planned expansion and the local Public Service District's lack of additional capacity.



Wastewater treatment plant

The planned expansion included waste flow from horse washing stalls, race track grandstands, restaurants, gaming facilities and hotels. A gravity main provides influent to the WWTP where a lift station and screening is provided. The WWTP for this project is based on a sequencing batch reactors (SBR) process supplied by Aqua-Aerobics Systems, Inc. Tertiary filtration and chemical treatment (ferric chloride and polymer) is provided to meet Chesapeake Bay standards for nutrient removal. Post-treatment with ultraviolet disinfection and aeration was also incorporated into the WWTP. The facility is designed

to meet an initial design daily flow of 250,000 gallons which can be increased to 325,000 gallons per day. Buildings were provided to house the headworks equipment, blowers, emergency generator, tertiary filter and ultraviolet unit and the motor control center, laboratory, office and garage.

### POTESTA's responsibilities included:

- 1. Evaluation of existing WWTP to serve proposed development.
- 2. Preparation of permit applications including the Waste Load Allocation, West Virginia Department of Environment Protection NPDES permit for discharge into the Flowing Springs Run, West Virginia Department of Health to construct the WWTP, and CSX railroad crossing
- 3. Conducting a wetland delineation.
- 4. Site design of the WWTP.
- 5. Specifying and selecting treatment and other associated equipment.
- 6. Design, detailed construction drawings and technical specifications for the WWTP.
- 7. Assistance during construction.

## **HUNTINGTON SANITARY BOARD**

### Huntington, West Virginia

POTESTA currently has a general agreement with the Huntington Sanitary Board (HSB) to perform services related to the Board's implementation of their Long-Term Control Plan, Water Treatment Plant Modernization Plan, and Storm Water Management Utility Establishment/Operation. This agreement has been comprised of multiple work orders for improvement of Huntington's combined sewer system.

Currently, POTESTA has concluded or is in the process of the following work:

- Redesign of conversion of four ejector stations to submersible pump stations to include altering design from a cast-in-place concrete cap to allow building to remain. Design included new hatches and hoisting, ventilation equipment, heating, bypass features, and oversight of electrical design.
- Design, bidding, and construction management of combined sewer replacement project on 13th Street West and 19th Street, which includes a combination of full trench replacement and trench-less technology pipe lining for approximately 3,000 feet of 24 through 36-inch pipe.
- Flow monitoring and preliminary and final design for a new sewage lift station (approximately 31,000 gpm) to replace an existing antiquated station which pumps the majority of Huntington's wastewater to the treatment plant.
- Design, bidding, and construction management of a pump around bypass system at the 13<sup>th</sup> Street West pump.





- Assistance to the HSB regarding the CSO long-term control plan's implementation schedule.
- Management of preparation of wastewater treatment plant incinerator failure analysis.

#### HUNTINGTON SANITARY BOARD PAGE 2

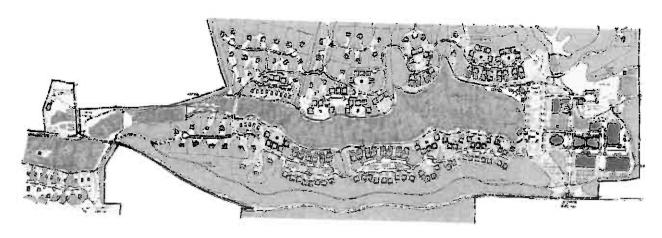
- Environmental remediation of fly ash lagoon through West Virginia Voluntary Remediation Program and design of Bioretention Basin at WWTP for treatment of stormwater fitting "green" project criteria.
- Management of study and preparation of Preliminary Engineer Report for replacement of Huntington's primary pump station facility, including geotechnical evaluation.
- Evaluation of the mixing zone for the wastewater treatment plant discharge into the Ohio River through computer analysis. Based on the analysis, it was determined that the effluent line required a diffuser to allow for adequate mixing at the discharge.
- Design of 54-inch HDPE force main to replace the existing 54-inch PCCP force main that transports the entire HSB's flow and had failed due to a build up of hydrogen sulfide gas at the top of the pipe at the forcemain's crossing of the Huntington flood levee prior to the pipes entrance to the WWTP.
- Design of a new HDPE effluent line, diffuser, and air chamber located in the Ohio River to replace 50-year-old existing effluent line which failed due to excessive weight of fill placed on its corrugated metal pipe.



## THE VILLAGES AT COOLFONT PROJECT

Carl M. Freeman Communities Berkeley Springs, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Carl M. Freeman Communities to provide environmental and engineering consulting services in conjunction with the redevelopment of the Coolfont Recreation property in Morgan County, West Virginia. Coolfont included a lodge, lake, spa, chalets, and other recreational facilities developed in the 1960s. Carl M. Freeman Associates acquired the Coolfont resort and other adjacent properties with the plan to create a second home community with high-end amenities.



POTESTA completed pre-acquisition services including a Phase I Environmental Site Assessment, an American Land Title Association (ALTA) boundary and property survey of 997 acres, and completed an assessment of the facility's sanitary sewer wastewater treatment plant to facilitate the acquisition of the property.

POTESTA participated in a week-long planning charette with Carl M. Freeman Associates, land planners, and other design consultants in order to assess the characteristics of the property, identify opportunities and constraints for development, obtain input from local residents and businesses, and develop design guidelines for the project. At the end of the charette, a land use plan was presented 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.

POTESTA completed civil engineering design work for potable water and wastewater treatment facilities. POTESTA selected source well locations, drilled potable water test wells, completed field testing and permitting. POTESTA designed a 300 gallon per minute potable water treatment plant to serve the proposed development. POTESTA also designed the water storage and distribution system. The storage distribution system was modeled so that fire protection and adequate pressure would result. The distribution system and storage tank were designed and permitted serving the first phase of the development.

# THE VILLAGES AT COOLFONT PROJECT PAGE 2

POTESTA completed the design and permitting for a 448,000 gallon per day membrane bioreactor wastewater treatment plant to serve the ultimate development. The design included the collection system for the first phase of development.

POTESTA assisted Carl M. Freeman Associates with permitting required for development of the new lake along with upgrades/expansion of the existing lake. Included were a Section 404 individual permit from the United States Army Corps of Engineers and a Section 404 water quality certification from the West Virginia Department of Environmental Protection.

POTESTA prepared roadway and stormwater management plans for the first phase of development. This included typical pavement sections, road profiles, geometric layout plan, culvert and drop inlet sizing, drainage conveyance pipe and channel profiles, and miscellaneous stormwater management details.

Project Abstract

## **EVALUATION OF INDUSTRIAL** WASTEWATER TREATMENT PLANT **ECOLAB**

#### Berkeley County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by ECOLAB to evaluate the Industrial Wastewater Treatment Plant (ITP) in Berkeley County, West Virginia. The ECOLAB facility manufactures sanitizers, lotions and other products. Wastewater from the facility is pretreated by adjusting pH, removing foam, and dechlorinating. The pretreated wastewater is then discharged to the ITP, which is operated by the Berkeley County Public Service Sewer District (BCPSSD). The effluent from the ITP had exceeded limitations for some parameters numerous times. ECOLAB's discharge to the ITP had also exceeded limits per a BCPSSD/ECOLAB agreement on numerous occasions. ECOLAB requested POTESTA's assistance in evaluating the ITP.

The ITP consists of the following equipment: equalizer tank, sequential batch reactor tank, aerobic digester tank, treatment tank, blower building, control building, piping valves and other

Aerobic digester tank (left) and SBR tank (right)

appurtenances. Tasks completed as part of the evaluation included: meeting with ECOLAB, BCPSSD, and West Virginia Department of Environmental Protection (WVDEP) officials to review and discuss the ITP, including a tour of the ITP and on-site operations evaluation; meeting with ECOLAB officials to discuss pretreatment efforts, view their pretreatment facility; and review historical data provided by ECOLAB, BCPSSD, and WVDEP; and preparation of a report summarizing the evaluation and recommendations.

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# **EVALUATION OF SANITARY WASTEWATER SYSTEM-CITY OF OAK HILL**

West Virginia-American Water Company

Oak Hill, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by West Virginia-American Water Company (WVAWC) to evaluate the condition of the collection system and wastewater treatment plants (WWTPs) in the City of Oak Hill, evaluate current operation and maintenance (O&M) practices for the collection system and WWTPs, and provide recommendations on potential areas for rehabilitation and improvement in O&M practices for the Oak Hill Sanitary Collection and Treatment System.

Tasks completed as part of the preliminary evaluation included: file review at the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management (DWWM); meeting with Oak Hill Sanitary Wastewater System personnel to review and discuss the existing sanitary wastewater system, including tours of the collection system and WWTPs; meetings with WVDEP-DWWM officials; preparation of a summary of five years of Discharge Monitoring Reports; preparation of a preliminary list of prioritized areas for sewer system evaluation study and/or rehabilitation; and preparation of a report summarizing the findings of the preliminary evaluation and providing recommendations.



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### EVALUATION OF SANITARY SEWER SYSTEM FOR HUNTING HILLS RESIDENTIAL DEVELOPMENT

CNX RCPC, LLC Monongalia County, West Virginia

Potesta & Associates, Inc. was retained by CNX RCPC, LLC to complete an evaluation of Hunting Hills Residential Development Sanitary Sewer System. Included in the scope of services was:

- Reviewed violations from the West Virginia Department of Environmental Protection, and preliminarily evaluated existing package plant and determined it was in a state of disrepair.
- Designed a new plant including permit level drawings and all associated permits to bring it back in to compliance.
- Performed and Inflow and Infiltration Study to evaluate problems with the sanitary collection system.
- Performed smoke testing on the sanitary collection system.
- Observed 2,200 feet of sanitary collection system pipe via CCTV (i.e., camera).
- Identified defect in the pipeline, including offset joints, cracks and breaks, and direct connections.
- Developed a preliminary estimate of a construction cost for rehabilitation.



### **HOLIDAY PARK ON-SITE SEWAGE SYSTEM**

Salt Rock Sewer Public Service District Padero Drive, Ona, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the Salt Rock Sewer Public Service District to provide conceptual engineering for on-site sewage systems for residents of Holiday Park in rural Cabell County, West Virginia. The residents of Holiday Park were being served by a failing package treatment plant and complaints had been filed with the West Virginia Public Service Commission (PSC).

Specific services provided by POTESTA on this project included:

- Meeting on-site with the client and the Cabell-Huntington Health Department.
- Identifying that approximately 36 homes existed in Holiday Park that were being served by the failing package treatment plant.



Failing Package Treatment Plant

- Developing a conceptual plan for on-site sewage systems, consisting of 12 single-home septic tank/leach bed systems and eight larger septic tank/leach beds serving three homes each.
- Preparing estimates of construction cost and total project cost.
- Communicating results with client and PSC staff.

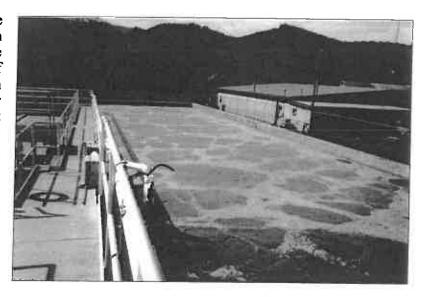
# EVALUATION OF SANITARY WASTEWATER SYSTEM - CITY OF WHITE SULPHUR SPRINGS

West Virginia-American Water Company

White Sulphur Springs, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by West Virginia-American Water Company (WVAWC) to evaluate the condition of the existing collection system and wastewater treatment plant (WWTP) in the City of White Sulphur Springs, evaluate current operation and maintenance (O&M) practices for the collection system and WWTP, and provide recommendations on potential areas for rehabilitation and improvement in O&M practices.

Tasks completed as part of the preliminary evaluation included: file review at the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management (DWWM); meeting with White Sulphur Springs Sanitary System officials to review and discuss the existing sanitary wastewater system, including tours of the collection system and WWTP; meetings with WVDEP-DWWM officials: preparation of a summary of five years of Discharge Monitoring Reports (DMRs);



preparation of a preliminary list of prioritized areas for sewer system evaluation study and/or rehabilitation; and preparation of a report summarizing the findings of the preliminary evaluation and providing recommendations.

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# OLD STANDARD DEVELOPMENT SEWER LINE AND WASTEWATER TREATMENT PLANT

Old Standard Development LLC Millville, Jefferson County, West Virginia



Potesta & Associates, Inc. (POTESTA) was retained by Old Standard Development LLC to provide professional services for the design of a sanitary sewer collection line and wastewater treatment plant (WWTP) in Jefferson County, West Virginia. The project consists of a sanitary sewer collection line extending from a housing development to a WWTP with an effluent discharge line to the Shenandoah River. The collection line begins with a pump station located at the Sheridan housing development and extends along U.S. Route 340 to

County Route 27 (Bloomery Road) where the line continues toward the WWTP located on the site of the Old Standard Quarry. The effluent line will then extend onto the Old Standard Quarry property, under the CSX railroad and discharge into the Shenandoah River. The sewer collection line consists of approximately 7,300 linear feet of force main and approximately 4,370 linear feet of gravity sewer line. A gravity discharge line carries effluent from WWTP approximately 1,380 linear feet to an outfall into the Shenandoah River. The WWTP for this project is based on an activated sludge membrane bioreactor (MBR) process supplied by Enviroquip, Inc. of Austin, Texas. The plant is designed to treat a daily average flow of 50,000 gallons per day and is expandable to 250,000 gallons per day.

#### POTESTA responsibilities included:

- Preparation of the design, construction drawings and technical specifications for the sanitary collection and effluent line, including the lift station.
- Geotechnical investigation and foundation recommendations for the WWTP building enclosure.
- Site design of the WWTP.
- Preparation of the design, construction drawings and technical specifications for the WWTP headworks including the pre-treatment, flow equalization and the lift station facilities and onsite sludge storage.
- Preparation of permit applications including the Waste Load Allocation, West Virginia Department of Environment Protection NPDES permit for discharge into the Shenandoah River, West Virginia Department of Health to construct the collection line and WWTP, CSX railroad crossing and the West Virginia Department of Highways for road crossings, highway entrance and use of right-of way.
- Coordination of sub-consultants for the design of the foundations, heating, lighting and ventilation systems for the WWTP building enclosure and emergency backup power for the WWTP.



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# TUCKER COUNTY INDUSTRIAL PARK—CONSTRUCTION OF ADDITIONAL WATER AND SEWER LINE

## **Tucker County Development Authority**

#### Tucker County, West Virginia

After completion of initial construction at the Tucker County Industrial Park, additional monies remained. The owner, Tucker County Development Authority, authorized Potesta & Associates, Inc. (POTESTA) to prepare bidding documents for construction of additional water and sewer lines at the site, using the remaining monies. More specifically, POTESTA:

- 1. Completed ground survey to develop topographic mapping to reflect as constructed conditions after the first phase.
- Prepared drawings and specifications depicting the construction of an additional 1,000 feet of gravity sewer line, including five manholes and 500 feet of additional water line, including construction through wetlands and across a stream.
- 3. Prepared permit applications for crossing of the stream and wetlands, and to obtain approval from the West Virginia Bureau for Public Health.
- 4. Prepared bidding documents and coordinated obtaining approval from the United States Economic Development Agency.
- 5. Presented the project at a pre-bid meeting, and prepared addenda.
- 6. Compiled contractor bid information.
- 7. Provided construction phase services, including attending preconstruction meeting, reviewing and commenting on shop drawings on manholes, pipe and other materials; and providing nearly full-time construction observation services.

The additional water and sewer lines were successfully installed.





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# **EVALUATION OF SANITARY SEWER SYSTEM**

Pocahontas County Public Service District/Wastewater Management, Inc. Pocahontas County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Wastewater Management, Inc. to complete an evaluation of Pocahontas County Public Service District's Hawthorn Loop Sanitary Sewer System. Included in the scope of services was:

- Observed 6,200 feet of pipe via CCTV (i.e., camera).
- Reviewed previous engineering studies.
- Identified defect in the pipeline, including "humps," "swags," orality issues, broken or separated pipe, and incorrect grades.
- Developed a preliminary estimate of a construction cost for rehabilitation.



Manhole Identified for Replacement

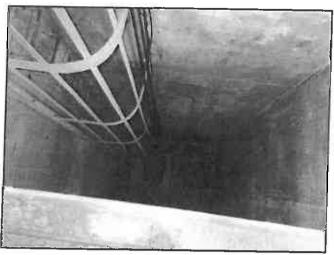
# WEST MADISON WASTEWATER SYSTEM IMPROVEMENTS PROJECT

Boone County Public Service District Danville/Madison, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Boone County Public Service District (BCPSD) to provide design, permitting, bidding, and construction phase services for 3,700 feet of gravity sewer line replacement, and rehabilitation of two pump stations. Included in this project was:

- 1. Preparing construction drawings that presented the upgrades, including plans and profiles.
- 2. Completing hydraulic calculations to size units.
- 3. Preparing permit applications to the West Virginia Division of Highways, West Virginia Department of Health and Human Resources, West Virginia Public Lands Corporation, United States Army Corps of Engineers, and the West Virginia Department of Environmental Protection.
- 4. Preparing a West Virginia Infrastructure and Jobs Development Council funding application and Preliminary Engineering Report, and Facility Plan.
- 5. Preparing contract documents and providing assistance during the bidding of the project (under contract to provide).
- 6. POTESTA is under contract for construction administration/observance.

The project is to be funded by the West Virginia State Revolving Fund (SRF).



Wet Well of Pump Station to be Rehabilitated



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### **ODOR CONTROL STUDY**

Salt Rock Sewer Public Service District Cabell County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Salt Rock Sewer Public Service District (Salt Rock) to complete an odor control study mandated by the West Virginia Public Service Commission (WVPSC). The WVPSC had required that Salt Rock complete the study after complaints arose after a proposed lift station site was modified to include a "headworks" facility. The "headworks" facility included a screening unit and grit chamber. To complete the study, POTESTA:

- Reviewed project documentation.
- Reviewed sewage flow, hydrogen sulfide (H<sub>2</sub>S), and chemical dosing data.
- Visited the project site 10+ times to record observations.
- Estimated capital and operation/maintenance costs for three options (chemicals only, enclosure of facilities, or relocation of facilities) to reduce odors. Included in this was sizing of key components.
- Prepared a report summarizing the findings and providing recommendations.

In addition, POTESTA provided support by responding to additional requests from the WVPSC.

Project was completed using funding from the Clean Water State Revolving Fund (CWSRF).



"Headworks" Facility with Scrubber Unit



# DESIGN AND CONSTRUCTION OF SEWER REHABILITATION

Town of Handley Handley, Kanawha County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Handley (Handley) to provide design and construction phase services for rehabilitation of their 1980s sewer system. Handley had constant problems with their pump stations over the years, as well as one station being intermittently flooded which caused electrical and pump failure. POTESTA's services included:

- Assisted in obtaining funds for field work and preliminary engineering report.
- Assisted the Town of Handley and the Regional Development Council in obtaining a Small Cities Block Grant (SCBG).
- Worked continuously to keep system operating by bidding smaller projects for servicing while waiting for funding.
- Designed total rehabilitation to the three pump stations (including permanent and mobile generators).
- Designed pipe and valve replacement.
- Assisted in obtaining an SCBG construction grant.
- Able to obtain other necessary equipment with excess money from grant funding.



Before: Upper Drive Lift Station



After: Upper Drive Lift Station

## DANVILLE WASTEWATER TREATMENT PLANT UPGRADE PROJECT

Boone County Public Service District Danville/Madison, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Boone County Public Service District (BCPSD) to provide design, permitting, bidding, and construction phase services for upgrade of the following at the Danville Wastewater Treatment Plant:

- Replace mechanical bar screen.
- Replace grit pump at grit removal site.
- Repair grit removal unit drain line.
- Upgrade Orbal aeration unit.
- Add third clarifier.
- Replace UV unit.
- Replace belt filter press with rotary fan press.
- Replace hydropneumatic tank for non-potable wash water.



Addition of Third Clarifier

#### Included in this project was:



Mechanical Bar Screen to be Replaced

- 1. Preparing construction drawings that presented the upgrades.
- 2. Preparing permit applications.
- 3. Preparing a West Virginia Infrastructure and Jobs Development Council funding application and Preliminary Engineering Report, and Facility Plan.
- 4. Preparing contract documents and providing assistance during the bidding of the project (under contract to provide).
- 5. POTESTA is under contract for construction administration/ observation.

The project is to be funded by the West Virginia State Revolving Fund (SRF).

## EVALUATION OF REPLACEMENT OF ULTRAVIOLET LIGHT (UV) DISINFECTION SYSTEM WITH CHLORINATION TABLET DISINFECTION SYSTEM

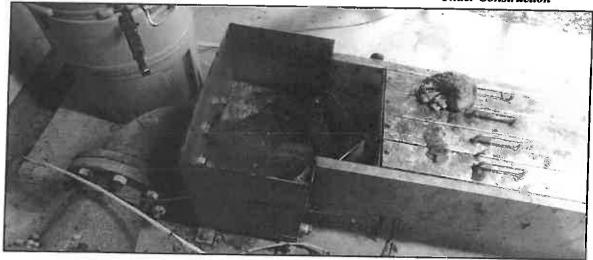
Steptoe & Johnson PLLC/Berkeley County Public Sewer Service District Berkeley County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by a law firm to provide an evaluation and subsequent affidavit regarding disinfection at Berkeley County Public Sewer Service District's (BCPSSD) 50,000 gallon per day (GPD) Marlowe Town Center package wastewater treatment plant (WWTP). The WWTP, using UV disinfection, had frequent exceedances of its fecal coliform limitation of the National Pollutant Discharge Elimination System (NPDES) permit. POTESTA provided the following services:

- Visited the WWTP site.
- Reviewed the compliance history of the WWTP.
- Reviewed operation and maintenance practices being employed at the WWTP.
- Prepared an affidavit that concluded compliance would substantially improve using chlorination tablets in lieu of UV disinfection methods.



New Chlorine Contact Basin, Under Construction



Existing UV Unit



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## SANITARY SEWER SYSTEM UPGRADES

Town of Ceredo Wayne County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Ceredo to provide design, permitting and construction phase services for an upgrade to their sanitary sewer system. The design phase included identifying the need to upgrade piping sizes and pumping rates. The project construction included:

- Replacement of 8-inch gravity line with 12-inch gravity line.
- Replacement of 2-inch force main line with 4-inch force main line.
- Upgrade of a pump station via replacement of 35 GPM submersible pumps with a new 100 GPM vacuum primed pump station.





After construction, POTESTA completed an Asset Management Plan for the sanitary system.

Project was completed within budgeted amounts using funding from the Clean Water State Revolving Fund (CWSRF).

### ASSET MANAGEMENT PLAN

Town of Ceredo Wayne County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Ceredo to prepare an Asset Management Plan, required as part of a sanitary sewer system upgrade funded by the Clean Water State Revolving Fund (CWSRF). Our effort included:

- Met on-site and reviewed the system with Town of Ceredo personnel.
- Development of asset inventory, including gravity lines, force mains, pump stations, etc.
- Identification of level of service and critical assets.
- Identification of asset redundancy, probability of failure, consequence of failure, maintenance cost, expected effective life, and replacement costs.
- Preparation of Long-Term Funding Plan.

The United States Environmental Protection Agency (USEPA) Check-up Program for Small Systems (CUP\$\$) program was used for preparing inventories, financial evaluations, etc.

POTESTA prepared the plan, received CWSRF's approval, and presented the plan in a public setting.

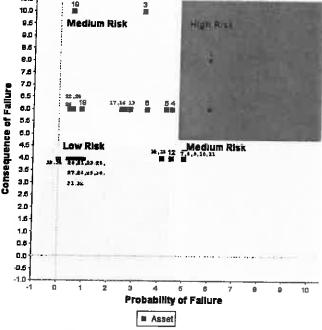


Figure from CUP\$\$ Report



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# DESIGN AND CONSTRUCTION OF WASTEWATER TREATMENT PLANT AND WATER TREATMENT PLANT

Carmeuse Lime & Stone - Winchester Quarry Clearbrook, Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Carmeuse Lime & Stone to provide permitting, design, and construction oversight services for a wastewater treatment plant and a water treatment plant.

Alternative On-site Sewage Systems (AOSS) with a maximum 900 gpd was proposed for a new administration and lime kiln equipment / operations buildings at Carmeuse's Winchester Quarry. Our services included:

- Teamed with a local onsite soils evaluator (OSE) and determined a drip irrigation system was required for this onsite sewage system.
- Designed the waste water treatment system to include; 2,000 gallon primary tank, a 1,500 gallon recirculation tank, three Advantex AX-20 treatment units, and a 1,500 gallon drainfield dosing tank.
- The system then pumps to a drainfield via a 1475 foot forcemain and return line. The drainfield consists of an alternating 3-zone, shallow-placed, forward flushing drip dispersal field.
- Worked with the OSE in acquiring the proper permits for this design, and then developed bid and specification documents, assisted in pre-bid and pre-construction meetings and provided construction oversight for construction of this system.
- Developed the operation & maintenance manual and as-built drawings for final permitting.



Non-transient/non-community waterworks system with a Class IV 900 gpd was proposed for a new administration and lime kiln equipment/operations buildings at Carmeuse's Winchester Quarry. POTESTA services included:

- Acquired permitting and developed bid and specification documents for development of a 400 foot deep Class II-B groundwater well.
- Based on the raw water quality, which was high in iron, manganese, total dissolved solids and sulfate, POTESTA designed a water treatment system that included; 3 sediment filters, 1 iron/manganese treatment unit with backwash capability, 2 1500 gpd reverse osmosis units with anti-scalant system, calcite filtration to reintroduce hardness and two 750 gallon storage tanks.
- The finished water was designed to be pumped using the 35 gpm high service pumps to a 40 gpm UV disinfection system, and out to the distribution system.
- Submitted design to the Virginia Department of Health and a Waterwork and a construction permit was acquired.
- Daily construction oversight of the waterworks construction, including acquiring a certified operator to operate and maintain (daily) the system and provided assistance in waterworks permitting.



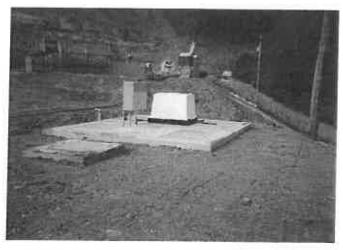
# UPGRADE OF TOWN OF BRADSHAW VACUUM/SEWAGE COLLECTION SYSTEMS FOR NEW SCHOOLS

ZMM, Inc. McDowell County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by ZMM, Inc. to provide design, permitting, bidding and certain construction phase services associated with (a) a collection system associated with two new schools of the same site, and (b) the associated upgrade of the Town of Bradshaw's existing vacuum collection system. Construction included:

- Upgrading an existing single valve vacuum system buffer tank to a triple valve buffer tank.
- Upgrading an existing vacuum pump station by adding a third 10-horsepower (HP) pump.
- Installing an approximate 11,500-gallon equalization tank, with duplex 45 gallons per minute (GPM) pumps with variable frequency drives (VFDs).
- Relocating approximately 200 feet of grinder pump system pipeline.
- Installing approximately 1,500 feet of force main.
- Installing approximately 1,800 feet of 8-inch gravity sanitary sewer line.

The project was completed and went into service with completion of the schools.



Equalization Tank/Pump Station During Construction



# BOY SCOUT CAMP WATER AND SEWER SYSTEMS AT DILLEY'S MILL

Buckskin Council – Boy Scouts of America Pocahontas County, West Virginia

Potesta & Associates, Inc. (POTESTA) worked with the Buckskin Council of the Boy Scouts of America (BSA), the West Virginia Department of Environmental Protection (WVDEP) and the West Virginia Department of Health and Human Resources (WVDHHR) to correct problems with the existing drinking water and sanitary sewer systems at the Buckskin Reservation at Dilley's Mill, Pocahontas County, West Virginia.

After problems were discovered at the camp, the BSA asked POTESTA to review the sanitary sewer system and make recommendations regarding the upgrade and replacement of the existing lines. POTESTA was also asked to evaluate the existing sewage lagoon to determine if the facility was of adequate size. A site review of well locations, tank site, sewage treatment lagoon and alignment and location of both water and sewer lines was completed, and a report on problems identified and recommendations for correction was submitted to the BSA.

POTESTA provided administration and oversight of closure and abandonment of two of the camp's drinking water wells and the drilling of a replacement potable water well. Evaluation, recommendations and a master plan for replacement of the existing sanitary sewer system were provided by POTESTA engineers. The camp's sewage treatment lagoon was evaluated and recommendations were made for completely rehabilitating the lagoon to meet current regulatory standards.

POTESTA provided regulatory liaison and assistance with the forms required for well closure and abandonment, installation of a replacement well and replacement of the existing sewer system. Bid packages were developed for the required work and POTESTA worked closely with the BSA to issue and administer the contract with the successful bidder. After evaluation, the sewage lagoon was found to need replacement, and POTESTA worked with the BSA to provide design and construction of the replacement facility.





# GETTYSBURG SUBDIVISION SANITARY SEWER LINE EXTENSION

Timberwolf Development Corporation Kanawha County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Timberwolf Development Corporation (Timberwolf) to provide engineering design, permitting, and construction monitoring for a gravity sewer line extension as part of development of an 18-lot subdivision. POTESTA's effort included:

- Engineering design of 1,200-foot, 8-inch gravity sanitary sewer line; a duplex grinder pump station with a 48-inch diameter wet well; and 740 feet of 3-inch force main.
- Obtained permits from West Virginia Division of Highways, West Virginia Office of Environmental Health Services, West Virginia Bureau of Public Health, and West Virginia Department of Environmental Protection.
- Prepared construction drawings and technical specifications.
- Provided daily construction monitoring.
- Submitted weekly progress reports to Charleston Sanitary Board (CSB) throughout sanitary sewer line construction.
- Coordinated with CSB to obtain acceptance of sanitary sewer line upon project completion.



Manhole During Construction





#### **EDUCATION**

M.S. Civil Engineering, 1979 West Virginia University

B.S. Civil Engineering, 1978 West Virginia University

#### **EMPLOYMENT HISTORY**

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

#### PROFESSIONAL REGISTRATIONS

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

#### PROFESSIONAL CERTIFICATIONS

40-Hour Health and Safety Training

#### SERVICE ON BOARDS AND COMMISSIONS

Environmental/Technical Committee member – West Virginia Coal Association

Environmental Committee member - Kentucky Coal Association

Past Board of Directors member and current Waste Team Chairman on the Environmental Safety and Health Committee – West Virginia Manufacturers Association

Environmental and Safety Committee member Independent Oil and Gas Association of West Virginia

Environmental Committee member – West Virginia Oil and Natural Gas Association

Past President – West Virginia Society of Professional Engineers, Professional Engineers in Private Practice

Past President and past Board of Directors member – American Council of Engineering Companies West Virginia Chapter

Past Chairman of Transportation Committee – American Council of Engineering Companies West Virginia Chapter

Past Board of Directors member – Society of American Military Engineers Huntington Post

Member Committee D-18 on Soil and Rock — American Society for Testing and Materials (ASTM)

#### PROFESSIONAL AFFLIATIONS

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

#### AREAS OF SPECIALIZATION

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

#### PROFESSIONAL EXPERIENCE

#### Civil/Site Design

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

- Residential subdivisions
- Commercial developments

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

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

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

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

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

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

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

The Villages at Coolfont – Principal-in-Charge to provide environmental and engineering consulting services for the redevelopment of the Coolfont Recreation property in

Morgan County, West Virginia to create a second home community with high-end amenities.

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

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

Tucker County Industrial Park — Principal-in-Charge for the design which included water and sewer lines, stormwater management design, roadway design, pavement design, site grading plan, master plan, and geotechnical exploration/foundation recommendations. Principal-in-Charge for site grading plans, stormwater management system, site surveying, roadway/parking lot design, wetland delineation/mitigation, and construction monitoring for the 400,000 square foot Coldwater Creek distribution center in Parkersburg, West Virginia.

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

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

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

Carmeuse Lime & Stone - Principal-in-Charge of engineering and environmental services for the expansion

of current quarry operations at Winchester quarry in Winchester, Virginia. The expansion includes the addition of two new vertical lime kilns and associated equipment, increasing their current aggregate crushing operation, and expanding their rail system to allow for increased shipping of product.

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

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

#### Water Lines, Water Storage Tanks, and Water Treatment Plants

New extensions and replacement of existing lines:

- Cassity Fork Water Supply Extension Project –
   Randolph County, WV (Project Manager)
- Godby Branch Water Supply Extension Project Logan County, WV (Project Manager)
- Beaver Creek Water Supply Extension Upshur County, WV (Project Manager)
- Buff Creek/Trace Fork Putnam County, WV (Principal-in-Charge)

- Route 60 Putnam County, WV (Principal-in-Charge)
- Boone County PSD numerous extensions Boone County, WV (Principal-in-Charge)

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

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

Principal in charge for design of multiple water line extensions including design of water storage tanks, booster stations, pressure reducing valves, master meters, and telemetry systems. Work included surveying, subsurface explorations, hydraulic design, preparation of drawings, specifications, cost estimates and permit applications, and assistance with bidding in West Virginia, including:

- 10-Mile-South Putnam Water Supply Extension project – Lincoln and Putnam Counties, WV
- 5-Mile-Cline Hollow, Younger Drive, Left Hand Fork of Lens Creek, and Emmons-Grippe Water Supply Extension Project – Kanawha County, WV

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

contractor submittals, review of change order requests, and review of contractor invoices.

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

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

West Virginia Bureau for Public Health — Principal-in-Charge for services associated with Source Water Assessment Protection Plans (SWAPP) for 38 public water systems throughout West Virginia. Services provided included windshield surveys to identify and locate (via GPS) potential contaminant sources (PCS's), review of regulatory databases, entering data into Access database, and preparation of summary reports.

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

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

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

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

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

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

#### Sewer Lines and WWTPs

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

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

#### **Geotechnical**

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

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

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

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

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

Principal-in-Charge for Williamson Landslide Project involving an abandoned mine land site. Geotechnical exploration and design of 480-foot long soldier beam and lagging retaining wall with tiebacks to support loose mine spoil backfill along the edge of a previously mined area with steep terrain. Project was required to protect an existing 125-bed nursing home facility.

#### NPDES Industrial/Municipal Permitting

Completed NPDES renewal permitting and associated agency negotiations for several facilities.

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

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

#### Hydrology and Hydraulics

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

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

#### Environmental Assessments/Impact Statements

Management of numerous environmental assessments for property transactions:

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

#### DANA L. BURNS, P.E., P.S. Page 6

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

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

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



#### **EDUCATION**

M.S. Civil Engineering, 1989 West Virginia University

B.S. Civil Engineering, 1987 West Virginia University

#### **EMPLOYMENT HISTORY**

1999-Present Potesta & Associates, Inc. 1989-1999 GAI Consultants 1987-1989 West Virginia University

1985-1987 West Virginia Division of Highways

(summers)

#### PROFESSIONAL REGISTRATION

Professional Engineer - West Virginia, Virginia

#### PROFESSIONAL CERTIFICATION

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

#### AREAS OF SPECIALIZATION

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

#### PROFESSIONAL EXPERIENCE

#### Sewer Lines and WWTPs

Project Manager for more than 30 wastewater projects, including municipal sanitary sewer treatment systems, industrial pretreatment systems, modification of sewer treatment plants, outfall modifications including diffuser installation, and upgrades to municipal collection systems. Also included were completions of studies mandated by the West Virginia Public Service Commission.

Projects funded by State Revolving Fund (SRF), West Virginia Infrastructure and Jobs Development Council, United States Economic Development Agency and Private Funding sources.

Boone County Public Service District – Preliminary engineering, funding application, and final design for WWTP upgrade. Funding proposed through the Clean Water State Revolving Fund (SRF).

- Mechanical bar screen replacement
- Grit removal system replacement
- Mechanical aerator replacement
- Addition of third clarifier
- RAS pump addition
- UV unit replacement
- Belt filter press replacement
- Wash water system upgrade
- Other upgrades

Town of Ceredo – Perform design, bidding, and construction phase services for upgrade of existing sanitary sewer collection system, including upgrades to gravity and force main lines, and a lift station. Funding was thru the Clean Water State Revolving Fund (SRF).

Salt Rock Sewer Public Service District Master Service Agreement:

- Specification for WWTP wash line
- Preparation of NPDES modification for sludge disposal from a publicly owned treatment works
- Preparation of odor control study mandated by the West Virginia Public Service Commission (WVPSC)
- Preparation of cost estimates for requests for service
- Evaluation of lift station overflows

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Town of Ceredo – Evaluation of remaining capacity of grinder pump system.

Town of Moorefield – Study on costs of \$30,000,000 sanitary sewer system (plant and collection system).

South Putnam Public Service District – Evaluation of conversion of industrial wastewater treatment to a publicly owned treatment works.

West Virginia American Water – Assessment of City of Oak Hill and City of White Sulphur Springs publicly owned treatment works (POTW) to recommend improvements in operation and maintenance.

Town of Bradshaw – Design of collection system for two new schools, and design, permitting, bidding, and certain construction phase services for equalization basin/lift station, and upgrades to vacuum station and buffer tanks.

Tucker County Development Authority – Design, permitting, bidding, and construction phase services for gravity collection system, force main, and lift station for industrial park.

Boone County Public Service District – Preliminary engineering report for collection system and sequencing bench reactor (SBR) wastewater treatment plant for the Town of Nellus.

MDG Homes – Preparation of hydraulic calculations and record drawings for variable grade effluent sewer system at large development in eastern panhandle.

Client Confidential – Coordination of treatability study for industrial treatment plant.

Design of numerous sanitary sewer extensions associated with private developers, including design of gravity and force main lines and lift stations, including approvals by local public utilities such as Jefferson Utilities, and approvals by West Virginia Department of Environmental Protection.

Pocahontas County Public Service District/Wastewater Management – Study on replacement of Hawthorn Loop Sanitary Sewer System.

Steptoe & Johnson/York Bronze Company – Design of batch chemical pretreatment system for bronze facility in northern West Virginia. Included were sizing of units and

building to house treatment system, and preparation of drawings, specifications, and cost estimate.

Columbia Gas Transmission Corporation:

- Design of sump/pump and storage tank to allow treatment and storing of waste water; and negotiation with hauler and POTW to allow disposal of waste water at Files Creek Compressor Station.
- Design of an oil/water separator, sump/pump, and storage tank to allow treatment and storing of waste water; and negotiation with hauler and POTW to allow disposal of waste water at Cleveland Compressor Station.
- Design of a waste water treatment plant for compliance with a compressor station's NPDES permit. Included was preparation of facilities preliminary and final engineering plans, selection of treatment (chemical precipitation, activated carbon and filtration), and detailed drawings and specifications.
- Evaluation of effectiveness of existing ozonator/activated carbon wastewater treatment system at a natural gas compressor station. Evaluation included 30-day composite sampling plan of wastewater, compilation of results, comparison with treatment system capacity, and issuance of findings in a report. Also included was issuance of a report summarizing technical feasibility and costs for alternate treatment options.
- Project Manager for conceptual design of oil/water separator at the Crawford Compressor Station in Ohio.

Tetra Technology - Preparation of operation and maintenance manual for a waste water treatment plant at the Yak Tunnel Superfund site in Leadville, Colorado.

Project Engineer for design and permitting of sanitary waste water treatment system for coal mines in Logan and Raleigh Counties, West Virginia. Included was preparation of drawings and specifications.

- Eastern Associated Coal Corp.
- Rum Creek Coal Sales

West Virginia Department of Environmental Protection, LCAP – Design of 1.2 miles of pressure and gravity sewer line at the Jackson County Landfill to convey landfill leachate to an existing sanitary collection system. Included were provisions for servicing residences along the pathway, hydraulic sizing, and preparation of drawings, specifications and a cost estimate.

#### Water Lines, Water Storage Tanks, and Water Treatment Plants

Project Manager/Project Engineer for more than 70 water supply projects involving design and, permitting of water treatment facilities, water line extensions, water storage tanks, booster stations, chlorine boosters, pressure reducing valve stations, service connections and providing fire flow demands. Tasks include client/contract management; mapping development; hydraulic design; geotechnical investigations; preparation of drawings, specifications, and cost estimates; and preparation of Bureau of Public Health, Public Lands Corporation, United States Army Corps of Engineers, West Virginia Division of Highways, and NPDES permit applications.

Projects funded by federal, state and private funding including small cities block grant, United States Department of Agriculture, Rural Economic Development Agency, Drinking Water Treatment Revolving Fund (DWTRF), West Virginia Infrastructure and Job Development Council, Congressional Supplemental Appropriations (SAP), Abandoned Mine lands, United States Army Corps of Engineers, Governor's office funding, county commissions and private funding.

West Virginia Bureau for Public Health - Project Manager for 3 contracts for source water protection:

- Source water reports for 133 public water systems
- Preparation and presentation of state-wide source water awareness symposiums
- Source water assessment and protection plan reports for 60 public water systems

Town of Ceredo – Project Manager for 20,000 feet of water line replacement, water tanks, telemetry, and booster stations.

Boone County Public Service District – Project Manager for 15+ water supply extension projects in Boone County District from 2004 to present. Included were Preliminary Engineering Reports (PER), and design bidding and construction phase tasks.

Project Manager for Mill Creek Regional Water Supply Extension Project. Design included 34 miles of waterline, booster stations, tanks, and a water treatment plant. Included design of storm water ditches and culverts, and crossings of a railroad. Approval was obtained from CSX Transportation, WVDOH, PLC, USCOE, and West Virginia Bureau for Public Health. Deliverables included drawings, specifications, and cost estimates.

- West Virginia Division of Environmental Protection
- Logan County Public Service District

West Virginal American Water – Project Manager for construction administration/monitoring for the Poca River Road Waterline Extension Project; Cabell County Waterline Extension Project, Contract No. 7; Spite Road Waterline Extension Project; and Fisher Ridge Waterline Extension Project. Work included construction monitoring, preparation of weekly reports, review of contractor submittals, review of contractor invoices, and preparation of record drawings for 100,000+ linear feet of waterline extensions.

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

West Virginia American Water — Design of main line pressure reducing valve and vault for the Glenwood Avenue Extension of the Cabell County Waterline Extension Project, Contract No. 6. Work included hydraulic sizing and preparation of drawing.

West Virginia American Water — Design, permitting, bidding and contract documents, and construction phase services for residuals handling facility at largest water treatment plant in West Virginia, including 1,000,000 gallon gravity thickener, sludge pumping stations, two belt filter presses, and a plate settler.

West Virginia Department of Environmental Protection — Project Manager/Project Engineer for design of multiple waterline extension in West Virginia. Included was design of six water storage tanks, five booster stations, pressure reducing valves, master meters, and telemetry systems. Work included surveying, subsurface explorations, hydraulic design, preparation of drawings,

specifications, cost estimates, and permit applications, and assistance with bidding. Representative projects included:

- 10-Mile-South Putnam Water Supply Extension Project in Lincoln and Putnam Counties;
- 5-Mile-Cline Hollow, Younger Drive, Left Hand Fork of Lens Creek, and Emmons-Grippe Water Supply Extension project in Kanawha County;
- 2.5-Mile Godby Branch Water Supply Extension Project in Logan County;
- 20-Mile Cow Creek-Sarah Ann Water Supply Extension project in Logan County;
- 8-Mile Cassity Fork Water Supply Extension project in Randolph County; and
- 10-Mile Olive/Marshville/Catfish Hollow Water Supply Extension project in Harrison County

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

West Virginia Davison of Environmental Protection - Project Engineer for preparation of conceptual design and cost estimate for the Mill Creek — Isom Community (Logan County Public Service District) Water Supply Extension Project.

Town of Pineville – Evaluation of water treatment plant and water distribution system, including observation of system during site visit, records review, discussions with regulatory officials, and issuance of findings in a report.

West Virginia Division of Environmental Protection — Project Manager for technical review of the Gauley River Area Waterline Extension proposed by the Gauley River Public Service District and the Heizer/Manilla Creek Waterline Extension proposed by West Virginia American Water. Included hydraulic analysis, evaluation of line size, review of drawings and specifications, and reporting on the evaluation in letter format.

City of Philippi — Relocation of waterlines due to proposed roadway. Relocation included approximately 4,000 feet of 1-inch to 12-inch diameter pipe, fire hydrants, meters, and valves. Prepared construction drawings, specifications, and quantities.

Short Line Public Service District/Harrison County Planning Commission — Project Manager for feasibility/rates analysis study for the proposed Reynoldsville, Wallace, and Clarksburg Water Supply Extension Project. Included evaluation of six options at multiple loan/grant funding scenarios.

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

West Virginia Division of Environmental Protection – Project Manager/Project Engineer for numerous conceptual waterline designs for 20 unserviced areas (between 1991 and 1996) in coal mining areas in West Virginia. Included hydraulic evaluation, booster station, and water storage tanks sizing, waterline sizing, and estimation of construction cost. Work completed in Barbour, Boone, Brooke, Fayette, Harrison, Lincoln, Logan, Putnam, and Randolph Counties.

West Virginia Division of Environmental Protection – Project Manager for design of booster station upgrade for the Clinton Water Association's Ringgold pump station, including preparation of drawings, specifications, and cost estimate.

West Virginia Department of Energy — Groundwater contamination study for drinking water wells near Cassity, Randolph County, West Virginia, including water supply inventory of over 50 residents, collecting and analyzing well and surface water samples, and researching records to determine the percentage of homes whose water supply had been degraded by acid mine drainage.

Public Utility General - Project Manager for construction administration including preconstruction meetings, shop drawing review, coordination with construction technician team(s), contractor pay application review, public record drawings, and public interface for 15+ water and wastewater utility and/or infrastructure projects including utility line extension and upgrades, construction and modifications of treatment facilities. Clients include municipalities, public service districts, industry, county development authorities and private Construction included water and sewer lines, booster stations, tanks, lift stations, vacuum sewer stations, treatment basins, dewatering equipment, clarifiers,

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chemical fee systems, buildings associated with treatment systems, outfall modifications, and diffusers.

#### Environmental Assessments/Impact Statements

Environmental site assessments, including record searches and field investigations, for numerous sites in West Virginia, Virginia, Ohio, and North Carolina.

Specialization in large acre tracts, typically ranging from 1,000 acres to 65,000 acres, including coal properties.

- Dominion Resources
- Goldman Associates
- DiMucci Development
- FDIC
- Rhone-Poulenc Ag Company
- GSA
- General Electric
- West Virginia University
- Peabody Coal Company
- Massey Coal Services
- Kanawha County Solid Waste Authority
- Capel, Incorporated
- Plasma Processing Corporation
- Sun Bank South Florida
- Vaughan Railroad Company
- Foodland
- Jackson & Kelly
- Spilman, Thomas and Battle

University of North Carolina — Preparation of an Environmental Assessment showing no significant environmental impact for a proposed 1,400-foot television tower near Chapel Hill, North Carolina.

West Virginia Division of Highways – Project Engineer for completion of hazardous waste portion of environmental assessment for 22 miles of proposed upgrade to US 19, north of Summersville, West Virginia. Included site reconnaissance, interviews, and records search to identify potential hazardous waste sites along path of proposed upgrade.

#### NPDES Industrial/Municipal Permitting

Project Manager for the acquisition of NPDES permits for construction activities for multiple civil engineering projects, including sanitary sewer collection systems and water supply extensions.

Project Manager for compilation of storm water sampling plans/kits for NPDES permit applications:

- Columbia Gas Transmission Corporation
- Plasma Processing Corporation

Preparation of Stormwater Pollution Prevention Plans (SWPPs) required by NPDES permits for natural gas compressor stations and secondary aluminum facilities:

- Columbia Gas Transmission Corporation
- Plasma Processing Corporation

Preparation of NPDES permit applications for industrial sites, and regulatory liaison associated with the applications:

- Municipal and industrial waste landfills West Virginia Solid Waste Management Board, S & S Grading, Inc., and Rhone Poulenc, AG
- Water treatment plant West Virginia Department of Environmental Protection/Logan County Public Service District, and West Virginia-American Water Company
- Secondary aluminum facility Plasma Processing Corporation

Design of outfall modifications, including diffuser systems on outfalls. Included were hydraulic sizing and preparation of drawings, specifications and cost estimates. Some projects included bidding and construction phase services.

- City of South Charleston WWTP
- Allegheny Energy Services
- Cytec Industries Inc.
- Consol Energy, Inc.
- Akzo Nobel Chemicals
- Kureha, Inc.
- CNX Gas
- Patriot Coal
- Bayer Crop Science
- Momentive, LLC

Served on West Virginia Manufacturer's Association Committee to prepare guidance document for preparing Groundwater Protection Plans (GPP's) for facilities regulated by NPDES permits.

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#### Columbia Gas Transmission Corporation:

- Project Manager for preparation of template Groundwater Protection Plan to cover 50+ natural gas industry facilities in West Virginia. Included was preparation of hard copy and digital format version for use by facility personnel.
- Preparation of comments on draft NPDES permits including negotiations on revising permit conditions for multiple natural gas compressor stations in West Virginia.
- Preparation of report evaluating and recommending disposal options for water at Crawford Compressor Station in Ohio, including subsequent negotiations for direct discharge of water without NPDES permit.
- Project Manager for preparation of State of New York SPDES permit application for the Greenwood Storage Field.
- Preparation of default mixing zone model to allow for proposed increase in iron NPDES limits at the Cobb Compressor Station in Kanawha County, West Virginia.



#### **EDUCATION**

B.S. Civil Engineering, 1982 West Virginia University

#### **EMPLOYMENT HISTORY**

2011-Present Potesta & Associates, Inc.
1991-2011 West Virginia American Water
1988-1991 Dunn Engineers, Inc.
1982-1988 Kelley, Gidley, Blair & Wolfe, Inc.

#### PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia Professional Surveyor – West Virginia

#### PROFESSIONAL AFFILIATIONS

American Water Works Association National Society of Professional Engineers

#### AREAS OF SPECIALIZATION

Water including design of water mains, water storage tanks, booster stations, pressure reducing stations, advanced metering infrastructure – (AMI) and Automated Meter Reading – (AMR) systems. Extensive knowledge in water distribution systems operation and maintenance.

#### PROFESSIONAL EXPERIENCE

#### Sewer Lines and WWTPs

Project Manager for the replacement of the Wastewater Treatment Plant at Point Pleasant, West Virginia. This included being responsible for design, plans, specifications, regulatory approval, bidding and bond sale, and construction management.

Inspection of wastewater collection systems, writing Operation and Maintenance Manuals, Facility Plans, and Grant Applications for various clients.

Project Manager for the Big Sandy Sewer Public Service District Vacuum System Project, which included the design and construction of three vacuum sewer stations, two sewage pump stations, a 9-mile force main, and the vacuum sewer collection system. Responsibilities of the above involved the preparations of engineering contracts, planning reports, plans and specifications, bid documents, operation and maintenance manuals, and change orders for state and federally funded wastewater and water projects. The process involved cost-effective analysis, public relations, technical writing, and public speaking.

Project Engineer for the Logan Wastewater Interceptor Project, the Town of Barboursville Lagoon Improvements, and the Philippi Wastewater Project including a new Oxidation Ditch Plant, renovation of an existing pump station, sewer main replacement design, and construction. Experience included designing wastewater treatment plants, sludge handling facilities including belt filter presses, wastewater collectors and pumping systems, site developments, access roads, and combined sewer overflow (CSO) facilities.

#### Water Lines, Water Storage Tanks, and Water Treatment Plants

Responsible for engineering at West Virginia American Water (WVAW):

- Supervising an engineering staff of eight, working in conjunction with other departments at WVAW.
- Developing and prioritizing multiple capital projects while developing and managing the multi-million capital budget for West Virginia. Budgeting includes developing and creating large investment projects, multiple public private partnerships and several acquisitions.

# MARK A. SANKOFF, P.E., P.S. Page 2

- Involved in multiple operational issues/projects including non-revenue water reduction, comprehensive planning studies including interconnection studies to combine operations to increase efficiencies.
- Worked on the automation of Bluestone Water plant which is intended to be the first one shift automated and unattended surface water treatment plant in West Virginia.
- Design of multiple pressure reducing stations and booster stations.
- Overseeing a \$1.5+ million per year tank painting program.
- Managed tank painting program, which included evaluating, prioritizing, draining and refilling tanks, tank inspections, preparation of contract documents, bidding, bid evaluations, contract awards, scheduling, taking tanks out of service while maintaining uninterrupted service to customers.
- Responsible for over 300 tanks in the largest water system in West Virginia.

Responsible for the Fayette AMI project, a \$4.3 million dollar meter replacement/automation project to automate almost 12,000 water meters in Fayette County, West Virginia. This project was part of an EPA Green Project and the project was successfully publically bid using a performance specification using stimulus money. Methods were developed to economically work through terrain issues as it related to radio signals to develop a successful project. The project successfully incorporated acoustic listening devices to monitor the distribution system at night to reduce non-revenue water in the Fayette water system.

City of Glenville – Project Manager for the study, design, bidding, and construction phase services for project involving upgrades and construction monitoring to their existing potable treatment and water distribution system.

Town of Mills Creek - Project Manager for the design, permitting, preparation of construction plans, specs, and bidding documents, and construction administration/observation services for the construction of two backwash ponds behind the existing water treatment plant.

Responsible for the project management to complete the WVAW building complex at 1600 Pennsylvania Avenue, Charleston, West Virginia. Provided oversight of the building complex for all operation and maintenance items, as well as liaison with the leasees.

Project Manager of the Kanawha Valley to Montgomery Interconnection Project design which included over 20 miles of 20-inch to 12-inch water mains, two relay booster stations, one storage tank, Kanawha River Crossing, railroad crossings, two pressure reducing stations and radio telemetry.

Project Manager for the EPA IDSE disinfection project to develop the computer water models for the Charleston and Huntington water systems which calibrated the two largest water distribution systems in West Virginia.

Project Manager for the Kanawha County IDB Water Project 2000 which served 33 areas and brought water to over 1,740 families. The total project cost of over \$22 million included over 100 miles of water mains, five boosters and six water storage tanks of various sizes. Oversaw the design work of six consultants, including acquiring the rights-of-way, the bidding of 12 water main contracts, and the construction of those contracts with five consultants handling five contractors, while managing the bidding and construction of the above boosters and water storage tanks.

Prepared specifications and plans for numerous water main extensions, water storage tanks, boosters and hydro pneumatic booster stations and pressure regulating stations including site work, other utilities, and property acquisition, including bidding, project and construction management.

Parcoal Project, Webster County, consisting of 8-inch water main extension and a 160,000-gallon water storage tank using an ARC Grant.

Southridge Development Project consisting of 16-inch water main extension to serve the Southridge Development on Corridor G.

Responsible for the 55-person department that maintained the Kanawha Valley water distribution system, which repaired an average of 1,500 main breaks per year up to 30-inch PCCP:

- Responsible for providing new water services the department made an average of 850 taps per year
- Oversaw the leak survey effort to reduce unaccounted for water developed a system to check night flow in systems using existing telemetry to determine leakage and direct efforts to maximize finding and fixing those leaks

# MARK A. SANKOFF, P.E., P.S. Page 3

- Coordinated the small diameter main replacement program which averaged over one million dollars per year
- Comprehensive supervisory experience between union and non-union personnel – responsible for five supervisors
- Assisted in union negotiations developing a process to equalize overtime within the distribution department Worked with the Manager to develop 24-hour coverage shifts to provide better customer service and reduce O&M costs, including a 12-hour shift schedule using four foremen to provide round the clock coverage
- Served as the liaison with Kanawha County Commission and KCRDA on new water projects to serve un-served areas

Oversaw the completion of the construction of the Consolidated Office Complex for WVAW's corporate headquarters in Charleston in 1997 to 1999.

Kanawha County Water Main Extension Project consisting of waterlines, booster, a 200,000-gallon water storage tank, and four pressure-regulating stations for the Campbells Creek area of Kanawha Valley.

Quarry Creek Subdivision consisting of vertical turbine booster station and a 330,000-gallon water storage tank, with an elevated storage tank bid option and water lines.

Kellys Creek Project consisting of 16-inch water main extension, booster station, and water storage tank along Route 60 using WVDEP, AML funding.

Little Sandy, Aarons Fork and Edens Fork Projects. Construction of water mains, a booster station and a 160,000-gallon storage tank utilizing two Small Cities Block Grants with KCDRA.

Summers-Mercer Water Project included design of an 8-inch water main to Hinton and a 24-inch water main from the new Bluestone plant to Princeton, including the pressure reducing stations along with the 300,000-gallon water storage tank near Pipestem.

Designed and constructed multiple small water main extensions, working with developers, customers and small contractors to serve new subdivisions and unserved areas.



# **EDUCATION**

M.S. Engineering Management, 2006 Marshall University

B.S. Civil Engineering, 1988 University of Florida

Administration – United States Air Force Technical School

## **EMPLOYMENT HISTORY**

2007-Present 2000-2007	Potesta & Associates, Inc. WV Dept. of Health and Human		
	Resources		
1997-2000	Summit Engineering, Inc.		
1 <b>997</b>	Pyramid Consultants, Inc.		
1995-1997	Haworth, Meyer and Boleyn, Inc.		
1989-1995	GAI Consultants, Inc.		
1979-1983	United States Air Force		

#### PROFESSIONAL REGISTRATION

Professional Engineer - West Virginia

# AREAS OF SPECIALIZATION

Drinking water and wastewaster including funding coordination; hydrologic and hydraulic analysis including dam break; chemical and municipal solid waste disposal; surface coal mining; limestone quarry mining; abandoned mine lands reclamation; and site development.

# PROFESSIONAL EXPERIENCE

### Sewer Lines and WWTPs

Huntington Sanitary Board – Client Manager for oversight of designed construction of the following:

- Design, bidding, and construction management of combined sewer replacement project on 13<sup>th</sup> Street West and 19<sup>th</sup> Street, which included a combination of full trench replacement and trench-less technology pipe lining (cured-in-place pipe) for approximately 3,000 feet of 24 through 36-inch pipe.
- Redesign, bidding, and construction management of conversion of four ejector stations to submersible pump stations to include altering design from a castin-place concrete cap to allow building to remain. Design included new hatches and hoisting, ventilation equipment, heating, bypass features, and oversight of electrical design.
- 13th Street Pump Station design, bidding, and construction management of installation of 30-inch bypass on 48-inch prestressed concrete cylinder pipe and replacement of 2-24" failing 90 degree discharge pipe bends, including air release valves. Project included installations of water stops in existing 48" pipe and coordination with the WVDEP to discharge into river during construction work.
- Assistance regarding the CSO long-term control plan's implementation schedule and lead participation development of asset management plan.
- Preparation of wastewater treatment plant incinerator failure analysis and replacement analysis.
- Environmental remediation of fly ash lagoon through West Virginia Voluntary Remediation Program and design of bioretention basin at WWTP for treatment of stormwater fitting "green" project criteria.
- Management of study and preparation of Preliminary Engineer Report for replacement of Huntington's primary 33 MGD pump station facility (13<sup>th</sup> Street).
- Evaluation of the mixing zone for the Wastewater Treatment Plant discharge.
- Replacement of 54" of PCCP force main crossing flood level at WWTP entrance.
- Design, bidding, and construction management of replacement of 54-inch CMP effluent line with 48-inch HDPE line and diffuser at WWTP, including installation of connection vault, degassing manhole, two manholes, and overflow channel and

rehabilitation of existing pipe at entrance to effluent line with ecocast lining.

Design, bidding, and construction management of installation of new septage receiving and vacuum truck discharge station to include truck operator control station to allow flow measurement and billing, new access road and pump station to tie-into force main.

Town of Handley – Design of complete rehabilitation of three existing pump stations to include raising elevation of one station above flood plain level.

University of Charleston – Design engineer on rehabilitation of sanitary and stormwater system to include the design and construction of precise bore and jack of two sections main truck line (approximately 500 feet) under the existing main entrance area so that existing old trees, entrance walkways, and vegetation were not disturbed. Due to flat slope lines and requirement of line to meet existing manhole elevations, lines were accurate to a 1/100<sup>th</sup> foot.

Developed 201 Facilities Plan for \$28 million wastewater collection and treatment project in Logan County, West Virginia.

Summit at Cheat Lake Residential Development – Design of package plant and gravity inflow sewer lines, 2,500 linear feet of 1.5-inch and 2-inch force main line from three pump stations for 120-acre, 95-lot residential development at Cheat Lake in Monongalia County, West Virginia.

#### American Electric Power Company:

 London Locks, West Virginia and Clayton Lake, Virginia - Peat Sanitary Sewer Treatment System, including sediment basin, peat treatment, and UV system

# <u>Water Lines, Water Storage Tanks, and Water</u> <u>Treatment Plants</u>

# West Virginia Bureau for Public Health

- West Virginia Infrastructure and Jobs Development Council:
  - Oversight of water technical review committee for infrastructure water projects
  - Member of sewer committee and sitting member of the Funding and Infrastructure Council

- Oversight of technical assistance/review for infrastructure water projects and wastewater preliminary applications Represented Bureau of Public Health in committee and council meetings
- Sitting member of consolidation committee
- Permitting Program Directed review and issuance of public water and wastewater, public swimming pool, agricultural waste construction permits and water vending machine permits.
- Drinking Water Treatment Revolving Fund and State Tribal Assistance Grant Programs:
  - Oversight of loan and grant administration, including technical and financial review
  - Project selection
  - Coordination with appropriate federal and state agencies (environmental and funding) and public water systems
  - Coordination of bid advertising, loan closing, construction administration (processing of invoices, change orders, etc.)
  - Water system adherence to loan conditions
  - Preparation of program grant applications and reports to EPA including: annual reports, disadvantaged business enterprise reports, and intended use plans
  - Oversight of 2 percent technical assistance grant with the West Virginia Rural Water Association, which provides continuing education to water treatment plant operators
  - Oversight of the 4 percent administrative set-aside to Water Development Authority in financial management of the Drinking Water Treatment Revolving Fund
  - Directed, assessed, reported on and provided assistance on the technical, financial and management capabilities of public waters systems
  - Responsible for the oversight of program adherence to capacity development strategy, Governor's report, and annual reports to the EPA.

Project engineer on multiple waterline extension projects, including WVDEP-AML projects in central and southern West Virginia. Projects contained waterline, tank and booster station design, preparation of contract bid documents, and construction management.

Villages of Coolfont – Project Engineer for design, including three raw water wells drilling and development, field testing and design of 300 gallon per minute potable ionization water treatment plant to serve 1300-home village center and spa, three deep wells and raw water transmission lines. Water treatment plan was designed to treat hard water.

Webster County Commission, Countywide Water Study – Secured grant from the West Virginia Bureau for Public Health to conduct county wide study to include consolidation of county service providers in order to provide better service to customers in Webster County, West Virginia. Prepared preliminary engineering reports to provide service to Erbacon and Route 82 areas of Webster County.

# Hydrology and Hydraulics

City of Charleston – Stormwater analysis on existing and future developments of residential watershed in Charleston, West Virginia. Preliminary design of channels, culverts, and flood detention structures. Preparation of design report in which various alternative hydraulic structures were compared with respect to cost and constructability.

Preliminary design of a stormwater management system and grading plans for a regional mall in Western Pennsylvania. Evaluation of several drainage alternatives and pond designs for a site containing numerous wetlands.

Analysis and design of stormwater management for six separate sites, two of them shopping centers, including storm channels, surface and subsurface stormwater detention facilities, culverts, and pipe sizing design. Design, installation, monitoring and analysis of data from a stream gage for a water supply study of a power generating plant owned by an independent power company.

Pennsylvania Department of Transportation – Drainage structure designs for various projects to include hydrologic analysis, storm channel and detention pond design.

Private Dam Owners – Hydrologic and hydraulic analysis on various private dams within West Virginia to determine impacts from multiple storm events on dam principal and emergency spillways, overtopping and impacts to downstream structures, including dam break conditions using HEC-HMS and HEC-RAS computer programs.

# Civil/Site Design

Vaughan Railroad — Preparation of construction specifications for railroad line construction, including erosion and sediment control, culvert installation and subgrade compaction.

U.S. Army Corps of Engineers – Participated in utility relocation planning for two local flood protection projects for Petersburg and Moorefield, West Virginia to include utility relocation design and quantity and cost estimation.

# 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, South Carolina 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

# Sewer Lines and WWTPs

Project manager/project engineer for the Fleming Landfill Sanitary Sewer Extension project in Kanawha County, West Virginia. Project included design, permitting, construction monitoring, and certification of 9,900 linear feet of gravity and force main sanitary sewer, a new duplex pump station, and rehabilitation/upgrade of an existing pump station. The construction contract was over \$1 million. The completed sewer extension was turned over from the West Virginia Department of Environmental Protection to the Sissonville Public Service District for ownership and operations.

Project engineer for sanitary sewer system including 8 inch gravity sewer, pump station, and force main sewer serving the Gettysburg Subdivision in Charleston, West Virginia. Project included an alternate mainline extension agreement with Charleston Sanitary Board, construction monitoring, surveying, road design and subdivision plans.

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

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

#### 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

section collection of general data used by other scientists, field reviews, and public meeting participation.

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

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

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

#### Stormwater

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

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

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

Expert retained to support a property owner damaged as a result of flooding caused by downstream obstructions. Reviewed regulatory agency files, conducted site inspections, evaluated possible remedial measures, and provided support in anticipation of litigation.

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

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

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

# Water Lines, Water Storage Tanks, and Water Treatment Plants

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

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

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

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

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

## ESAs (Phase I and II)

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

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

detailed description of sampling and laboratory analysis methods, drawings showing sample locations, laboratory results, estimated volumes of contaminated soils, and recommendations for cleanup.

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

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

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

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

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

# Stream/Wetland Delineation, Permitting, and Mitigation

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



To all to whom these presents shall come Greeting

Know He That The State Board of Examiners of Land Surveyors of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Dana L. Burns

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by law, hereby certify that this person, having submitted
satisfactory evidence of their ability and experience, is a

# Professional Surveyor

License Number

To Holdand use such title in the practice of their profession, subject to the conditions prescribed by law.



The Board this 21st day of August in the year of our Lord One Thousand Hine Hundred and Ninety-Five and of the State the One Hundred Thirty-Second year.

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# WEST VIRGINIA UNIVERSITY



# THE GRADUATE SCHOOL

ENOW ALL PERSONS BY THESE PRESENTS
THAT THE WEST VIRGINIA BOARD OF REGENTS
UPON THE RECOMMENDATION OF THE FACULTY
HAS CONFERRED UPON

# DANA LEIGH BURNS

THE DEGREE OF

# MASTER OF SCIENCE IN CIVIL ENGINEERING

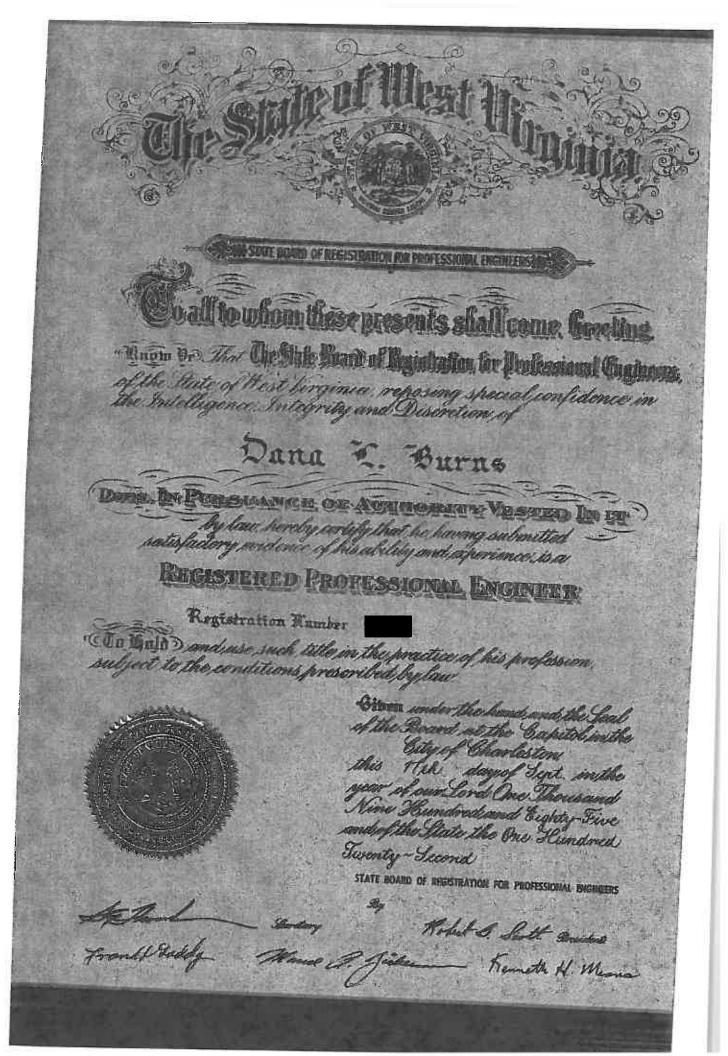
WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO APPERTAINING, WITNESS THE SEAL OF THE UNIVERSITY AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS HEREUNTO AFFIXED THIS TWENTY-SECOND DAY OF DECEMBER, NINETEEN HUNDRED SEVENTY-NINE.

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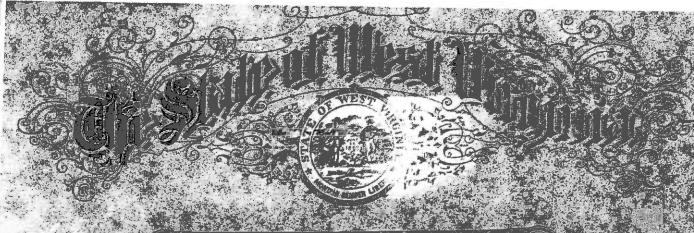
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Issued by the Board of Regents upon recommendation of the Juculty of

The College of Engineering

at Cainesville, this seventeenth day of Accember, A.A. 1988.

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The Marshall University Board of Covernors upon the recommendation of the faculty of the

Graduate College

has conferred upon

Patrick Alan Taylor

the degree of

# Master of Science in Engineering

In Testimong Whereof, the signatures of the duly authorized officers of the Moore of Conversors and the Faculty of the University and the seal of the Aniversity have been affixed.

Citizen at Auriliagiton, Mest Niegiria, this therlift day of December, 2006.

Marshall Hadingsity Board of Communics

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# THE COLLEGE OF ENGINEERING

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HAS CONFERRED UPON

# DAVID MARK KISER

THE DEGREE OF

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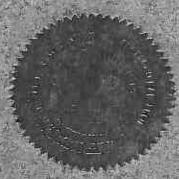
of the Sate of West Ingenia repasing special confidence in the Intelligence, Integrity and Discretion of

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RECISIENED PROKESSIONAL ENGINEER

Registration Rumber 10779

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STATE HOURD DE REGISTRATION FOR PROFESSIONAL ENGINEERS

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Kanth H. Mener

Front Forty and

Project No. 0101-16-0190

WATOGA- A/E SERVICES RIVERSIDE CAMPGROUND WASTEWATER PLANT



#### Principal-in-Charge

Dana Burns, PE - 36 Years Experience

#### Technical Support QA/QC Review

D. Mark Kiser, PE - 31 Years Experience

#### **Project Manager**

Terry Moran, PE - 26 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
Joe Knechtel, PE – 25 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

#### 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

#### 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

#### <u>Clerical</u>

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





Purchasing Divison 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: 214527

Doc Description: Addendum No.01:Pipestem SP-A/E for Cabin Area Wastewater

Proc Type: Central Contract - Fixed Amt

 Date Issued
 Solicitation Closes
 Solicitation No
 Version

 2016-06-07
 2016-06-16
 CEOI
 0310 DNR1600000022
 2

 13:30:00
 2
 2

BID CLERK

DEPARTMENT OF ADMINISTRATION

**PURCHASING DIVISION** 

2019 WASHINGTON ST E

CHARLESTON

US

WV

25305

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

FEIN# 311509066

**DATE** June 16, 2016

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

Page: 1

FORM ID: WV-PRC-CEOI-001

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Addendum

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

\*

#### Expression of Interest

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The Division of Natural Resources WVDNR, from qualified firms to provide architectural/engineering services and other related professional services to design and provide construction contract administration services to replace a wastewater treatment plant at Pipestem Resort State Park as defined herein.

INVOICE TO	SEIP 70
DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION 324 4TH AVE	DIVISION OF NATURAL RESOURCES WEST VIRGINIA STATE PARKS 324 4TH AVE
SOUTH CHARLESTON WV25305	SOUTH CHARLESTON WV 25303-1228
us	US

Line	Comm Ln Desc	Qty	Unit Issue		
1	Wastewater engineering			_	

Comm Code	Manufacturer	Specification	Model #	
81101527				

#### **Extended Description:**

A/E services necessary to replace the cabin area wastewater plant at Pipestem Resort State Park.

	Document Phase	Document Description	Page 3
DNR1600000022	Final	Addendum No.01:Pipestern SP-A/E for	of 3
	<u> </u>	Cabin Area Wastewater	

# ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions



Purchasing Divison 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: 214527

Doc Description: Pipestem SP-A/E services for Cabin Area Wastewater Plan

Proc Type: Central Contract - Fixed Amt

 
 Date Issued
 Solicitation Closes
 Solicitation No
 Version

 2016-05-09
 2016-06-16 13:30:00
 CEOI
 0310 DNR1600000022
 1

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

W. P. W. S.

US

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

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Page: 1

FORM ID: WV-PRC-CEOI-001

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DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION 324 4TH AVE	DIVISION OF NATURAL RESOURCES WEST VIRGINIA STATE PARKS 324 4TH AVE
SOUTH CHARLESTON WV25305	SOUTH CHARLESTON WV 25303-1228
US	us

Line	Comm Ln Desc	Qty	Unit Issue	
1	Wastewater engineering	<del>-</del>		

Comm Code	Manufacturer	Specification	Model #
81101527			
L			

### **Extended Description:**

A/E services necessary to replace the cabin area wastewater plant at Pipestern Resort State Park.

	Document Phase	Document Description	Page 3
DNR1600000022	Final	Pipestem SP-A/E services for Cabin Area	of 3
		Wastewater Plan	

# ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the
Contract Administrator and the initial point of contact for matters relating to this Contract.
Stone In Deurs, Vie President
(Name, Title)
Dana L. Burns, Vice President
(Printed Name and Title)
7012 MacCorkle Avenue, SE, Charleston, WV 25304
(Address)
304-342-1400 / 304-343-9031
(Phone Number) / (Fax Number)
dlburns@potesta.com
(email address)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.
Potesta & Associates, Inc.
(Company)
Dana L. Burns, Vice President
(Authorized Signature) (Representative Name, Title)
(Adminized Signature) (Representative Name, Title)
Dana L. Burns, Vice President
(Printed Name and Title of Authorized Representative)
The state of the s
June 16, 2016
(Date)
304-342-1400 / 304-343-9031
(Phone Number) (Fax Number)

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI 0310 DNR1600000022

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 rec necessary revisions to my proposal, plans and	eipt of the following addenda and have made the d/or specification, etc.
Addendum Numbers Received: (Check the box next to each addendum receiv	and)
( was some no each audendring / ecely	eaj
🛛 Addendum No. 1	Addendum No. 6
Addendum No. 2	Addendum No. 7
Addendum No. 3	Addendum No. 8
Addendum No. 4	Addendum No. 9
Addendum No. 5	Addendum No. 10
	J Addeniation No. 10
Turner understand that any verbal representa	of addenda may be cause for rejection of this bid tion made or assumed to be made during any oral ves and any state personnel is not binding. Only the specifications by an official addendum is
Potesta & Associates, Inc.	
Company	
Dang L. Brenns	
Authorized Signature	
June 16, 2016	
Date	
TOTE: This add to the second	

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

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

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that 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.

# 

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

Purchasing Affidavit (Revised 08/01/2015)

#### **POTESASS**

# ACORD.

# CERTIFICATE OF LIABILITY INSURANCE

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

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

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

PRODUCER	TOTAL TEXT				
USI Ins Svcs C/L Charleston	CONTACT Brenda Samples				
1 Hillcrest Drive East	PHONE (A/C, No, Ext); 304-347-0066 FAX (A/C, No):				
Charleston, WV 25311	E-MAIL ADDRESS: brenda.samples@usi.biz				
304 347-0611	INSURER(S) AFFORDING COVERAGE	NAIC#			
INSURED	INSURER A: Travelers Indemnity Co. of Amer	25666			
Potesta & Associates, Inc.	INSURER B: Travelers Property Cas. Co. of	25674			
7012 MacCorkle Avenue SE	INSURER C: Farmington Casualty Company	41483			
Charleston, WV 25304	INSURER D : Lexington Insurance Company	19437			
	INSURER E :				
	INSURER F:				
COVERAGES CERTIFICATE NUMBER:	REVISION NUMBER				

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

IN:	R	TYPE OF INSURANCE	ADDL	SUBR	LIMITS SHOWN MAY HAVE BEE				
A	$\neg$	COMMERCIAL GENERAL LIABILITY	INSR	WVD			POLICY EXP (MM/DD/YYYY)		rs
1^	` <del>  ^</del>		1		6308476376	03/07/2016	03/07/2017		\$1,000,000
	v	CLAIMS-MADE X OCCUR						PAMAGE TO RENTED PREMISES (Ea occurrence)	\$300,000
	1-	Birb						MED EXP (Any one person)	\$10,000
	GE	N'L AGGREGATE LIMIT APPLIES PER:			i			PERSONAL & ADV INJURY	\$1,000,000
	1	PRO-	1 1					GENERAL AGGREGATE	\$2,000,000
	$\vdash$	OTHER:						PRODUCTS - COMP/OP AGG	s 2,000,000
В	AU	TOMOBILE LIABILITY		+	D4004F0000			COMPINE ON TO	\$
-	1	ANYAUTO	1 1	İ	BA8G476339	03/07/2016	03/07/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000.000
		ALL OWNED SCHEDULED	1 1	- 1	ļ			BODILY INJURY (Per person)	\$
	X	AUTOS AUTOS NON-OWNED	]	ı	J	İ	,	BODILY INJURY (Per accident)	\$
ı		HIRED AUTOS AUTOS		- 1	i		,	PROPERTY DAMAGE (Per accident)	\$
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ľ	AND	EMPLOYERS' LIABILITY	1	- 10	UB8G568511 0	3/07/2016	03/07/2017	X PER OTH-	
	OFFIC (Man)	PROPRIETOR/PARTNER/EXECUTIVE N DERMEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT	\$1,000,000
	If ves	desorthe under	- }	-				E.L. DISEASE - EA EMPLOYEE	\$1,000,000
D		RIPTION OF OPERATIONS below	$\dashv$	-	200474000			E.L. DISEASE - POLICY LIMIT	\$1,000,000
		ution		ال	0:028174922	3/07/2016	03/07/2017	\$5,000,000	
	. 👊	and:					,	\$5,000,000	
DESC	PIOT	ON OF OPERATIONS (1 OCATIONS LIVERIUS						\$25,000 Deductible	Ĺ

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

CERTIFICATE HOLDER	CANCELLATION			
Potesta & Associates, Inc. 7012 MacCorkle Ave., SE Charleston, WV 25304	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.			
	AUTHORIZED REPRESENTATIVE			

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