











West Virginia Army National Guard
Construction and Facilities Management Office

CEOI 0603 ADJ1900000011

Martinsburg Facility

McKINLEY
ARCHITECTURE + ENGINEERING

in association with:

STAFFORD
CONSULTANTS
INCORPORATED
Engineering Design and Consulting

&

POTESTA
Engineers and Environmental Consultants

McKINLEY
ARCHITECTURE + ENGINEERING

21 November 2018

Stephanie L. Gale
Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Dear Ms. Gale and Members of the Selection Team,

McKinley Architecture and Engineering, Stafford Consultants, and Potesta & Associates (McKinley Team) have teamed up again, and are pleased to provide the West Virginia Army National Guard, Construction and Facilities Management Office with our Expression of Interest to provide architectural and engineering services to design and develop construction documents to fully renovate the Martinsburg Facility. As you review this submission, we emphasize the following strengths of the McKinley Team with respect to your projects:

McKinley Architecture and Engineering (*McKinley & Associates*) is a full-service architectural and engineering firm that been providing design services since 1981. We support a professional staff of **Architects, Engineers, Construction Administrators, LEED Accredited Professionals specializing in Building Design and Construction**, an **HVAC Qualified Commissioning Process Provider**, and more.

Potesta & Associates, Inc. is our **Geotechnical Engineering** and **Asbestos/Hazardous Materials Abatement Consultant.** They were founded in 1997 to provide quality engineering and environmental consulting services to a wide variety of clients. They have now grown to a large and very diverse staff that includes geotechnical, environmental, Licensed Remediation Specialists, surveyors, toxicologists, ecologists, geologists, hydrogeologists, occupational safety and health specialists, and much more.

Stafford Consultants, Inc. is our **Structural, Civil/Site, and Stormwater Engineering consultant.** McKinley has utilized the services of Stafford Consultants on **dozens** of projects across the State, and in multiple sectors of business; these projects range from new construction to additions and renovations. This has included asphalt, drainage, utilities, and more.

We are ready to begin **immediately** and will **meet all your Goals and Objectives.** Thank you for reviewing our submission and considering the McKinley Team for your project.

Personal Regards,

Ernest Dellatorre
President
McKinley Architecture and Engineering

The Maxwell Centre - Suite 100 / Thirty-Two Twentieth Street / Wheeling, West Virginia 26003
Phone 304-233-0140 / Fax 304-233-4613 / www.McKinleyDelivers.com / edellatorre@mckinleydelivers.com

"Vendors will provide information regarding its employees, such as staff qualifications and experience in completing similar projects ...

First and foremost, the McKinley/Potesta/Stafford Team can state that our large professional staffs will devote the talent and time necessary to provide the West Virginia Army National Guard, Construction and Facilities Management Office with a successful project.

The McKinley/Potesta/Stafford Teams' portfolios include **multiple relevant projects**; examples of which you will see later in our proposal. Together, our Team will handle all of the **goals and objectives** of your project, including engineering and architectural services, complete restoration of a facility, office area renovations, hazardous material studies (including lead, asbestos, and more), hazardous material abatement and abatement cost estimates, power load assessments, a new roofing systems, a new HVAC systems, new and more efficient windows, new exterior and interior doors, and new interior and exterior LED lighting for the building, asphalt, landscaping, drainage, geotechnical work, drill borings, researching and investigating the location of existing underground and above ground utilities and road infrastructure, meeting codes, and much more.

If the **McKinley Team** is chosen for this project; **we are available to start immediately upon our being selected, and will provide the necessary hours to complete your project on time.** In addition to those key team members whose resumes are on the upcoming pages; **we can also attribute more professionals from our various trades.** The technical **depth** of our professional staffs indicates that this project can be accomplished without overloading our group or computer graphics systems.

McKinley/Potesta/Stafford all have multiple licensed **Professional Engineers** (PEs), who are licensed in West Virginia:

- **McKinley Architecture and Engineering** is an **A/E firm** that employs a staff of registered **Professional Engineers** and engineering designers in the **MEP** fields, has **multiple licensed Architects** and architectural designers, and more.

- **Potesta & Associates** is a full service **engineering** and **environmental** consulting firm that employs more than 80 experienced engineers, scientists, and support personnel. They will provide **Asbestos Abatement** and **Geotechnical Engineering**.

- **Stafford Consultants** employs a total staff of 25, including 6 registered **Professional Engineers**. They provides services in **Civil, Site, Structural, Stormwater,** Highway, Bridge, Airport, Environmental, and Sanitary Engineering.

McKinley Architecture and Engineering believe our strength lies in the quality of the people we employ. Our seasoned staff has an unsurpassed knowledge of the business and the dedication it takes to make each project a success. And we're structured for efficiency; our Engineers, Architects, and technicians are all in-house, creating optimum communication and collaboration, which results in outstanding service to our clients. All of our project managers, Architects and Engineers, write their own specifications for a project. By doing so, the specifications are written for - and pertinent to - only your project.

On the following pages are resumes of the employees, along with firm corporate information, for all three firms.

Thomas R. Worlledge, AIA, LEED AP BD+C, REFP

Architect / Specialized LEED Accredited Professional

EDUCATION:

Virginia Polytechnic Institute & State University
Master of Architecture - 1992

Fairmont State College, School of Technology
B.S. Architectural Eng. Tech. - 1983

PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Architect in:
West Virginia
Ohio
Pennsylvania
Tennessee
Virginia

National Board Certification:
NCARB #[redacted]

President:
West Virginia Society of Architects

Member:
The American Institute of Architects
US Green Building Council
Sustainable Building Industries Council
Recognized Educational Facility Professional

Founder & Chairman of the Board:
US Green Building Council's WV Chapter

Former Voting Member:
ASHRAE 90.1 Int'l Energy Code Committee

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Manager, Charleston Office
Charleston, WV (2005 to present)

Proactive Architecture Inc.
President
Charleston, WV (1999-2005)

Silling Associates Inc.
Vice President
Charleston, WV (1992-1999)

TAG Architects
Charleston, WV (1985-1990)

Alpha Associates Inc.
Morgantown, WV (1983-1985)

SUMMARY OF EXPERIENCE:

Mr. Worlledge is a skilled **Architect** with over 35 years of experience, who has been the former President of the WV chapter of AIA, has received State-wide and National design awards, and placed in National and Global design competitions. Thom was the **first LEED AP in West Virginia**, has been a member of the USGBC since 2001, and is a Founder & Chairman of the Board for USGBC's West Virginia Chapter. As a **LEED Accredited Professional specializing in Building Design & Construction** and a **recognized sustainable design expert**, he has **2 LEED Certified**, **multiple LEED Registered**, **CHPS Registered**, and **other energy-efficient projects**; had articles published in state and national trade publications; spoken before architectural students, ASHRAE chapters, and business groups on sustainable design issues; was a featured speaker at multiple National conferences; served on the committee that sets the standards for the International Energy Code; and as a professional trainer for the Sustainable Building Industries Council, he teaches other design professionals in the art of High Performance design. He is also a **Recognized Educational Facility Professional (REFP)** as designated by the A4LE.

NOTABLE PROFESSIONAL ACHIEVEMENTS:

West Virginia State Police - Open-End A/E contract / multiple projects across WV, including WVSP Academy's renovations to Buildings A, B, & C; new Buildings D & Multi-Purpose Building. New Logan Detachment

Building 55: WV State Office Complex in Logan (**LEED Certified**)

WVDHHR's new Ohio County office fit-out / renovations

United States Postal Service - Open-End IDIQ (Indefinite Delivery / Indefinite Quantity) contract / multiple projects across WV

West Virginia School Building Authority - State-Wide School Safety/ Vulnerability Assessments. New construction & renovations for multiple districts, including Boone, Hancock, Marshall, & Wood County Schools

Veterans Affairs Medical Centers - multiple VAMCs around WV and PA

West Virginia University - Open End A/E contract / University Police Building office fit-out & WVU Tech's Maclin Hall Dormitory renovations

Fairmont State University - "University Terrace" College Student Housing Apartments 3 Building Complex

Southern WV Community & Technical College - Wyoming/McDowell Campus renovations and Williamson Campus renovations

West Virginia State University - Gus R. Douglass Economic Development Center (DigiSo) renovations/repurpose

Charleston Enterprise Center office renovation (**2009 WV AIA Design Award winner / energy efficient "green" design**)

Natural Energy Design (NēD) Building (**energy efficient "green" / 2013 Placemaker Award**)

Marshall County Schools - Hilltop Elementary School (**LEED Certified - won multiple WV and National Awards & Recognitions**)

Williamson Redevelopment Authority's SMART Office fit-out (**LEED Registered / 2013 Placemaker Award**)

Tim E. Mizer, PE, RA, QCxP

Architectural Engineer / Architect / Qualified Commissioning Process Provider

Director of Engineering Services

EDUCATION:

Kansas State University
B.S. Architectural Engineering - 1983

University of Cincinnati
Architecture

PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Engineering in:
West Virginia
Ohio

Registered Architect in:
Ohio

Qualified Commissioning Process Provider

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Director of Engineering Services
Architect / Engineer / Commissioning
Wheeling, WV (1995 to present)

M.C.C. Engineering
Director of Design
Columbus, Ohio (1988-1995)

Schooley Caldwell and Associates
Electrical & Mechanical Design
Columbus, Ohio (1986-1988)

Mizer Design
Free Lance Architectural Engineering Design
Columbus, Ohio (1985-1986)

Envirotek, Inc.
Drafting and Electrical & Mechanical Design
Raleigh, NC (1984-1985)

SUMMARY OF EXPERIENCE:

The engineering will be led by Tim E. Mizer, PE, RA, QCxP, who is an **Architectural Engineer**, an **Architect**, and a **Qualified Commissioning Process Provider**. He joined McKinley Architecture and Engineering in 1995, and has over 35 years of experience. Mizer's background as both an Architect and Engineer has provided him with a total understanding of the engineering components and the process necessary for integrating architectural design and building systems. Furthermore, as a **qualified commissioning process provider**, he has been formally trained to fully understand how integrated HVAC systems function and how systems interface with others to run your building efficiently. As the **Director of Engineering Services,** Tim's presence is a key to the design procedures required to coordinate the functionality of the engineering systems into the aesthetics of a building space.

NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - multiple projects, including AASF#1 Hangar renovations, statewide SPCC Certifications, new Mountaineer ChalleNGe Academy, and new Multi-Purpose Building at Camp Dawson

United States Postal Service - multiple post offices in WV and PA, from our 2 IDIQ contracts. Also designed over 100 Post Offices throughout West Virginia for ADA compliance.

West Virginia State Police - worked on multiple projects from our 3 consecutive Open-Ended A/E Services contracts, including renovations and new detachments. Also surveyed, reviewed, projected, budgeted, and documented 72 police facilities State-Wide.

Building 55: West Virginia State Office Complex in Logan (LEED Certified)

Building 34: West Virginia State Office Complex in Weirton

Wheeling Island Hotel•Casino•Racetrack multiple projects

WVU State Fire Training Academy

Wheeling Island Fire Station

WVDHHR's new Ohio County office fit-out

Orrick's Global Operations Center office building fit-out

Maxwell Centre office building fit-outs

Bennett Square office building fit-outs

Wagner Building office building fit-outs

Marshall County Schools - Hilltop Elementary (LEED Certified)

Cabela's Eastern Distribution Center ($40 million / 1.2 million SF)

The Silver Companies' Moss Neck Farm Storage Building

West Virginia School Building Authority - dozens of school renovations and new construction projects across the State

Parkview Vehicle Storage and Maintenance Garage

Bruce A. Kennedy, PE

Electrical Engineer

EDUCATION:

The University of North Dakota
B.S. Electrical Engineering - 1975

DeVry Institute of Technology

PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Engineering in:
West Virginia
Ohio
Pennsylvania
Texas

MILITARY SERVICE:

US Air Force - Honorable Discharge

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Electrical Engineer
Wheeling, WV (2018 to present)

Advanced Electrical Simulations LLC
Owner/Principal Engineer
Spring, TX (2014 to present)

Cameron International
Principal Electrical Engineer
Houston, TX (2011-2014)

SUMMARY OF EXPERIENCE:

Mr. Kennedy has been an **Electrical Engineer** since 1975. He is an experienced power electronics/electrical systems design engineer with extensive electrical simulation experience using ETAP, SKM, EasyPower and PSIM. He personally owns and maintains ETAP license. He has completed electrical system designs for industrial, office, medical, educational, retail construction, and more.

NOTABLE PROFESSIONAL EXPERIENCES:

WVDOT, Division of Highways - District 6 Moundsville Headquarters

The Towers Building renovations

Belmont County Divisional Courts & Offices

Harrison County Schools - Johnson Elementary School

Tyler County Schools - multiple projects

Wetzel County Schools - New Martinsville School renovations
Wetzel County Schools - Valley High School meat lab
Wetzel County Schools - Valley Field House

Facilities arc-flash, short-circuit fault, protective device coordination, load flow and harmonics studies.

Facilities electrical system existing conditions, code compliance and problem solving surveys.

Drilling rig short-circuit fault current, protective device coordination, load flow and harmonics studies.

Application of NEC, IEC and ABS standards to mobile offshore drilling rig electrical systems.

Computer data center electrical system design and onsite project management.

Data center short-circuit fault current, protective device coordination and arc-flash studies.

Electrical system designs for medical, industrial, office and retail construction.

Building load analyses, emergency generator sizing and fault current studies.

Electrical system designs for hospitals, medical clinics and educational buildings.

Short-circuit fault current, protective device coordination and arc-flash studies.

Industrial battery charger and UPS systems power electronics design.

Custom power conversion equipment/systems design.

Michael A. Heath

Mechanical/HVAC & Fire Protection Engineering Designer

EDUCATION:

ITT Technical Institute
Associate Degree in Specialized Technology:
Computer-Aided Drafting Technology - 2000

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Mechanical & Fire Protection Designer
Wheeling, WV (2007 to present)

Janus, Inc.
AutoCAD Designer / Project Manager
Pittsburgh, PA (2002-2007)

Comunale Automatic Sprinkler
Fire Protection Designer
Pittsburgh, PA (July 05 - Oct 05)

S.A. Comunale Inc.
Fire Protection Designer
Pittsburgh, PA (2000-2002)

SUMMARY OF EXPERIENCE:

Mr. Heath brings a cross-trained design background to your project, and has vast knowledge in a diverse range of disciplines. He was trained by the National Fire Protection Association (NFPA) in Dallas, Texas, and has used these skills to work on projects from multiple business sectors and with various sizes, such as the 4 story, 1,500,000 square foot David L. Lawrence Convention Center in Pittsburgh, Pennsylvania. He has vast expertise in designing and calculating fire protection systems, standpipes, dry and wet systems, hydraulics, and water cannons; stock listing materials for systems; as well as surveying job sites and frequent business trips to coordinate jobs.

NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - AASF#1 hangar renovations

West Virginia Army National Guard - Multipurpose Building at Camp Dawson

United States Postal Service - multiple projects

Building 55: WV State Office Complex in Logan (LEED Certified)

Wheeling Island Hotel•Casino•Racetrack - various projects

Cabela's Eastern Distribution Center

For 14 West Virginia counties; provided Mechanical and Fire Protection assessments at every school (160+ schools), for their 10-year Comprehensive Educational Facilities Plan (CEFP 2010-2020)

Big Sandy Arena & Convention Center

WVU Institute of Technology - Conley Hall

Southern WV Community and Technical College - Wyoming Campus

Silver Company - Moss Neck Storage Building

Bennett Square business center

WVDRS Wheeling District's new office space fit-out

WVDHHR's new Ohio County office building fit-out

PWP Industries

Carenbauer Wholesale Corp. office renovations / new warehouse

Panhandle Cleaning & Restoration warehouse & office building

Boone County Schools - multiple projects

Marshall County Schools - multiple projects

Ohio County Schools - multiple projects

Hancock County Schools - multiple projects

Ritchie County Middle/High School

Summers County Schools - Summers Middle School

Tyler County Schools - 3 HVAC projects

Wetzel County Schools - Long Drain Elementary

Scott D. Kain

Plumbing & Electrical Engineering Designer

EDUCATION:

Technology Education College /
Ohio State University
Associates in Mechanical Design - 1996

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Engineering Designer
Wheeling, WV (2001 to present)

HAWA Inc.
Mechanical Designer
Columbus, OH (1998-2001)

Autotool Inc.
Engineer
Columbus, OH (1995-1998)

SUMMARY OF EXPERIENCE:

Mr. Kain is an accomplished engineering designer who has performed in all the engineering trades we provide; specializing in electrical, plumbing, and fire protection. He has been utilized for various McKinley Architecture and Engineering' projects that needed additional mechanical, structural, and architectural manpower. In addition, Mr. Kain has also provided 3D renderings, to aid in business development, during his long tenure at McKinley Architecture and Engineering.

NOTABLE PROFESSIONAL EXPERIENCES:

WV Army National Guard - multiple projects / new & renovations

United States Postal Service - multiple projects / new & renovations

West Virginia State Police - multiple projects / new & renovations

Building 55: WV State Office Complex in Logan (LEED Certified)

Building 34: WV State Office Complex in Weirton

West Virginia University - multiple projects / new & renovations

Wheeling Island Hotel•Casino•Racetrack multiple projects

Cabela's Eastern Distribution Center ($40 million)

West Virginia Department of Health & Human Resources' Ohio County office building renovation

Orrick's Global Operations Center

Millennium Centre Technology Park

Panhandle Cleaning & Restoration warehouse and office building

VAMC Beckley

WLU Student Union - bookstore/gift shop, concessions, lounge

Glenville State College - Robert F. Kidd Library

The Linsly School - Coudon Ogden Library

Bishop Bernard Schmitt Catholic Heritage Center

West Virginia Northern Community College - B. & O. Building

Maxwell Centre multi-use building

Bennett Square multi-use building

Wagner Building multi-use building

2000 Main Street Multi-Use Complex

Charleston Enterprise Center renovations (2009 WV AIA Design Award)

Big Sandy Arena & Convention Center

WVU Institute of Technology - Maclin Hall

Hilltop Elementary School (LEED Certified)

Cameron High School ($32 million / LEED Registered)

J.B. Chambers Performing Arts Center

Robert E. Smith

Construction Administrator

EDUCATION:

University of Pittsburgh
M.S. Industrial Engineering - 1989

United States Air Force Academy
B.S. Behavioral Science /
Human Factors Engineering - 1983

PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Board Member:
Indian Creek School District

Instructor:
Mechanical Engineering, Eastern Gateway Community College

Village Administrator:
City of Mingo Junction

Commander:
American Legion Post 351

PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering
Construction Administrator
Wheeling, WV (2009 to present)

Jefferson County Regional Planning Commission
Regional Planner
Steubenville, OH (2008-2009)

Edison Local School District
Director of Operation (1999-2008)
Transportation Supervisor (1998-1999)
Hammondsville, OH

MILITARY SERVICE:

Wright Patterson Air Force Base - Dayton, OH
Chief B-2, Block 20 Field Retrofit, $300 million
B-2 Systems Program Office (1994-1996)
Team Leader, Process Improvement Technology
Armstrong Laboratory (1989-1994)

Randolph Air Force Base - San Antonio, TX
Chief, Test Construction Section
Occupational Measurement Center (1987-1988)
Quality Control Psychologist
Occupational Measurement Center (1985-1987)
Supervisor of Test Construction Team
Occupational Measurement Center (1983-1985)

SUMMARY OF EXPERIENCE:

Mr. Smith has been a **Construction Administrator** at McKinley Architecture and Engineering for over 8 years. Bob is a self confident, articulate and highly motivated individual with superior interpersonal and teamwork skills. He has a plethora of experience in mid to upper level personnel management, advanced information systems integration, training, acquisition, contract management, transportation and maintenance, and quality control. He has 23 years of direct supervisory experience, as well as **13 years of documented success as an Air Force Officer.** He is currently a member of the Board of Education for the Indian Creek School District in Jefferson County, Ohio. He is also an Adjunct Professor at Eastern Gateway Community College in Steubenville, Ohio, where he is teaching Mechanical Engineering.

NOTABLE PROFESSIONAL EXPERIENCES:

WV Army National Guard - AASF#1 Hangar renovations

USPS Clarksburg Financial Office renovations

USPS Parkersburg Carrier Annex & Hub renovations

Jefferson County Commission - Ohio Valley Towers renovations (main roof, mezzanine roof, building envelope, HVAC, office build-out, etc.)

Steel Valley Regional Transit Authority roof

Cameron American Legion exterior renovations

Jefferson County Jobs & Family Services roof

Harrison County Courthouse roof

Follansbee City Building renovations

Cabela's Eastern Distribution Center

Lincoln National Bank Building

Fairmont State University's College Apartments Housing Complex

Brooke County Schools - Follansbee Middle renovations

Grant Co. Schools - Maysville Elementary renovations

Grant Co. Schools - Union Educational Complex renovations

Hampshire County Schools - Animal Vet Science Center

Hancock Co. Schools - Senator Rockefeller Career Center renovations

Hancock Co. Schools - New Manchester Elementary renovations

Hancock Co. Schools - Oak Glen High renovations

Hancock Co. Schools - Weirton Elementary ($26.5 million)

Marshall Co. Schools - Cameron High ($32 million / LEED Registered)

Marshall Co. Schools - Hilltop Elementary (LEED Certified)

Tyler Co. Schools - 3 HVAC renovation projects

The Linsly School - Banes Hall & Coudon Ogden Library

The Linsly School - Behrens Gym

Firm History

Founded in 1981, McKinley Architecture and Engineering is a multi-discipline **full service Architectural & Engineering firm,** offering comprehensive **professional services in Architecture, Engineering, Interior Design, Learning Environment and Educational Facility Planning, Energy Efficient and Sustainable (LEED) Design, Commissioning, Construction Administration, and Historic Preservation.**

We have a broad range of skill and experience for projects involving **governmental, emergency service, commercial/ office,** PK-12 schools, higher educational, sports & recreation, medical, industrial, private sector, and much more.

Over the years, our firm won multiple **State and National awards and recognitions** for our works.

Firm Information

Ernest Dellatorre
President

Tim Mizer, PE, RA, QCxP
Director of Engineering Services

Patrick J. Rymer, AIA, ALEP
Director of Architectural Services

Date of Incorporation

July 1, 1981
Wheeling, West Virginia

Number of Professionals

Total Size	**24**
Architects	5
Engineers	2
Arch./Eng. Designers	6
Construction Admins.	2
LEED AP BD+C	2
ALEP (CEFP)	1
REFP	1
Commissioning Provider	1
Historic Preservationist	1

Locations

32 Twentieth Street
Suite 100
Wheeling, WV 26003
P: 304-233-0140
F: 304-233-4613

129 Summers Street
Suite 201
Charleston, WV 25301
P: 304-340-4267

416 Longridge Drive
Pittsburgh, PA 15243
P: 724-223-8250

Credentials

McKinley Architecture and Engineering is a member of the following **organizations:**

AALE *(formerly CEFPI)*, ACI International, AIA, ASCE, ASHRAE, ASPE, AWI, BOCA, NCARB, NFPA, WVEDC, and more.

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McKINLEY
ARCHITECTURE + ENGINEERING

DAVID J. CORSARO, L.R.S.

Senior Scientist

EDUCATION

M.S. Environmental Science, 2008
Marshall University

B.S. Safety Technology, 1999
Marshall University

EMPLOYMENT HISTORY

2000-Present Potesta & Associates, Inc.
1997-2000 Clearon Corporation

PROFESSIONAL REGISTRATIONS

- Licensed Remediation Specialist – West Virginia
- Certified Monitoring Well Driller – West Virginia

PROFESSIONAL CERTIFICATIONS

Hazardous Waste Operations and Emergency Response – 40-hour

AREAS OF SPECIALIZATION

Educational background in industrial health/safety and environmental science. Highly experienced with West Virginia Voluntary Remediation and LUST Programs, RCRA, and CERCLA/USEPA Brownfields. Project management and field experience includes site assessment and remediation of commercial, industrial, and residential sites; environmental emergency response; and hazardous waste management.

PROFESSIONAL EXPERIENCE

Hazardous Waste/RCRA/Corrective Action

RCRA compliance assistance regarding waste analysis, recordkeeping, storage areas, applicable exemptions, and point of generation issues. Have also managed large amounts of hazardous and non-hazardous wastes as part of remediation projects.

ESAs (Phase I and II)

Phase I Environmental Site Assessments (ESAs) on various types of sites, including:

- Large land transaction totaling over 145,000 acres.
- Former industrial sites as part of a USEPA Brownfields Assessment Grant.
- Numerous active and former industrial and commercial facilities.
- Undeveloped and residential properties.

Phase II/Sampling ESAs, including soil boring advancement and sampling, monitoring well installation and sampling, surface water sampling, and soil gas sampling:

- West Virginia Voluntary Remediation Program (VRP).
- West Virginia Leaking Underground Storage Tank (LUST) Program.
- Ohio Bureau of Underground Storage Tank Regulation (BUSTR).
- Resource Conservation and Recovery Act (RCRA) Corrective Action.
- Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA) Site Assessment and United States Environmental Protection Agency (USEPA) Brownfields.
- Environmental emergency response (petroleum and chemical spills related to transportation incidents), typically performed under state environmental response or enforcement programs.
- Property transaction-related (*i.e.*, due diligence or baseline ESAs).

Remediation

Experienced with remediation of sites impacted by petroleum, volatile and semi-volatile organics (including

chlorinated solvents), metals, dioxin, and polychlorinated biphenyls (PCBs). Experience with bioremediation (aerobic and anaerobic), excavation, slurry walls, solidification/stabilization, pump and treat, soil vapor extraction, dual phase extraction, capping, and institutional controls.

Environmental Emergency Response

Performed and/or managed environmental response, assessment, and/or remediation on over 40 transportation related incidents in West Virginia, Kentucky, Ohio, Pennsylvania, and Virginia. These have included response to and assessment and remediation of releases from chemical and petroleum tankers and fuel tanks, transfer and/or removal of cargo, and coordination with regulatory agencies and affected property owners.

- Gasoline tanker release of over 3,500 gallons in northern Kentucky onto private property and railroad right of way (ROW). Remediation included excavation of soil and subsurface injection of a bioremedial compound on both sides of railroad ROW.
- Formaldehyde tanker release of 4,500 gallons in western Virginia. Project included initial containment, sampling and monitoring of groundwater contamination, soil remediation, hazardous waste characterization and disposal, US Army Corps of Engineers permitting for access roads, and ambient air sampling.
- Gasoline tanker release of over 3,000 gallons to frozen stream in central Ohio. Remediation included excavation of impacted areas of streambed (with United States Army Corps of Engineers approval) and additional soil, and subsurface injection of a bioremedial compound.
- Trailer load of white paint spilled adjacent to an interstate highway in West Virginia. Remediation included onsite solidification and removal of free liquids.
- Acid and caustic releases requiring stabilization of remaining load and on-site neutralization and removal of spilled material.
- Errant deliveries of products resulting in spills or damage to facility and/or inventory.
- Chemical lime spill to stream in western Virginia requiring long-term biological monitoring.

Additional Experience

Storage Tanks:

- Oversight of removal of USTs in West Virginia, Ohio, and Michigan, and management of UST components from over 30 sites in support of litigation.
- Compliance assistance and management of UST removals.

Biological Studies and Sampling:

- Performed surface water and sediment sampling and benthic invertebrate collection as part of an evaluation of environmental impact of a coal slurry spill.
- Performed baseline water quality sampling for several projects as part of mixing zone and metals translator studies.

Industrial Health and Safety:

- Served as Health and Safety Officer for several WV VRP RCRA and Corrective Action projects.
- Developed Health and Safety Plans for sampling activities for numerous types of projects.

File Review/Environmental Audits:

- Participated in review of more than 1,000 state CERCLIS files as an audit for West Virginia Department of Environmental Protection file system.
- Managed compliance audit field team for client with numerous facilities throughout West Virginia.

DENNIS L. LITWINOWICZ, L.R.S.

Senior Scientist

EDUCATION

B.S. Geology and Mineralogy, 1980
The Ohio State University

EMPLOYMENT HISTORY

1999-Present	Potesta & Associates, Inc.
1995-1999	Pennzoil Company
1987-1995	W. E. Shrider Company
1982-1987	Geological Consultant
1980-1982	Hopco Resources

PROFESSIONAL REGISTRATIONS

- Licensed Remediation Specialist – West Virginia [redacted]
- Certified Petroleum Geologist – AAPG [redacted]

PROFESSIONAL CERTIFICATIONS

Hazardous Waste Operations and Emergency Response Standard – 40-hour and 8-hour refresher

PROFESSIONAL AFFLIATIONS

- American Association of Petroleum Geologists
- Ohio Geological Society
- Ohio Oil and Gas Association
- West Virginia Oil and Natural Gas Association

AREAS OF SPECIALIZATION

Multi-media regulatory compliance and permitting with air, water and hazardous waste issues, site assessments, geologic mapping and interpretation, project design, management and supervision, soil and groundwater assessments and remediation of contaminated sites, and voluntary remediation and Brownfield projects.

PROFESSIONAL EXPERIENCE

Remediation

Preparation and submittal for multiple projects for:

- Voluntary Remediation Applications
- Voluntary Remediation Agreements – including client/agency coordination and input to develop project goals and timetables
- Site Specific – Site Assessment Work Plans, Health and Safety Plans, Quality Assurance Project Plans
- Human Health and Ecological Risk Assessments
- Screening and Selection of Remedial/Remedy Alternatives
- Remediation Work Plans
- Participation in Community Relations and Stakeholder presentations

Assessments of Polychlorinated Biphenyls (PCB) Remediation Waste Sites according to the disposal of PCB: Final Rule (40 CFR Parts 750 and 761).

USEPA approved self-implementing and risk-based cleanup plans.

Certificate of Completion for PCB sites in the West Virginia Voluntary Remediation and Redevelopment Act Program.

ESAs (Phase I and II)

Participated in review of West Virginia CERCLIS files.

Phase I Environmental Site Assessments for commercial and industrial properties.

Phase II Environmental Site Assessments for commercial industrial sites.

Site Characterizations – Assessment of air, soil, ground and surface water, sediment through computer modeling, soil borings, piezometers and monitoring wells.

Experience with intrusive site sampling using Geoprobe®, drill augers, and trenching equipment.

Creation of Investigation Derived Waste Plans.

Site Assessment Work Plan and Quality Assurance Project Plan for potentially dioxin contaminated facility.

Computer generated Field Sampling Plans, Monitoring Well Installation Plans created using Visual Sample Plan.

Oil and Gas

Created an OPA 90 plan for crude oil transportation and storage facility.

Obtained blanket stream work permit for multi-county pipeline recovery project in West Virginia.

Collaborated on creation of a "One Plan- Integrated Contingency Plan" for a crude oil production and transportation facility meeting the requirements of Environmental Protection Agency, Department of Transportation, and United States Coast Guard regulations.

Project Manager for cleaning and moving of large volume crude oil tanks.

Investigated landowner water well complaints in areas of oil and natural gas productions operations.

Negotiated remediation plans and plugging schedules for inactive and leaking oil and gas wells with New York, West Virginia, Ohio and Pennsylvania state oil and gas regulatory agencies.

Designed three-year, state-wide pipeline remediation project for a West Virginia crude oil transportation company.

Developed a RSPA Operations and Safety Manual for a natural gas utility company.

Created Risk Management Programs and Plans for regulated facilities.

Oil and natural gas exploration, production, and transportation experience.

Explored, drilled and produced oil and natural gas throughout the Appalachian Basin.

Researched and performed geologic evaluations as part of prospect development.

Managed drilling programs and engineered well completion designs.

Supervised and acted as well-site geologist for over 300 wells.

Hired and supervised drilling contractors and service contractors.

Applied for drilling permits included site construction and restoration plans.

Negotiated leases and right-of-way agreements.

Supervised daily operations for 250 producing oil and gas wells.

Prepared permits, hired contractors, and supervised well plugging operations.

Prepared SARA, SPCC, NPDES, and Emission Inventory reports for oil and gas facilities.

Participated in successful Consent Order negotiations with West Virginia, Pennsylvania, and the USEPA.

Negotiated extensions and modifications to state and federal Consent Orders and Decrees.

On-scene spill response supervisor for oil spill cleanup and remediation.

Created Emergency Response Programs for regulated facilities.

Filed monthly NPDES reports for facilities in West Virginia, Pennsylvania, and New York.

Created Spill Prevention, Control & Countermeasure (SPCC) plans for facilities in Ohio, West Virginia, and Pennsylvania.

Submitted SARA Community Right-to-Know annual reports in Ohio, West Virginia, and Pennsylvania.

Mining

Field evaluation of Acid Mine Drainage sites.

Air Pollution/Air Services

Evaluation of indoor air exposure using Johnson-Ettinger computer modeling.

Created Regulation 13 air permit applications for West Virginia Department of Environmental Protection.

Performed LDAR monitoring for VOCs in packaging plant.

Created Risk Management Program in compliance with Section 112(e) of the Clean Air Act.

Environmental Assessments/Impact Statements

Ecological risk assessment of property for two endangered species.

Ecological risk assessment of terrestrial, riparian, and aquatic receptors.

De Minimis, Uniform Standard, and Site-Specific Human Health Risk Assessments of surface water, sediment, groundwater, and soil.

Stormwater

Collected stormwater samples and reported results for sites in West Virginia.

ANDREW A. KIRSCH
Staff Scientist

EDUCATION

M.S. Environmental Sciences, 2003
Marshall University

B.S. Horticulture, 1997
West Virginia University

EMPLOYMENT HISTORY

2003-Present	Potesta & Associates, Inc.
1998-2003	Terracare, Inc.
1997-1998	Greenscape, Inc.

PROFESSIONAL CERTIFICATIONS

- Certified Asbestos Inspector – Kentucky, West Virginia, and Virginia
- OSHA 40-Hour HAZWOPER Training
- West Virginia Office of Miners' Health, Safety & Training

TRAINING/RELEVANT COURSE WORK

- 2014 – SWAMP School Wetland Delineation
- 2009 – River Assessment and Monitoring (Rosgen Level III)
- 2006 – River Morphology and Applications (Rosgen Level II)
- 2006 – Applied Fluvial Geomorphology (Rosgen Level I)

AREAS OF SPECIALIZATION

Experience in conducting and reporting environmental site assessments, biological assessments, and remediation of commercial, industrial, and residential sites, environmental emergency response, and hazardous waste management. Conducting asbestos inspections and report writing. Performing Level Riparian development and stream restoration/enhancement (Rosgen trained).

Stream and wetland delineation assessments and mitigation design. Plant physiology and identification. Principles and implementation of phytoremediation for sites of contamination. Conducted and evaluated habitat and biological surveys. Knowledgeable of mining-related activities and issues, including mountaintop mining and valley fills.

PROFESSIONAL EXPERIENCE

Asbestos

Performed numerous asbestos inspections and report writing for industrial, commercial, and residential entities:

- Kilns – Winchester, Virginia
- Waste Water Treatment Plant – Morgantown, West Virginia
- Charleston Civic Center – Charleston, West Virginia
- Residences

Construction monitoring for asbestos abatement of several large buildings located within a chemical plant in Willow Island, West Virginia.

Hazardous Waste/RCRA/Corrective Action

Performed site investigations and report writing hazardous material surveys at the following locations:

- Charleston Civic Center – Charleston, West Virginia
- Morgantown Utility Board – Morgantown, West Virginia
- Weatherford – Elkview, West Virginia

Remediation

Experienced with remediation of sites impacted by petroleum, volatile and semi-volatile organics (including chlorinated solvents), metals, dioxin, and polychlorinated biphenyls (PCBs). Experience with bioremediation (aerobic and anaerobic), excavation, slurry walls, solidification/stabilization, pump and treat, soil vapor extraction, dual phase extraction, capping, and institutional controls.

Assisted in the design for the upgrade of a phytoremediation project on a 7-acre biological sludge pond.

Performed monthly site inspections and reporting for multiple industrial sites including:

- A 110-acre zinc smelter site that has been capped and reclaimed as part of a remediation plan.

- Industrial landfills that have been sealed with a geotextile liner and capped.

ESAs (Phase I and II)

Phase I Environmental Site Assessments (ESAs) on various types of sites:

- Large land transaction totaling over 145,000 acres
- Numerous active and former industrial and commercial facilities
- Undeveloped and residential properties

Phase II/Sampling ESAs, including soil boring advancement and sampling, monitoring well installation and sampling, surface water sampling, and soil gas sampling:

- West Virginia Voluntary Remediation Program (VRP)
- West Virginia Leaking Underground Storage Tank (LUST) Program
- Ohio Bureau of Underground Storage Tank Regulation (BUSTR)
- Resource Conservation and Recovery Act (RCRA) Corrective Action
- Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA) Site Assessment and United States Environmental Protection Agency (USEPA) Brownfields
- Environmental emergency response (petroleum and chemical spills related to transportation incidents), typically performed under state environmental response or enforcement programs
- Property transaction related (*i.e.*, due diligence or baseline ESAs)

Stream/Wetland Delineation, Permitting, and Mitigation

Implemented mitigation designs complete with stream restoration and riparian layout, material requirements, and cost analysis for several projects.

Completed field assessments and biomonitoring for the establishment of a mitigation banking program within the state of West Virginia.

Supervised numerous wetland/stream characterization and delineations.

Preparation of environmental permits and associated documents, (i.e. environmental information documents, compensatory mitigation plans, jurisdictional determination reports, and benthic macroinvertebrate reports) for highway construction and individual 404 permits for large-scale disturbances.

Environmental Emergency Response

Environmental response, assessment, and remediation on numerous transportation related incidents in West Virginia, Ohio, and Virginia. These have included response to and assessment and remediation of releases from chemical and petroleum tankers and fuel tanks, transfer and/or removal of cargo, and coordination with regulatory agencies and affected property owners. Examples include:

- Formaldehyde tanker release of over 3,800 gallons in western Virginia. Remediation included soil aeration (unable to excavate due to geotechnical considerations). Obtained No Further Action status from Virginia Department of Environmental Quality (DEQ).
- Gasoline tanker release of over 3,500 gallons in northern Kentucky onto private property and railroad right of way (ROW). Remediation included excavation of soil and subsurface injection of a bioremedial compound on both sides of railroad ROW.
- Gasoline tanker release of over 3,000 gallons to frozen stream in central Ohio. Remediation included excavation of impacted areas of streambed (with United States Army Corps of Engineers approval) and additional soil, and subsurface injection of a bioremedial compound.
- Trailer load of white paint spilled adjacent to an interstate highway in West Virginia. Remediation included onsite solidification and removal of free liquids.

COY A. SPENCER
Scientist

EDUCATION

B.A. Geography, Natural Resources and Environment, In Progress
West Virginia University

EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.

PROFESSIONAL CERTIFICATIONS

West Virginia Office of Miners' Health Safety and Training – 8-Hour

TRAINING/RELEVANT COURSE WORK

- April 2012 – Benthic Macroinvertebrate Surveying and Rapid Bioassessment Protocol Methods (WVDEP)
- 2011 – Fish Identification – US Fish and Wildlife Service

AREAS OF SPECIALIZATION

Water Quality, Storm water, NPDES, Fish Identification, Benthic Macroinvertebrates

PROFESSIONAL EXPERIENCE

Benthics

Conducted benthic surveys using USEPA Rapid Bioassesment Protocols (RBP) to assess stream quality prior to the issuance of mining permits in several streams in West Virginia and Pennsylvania.

Implementation of the Interim Chemical/Biological Monitoring Protocols for Mountaintop Mining Operations. Responsibilities include water chemistry sampling, benthic macroinvertebrate sampling, fisheries collection, habitat assessment, report preparation, and report finalization.

Collected and identified fish, benthics, and water chemistry samples relative to ecosystem recovery following spill events.

Conducted seston and periphyton studies, as well as dissolved oxygen studies utilizing sondes such as a Hydrolab and YSI or other data logging equipment.

Supervision and management of field crews, schedules, and data of the collection of water chemistry, benthics macroinvertebrates, fish, and habitat assessment.

Prepared data management and quality assurance/quality control plans, performed database design, data interpretation, data validation, and statistical analysis to obtain, determine, and compile available benthic data collected.

Asbestos

Performed asbestos inspections and report writing for asbestos-containing buildings.

Stream/Wetland Delineation, Permitting, and Mitigation

Conducted stream delineation on several streams to determine point of origin, intermittent, and perennial reaches.

Stormwater

Collected storm water samples as required by NPDES permits.

Prepared Storm Water Pollution Prevention Plan (SPPP) for facilities in West Virginia.

Prepared and reviewed Discharge Monitoring Reports (DMR) to evaluate compliance with permits.

Groundwater

Prepared Groundwater Protection Plans (GPP) for facilities in West Virginia.

Completed several well monitoring surveys (water chemistry sampling and GPS) for various companies.

ESAs (Phase I and II)

Completed Phase 1 ESA assessment field work for 186,000-acre area in West Virginia.

Mining

Performed environmental audit of major West Virginia coal producer.

CHRISTOPHER A. GROSE, L.R.S.

Senior Engineering Associate

EDUCATION

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

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

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATIONS

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

PROFESSIONAL AFFILIATIONS

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

AREAS OF SPECIALIZATION

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

PROFESSIONAL EXPERIENCE

Civil/Site Design

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

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

Geotechnical

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Roadway Design

Geotechnical engineer for various bridge and highway projects including:

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

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

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

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

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

Abandoned Mine Lands

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

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

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

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

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

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

Oil and Gas

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

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

Mining

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

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

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

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

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

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

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

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

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

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

Landfills/Solid Waste/Waste Disposal

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

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

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

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

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

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

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

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

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

Storage Tanks

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

Groundwater

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

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

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

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

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

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

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

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

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

ESAs (Phase I and II)

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

DAVID B. SHARP, P.E.

Branch Manager/Senior Engineer

EDUCATION

M.S. Civil Engineering, 1995
West Virginia University

B.S. Civil Engineering, 1993
West Virginia University

EMPLOYMENT HISTORY

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

PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia, Virginia

PROFESSIONAL CERTIFICATIONS

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

AREAS OF SPECIALIZATION

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

PROFESSIONAL EXPERIENCE

Geotechnical

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

- Family Dollar Store – Berkeley Springs, WV
- Rubbermaid Distribution Center Addition – Winchester, VA
- WVU Transportation Center/Parking Garage – Morgantown, WV
- 4 West Water Treatment Plant – Greene County, PA
- CA Ventures (9 story student housing building) – Morgantown, WV
- Copper Beech Student Housing (included 31 buildings, parking areas, and 11,250 linear feet of retaining walls) – Morgantown, WV
- Sunnyside Commons Student Housing (included three multi-story buildings, parking, and 43,000 sq. ft. of retaining walls) – Morgantown, WV
- WVU Engineering Building East Addition – Morgantown, WV
- Potomac State College Admissions Building Addition – Mineral County, WV
- Glenville State College Health & Sciences Building – Gilmer County, WV
- Glenville State College Residence Hall – Gilmer County, WV
- Christy Street Office Building – Morgantown, WV
- Harry Green Nissan Dealership Building Addition – Harrison County, WV
- Elkins Dodge Dealership – Randolph County, WV
- Sam's Club Fueling Station – Clarksburg, WV
- Wal-Mart Fueling Station – Connellsville, PA
- Cheat Lake Elementary School Building Addition – Monongalia County, WV
- Churchhill Village Housing Project – Monongalia County, WV

- R.E. Michel HVAC Commercial Building – Monongalia County, WV
- ICM Islamic Center – Morgantown, WV
- Catlettsburg Refining Company – Alkylation and Wastewater Control Room – Catlettsburg, KY
- WVARNG Camp Dawson Fueling System – Kingwood, WV
- MEPCO Dock Expansion Project – Morgantown, WV
- West Run Student Housing (includes 16 buildings, parking areas, and 50,000 sq. ft. of retaining walls) – Morgantown, WV
- Fairmont Federal Credit Union – Bridgeport, WV
- Morgantown Waterfront Marina – Morgantown, WV
- Residence Inn – Morgantown, WV
- Suncrest Executive Office Plaza and Parking and Garage – Morgantown, WV
- WVU Research Park – Morgantown, WV
- View at the Park Apartment Complex – Morgantown, WV
- Marriott Hotel – Morgantown, WV
- Bucks Tavern – Morgantown, WV
- Stouts Run United Methodist Church Addition – Parkersburg, WV
- Fairfield Inn Hotel – Fairmont, WV
- Wendy's Restaurant – Morgantown, WV
- Sunoco Service Station – Robinson Township, PA
- St. Stephen Baptist Church – Morgantown, WV
- Islamic Center – South Charleston, WV
- Oak Hill Public Library – Oak Hill, OH
- Westside High School – Oceana, WV
- WVARNG Readiness Center – Summersville, WV
- Student Housing Facility, Parking Garage, Library/Information Center, Student Center Addition, Jomie Jazz Center, and Child Care Center for Marshall University – Huntington, WV
- U.S. Equipment Distributors – Huntington, WV
- PC WV #2 and #3 – Pace Carbon Fuels – Summersville and Eckman, WV
- WVU Luxury Box for Mountaineer Field – Morgantown, WV
- Marshall University Mid-Ohio Valley Center – Point Pleasant, WV
- Arbor Terrace Assisted Living Facility – Charleston and Huntington, WV
- Pocahontas County PSD Wastewater Treatment Plant – Snowshoe, WV
- Pt. Marion Water Tank Replacement – Pt. Marion, PA
- Monongalia General Hospital and Access Road – Morgantown, WV
- Kasson Elementary/Middle School Repair Project – Kasson, WV
- North Marion Vocational/Technical Center School Repair Projects – Marion County, WV
- Monongalia County Public Office Building – Morgantown, WV
- Numerous Cell Phone Towers in WV, PA, and MD
- Numerous Natural Gas Compressor Stations Pads and Additions:
  - EQT – Logansport Compressor Station Addition – Wetzel County, WV
  - EQT – Plasma Compressor Station Pad – Monroe County, OH
  - EQT – Corona Compressor Station Pad – Wetzel County, WV
  - EQT – Gemini Compressor Station – Geotechnical Feasibility – Marion County, WV
  - EQT – Gemini Interconnect Pad – Marion County, WV
  - Basic Systems, Inc. – Waynesburg Compressor Station Addition – Greene County, PA
  - Basic Systems, Inc. – Gettysburg Compressor Station Addition – Adams County, PA
  - Basic Systems, Inc. – Greencastle Compressor Station Addition – Franklin County, PA
  - Basic Systems, Inc. – Files Creek Compressor Station Addition – Randolph County, WV
  - Basic Systems, Inc. – Smithfield Compressor Station Addition – Wetzel County, WV
  - Dominion Transmission – Crayne Compressor Station – Green County, PA
- Numerous Marcellus Well Pad Sites – Northern WV:
  - Stone Energy – Mills Wetzel #3 Well Pad – Wetzel County, WV
  - Stone Energy – Conley Well Pad – Wetzel County, WV
  - Stone Energy – Langmyer Pad – Wetzel County, WV
  - Mountaineer Keystone – Mackey-Wolfe Well Pad – Barbour County, WV
  - Chesapeake Energy – Rayle Coal Co. Well Pad – Ohio County, Wv
- Numerous Residential Geotechnical Projects – Charleston and Morgantown, WV
- Geotechnical Recommendations for Natural Gas Transmission Lines including Horizontal Directional Drilling Projects:
  - EQT Midstream – H-310 Coal Refuse Area – Monroe County, OH
  - EQT Midstream – Harrison County HDD – Harrison County, WV
  - EQT Midstream – Ohio River HDD – Wetzel County, WV and Monroe County, OH

Responsible for the coordination of subsurface investigation, laboratory testing program, slope stability

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

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

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

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

Expert Witness

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

- JKLM Energy, LLC et. al. vs. Big Level Wind, LLC, John Hankock Life Insurance et. al. Court of Common Places of Potter County, Pennsylvania No. 86 CD 2017 – Construction, geotechnical and civil/site design associated with gas well pads
- Wilkins, Scott v. R&R Holdings – Civil Action 15-c-295 – Flooding and drainage

- Larry Rine, et. al. vs. Chesapeake Appalachia, LLC. Robinson & McElwee – Civil Action No. 5:11-CV-4 – Landslide on Natural Gas Well Pad
- Bisacca v. Pennsylvania Department of Transportation, Thomas J. Dempsey, Attorney at Law – Earthwork Construction Practices
- Sven Verlinden and Lisa Verlinden v. Morgantown Utility Board, et. al. Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-573 – Combined Sewer Flooding
- Russell D. Kitchen and Suzanne G. Kitchen v. Morgantown Utility Board – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-745 – Combined Sewer Flooding
- Darin O. Arnold and Sarif J. Arnold v. Morgantown Utility Board – Shuman, McCuskey & Slicer, PLLC – Civil Action No. 11-C-749 – Combined Sewer Flooding
- Rider v. Fairmont Homes, LLC. – Flaherty, Sensabaugh & Bonasso, PLLC – Claim No. 1012802 – Landslide and Residential Construction Issues
- Thomas A. Logston and Joanne C. Logston v. Charles E. Kolb d/b/a Kolb Excavating – A.D. Baker Homes, Inc. and Alan D. Baker, Bowles, Rice, McDavid, Graff & Love – Civil Action No. 10-C-116 – Landslide Resulting in Property Damage
- LJH, Inc. v. Quadruple S. Farms, LLC and Four-S-Development, Bowles Rice LLP – Civil Action No. 09-C-438 – Rockfall and Commercial Construction Practices
- Mingo County Airport Authority Claim Against Appalachian Paving & Aggregate, Inc. – Robinson & McElwee, PLLC – Earthwork and Construction Related Issues
- Children's Home of Wheeling v. Cast & Baker, et. al. Civil Action No. 06-CV-374W – Geotechnical
- Colaianni Construction, Inc. Claim for Cost Recovery Against Koker Drilling at Wetzel County Hospital, Wellness Center Addition – Spilman, Thomas & Battle – Retaining Wall Failure Resulting in Building Damage
- Hilling Enterprises, LLC et. al. v. Midtown Motors, Inc. et. al. – Civil Action No. 13-C-308 – Landslide Causing Property Damage
- Stan-Corp v. Scott Properties, LLC. et. al – Bowles Rice LLC – Landslide Impacting Roadway and Property
- Stephen C. Fish et. al. v. McCloy Construction et. al. – Bowles Rice, LLP – Civil Action 03-C-3050 – Structure Foundation Settlement
- Industrial Machine v. American Geotech – Bowles Rice, LLP – Civil Case 02-C-115 – Subsurface Exploration and Geotechnical Design
- Pell, Robert K., et. al. v. SAMOA, LLC, et. al. – Claim No. 010510386236 – Drainage Related Claim

Civil/Site Design

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

- University Place Parking Garage – Morgantown, WV
- Sunnyside Commons Student Housing Project (included 5 multi-story buildings, 268 parking spaces, and 43,000 sq. ft. of retaining walls) – Morgantown, WV
- Coombs Farm Residential Development – Morgantown, WV
- Morgan Point Residential Subdivision – Morgantown, WV
- Town of Granville Boat Ramp Project – Granville, WV
- West Run Student Housing (1,000 bed student housing Project) – Morgantown, WV
- Copper Beech Student Housing (1,000 bed student housing project) – Morgantown, WV
- Summit at Cheat Lake Residential Development – Morgantown, WV
- Summit at Greystone Residential Development – Morgantown, WV
- Sleepy Hollow Residential Development – Morgantown, WV
- Shiloh Residential Development – Morgantown, WV
- Summerfield Residential Development – Morgantown, WV
- Mayfield Estates Residential Development – Morgantown, WV
- Cheat Landing Residential Development – Morgantown, WV
- Churchill Village Complex – Morgantown, WV
- Trinity Christian School Football Field – Morgantown, WV

- Morgantown Technical Services Industrial Expansion – Mt. Morris, PA
- WVU Beechhurst Parking Lot – Morgantown, WV
- Numerous Marcellus Well Pad Sites for Various Clients – Northern WV

Construction Monitoring

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

- Sunnyside Commons Student Housing Project – Morgantown, WV
- Family Dollar Store – Smithfield, PA
- University Place Parking Garage – Morgantown, WV
- Church Hill Village Housing Project – Morgantown, WV
- Mills Wetzel #3 Well Pad – Wetzel County, WV
- Shupbach Ridge Road Landslide Repair – Wetzel County, WV
- Potts Landslide Repairs – Wetzel County, WV
- Pribble Tank Landslide Repair – Wetzel County, WV
- Potokczny Landslide Repair – Marion County, WV
- Tucker County Industrial Park – Tucker County, WV
- Pocahontas County Landfill Cell 3 Expansion – Pocahontas County, WV
- Disposal Services Landfill Expansion Area – Hurricane, WV
- Platinum Drive Urban Connector Landslide Repair – Bridgeport, WV
- Trinity Christian School Football Field – Morgantown, WV
- Kasson Elementary/Middle School Pyrite Remediation Project – Barbour County, WV
- City of Philippi Water Improvement Project – Barbour County, WV
- Mackey Wolfe Well Pad – Barbour County, WV
- Morgantown Technical Services Expansion – Mt. Morris, WV
- Lakin Correctional Center – Wood County, WV
- Western Regional Jail – Cabell County, WV
- Merrick Creek Farm Commercial Development – Cabell County, WV

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

Sewer Lines and WWTPs

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

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

Water Lines, Water Storage Tanks, and Water Treatment Plants

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

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

documents, and construction observation/administration.

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

Company Overview

FIRM HISTORY

Potesta & Associates, Inc. (POTESTA) was founded in 1997 as a full service engineering and environmental consulting firm headquartered in Charleston, West Virginia. We have now expanded to a diverse staff of more than 81 experienced engineers, scientists, and support personnel with branch offices in Morgantown, West Virginia, and Winchester, Virginia. Our clients include mining, manufacturing and chemical companies; utility companies; waste management companies; colleges/universities; land developers; attorneys; financial institutions; insurance companies; local, state and federal agencies; construction companies and architects.

SERVICES

- Air
- Asbestos Abatement
- Biological and Toxicological
- Civil Engineering and Site Design
- Coal Supply and Procurement
- CADD
- Construction Monitoring
- Environmental Emergency Response
- Environmental Site Assessment
- Geographic Information Systems
- Geotechnical Engineering
- Groundwater
- Hydrology and Hydraulics
- Landfills and Solid Waste
- Litigation Support
- Marcellus Shale Natural Gas
- Mining
- Mixing Zone Analysis
- Occupational Safety and Health
- Oil and Natural Gas
- Permitting
- Remedial
- Roadway Engineering
- Stream Restoration
- Storage Tanks
- Surveying and Mapping
- Water Quality Studies
- Water and Wastewater
- Wetlands

Experienced Professionals

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 39 years experience with civil, geotechnical, mining, and environmental engineering projects.

FIRM HIGHLIGHTS:

Established in 1997

Staff of More Than 81

Corporate Office in Charleston, WV

Regional Offices in Morgantown, WV Winchester, VA

Primarily Serve Clients East of the Mississippi River

Carry a Full Line of Insurance Coverage

Stringent Internal Quality Control System

Additional information on our services and capabilities can be found on our corporate website: www.potesta.com. POTESTA

POTESTA & ASSOCIATES, INC.

Asbestos Inspection Services

Potesta & Associates, Inc. (POTESTA) is an engineering and environmental consulting firm whose staff of professionals has completed numerous asbestos inspection services. Our qualified personnel can assist you with:

- Building Inspections for Asbestos-Containing Building Materials
- Liaison with Regulatory Agencies
- Completion and Submittal of Notification of Abatement, Demolition and Renovation Forms to the Appropriate Regulatory Agencies
- Selection of Qualified Asbestos Abatement Contractors
- Preparation of Bidding and Contract Documents
- Participation in Pre-Bid and Pre-Abatement Meetings
- Monitoring of Contractor Work Procedures During Completion of Asbestos Abatement Activities

BUILDING INSPECTIONS

State and federal regulations require that an asbestos inspection be performed by a licensed asbestos inspector prior to abatement, demolition or renovation activities. POTESTA has West Virginia and Virginia Licensed Asbestos Inspectors on staff that have conducted several hundred asbestos inspections and produced reports presenting the results of these inspections.

REGULATORY ASSISTANCE

A Notification of Abatement, Demolition and Renovation form must be completed and submitted to appropriate regulatory agencies prior to project start-up. POTESTA has developed strong working relationships with these agencies and can assist you in producing notification forms for your asbestos abatement projects.

PROJECT ABATEMENT DESIGN PLANS

State and federal regulations require that a project abatement design plan be developed by a licensed asbestos abatement project designer. The design plan establishes procedures for abatement of asbestos-containing materials and methods for protecting workers, the public and the environment from releases of asbestos fibers.

ENGINEERING AND PROJECT MONITORING ASSISTANCE

POTESTA's asbestos inspection services also include preparing specifications, cost estimates, and bidding documents; soliciting bids from qualified contractors; assisting in the selection of a contractor; providing project management during completion of abatement activities; and monitoring contractor adherence to specifications, verifying pay quantity, and participating in dispute resolution.

POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
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Regional Offices: Morgantown, WV and Winchester, VA

POTESTA & ASSOCIATES, INC.

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™, etc.)
- Sample Collection Methods (split spoons, shelby tubes, Geoprobe™ sleeves, etc.)
- Classification and Logging of Soil and Rock Samples
- Monitoring Well and Piezometer Installation

SLOPE STABILITY ANALYSIS AND REMEDIAL DESIGN

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

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

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

FOUNDATION DESIGN RECOMMENDATIONS

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

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

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

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POTESTA & ASSOCIATES, INC.

Surveying and Mapping

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

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

POTESTA is equipped with modern surveying instruments, allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field-to-office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products. These products can be supplied to our clients in AutoCAD and/or Microstation format.

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

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

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

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

POTESTA

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STAFFORD CONSULTANTS INCORPORATED
Engineering, Design, Consulting, Planning, & Environmental Services

KENNETH R. CROWE, P.E.
VICE PRESIDENT

EDUCATION:

West Virginia Institute of Technology
Bachelor of Science, Civil Engineering (1976)

REGISTRATIONS/AFFILIATIONS:

Registered Professional Engineer in
West Virginia (1980) and Virginia (1981)

EXPERIENCE:

Stafford Consultants Incorporated (1985 to present)
Gates Engineering Company (1981 to 1985)
Westmoreland Coal Company (1976 to 1981)

PROJECT MANAGER AND DESIGN ENGINEER:

- Cameron High School, Marshall County – site work
- Weirton Elementary School, Hancock County – site work
- Hilltop Elementary School, Marshall County – site work
- Williamstown High School renovations, Wood County – site work
- Bayer Federal Credit Union, Ohio County – site work
- Brooke County Middle School, Brooke County – structural and site work
- Oak Glen High School Multi-use Stadium, Hancock County – site work
- Marshall University Married Student Housing, Huntington, WV – structural renovation work
- Princeton Renaissance Theater Renovations, Princeton, WV – structural renovation work
- Mercer County Health Center in Green Valley, WV – structural and site work
- Oakvale Elementary School in Oakvale, WV – structural and site work
- North Central Advanced Technology Center in Marion County, WV – structural work
- Merriman Athletic Facilities building at Virginia Tech – structural and site work
- 25 projects for the WVDoH including Cass Arch Bridge (*WVDoH Small Bridge Engineering Excellence Award Winner*), Mineral Wells I-77 Interchange Overpass Bridge (*WVDoH Small Bridge Engineering Achievement Award Finalist*), Camden Avenue I-77 Bridge, Grapevine Creek Bridge (*WVDoH Small Roadway Engineering Excellence Award Winner*), North Lewisburg Road Widening (*WVDoH Small Roadway Engineering Achievement Award Finalist*), and Mullens Overhead Bridge.
- 21 mine reclamation projects for the WVDEP, including Williamson Nursing Home Slide, Milburn Red Dog Pile, Mill Branch Refuse Piles, Canebrake Complex, and Matoaka Refuse Pile.

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Engineering, Design, Consulting, Planning, & Environmental Services

STACY A. FOWLER, P.E.
PROJECT MANAGER

EDUCATION:

Bluefield State College
BS, Civil Engineering Technology (1995)
University of Central Florida
Master of Science, Civil Engineering (2007)

REGISTRATIONS/AFFILIATIONS:

Registered Professional Engineer in West Virginia (2002), Georgia (2003), and Florida (2007)

EXPERIENCE:

Stafford Consultants Incorporated (2009 to present)
Engineering Design and Construction, Inc. (2004-2009)
Port St. Lucie, FL Utility Systems Dept. (2001 to 2004)
Velcon Group, Incorporated (1998 to 2001)
Pentree, Inc. (1998)
Computects, Incorporated (1997-1998)
Visualizations, Incorporated (1995-1997)
Pentree, Inc. (1995)

PROJECT MANAGER AND DESIGNER:

- Meadow Bridge Sewer Improvements Project for the Town of Meadow Bridge, WV
- Mercer/Summers Phase IV-A Waterline Extension for Oakvale Road PSD – 8 miles of water main, storage tank and pressure reducing stations near Oakvale, WV
- Town of Rainelle Water System Expansion Project in Greenbrier County, WV
- Renovations to the Welch Water Treatment Plant for the City of Welch, WV
- Southern Grove Master Drainage Model for 3,600 acre development in Port St. Lucie, FL
- Tradition Operable Structures within the Tradition Development in Port St. Lucie, FL
- Tradition Master Control Structure spanning 50' wide drainage canal for 1,500 acre land development project in Port St. Lucie, FL
- Western Grove Master Drainage Model for 1,550 acre development in Port St. Lucie, FL
- Peacock Canal Relocation and Maintenance – included stream restoration and relocation for 3,000 acre land development in Port St. Lucie, FL
- Chester Brook Academy – paving, grading, and drainage plans along with permitting for 10,000 sq.ft. day care facility in Port St. Lucie, FL
- Port Consolidated – paving, grading, and drainage plans along with permitting for a 2 acre fueling station in Fort Pierce, FL
- B-Shaped Lake – construction plans, permitting, and contract administration for 2 acre, 80' deep lake for stormwater system in Port St. Lucie, FL

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Engineering, Design, Consulting, Planning, & Environmental Services

KEVIN G. SMITH
DESIGNER/CADD TECHNICIAN

EDUCATION:

Raleigh County Vocational Ed. Center (1979)

REGISTRATIONS/AFFILIATIONS:

Civil I and Civil II Certificates

EXPERIENCE:

Stafford Consultants Incorporated (1998 to present)
Computects and DBD Professional Group (1998)
G. A. Tice Incorporated (1992 to 1997)
ESP Associates (1986 to 1992)
G. O. Bledsoe Incorporated (1981 to 1986)
Holly, Kenny, Shott (1980 to 1981)

DESIGNER AND CADD TECHNICIAN:

Assists with all phases of project development, from initial site survey to preparation of base mapping, project layout (roadways, parking, water, and sewer), geometric layout, erosion & sediment control plans, profiles, structural plans, and detail sheets. Projects include:

- 12 projects for the WVDoH including Coalfields Expressway, Grapevine Creek Bridge, Hutchinson Branch Bridge, Cass Arch Bridge, Mullens Bridge, North Lewisburg Roadway Widening, Bellepoint Road Widening, West Webster Road Intersection, and Craigsville Intersection.
- Chapmanville Regional High School in Chapmanville, Logan County (site layout)
- Parkersburg South High School in Parkersburg, Wood County (site layout)
- Bayer Federal Credit Union in Moundsville, Marshall County (site layout)
- Hilltop Elementary School in Sherrard, Marshall County (site layout)
- Cameron High School in Cameron, Marshall County (site layout)
- Weir High School Stadium in Weirton, Hancock County (site layout)
- Oak Glen High School Stadium in New Manchester, Hancock County (site layout)
- Weirton Elementary School in Weirton, Hancock County (site layout)
- Oakvale Elementary School in Oakvale, Mercer County (site layout and structural)
- Mercer County Health Center in Green Valley, Mercer County (site layout and structural)
- North Central Advanced Technology Center in Fairmont, Marion County (structural)
- Brooke County Middle School in Wellsburg, Brooke County (site layout and Revit structural model)

STAFFORD CONSULTANTS INCORPORATED
Engineering, Design, Consulting, Planning, & Environmental Services

MATTHEW W. PETERS
PROJECT MANAGER

EDUCATION:

Bluefield State College
BS, Civil Engineering Technology (2010)
Bluefield State College
BS, Architectural Engineering Technology (2009)

REGISTRATIONS/AFFILIATIONS:

None

EXPERIENCE:

Stafford Consultants Incorporated (2009 to present)

TECHNICIAN AND DESIGNER:

- City of Princeton, Mercer County – wastewater treatment plant upgrade
- City of Welch, McDowell County – North Welch Wastewater Expansion
- City of Welch, McDowell County – Contracts 8B, 8C, 8D Stormwater/Sanitary Separation Projects
- Big Bend Public Service District, Summers County – water system expansion
- Town of Alderson, Greenbrier County – wastewater treatment plant upgrade
- City of Richwood, Nicholas County – Hinkle Mountain water system expansion
- Melrose Elementary School, Princeton, WV - layout and location survey for multipurpose building
- Bluefield High School, Bluefield, WV – layout for softball field lights
- Montcalm High School, Montcalm, WV – layout for softball field lights
- Princeton Middle School, Princeton, WV – elevation control for hallway floor slab leveling project
- Site location surveys for various projects

STAFFORD CONSULTANTS INCORPORATED
Engineering, Design, Consulting, Planning, & Environmental Services

CORPORATE PROFILE

SERVICES:

Stafford Consultants is a full service engineering firm providing services in Civil, Structural, Highway, Bridge, Airport, Environmental, and Sanitary Engineering. We have been providing engineering services for water, sewer, and general civil projects for more than 31 years. Although our main emphasis is toward the municipal utility market, our firm is highly qualified and capable of completing varied civil and structural projects. The football stadiums at West Virginia and Marshall Universities, the Merriman Athletic Facilities building at Virginia Tech, the Chuck Mathena Center in Princeton, sidewalks for the City of Princeton, artificial turf for the Princeton Senior High School football field, structural design and sitework for the Oakvale Elementary School, and master planning of athletic facilities at Virginia Tech and Marshall University are just a few examples.

Stafford works closely with our clients to develop projects that meet their needs and can be constructed in a timely and cost effective manner. We assist the client from the beginning to end of their project with complete project services – preliminary study reports, preliminary design, final design, bidding, and complete construction administration services.

HISTORY:

Stafford Consultants Inc. was formed in 1985 from a core group of employees of Gates Engineering Company. After many successful years of operation, Gates Engineering Company was bought by a large design / build firm that later decided to divest the consulting engineering firm. Six employees have been with the firm since its inception.

Our office has been located in Princeton since opening for business. While the majority of our clients are located in the southern part of the state, Stafford has worked throughout West Virginia and also provides services in Virginia.

COMMITMENT:

Stafford is committed to providing quality engineering services to our clients, completed on time and at a fair price. Continuity of the project management team is paramount. The engineer preparing the proposal and presenting our qualifications at the interview is the same engineer that will be managing your project.

Our design teams utilize the latest versions of AutoCAD and AutoCAD Civil 3D software, in addition to various other structural, hydraulic, and hydrology packages. We utilize Ajera Complete to track all project time and expenses to make sure projects remain on schedule and within budget.

1105 Mercer Street
Princeton, WV 24740
304-425-9555

Water

Summersville Water Plant

- Over 30 storage tanks ranging from 30,000 to 750,000 gallons
- Surface water treatment plants from 50 to 2,000 gallons per minute
- Transmission and distribution systems ranging in costs from $100,000 to over $30,000,000
- Pumping stations designed with the needs and desires of the client in mind

Alderson Water Storage Tanks

Site Development

Glade Springs Village

Stafford Consultants provides engineering services to public and private clients such as:

- grading
- site utilities
- stormwater permitting
- structural analysis
- construction monitoring
- expert witness

Typical projects like Chapmanville, Williamstown, Parkersburg and Parkersburg South High Schools included:

- site grading
- utilities
- stormwater

Parkersburg South High School

Wastewater

Princeton Wastewater Treatment Plant

Athens Wastewater Treatment Plant

Stafford projects include:

- treatment systems from 10,000 gallons per day to 5 million gallons per day
- conventional activated sludge, extended aeration, "orbal" oxidation ditch and sequencing batch reactor treatment systems
- conventional sewer systems and innovative systems such as pressure systems, vacuum systems, septic tank effluent systems and constructed wetlands

Some of Stafford's Satisfied Clients

Town of Alderson, West Virginia
Alleghany County, Virginia
Town of Ansted, West Virginia
Town of Athens, West Virginia
Big Bend P.S.D., Talcott, West Virginia
Town of Blacksburg, Virginia
City of Bluefield, West Virginia
Bluefield Sanitary Board, Bluefield, Virginia
Town of Bramwell, West Virginia
Bramwell P.S.D., Bramwell, West Virginia
Cooper Land Development, Inc., Beaver, WV
City of Gary, West Virginia
Greenbrier Valley Airport, Lewisburg, WV
City of Hinton, West Virginia
City of Lewisburg, West Virginia
Logan County PSD, Logan, West Virginia
Marshall University, Huntington, West Virginia
McDowell County PSD, Coalwood, West Virginia
Mercer County Commission, Princeton, WV
New Haven PSD, Fayetteville, WV
Nicholas County Commission, Summersville, WV
Oakvale Road PSD, Princeton, West Virginia
City of Princeton, West Virginia
Princeton Sanitary Board, Princeton, West Virginia
City of Welch, West Virginia
WV Division of Highways, Charleston, WV
WV Department of Environmental Protection, WV
White Oak PSD, Scarbro, West Virginia
Wilderness PSD, Mt. Nebo, West Virginia

****

Lyle Huntington, former Manager of Oakvale Road PSD said: *"Oakvale Road has done service with Stafford Consultants since 1989. They have handled over $50,000,000 worth of water and sewer projects. Stafford Consultants does exceptional work. You will not be disappointed if you should choose Stafford Consultants. I will continue to use them for future projects."*

Transportation

Devil's Backbone Bridge

- 19 bridge design projects for WV Division of Highways
- 5 roadway design projects for WV Division of Highways
- 3 Engineering Achievement Awards for Bridge and Roadway Designs

Mullens Bridge

A Client-Caring and Serving Company

STAFFORD CONSULTANTS INCORPORATED

Whether your needs are for utilities, transportation, athletic facilities, structures or site development, you can trust the **EXPERIENCED** Engineers at **STAFFORD CONSULTANTS.**

Engineering, Design and Consulting

1105 Mercer Street
Post Office Box 5849
Princeton, West Virginia 24740
Phone: (304) 425-9555
Fax: (304) 425-9557
E-Mail: staffordconsultants@frontiernet.net

... references ...

We feel that the best way to demonstrate our strengths and leadership in design is by referring to our past and present clients. McKinley Architecture and Engineering have an ever-growing list of repeat clients, which include having multiple open-end contracts; many of these are in the governmental sector. We have multiple open-ended contracts with organizations such as the United States Postal Service and West Virginia University to name a few. We are able to respond to their needs, and we are certain that we are able to respond to all of your needs as well. So that you don't only have to take our word for it; here is a list of references that we encourage you to call ***(more references are included on every project sheet)***:

McKINLEY
ARCHITECTURE + ENGINEERING

WVDOT Division of Highways
(*Open-End A/E Services Contract*)
Mr. Joshua Smith, PE
Acting Buildings & Grounds Program Manager
Maintenance Division
1900 Kanawha Boulevard, East
Building 5, Room 350
Charleston, WV 25305
304 / 887-2325

United States Postal Service
(*Open-Ended IDIQ Contracts*)
Mr. Bruce Adams
P.O. Box 20867
22681 Woodward Avenue
Ferndale, MI 48220-0867
248 / 677-9660

State of West Virginia
(*West Virginia State Office Complexes*)
Mr. Gregory L. Melton
Director
WV Department of Administration
General Services Division
1900 Kanawha Boulevard East
Charleston, WV 25305
304 / 558-1808

Panhandle Cleaning & Restoration
(*Panhandle Office & Warehouse*)
Mr. Bob Contraguerro, Jr.
42 38th Street
Wheeling, WV 26003
304 / 232-2321

POTESTA

Mr. John Allevato
Spilman Thomas & Battle PLLC
300 Kanawha Blvd East
Charleston, WV 25301
304 / 340-3885

WVDOH
(*Multiple Projects*)
Mr. Harry Bradley
1900 Kanawha Blvd. East
Building Five
Room 110
Charleston, WV 25305-0430
304 / 558-9726

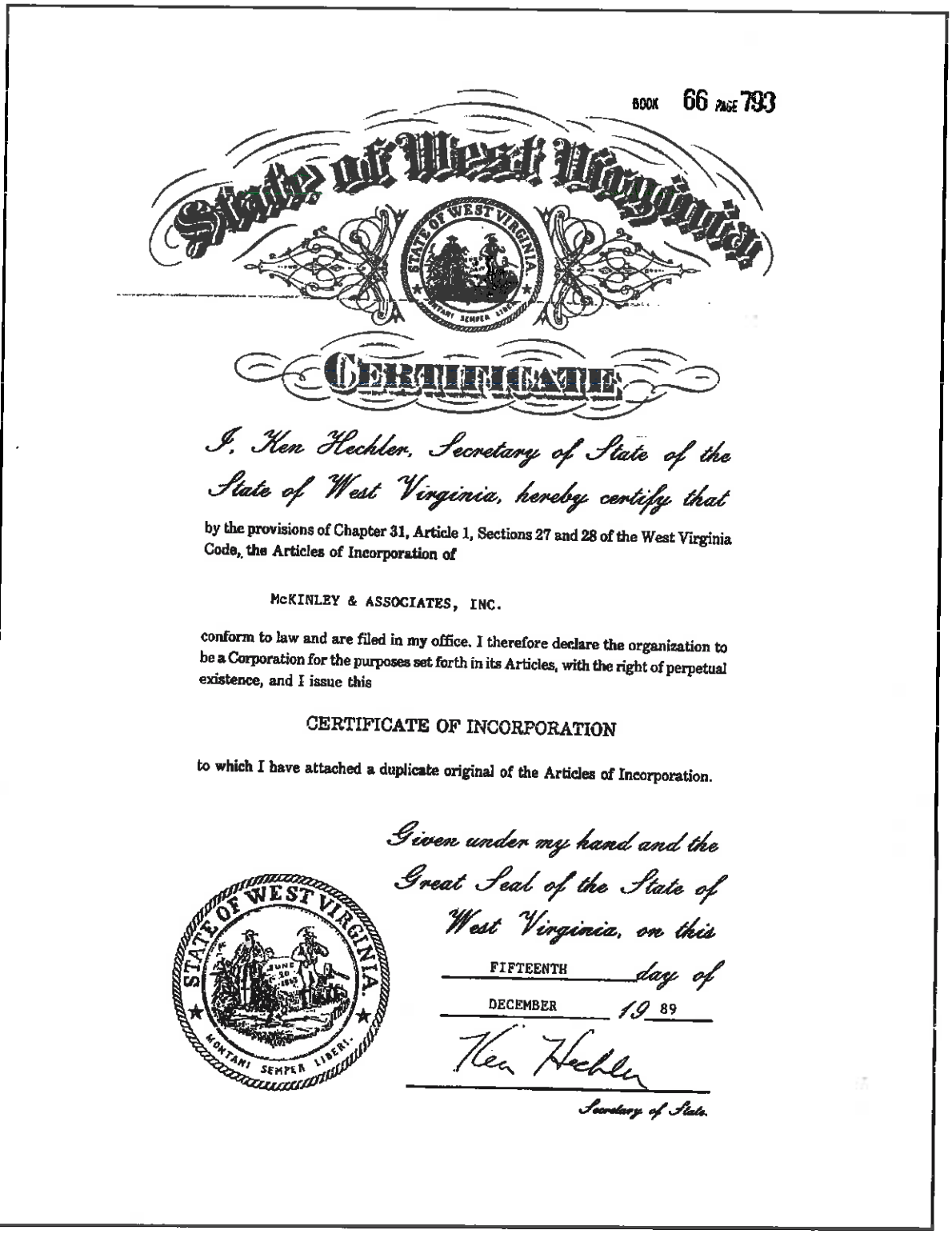
STAFFORD CONSULTANTS INCORPORTATED

Oakvale Road PSD
(*Multiple Projects, $50M*)
Mr. Lyle Huntington
P.O. Box 1061
Princeton, WV 24740
304 / 487-2750

Greenbrier County Airport Authority
(*Multiple Projects*)
Mr. Jerry O'Sullivan
P.O. Box 329
Lewisburg WV 24901
304 / 645-3961

... copies of any staff certifications or degrees applicable to this project ...

Copies of McKinley Architecture and Engineering's various **licenses** and **certifications** are found on the following pages. In addition, copies of Thom Worlledge's (your project manager) Registration & Authorization Certificate to provide Architectural Services in West Virginia is also included. Furthermore, the **degrees** and additional **certifications** these professionals have earned are listed on their **resumes**. We can also provide copies of certifications/licenses of our consultants if you wish to see them.



BOOK 66 PAGE 793

State of West Virginia

CERTIFICATE

I, Ken Hechler, Secretary of State of the State of West Virginia, hereby certify that

by the provisions of Chapter 31, Article 1, Sections 27 and 28 of the West Virginia Code, the Articles of Incorporation of

McKINLEY & ASSOCIATES, INC.

conform to law and are filed in my office. I therefore declare the organization to be a Corporation for the purposes set forth in its Articles, with the right of perpetual existence, and I issue this

CERTIFICATE OF INCORPORATION

to which I have attached a duplicate original of the Articles of Incorporation.

Given under my hand and the Great Seal of the State of West Virginia, on this

FIFTEENTH day of

DECEMBER 19 89

Ken Hechler

Secretary of State

State of West Virginia

Certificate

I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

MCKINLEY & ASSOCIATES, INC.

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on December 15, 1989.

I further certify that the corporation has not been revoked by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Dissolution to the corporation.

Accordingly, I hereby issue this

CERTIFICATE OF EXISTENCE

Validation ID:0WV3W_CQTDH

Given under my hand and the Great Seal of the State of West Virginia on this day of October 27, 2015

Natalie E. Tennant

Secretary of State

Notice: A certificate issued electronically from the West Virginia Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Validation Page of the Secretary of State's Web site, https://apps.wv.gov/sos/businessentitysearch/validate.aspx entering the validation ID displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate.

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
MCKINLEY & ASSOCIATES INC
32 20TH ST
WHEELING, WV 26003-3750

BUSINESS REGISTRATION ACCOUNT NUMBER: **1040-9524**

This certificate is issued on: **06/28/2011**

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4
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CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

The West Virginia State Board of Registration for Professional Engineers having verified the person in responsible charge is registered in West Virginia as a professional engineer for the noted firm, hereby certifies

MCKINLEY & ASSOCIATES, INC.
C00366-00

Engineer in Responsible Charge: TIM E MIZER - WV PE 013169

has complied with section §30-13-17 of the West Virginia Code governing the issuance of a Certificate of Authorization. The Board hereby notifies you of its certification with issuance of this Certification of Authorization for the period of:

January 1, 2018 - December 31, 2019

providing for the practice of engineering services in the State of West Virginia.

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE, PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.

IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA UNDER ITS SEAL AND SIGNED BY THE PRESIDENT OF SAID BOARD.

BOARD PRESIDENT

The West Virginia Board of Architects

certifies that

THOMAS R. WORLLEDGE

is registered and authorized to practice
Architecture in the State of West Virginia.

In testimony whereof this certificate has been issued
by the authority of this board.

Certificate Number [redacted]

The registration is in good standing until June 30, 2019.

Board Administrator

... proposed staffing plan ...

The work to be performed by your design team is very clear; **to evaluate, prioritize and design within budget and schedule to meet the needs of the West Virginia Army National Guard, Construction and Facilities Management Office.** We know the **McKinley/Potesta/Stafford Team** possesses the required expertise to address **all facets of your Martinsburg Facility** project; such as architectural services; electrical, mechanical, civil, structural, & geotechnical engineering services; construction administration services; etc. We are available to start **immediately** upon our being selected, and the McKinley/Potesta/Stafford Team is available to dedicate the necessary personnel, effort, and hours to complete your projects on time.

In the past 37 years, McKinley Architecture and Engineering have had extensive experience with similar projects. With our "in-house" registered professional architects and engineers, we have the ability to make your projects a success. The technical depth of our professional staff indicates that these projects can be accomplished without overloading our group or computer graphics systems. Also, by having both architects and engineers in-house, you can be reassured of smooth project delivery and sensitivity to all relevant guidelines in our state.

The most important element of the entire process becomes **communication** from you to our designers. We use and welcome your input throughout the project. We continually achieve success in projects by maintaining **time and cost management, quality control and excellent communication** amongst the client, consultants, and contractors. We can and will perform for you on time and within your budget. In addition, we will help with **cost estimating** throughout the design phases. The way that we have historically achieved success with ANY construction project is by understanding fully the needs pertinent to the project by reviewing with the building Owner as early on as possible. Initial meetings with the users and staff will incorporate references to the standard with the object goal of determining budget, design and logistical priorities for the various projects.

At the **kickoff** of the project, the McKinley Team members will meet with the WVARNG to review scope and gather project information. We will review this existing material provided by you to ascertain if this information can be incorporated into the current program. Upon completion of this step, the McKinley Team will acquire all new information sufficient for use as base mapping, and will commence Schematic Design in connection with the design team and focus on designing the project. Upon completion of the Schematic Design Phase, we will prepare a preliminary cost estimate of expected costs. Our Team will meet with you and discuss these findings and based upon conclusion of this meeting move forward with the preparation of the Design Development Phase. We will provide a milestone progress set for the client to review and provide comment at the completion of the Design Development phase. After conclusion of this phase, the McKinley Team will prepare Final Construction Plans and Specifications and a final cost estimate for all aspects of the project. We will also submit necessary applications for jurisdictional permitting to allow construction. We will assist in bid preparation and selection, and upon contract award provide construction administration services, and McKinley Architecture and Engineering has Construction Administrators on staff to fulfill this need as well. In addition, our Eleven Month Walk-Through is a process where our professionals return to your facility eleven months after the project is completed. At that time they review all the work that was completed and check all warranties. We are making sure all of the covered work is in order and that the warranties do not expire with equipment or product not working properly. We have been doing this walk-through long before it being adopted as part of the AIA 101 Standard. We also conduct Post Occupancy Evaluations with the Owner to find out how well we matched the Owners' needs.

Furthermore, to design within **budget**, our Quality Assurance Program starts with a peer review where a registered professional not involved in the design becomes reviewer of the project before going to bid. Additionally, at our regularly scheduled weekly project meetings the entire design team is constantly reviewing the process to discuss **your project, the budget, schedule and quality assurance.** We provide Documented Minutes of all of our meetings; moreover, so that we meet your objectives and requirements, we encourage the WVARNG to participate in these meetings. Moreover, during the actual construction of the projects, the primary objective of our CA services is to ensure completion of work the way the client wants it - as **scheduled** and as **budgeted.** Throughout the years we have worked on many relevant projects, achieving **success of design** and schedule by maintaining time and cost management, quality control and excellent communication amongst the client, consultants, and contractors. This is a **constant process** which **begins with the initial project activity and continues through document submissions, construction and owner occupancy.** The longevity and sizes of the McKinley/Potesta/Stafford firms and our histories of success completing complex and innovative projects is founded upon our commitment to this process.

McKinley Architecture and Engineering is on the forefront of **innovative design. Sustainable Design** (whether it is **LEED** or any other type of **Energy Efficient "Green" Building**) is a fastly growing and supported philosophy. We approach ecological design from a business perspective, offering proactive solutions to complex problems such as **indoor air quality, energy efficiency, resource depletion, and water quality.** Our architectural/engineering staff has had special opportunities and experience related to various typical and atypical building types. We designed the first Chilled Beam HVAC System in the State of West Virginia, one of the first Variable Refrigerant Volume / Air-Cooled DX Multizone System in the State, and **one of the first buildings designed for all LED interior and exterior lighting - and the bids came in for the same cost as conventional florescent lighting. Function, economics and versatility,** in addition to the development of **strong aesthetic appeal,** are crucial elements in our design process.

Our **Construction Administrators** (CA) have an extra responsibility than what most firms' CAs have; our CAs are a part of the design process from Day 1 (they are not thrown into the project only when construction starts; they are involved from the beginning), so they know the ins-and-outs of the project. Your CA has an important role as being the liaison between the Owner, Contractor, and Architect/Engineer. As mentioned, the primary objective of this service is to ensure completion of work the way the client wants it - as scheduled and as budgeted. The CA will evaluate the quality of the work to verify that it meets the level required by clients; in addition, they will monitor the contractor's progress to ensure that they are following the Construction Documents. The CA will observe the construction progress, is responsible for all construction meetings and minutes, and will verify pay application and change orders.

McKinley Architecture and Engineering has a great working relationship with our State Fire Marshal and we commonly design to the State Fire and Life Safety Codes. We have worked with owners and tenants in many different sectors of business and have been able to comply with all of their various requirements and standards, including all Federal and State Agencies. We are able to respond to their needs, and we are certain that we are able to respond to your needs as well.

We are confident that we have the talent and technology needed to make this project successful.

The McKinley/Potesta/Stafford Team will meet all your goals and objectives!

Project Manager / Main Point of Contact

Thomas R. Worlledge, AIA, LEED AP BD+C, REFP

Architecture

Thomas R. Worlledge, AIA, LEED AP BD+C, REFP
Architect / LEED Accredited Professional Specializing in Building Design & Construction

Engineering Team

Tim E. Mizer, PE, RA, QCxP
Director of Engineering Services / Architectural Engineer / Architect / HVAC Commissioning Provider

Bruce A. Kennedy, PE
Electrical Engineer

Michael A. Heath
Mechanical/HVAC & Fire Protection Engineering Designer

Scott D. Kain
Plumbing & Electrical Engineering Designer

Christopher A. Grose, LRS
Geological/Geotechnical Engineer

Kenneth R. Crow, PE
Stafford Vice President / Site Civil Engineer / Structural Engineer

Stacy A. Fowler, PE
Civil Engineer / Water and Wastewater

Kevin G. Smith
Civil Site Structural Engineering Designer

Matthew W. Peters
Water and Wastewater Engineering Designer

David B. Sharp, PE
Geotechnical Engineer

Hazardous Materials Inspection / Abatement Services

David J. Corsaro, LRS
Senior Scientist / Licensed Remediation Specialist

Andrew A. Kirsch
Staff Scientist / Certified Asbestos Inspector

Dennis L. Litwinowicz, LRS
Senior Scientist / Licensed Remediation Specialist

Coy A. Spence
Scientist

Construction Administration

Robert E. Smith

... Descriptions of past projects completed entailing the location of the project, project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.

<u>West Virginia Army National Guard projects</u>

Location: State-Wide, West Virginia

Type of Project: Governmental - Full A/E Services - Multiple Projects

Project Description, Goals, and Objectives: McKinley Architecture and Engineering has completed multiple projects for you, the West Virginia Army National Guard, all around the State, including full A/E design services and construction administration.

We have worked on dozens of SPCC (Spill Prevention, Control, and Countermeasure) Plans and Amendments State-Wide.

We recently completed an HVAC renovation and electrical upgrades project at the Williamstown AASF #1 main storage hangar and maintenance building.

Moreover, we have also teamed with Assemblage Architects to create 2 buildings at Camp Dawson in Kingwood, Preston County, WV; our involvement in these 2 projects includes HVAC/mechanical, electrical, plumbing, and fire protection engineering, as well as construction administration services:

The new Mountaineer Challe*NG*e Academy is the first nationwide educational program for at-risk children in a quasi-military setting. This project won a 2011 WV AIA Merit Award. The building program includes staff offices, counselors offices, support staff areas, classrooms, an exercise area/ gymnasium, locker and shower rooms, medical assistance space, restrooms, and a full service kitchen with dining facility; these spaces will accommodate the 160 young adults/student residents living at Camp Dawson as part of the Challe*NG*e Academy. The first floor of the wing contains multiple classrooms, while the second floor contains multiple offices, conference, recruiting, and server rooms. There are also offices on the first floor. The gymnasium accommodates physical activity, weight training, and serves as the central hub of the complex. Drill exercises and formations, as well as graduation ceremonies are held here. The U-shaped building creates a large, central courtyard which includes a long shed-roof covered pavilion, along with a circular, concrete amphitheater. This courtyard is a multi-purpose outdoor events area for student functions, training activities, drills and formations, educational purposes, receptions, and more.

The mission of the Multi-Purpose Building is a new permanent multi-use masonry steel-framed structure with supporting facilities for military units of the WVARNG. The facility is serves as the primary physical training and event space for the Camp Dawson residents. This project won a 2014 West Virginia AIA Honor Award. The facility houses a large open space (gymnasium), a physical fitness area, locker rooms, shower facilities, offices, and more. The facility and grounds include parking, attached and detached storage, landscaping, security lighting and fencing, and a unique entry. This project was designed with energy recovery systems, as well as daylight harvesting in the gym. The gymnasium was based on occupancy of 200 exercising, or 3,500 at rest for events/assembly. It includes a tailor-made public address system with wireless microphone inputs for the events. We designed the gymnasium for three lighting scenarios: a) Stage use in Gym, b) Game lighting, c) General everyday lighting.

West Virginia Department of Transportation, Division of Highways projects

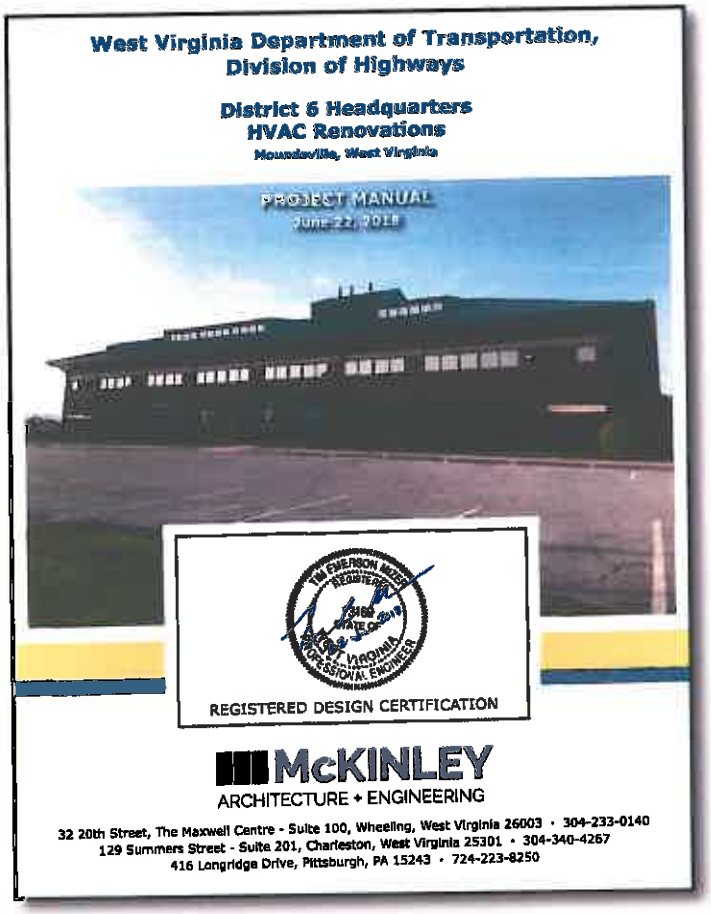
Location: Buckhannon & Moundsville, West Virginia

Contact: Mr. Joshua Smith, PE
Acting - Buildings and Grounds Program Manager
WV Division of Highways, Maintenance Division
1900 Kanawha Boulevard, East
Building 5, Room 350
Charleston, WV 25305
304 / 887-2325

Type of Project: Governmental

Project Description, Goals, and Objectives: McKinley Architecture and Engineering are now on our **2nd consecutive Statewide On-Call Agreement** with the **West Virginia Department of Transportation, Division of Highways**. This **open-ended contract** is to provide both **architectural/ engineering consulting services** (along with Construction Administration, and more) for the performance of various "tasks." The **design services** generally consist of planning, studying, designing, renovating, repairing, conducting plan/specification reviews, preparing equipment specifications and related services for Department of Transportation facilities, **including the site, utilities, buildings, and structures.**

For one task, we designed the HVAC replacement to the existing 2-story, 8,820 square foot **WVDOH Equipment Division Facility in Buckhannon** (State Project N081-BLD/GR-0.00 00). We designed a new Variable Refrigerant Flow (VRF) air handling unit with remote condensing unit to condition the offices and conference room. A complete digital controls system will be installed, with a desktop computer to allow authorized users access to the system. There are **energy efficient** aspects within this $350,000 project, such as energy recovery wheel.



For another task, we are designing the $545,000 HVAC replacement to the **WVDOH District 6 Headquarters Complex in Moundsville** (State Project N081-BLD/ GR-0.00). The building is conditioned by 2 different types of systems, and over the course of the last several years, half of the condensing units have failed, and there has been ongoing problem with the heating and cooling throughout. We recommend that all of the units be replaced with new compatible units, both indoor and outdoor. The units that we would be proposing would be gas fired and have a higher static air capacity to make sure there is proper airflow to all of the rooms. This would eliminate the variable volume diffusers and booster fans in the corner offices. With the units being gas fired, the separate duct heaters would be eliminated so that only one control would be needed and the switchover from heating to cooling, and vice versa, would be automatic. A new control system would allow the complete system to be set back on a consistent schedule and be remotely monitored.

Orrick's Global Operations Center

Location: Wheeling, West Virginia

Contact: Mr. Will Turani
Orrick, Herrington & Sutcliffe LLP
2121 Main Street
Wheeling, WV 26003
304 / 231-2629

Type of Project: Office Building renovations

Project Description, Goals, and Objectives: This 100 year old warehouse was adaptive reused and renovated to create **some of the most creative office space in the State.** This **four-story, 88,000 SF** former historic warehouse **is now a high tech "back office" for a major multinational company.** The greatest challenge was to convert the 100 year old once very industrial wood-framed building into a **modern "Class A" office facility** while retaining the historical heritage of the structure and district itself. **This $8 million dollar project won a West Virginia AIA Merit Award.**

AIA West Virginia
2002
MERIT AWARD
FOR EXCELLENCE IN ARCHITECTURE

Extensive restoration of the exterior was needed first. The entire exterior shell was designed and constructed in 6 months to attract a new tenant (it quickly became the home to the international law firm Orrick. This building soon became the company's Global Operations Center; no other firm has a 24/7 facility that rivals it. It provides the firm and its clients with a central business infrastructure that delivers comprehensive and reliable support services around the world, and around the clock). **The exterior renovations included reconstructing 120 dilapidated steel windows and glazing, extensive brick repointing, roof, construction of a new public entrance, and parking lot.**

The building was partially occupied while renovations continued. Architecture & engineering design was completed in-house and included a completely **new mechanical/HVAC system, structural, civil, electrical and fire suppression systems.** On the **interior,** the original facility was almost void of the vertical circulation needed a modern day, team oriented work environment. **Now,** an exposed steel atrium/elevator/stair core connects the four floors while introducing the industrial metals into the interior. Perforated columns, beams, and wire meshes allow daylight to filter in through usually solid steel construction. Two exposed, glass backed passenger elevators with stainless steel interior finishes now traverse the four floors allowing passengers a dynamic view through the atrium and walkways out to Main Street. The stainless steel and galvanized finishes of the exposed spiral ductwork, electrical conduits and cable trays, sprinkler piping, and perforated metal light fixtures further enhance the industrial concept of the design.

Wagner Building
Location: Wheeling, West Virginia
Contact: Mr. Dennis Kozicki
The Maxwell Partners
32-20th Street / Maxwell Centre #300
Wheeling, WV 26003
304 / 232-2280
Type of Project: Office Building renovations
Project Description, Goals, and Objectives: Located in the midst of the renaissance of downtown Wheeling, the historic Wagner Building is listed on the National Register of Historic Places and is the centerpiece of the new 10-acre Celoron Plaza Office Park. The Wagner Building was an old sugar warehouse built in the 1930s. After being vacant for over 30 years, McKinley Architecture and Engineering completed this $6.2 million (*original renovation project cost*) adaptive reuse project by **totally renovating this 7-story brick and concrete structure in phases (on a floor-to-floor basis), and turned it into a corporate center that includes beautiful Class "A" office suites as well as a new bank.** This office tower dominates the waterfront skyline and affords tenants incredible and unsurpassed panoramic views of the majestic Ohio River. The original fit-out of the tenant spaces on the first, fifth, sixth, and seventh floors was completed in 2000, and the fit-out of the tenant space on the second, third, and fourth floors was completed in 2004. We planned for **flex space**; many of the floors are "open floor plans" where we help customize the suites to meet a new businesses' needs; hence, **we have worked on multiple renovations over the years**, and recently worked on a new 5th floor office build-out for a new client.

Work on this **60,000 square-foot** structure included **total design of mechanical, electrical, plumbing, fire suppression systems as well as all architectural components, exterior renovations, window replacements, roof, ADA compliance design, new elevators, and a total gut of the interior.** All of the existing **windows** were replaced, and we designed them to match a close profile with the original windows; this included wider flat faced muntins, and the sash in the top six floors are all industrial steel units built around 1926. Two elevator replacements were also a major part of the original project; after they were completed, and **when new construction is on-going,** the contractor has the ability to return one of the two elevators into temporary service as a construction lift. Our firm also worked within the Standards of the Department of Interior for this historic structure renovation.

Bennett Square

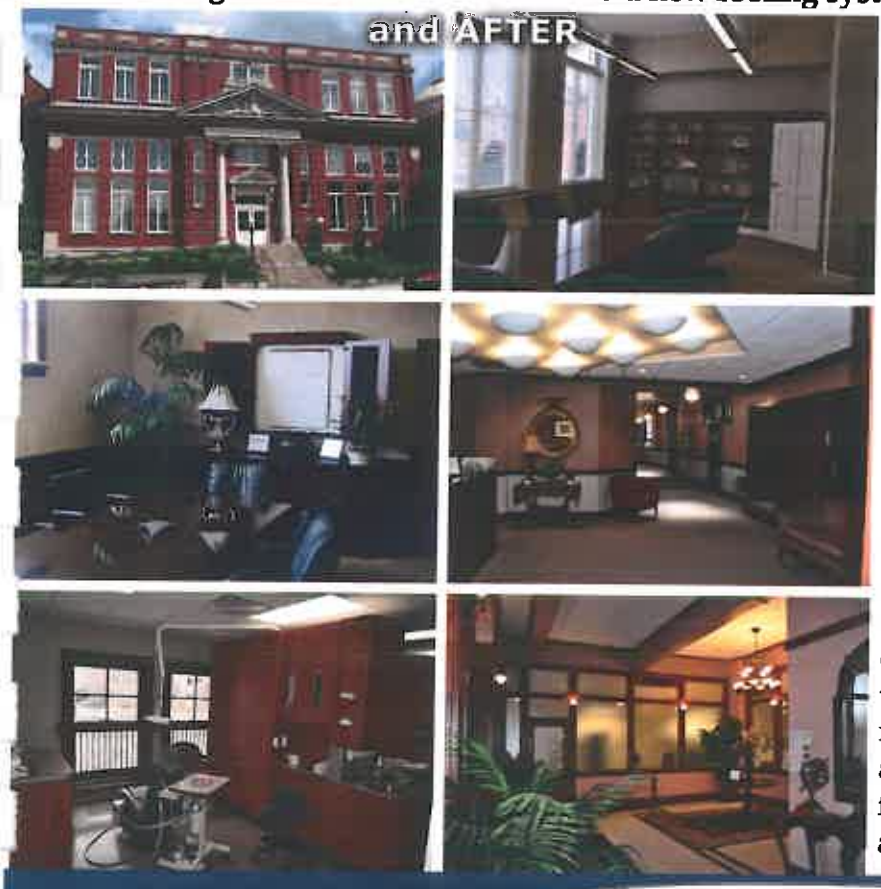
Location: Wheeling, West Virginia

Contact: Mr. David H. McKinley
McKinley Properties, LLC
10 Kenwood Place
Wheeling, WV 26003
304 / 230-2400

Type of Project: Office Building renovations

Project Description, Goals, and Objectives: Bennett Square is a historic **3-story, 22,000 SF** renovation project of the old Ohio County Public Library Building. The building was neglected and vandalized for over 30 years. The finished $7.5 million project houses "Class A" professional and medical office space in beautifully restored surroundings. The building is located in the Centre Market Square Historic District in the National Register of Historic Places; therefore, a successful review submission to the Secretary of the Interior was necessary. We are also experienced with the Section 106 process required by SHPO and the Federal Department of the Interior. Documentation for state and federal tax credits is also a part of this project. **The project was completed in multiple phases beginning in 2007 and the final phase completed in 2013.**

Bennett Square has quickly become a cornerstone of the Wheeling business community with several key businesses occupying the space including: McKinley Carter Wealth Services headquarters, Dinsmore and Shohl LLC office, Dr. Don Chapman's Keep Smiling Family Dentistry office, and Omni Strategic Technologies office. Phase I included "Class A" office fit-out for the fist and second floors, including preserved-in-place and salvaged architectural elements, as well as **major electrical and mechanical systems designs. Due to the deteriorated condition of the roof and evidence of severe roof leaks in the interior of the building, and evidence of water and mildew damage, the roofing materials was removed and a new roofing system was installed.** Renovations included both restored and new windows, doors, terra cotta restoration, exterior masonry pointing, paint, stairwell upgrades, and a new elevator. Phase II completed the "Class A" office fit-out for the second floor. This phase also includes a major front facade restoration including pointing and replacement of the terra cotta banding, cornice, main entrance pediment and window trim, exterior brick masonry pointing and brick unit replacement to match existing. Finally, Dr. Chapman's dental office is a fit-out on the third floor. Planning included business offices, exam/operatory rooms, hygienist room, lab, custom casework, track lighting, **specialty HVAC**, special electrical and data, special plumbing for gases, a central dental dry vacuum system, and much more. All of these spaces were integrated into an existing interior historic building context. We were able to highlight important architectural features while also providing a sensitive atmosphere for the patients.



WV Department of Health & Human Resources' new Ohio County office

Location: Wheeling, West Virginia

Contact: Mr. David J. Hildreth
WV Department of Administration
1409 Greenbrier Street
Charleston, WV 25311
304 / 558-1295

Type of Project: Office Building renovations

Project Description, Goals, and Objectives: We were asked by our client to **renovate a car showroom and service area into an office building** (now called the Mary Margaret Laipple Professional Building). **The first fit-out includes space for the Department of Health and Human Resources (DHHR).** The **56,783 SF building** was concrete and designed for cars; not people. The first challenge was to remove a large ramp that connected two floors of the building and level the concrete floors. **We worked with our client to fit the DHHR's program into the space and maximize the use of the space.** We had to work around the existing structural walls and columns and provide fire escapes at the different floor levels of the floor structure.

The **initial $2 million fit-out project** was built in **three phases:** the **exterior was completed first (including new skin, doors, windows, etc.)**, next the **interior**, and then the parking lot so the project could be fast tracked to meet the Owner's 2013 move-in requirements. We worked with the local and State code officials to bring the building into compliance with the current building and fire codes and provide access to all of the occupied areas of the building. We worked with the owner of the building to allow a separate entrance for future tenants of the upper two floors and to keep the renovation cost to a minimum while providing a state of the art facility for the DHHR's use.

The showroom **windows** were mostly in-filled because of the sensitive nature of the materials in the DHHR's office, but windows high on the wall provide **natural daylight** in the space. **The fit-out was divided into three distinct spaces: secure office space, Client space, and training areas. The Office space is secured from the client area by an access control system.** The training space was designed to be stand alone for use by other State staff training.

Maxwell Centre

Location: Wheeling, West Virginia

Contact: Mr. Dennis Kozicki
The Maxwell Partners
32-20th Street / Maxwell Centre #300
Wheeling, WV 26003
304 / 232-2280

AIA West Virginia
1998
HONOR AWARD
FOR EXCELLENCE IN ARCHITECTURE

Type of Project: Office Building renovations

Project Description, Goals, and Objectives: Dedicated to saving the past and long known as one of the state's leading historic preservation firms, McKinley Architecture and Engineering led the way for this **total renovation** and restoration of a 1908 structure. The **$2.3 million** project represents the firm's effort in protecting the historic fabric of Wheeling. The Maxwell Centre is now Wheeling's premier business address. In just over a year's time, this former YMCA facility became the home for over 100 professionals in two law firms (Schrader, Byrd & Companion, PLLC and Burns White LLC), an accounting company (Wilson, Kozicki & Gwynn, PLLC), and McKinley Architecture and Engineering. **The various companies had various program/space requirements we had to design. Each of the tenants had selected various upgrades, including parabolic light fixtures, chair rail, cove molding, ceramic tile, built-in bookcases, and wall coverings. Some of the other interior finishes and furnishings included a chandelier, fireplaces, casework, cabinets, reception desks, decorative ceiling upgrades, cornice, window sills, oriental carpeting, and signage among others.** Work on this **five story office building** included researching the architectural past as well as all **new systems, including; mechanical, electrical, plumbing and fire and life safety, data and communication, etc.** All design work and construction administration was completed by our firm. The **51,000 SF** building is found in the Centre Market Square Historic District (NRHP#: 84003651), in the National Register of Historic Places. We saved and restored multiple **architectural elements, such as the main foyer tile, wooden floors, columns, windows, and more.** We also helped the owner receive historic tax credits.

The Maxwell Centre was recognized and awarded a West Virginia AIA Honor Award, a Governors Award for Historic Preservation, a Friends of Wheeling - Architectural Preservation Award, a Wheeling Victorian Society - Property Improvement Award for Adaptive Reuse, a Civitans Award - Grand Victorian Property Improvement Award, a City Council & Mayor's Award for Preservation, and a City of Hope Preservation Award.

Fort Henry Building
Location: Wheeling, West Virginia
Type of Project: Office Building renovations
Project Description, Goals, and Objectives: The **45,046 SF** Fort Henry Building was originally designed and built as a Federal Style mansion in the **1850s**. Because of its prime location, situated on a prominent downtown corner, the building was later purchased in 1890 to become the home to the budding Fort Henry Club (*where it gets its present name*). It served as a social club and meeting places until it closed in 2010; thereby leaving the building vacant. A few years later, the new owner could not find tenants, and began taking steps to demolish it. **That's when Fort Henry LLC (McKinley's subsidiary company) stepped in to save the building from demolition.**

Since the **4-story** structure is included in the Wheeling Historic District in the National Register of Historic Places (NRHP Reference #: 79002597); McKinley Architecture and Engineering's goal is to maintain the historic character of the **interior and exterior by retaining any historic fabric, mouldings, finishes, windows, door frames, stone and masonry, etc.** All of the renovations being done are to comply with the United States Secretary of the Interior's guidelines for historic preservation and restoration. We have been grateful that the State Historic Preservation Office and other various entities have acknowledged our plans for the work, and we have been awarded a few Historic Preservation Grants, as well as has already recognized by the The City of Wheeling for our efforts to our commitment to the revitalization of downtown Wheeling.

To date, we have been successful in attracting multiple tenants, which has enabled us to commence with the development of the project. There is an anchor tenant which occupies the entire second floor, 2 other tenants occupy portions of the first floor, and we are designing another build-out for an additional tenant. Because the building had been in disrepair for many years, these **renovations/ restorations** included upgrades required to **get the building up to current codes and standards, 2 ADA lobby entrances, windows rehab/replacement, masonry repairs, porch restoration, new HVAC, electrical service, plumbing, sprinkler & fire alarm systems, roof replacement, new elevators, storm & sewage line separation, sidewalks, and much more.** The tenant space renovations included office build-outs, work areas, conference rooms, restrooms, kitchenettes/break rooms, lobbies, and data systems among other scope. The current construction activities at the site have produced several inquiries for space and we continue to work with those prospective tenants.

The Towers Building
Location: Steubenville, Ohio
Contact: Mr. Thomas Gentile
Jefferson County Commissioners
301 Market Street
Steubenville, OH 43952
740 / 283-8500
Type of Project: Office Building renovations
Project Description, Goals, and Objectives: We have worked with the Board of Commissioners of the County of Jefferson on several projects over the past few years. One project example is **multiple phases of renovations and upgrades** to **The Towers Building.** This **76,300 SF building is a 40+ year old, 8 story high-rise** in downtown Steubenville. Unusually cold weather, age, and the culmination of years of insufficient maintenance had resulted in a series of situations resulting in frozen pipes, systems shutting down, and continuing emergency maintenance issues in the building. In February 2014, due to primarily system malfunctions and weather related damages at the building, **an overall building condition assessment was determined to be necessary** by the Owner. Therefore, McKinley was hired to perform an **emergency Preliminary Analysis of the Needs and Energy Efficient Services** (including site visits, and write a report outlining our findings). **Existing conditions related to the architectural, mechanical and electrical portions of the building were the primary focus of the study with the goal of addressing concerns associated with occupancy comfort, continued tenant satisfaction and to determine an efficient repair and maintenance recommendations for the building. Our recommendations address repair options, efficiency and energy saving solutions.** McKinley's observations were conducted in a non-invasion fashion; essentially, this means that nothing was permanently removed or destroyed during the process. We completed a **Building Condition Assessment and Energy Efficiency Analysis Report**, and presented our findings.

After this, we have designed $5 million in multiple phases of renovations for the building; a main roof replacement, mezzanine roof replacement and new skylight, building envelope repairs, a new boiler, new ADA handicapped ramp, sprinklering, and more. In addition, there was an adaptive reuse of a former bank on the first floor, into an office fit-out / renovations for the Jefferson County Board of Elections.

The exterior envelope repair project was around a $800,000 project, and the contractor for that Phase was Church Restoration Group. This required masonry-clean all precast panels, including remove and replace all joint sealant, precast column repairs to realign columns as closely as possible, attached new steel anchors, patch precast concrete where required, restoration of glazing system including new gaskets and anodized caps, and more.

For another phase, the **new boiler** project involved the replacement of existing inefficient electric boilers with a new gas fired boiler. The new boiler is of a **high energy efficiency**, and has a much **smaller footprint**. These projects were phased, and most were recently completed; the HVAC is currently under construction. **The construction was performed with the building in operation.**

Charleston Enterprise Center

Besides the paint, what makes this office "green"?

AIA West Virginia
2009
MERIT AWARD
FOR EXCELLENCE IN ARCHITECTURE

McKinley Architecture and Engineering has been practicing "green" for years and has won awards for converting unused warehouse space into striking modern office buildings. We won a **West Virginia Chapter of the American Institute of Architects Merit Award** for this **Charleston Enterprise Center renovation. One of the best ways to build green is to adapt an existing building; twenty percent of a building's energy consumption is embodied in the building's physical structure itself.** The first thing you will notice is we left most of the existing structure exposed; this minimizes the amount of new materials required to define the space and allowed us to utilize some special features. For example, the centrally located conference room "Lantern" glows all day long from natural sunlight from above. This room's ceiling acts as a reflector, bouncing natural light throughout the space. In addition to reusing the space, we also reused doors to make all of the desks, workstations and conference table. The top of the dividers is made from "Homosote", a board made from 100% recycled newspapers and covered with a fabric made from 100% recycled polyester. An office full of unique, durable office furniture for less than 1/10th of the cost of standard modular furniture is another advantage. The office chairs are new, but the "Zody" chair by Haworth is the first chair to be **Cradle to Cradle Gold Certified.** This certification means that the manufacturer will take back the chair at the end of its useful life to disassemble and make a new chair, completing the cycle. Yes, the paint on the walls is green, but it also has very low volatile organic compounds (VOC's) which keeps the air we breathe cleaner, and contains an anti-microbial which inhibits the growth of mold and mildew. Most of the floor we chose to clean and seal with water based polyurethane, leaving the natural distressed state of the floor. The remainder of the space, we used a carpet tile by LEES which minimizes waste, has 35% recycled content and is **Green Label Certified**, meaning it **meets stringent indoor air quality requirements.** The window blinds allow the control of glare while maintaining the view and minimizing heat gain. The direct/indirect lights are controllable so the tenant can adjust the amount of electric lighting dependant on the amount of natural light coming in from the windows and skylight. Even the bowl on the conference room table is recycled from the original fire bell that used to be on the exterior of the building.

McKINLEY
ARCHITECTURE + ENGINEERING

Building 55: West Virginia State Office Complex

Location: Logan, West Virginia

Contact: Mr. Robert P. Krause, PE, AIA
State of West Virginia, General Services Division
1900 Kanawha Boulevard East
Charleston, WV 25305
304 / 558-9018

Type of Project: Governmental Office Building - Full A/E Services - New Construction

Project Description, Goals, and Objectives: City leaders were searching for a catalyst to stimulate community efforts to revitalize downtown Logan, West Virginia. This **State office complex** has become that inspiration. **In March 2014, this project became LEED Certified.** The building is designed to reflect the history and culture of the area while incorporating **current technology and safety elements**, thus empowering the community leaders to create a vibrant connected urban core. This new **5-story building** underscores its major role in the development and revitalization of downtown Logan by uniting office space for **127 employees for 6 State agencies** under one roof, whom were once scattered throughout the city. The **53,200 SF building provides current technology, flexibility for future growth, and security features for existing and future tenants.** At the request of the Owner, the building was designed to be **energy efficient "green" and meet sustainable design goals.** To help achieve this, a tight building envelope was created with **closed cell foam insulation** and **thermal efficient windows.** One of the unique features of the building is the **natural daylight system** where we added "**light louvers**" which redirect daylight to the ceiling and diffuse natural light throughout the space. The open offices were placed around the exterior of the building and the enclosed offices along the interior wall so more of the tenants receive quality light. In addition, interior windows allow the daylight to pass to the center offices. The **HVAC system** included the installation of 2 **high efficiency** condensing boilers, packaged rooftop **energy recovery** ventilator, and much more. For another feature, the plaza uses **recycled brick pavers** from the demolished street; the patterns intersect at a quilt star, a symbol of West Virginia heritage that is carried into the building's main entry. It is interesting to point out a stained glass window feature in this entry, which won a **2013 AIA Craftsmanship Award.** It is custom designed to reflect the culture and history of the area, **and use as much glass from West Virginia Manufacturers as possible.**

Building 34: West Virginia State Office Complex
Location: Weirton, West Virginia
Contact: Mr. Mr. Andy Guz
304/541-3749
Type of Project: Governmental Office Building - Full A/E Services - New Construction
Project Description, Goals, and Objectives: To better serve the citizens of the Northern Panhandle of the State, the State of West Virginia established an **office building** in the City of Weirton. This **Weirton State Office Complex (also known as Building 34)** is a **$4 million** state-of-the-art building that **houses offices for multiple state agencies.** This State Office Building was completed in 2006, and **accommodates the Division of Motor Vehicles, the Bureau of Employment Programs, the Department of Health and Human Resources, the Lottery Commission, Rehabilitation Services and the Work Force Investment Board.** This **two-story, 39,500 SF office building** was constructed with a structural steel frame and concrete foundations, cast concrete floors, precast concrete panel system, EPDM roof, two elevators, rooftop HVAC System, and building automation system. For **parking,** there was a large main lot and separate smaller lots to accommodate every client and/or building in the complex; this includes 14 handicapped parking spaces. Also included was site work. For security, the entire building has swipe-card access - both inside and outside, employee-only entrances, an x-ray machine, metal detector, bullet-proof glazing and tinted/reflective glazing, uninterruptible power supply, CCTV video monitoring and other surveillance equipment. There are various finishes and furnishing, such as desks, work stations, different floor materials (carpet, carpet tile, vinyl composite tile, unglazed ceramic tile, solid vinyl tile, and sealed concrete), casework, various door styles and swipe-access, bulletproof transaction windows, kitchen, laminated countertops, adjustable shelving, painted or glazed ceramic tile walls, and much more.

The first and second floor building **commons** spaces includes entry, security, lobby, restrooms, elevators, stairs, break room, conference room, and more. The **DMV** spaces on the first floor includes **work stations, offices,** break room, a large waiting area, license center, driver's testing room, photo area, data, plate/storage room, employee-only entrances, and more. The **Bureau of Employment Programs** spaces on the first floor includes **2 "open" work station rooms, manager offices, counselor office, work force training room,** a large waiting room, hearing room/conference, server room, and storage. The **Lottery** spaces on the first floor includes **an office, an "open" office room,** conference, security room, supply room, a separate entrance/lobby, and data room. The **Rehab** spaces on the first floor includes **7 offices,** clerical, conference room, waiting room, an employee-only entrance, and more. The **DHHR** spaces on the second floor includes **14 offices, an "open" office east and an "open" office west, work rooms,** multiple swipe-card access doors, employee-only entrance, waiting room, reception, classroom/conference, regular conference room, resource room, interview room, family visitation room, server rooms, storage rooms, and more.

Panhandle Cleaning & Restoration - Storage Warehouse, Garages, & Office Building

Location: Triadelphia, West Virginia

Contact: Mr. Bob Contraguerro, Jr.
Panhandle Cleaning and Restoration
42 38th Street
Wheeling, WV 26003
304/232-2321

Type of Project: Office Building / Warehouse - Full A/E Services - New Construction

Project Description, Goals, and Objectives: Panhandle Cleaning & Restoration invested **$3.5 million** in new prefabricated metal buildings. The **Storage Warehouse** and Contents Processing Facility's exterior measures 130'x200', which includes a 6,400 SF 2-story mezzanine within the structure, providing 32,000 total warehouse square feet. **There are multiple bays and loading docks around this structure; the garages fit vehicles of various sizes.** The exterior walls are finished with masonry infill and metal siding. Interior space varies between **20' - 30' clear** of the metal structure. The free-standing masonry area with a conventionally framed platform above it provides an additional storage area enabling the Owner to take advantage of the 2 ½ story clear height along one end of the warehouse. **An additional prefabricated 8,600 SF, 2-story office building is attached to the warehouse along the high side of the warehouse.** The office building also includes custom furnishings and finishes. Panhandle provides **24-hour emergency disaster clean-up services** and therefore required some **special electric, data, plumbing, and mechanical systems**. The first floor of the mezzanine is the "Contents Processing Facility," is broken into multiple rooms, and many have **specialized components and considerations** we had to design, such as casework, workbenches, and specialty electric to name a few.







WASTEWATER TREATMENT FACILITIES

PROJECT: Spanishburg Elementary School WWTP

Owner:
Mercer County Board of Education

Location:
Spanishburg, WV

Construction Cost:
$200,000

Project Architect-Engineers:
Stafford Consultants

Description:
Replacement of aging package plant with new Orenco treatment units. Units are more energy efficient and nearly maintenance free. All discharge parameters below allowable.

Original package treatment plant

Installation of Orenco treatment units

Completed installation.

STAFFORD CONSULTANTS INCORPORATED
Engineering Design and Consulting

WATER DISTRIBUTION FACILITIES

PROJECT: Windmill Gap Waterline Extension Project

Owner:
Bluewell Public Service District

Location:
Rock, Mercer County, WV

Construction Cost:
$2,485,000

Project Engineer:
Stafford Consultants

Description:
Installation of a 50,000 gallon elevated storage tank, booster station, and distribution system to provide service in an area affected by past mining activity.

STAFFORD
CONSULTANTS
INCORPORATED
Engineering Design and Consulting

SITE WORK

PROJECT: Williamstown High School Site Work

Owner:
Wood County Board of Education

Location:
Williamstown, West Virginia

Construction Cost:
$700,000 (Site Work Only)

Project Architect-Engineers:
McKinley & Associates
Stafford Consultants

Description:
Building addition with associated parking and sidewalk improvement. Also constructed new basketball court and tennis court facility.

STAFFORD
CONSULTANTS
INCORPORATED
Engineering Design and Consulting

SITE WORK

PROJECT: New Weirton Elementary School Site Work

Owner:
Hancock County Board of Education

Location:
Weirton, West Virginia

Construction Cost:
$1,825,000 (Site Work Only)

Project Architect-Engineers:
McKinley & Associates
Stafford Consultants

Description:
Complete site layout including parking, sanitary sewer, storm drainage, and water service. Storm drainage system included underground detention.

STAFFORD
CONSULTANTS
INCORPORTATED
Engineering Design and Consulting

SITE WORK

PROJECT: Hilltop Elementary School Site Work

Owner:
Marshall County Board of Education

Location:
Sherrard, West Virginia

Construction Cost:
$400,000 (Site Work Only)

Project Architect-Engineers:
McKinley & Associates
Stafford Consultants

Description:
New elementary school with associated parking, sidewalks, and storm drainage. Also included a small playground area and paved basketball court.

STAFFORD CONSULTANTS INCORPORATED
Engineering Design and Consulting

STAFFORD CONSULTANTS INCORPORATED
GENERAL STRUCTURAL and SITE CIVIL DESIGN PROJECTS

Mountain Eagle Distributing Warehouse Raleigh County Airport Industrial Park	Foundation design for pre-engineered building warehouse addition.
Ronceverte Elementary School Gym Ronceverte, WV	Foundation design for pre-engineered building addition to serve as a gymnasium.
North Central Advanced Technology Center Fairmont, WV	Foundation design, structural design, and retaining wall design for 36,300 sq.ft. three story structure. CMU walls with steel bar joists.
Mercer County Health Center Green Valley, WV	Foundation design, structural design, and site civil design for 11,500 sq.ft. one story structure. CMU walls with steel bar joists.
Oakvale Elementary School Oakvale, WV	Foundation design, structural design, and site civil design for 26,500 sq.ft. two story structure. CMU walls with steel bar joists.
Chuck Mathena Center for the Arts Princeton, WV	Foundation design, partial structural design, and site civil design for 1,000 seat theater and associated service areas. CMU and pre-cast concrete walls with steel frame structure.
Merriman Athletic Facilities Building Virginia Tech, Blacksburg, VA	Foundation design, structural design, and site civil design for 24,500 sq.ft. two story structure. CMU walls with steel frame structure.
Brooke County Middle School Wellsburg, WV	Foundation design, structural design, and site civil design for 112,600 sq.ft. school, consisting of one and two story sections, gymnasium, multi-purpose gym, and auditorium. CMU walls with steel frame structure.
Weirton Elementary School Weirton, WV	Site civil design for a 105,300 sq.ft. elementary school, including two parking lots and access road. Drainage design included an underground stormwater detention system.
Cameron High School Cameron, WV	Site civil design for a 126,000 sq.ft. high school, including two parking lots and access road. The project also included a biological wastewater treatment plant.
Willamstown High School	Site civil design for renovations at the high school to provide parking and sidewalk improvements. Work also included a new tennis court and basketball court.

STAFFORD CONSULTANTS INCORPORATED
GENERAL STRUCTURAL and SITE CIVIL DESIGN PROJECTS

Oak Glen High School New Cumberland, WV	Site civil design for renovations and improvements to the high school multi-use stadium and athletic complex. Work included new parking areas, new sidewalks, artificial surface on the football field, synthetic surface on the running track, drainage, and water system improvements.
Hilltop Elementary School Sherrard, WV	Site civil design for new elementary school including parking, sidewalks, storm drainage, water, and sanitary sewer. Work also included a package biological wastewater treatment plant.
Parkersburg High School Parkersburg, WV	Site civil design for renovations to the high school including parking improvements, sidewalks, and drainage design.

PHASE I AND LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT INCLUDING PRELIMINARY ASBESTOS SURVEY

Jackson County Newspaper
Ravenswood, West Virginia

Potesta & Associates, Inc. (POTESTA) performed a Phase I and Limited Phase II Environmental Site Assessment (ESA) and preliminary asbestos survey at the Jackson County Newspaper property located at Race Street in Ravenswood, Jackson County, West Virginia. The site is comprised of two separate parcels. Parcel 1 is a vacant lot, encompassing approximately 0.75 acre. Parcel 2 is approximately 0.371 acre and is the location of the newspaper publishing building. POTESTA completed the ESA as an inquiry designed to identify recognizable environmental conditions that may pose a threat to the character of the property, facilities and individuals. POTESTA's scope of services consisted of the following components: (1) records review, (2) site reconnaissance, (3) interviews, (4) subsurface sampling, (5) preliminary asbestos survey, and (6) evaluation and report.

Jackson County Newspaper Printing Facility

Soil Boring During Limited Phase II ESA

POTESTA conducted a site reconnaissance of the property in December 2001. POTESTA observed stained concrete in the dark room. Floor drains were observed in the basement of the facility. Staining was not evident near these drains. POTESTA conducted subsurface sampling in the area of the sanitary sewer line exiting at the facility. POTESTA did not observe permitted storm water discharge points during the site reconnaissance.

POTESTA advanced a total of 11 soil borings at the site, collected soil and groundwater samples, and submitted selected samples for laboratory analyses. Limited Phase II ESA methodology was developed based on three potential sources of impact to soil and/or groundwater at the site. These included potential impact to soil and groundwater from Underground Storage Tanks (USTs) and former USTs near the site, PCE contaminated groundwater in the City of Ravenswood, and current and historical site activities.

POTESTA did not identify evidence of recognized environmental conditions in connection with the subject property.

CHILD CARE CENTER

Marshall University
Huntington, West Virginia

Marshall University, working in conjunction with the City of Huntington, coordinated the efforts of a development committee to design a child care facility for the faculty and students of the University, as well as the residents of the city. Potesta & Associates, Inc. (POTESTA) was contracted to Marshall to prepare a topographic map of the site indicating the locations of the utilities at the site. The site also housed an abandoned block structure which served as a hardware store in the past. Prior to demolition of the structure, POTESTA conducted an environmental assessment of the property to determine the presence of any environmental concerns including the presence of asbestos containing materials.

POTESTA also conducted a geotechnical exploration of the property and prepared a foundation recommendation report to indicate the acceptable bearing capacity of the site soils to aid the structural engineering in the design of the foundation system. POTESTA field technicians and engineers were also involved during the construction of the structure. Various tasks included the sampling of concrete, field tests to ensure the bearing capacity of the subgrade met the original design criteria and design changes instituted during construction due to poor subgrade conditions.

ASSESSMENT AND REMEDY EVALUATION AND SELECTION OF FORMER WEST VIRGINIA PLASTICS/BABY WORLD

West Virginia Department of Environmental Protection
Grafton, West Virginia

Potesta & Associates, Inc. (POTESTA) was contracted by the West Virginia Department of Environmental Protection (WVDEP), Office of Environmental Remediation to complete an environmental site assessment (ESA), risk assessment, remediation feasibility study, and to develop a remediation work plan in accordance with the West Virginia Voluntary Remediation Program (VRP) guidelines. The property was owned by the Taylor County Development Authority and was being evaluated for potential redevelopment. ESA activities included advancement and sampling of soil borings, installation and sampling of groundwater monitoring wells, and collection of soil fill material, surface water, and sediment samples for laboratory analysis of volatile organic compounds, semivolatile organic compounds, polynuclear aromatic hydrocarbons, pesticides, polychlorinated biphenyls, metals and asbestos.

In addition, POTESTA collected oil and water from a pit and associated manhole that were discovered at the site and submitted these samples for hazardous waste determination analyses. POTESTA reported the summaries and conclusions of this assessment in the Supplemental Environmental Site Assessment Report, which was submitted to and approved by the WVDEP.

POTESTA developed the risk assessment in general accordance with the standards and formats required by the West Virginia Voluntary Remediation and Redevelopment Rule (VRRR), Title 60, Code of State Regulations (CSR), Series 3, and the VRRA Guidance Manual. Based on the risk assessment and the contaminants of concern for this site, POTESTA performed a remedy evaluation, selection and design study. The WVDEP approved of the conclusions of the study which were submitted for their review. POTESTA presented the work plan to the Taylor County Development Authority and the WVDEP.

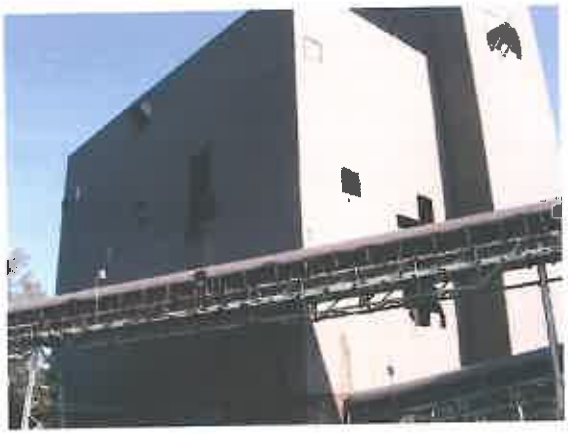
ASBESTOS INSPECTION AND SAMPLING PREPARATION PLANT

Anker Energy Corporation
Tallmansville, Upshur County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Anker Energy Corporation to perform asbestos inspection and sampling of the coal preparation plant located north of Tallmansville, Upshur County, West Virginia.

POTESTA's tasks for the project included:

- The inspection for suspected asbestos containing materials (ACM), which was conducted by a West Virginia licensed asbestos inspector and included a seven-story coal preparation plant building, lab building, screen tower, silos, metal shed, pump room, and loadout facility.
- Selection of a West Virginia certified laboratory to analyze samples for asbestos by polarized light microscopy (PLM) with dispersion staining techniques according to United States Environmental Protection Agency "Interim Method for Determination for Asbestos in Bulk Insulation Samples, July 1993" (EPA/600/r-93/116).
- Quantify and characterize identified ACM.
- Recommend proper handling procedures and disposal methods for ACM disturbed during renovation and demolition activities.



VARIOUS STRUCTURES SCHEDULED FOR DEMOLITION ON HIGHWAY RIGHTS-OF-WAY

West Virginia Department of Transportation, Division of Highways
Various Locations in West Virginia

Potesta & Associates, Inc. (POTESTA) is currently under contract to the West Virginia Department of Transportation, Division of Highways (WVDOH) to perform asbestos inspection services on structures scheduled for demolition on highway rights-of-way. The following services are being provided by POTESTA.

POTESTA performs asbestos inspection of structures identified by the WVDOH and produces reports detailing findings of the inspections. These reports include tables listing sampling locations, number of potential asbestos containing materials (pacm), samples collected from each homogeneous area, estimated amount of pacm for each homogeneous area, and laboratory analytical results for each sample. Color photographs of the sample locations are also included in the reports. These reports are included in the bid package provided to prospective demolition contractors.

WEST VIRGINIA DEPARTMENT OF CORRECTIONS JUVENILE DETENTION FACILITY

ZMM, Inc.
Institute, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by ZMM, Inc. to provide consulting services with respect to planned demolition of the West Virginia Department of Corrections Juvenile Detention Facility in Institute, Kanawha County, West Virginia.

POTESTA performed an asbestos inspection of two buildings associated with the Juvenile Detention Facility and produced a report detailing findings of the inspection. This report was then included in the bid package provided to prospective demolition contractors. POTESTA attended a pre-bid conference with representatives of the West Virginia Department of Corrections and ZMM, Inc. During the pre-bid meeting, POTESTA conducted a tour of the facility, pointing out locations of asbestos-containing building materials identified during the asbestos inspection. Upon selection of the general contractor, POTESTA attended a pre-demolition meeting with representatives of ZMM, Inc. and the contractor. The purpose of this meeting was to conduct a walk-through of the facility and discussing abatement procedures applicable for the types of asbestos containing building materials scheduled for abatement. POTESTA also completed and submitted the notification of abatement/demolition/renovation form to the appropriate regulatory agencies.

VOLUNTARY ASSESSMENT AND REMEDIATION, ASBESTOS ABATEMENT MONITORING, DEMOLITION, AND CAP INSTALLATION MONITORING FOR THE SPELTER SMELTER FACILITY

E.I. DuPont de Nemours & Company
T.L. Diamond & Company
Harrison County

Potesta & Associates, Inc. (POTESTA) was retained to serve as Project Manager and Licensed Remediation Specialist (LRS) to assist with an Environmental Site Assessment (ESA) of an 110-acre zinc smelting site located in Harrison County, West Virginia, and entered it into the West Virginia Voluntary Remediation Program (VRP). This is the largest VRP site in the State of West Virginia. The tasks associated with this project were performed after the applicants met the necessary requirements of a United States Environmental Protection Agency (USEPA) Administrative Order of Consent (Order).



As the LRS for the project, POTESTA assisted with development of the public involvement program, the Voluntary Remediation Agreement (Agreement) and negotiated and coordinated signing of the Agreement by the Director of the West Virginia Department of Environmental Protection (WVDEP). Additionally, POTESTA assisted the applicants with preparation of the Supplemental Site Investigation Work Plan, Site Specific Health and Safety Plan, Data Quality Objectives, and Quality Assurance Project Plan in accordance with VRP guidelines.

A major step in remediating this site involved the demolition of 33 structures. The demolition activities included abatement of asbestos containing materials and establishing an on-site construction debris landfill. POTESTA provided the following services for the demolition phase:

- Performed building asbestos inspections.
- Prepared an in-depth consolidated asbestos inspection report that was submitted to the WVDEP, Division of Air Quality (DAQ) and utilized by the demolition contractor.
- Assisted in the development of an Asbestos Abatement Project Design Plan.

- Assisted in the development of a work area air sampling plan.
- Served as liaison with the WVDEP-DAQ during asbestos abatement activities.
- Provided on-site monitoring of asbestos abatement activities.
- Assisted in the characterization of hazardous materials.
- Negotiated with the WVDEP to establish an on-site construction debris landfill.
- Performed an Ecological Evaluation of the site and the West Fork River.



The applicants and POTESTA also completed an ecological and human health risk assessment to evaluate impacts to potential receptors. Based on the risk assessment and the contaminants of concern for this site, the applicants and POTESTA performed a remediation feasibility study and developed a remediation work plan in accordance with VRP guidelines. The applicants and POTESTA designed the Engineered Cap System to encapsulate the 50-acre tailings pile.

GEOTECHNICAL AND CIVIL SITE DESIGN
STONERISE HEALTHCARE
EASTBROOK ADDITION

Stonerise Healthcare
Charleston, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Stonerise Healthcare (Stonerise) to provide geotechnical evaluation and site development services for an approximate 38,000 ft^2 addition to the existing Eastbrook facility in Charleston, West Virginia. POTESTA first performed a subsurface exploration, which included seven subsurface test borings. POTESTA then prepared the civil site design plans while working closely with the Stonerise architect, as well as the City of Charleston. There were many aspects to this project in which creative solutions were used to work within tight parameters associated with this site. Some of the tasks associated with the geotechnical exploration and civil site design are listed below:

- Designing a box culvert to cover up 275 feet of stream with minimal cover allowed for a parking lot.
- The design of a 120-foot segmental retaining wall.
- Working with the City of Charleston and West Virginia Department of Environmental Protection (WVDEP) to acquire proper permits associated with the addition.
- Design of a new ambulance entrance under tight restrictions associated with planned location and proximity to Chesterfield Avenue.
- Evaluation of the sanitary line with restrictions associated with minimal slope, the box culvert, existing tie in location, and existing buildings connection.

POTESTA prides itself on working closely with the client to deliver a product that POTESTA and the client are happy with. POTESTA has worked on many other similar projects for Stonerise and continues to do so.

GEOTECHNICAL EVALUATION FOR R. E. MICHEL BUILDING

Alpha Associates, Inc.
Morgantown, Monongalia County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Alpha Associates, Inc. of Morgantown, West Virginia to provide geotechnical related services for the R. E. Michel building now located on the northern side of the intersection between WV State Route 705 and US Route 119, along "The Mileground" in Morgantown, West Virginia. A one-story commercial structure with associated parking and loading/unloading facilities was placed on the property, which was previously used by West Virginia University's agricultural college as a cornfield.

Four soil borings were completed as part of our scope of the project and to aid in foundation recommendations. Soil depth was between 18 inches and 5 feet, with auger refusal occurring in sandstone bedrock.

In addition to soil boring activities and foundation recommendations, POTESTA performed a limited review of available information relative to coal mining activities. Based on information from the West Virginia Geological Survey (WVGS), the Pittsburgh coal seam underlies the project site. This seam is typically 5 to 8 feet thick, although areas around Morgantown exhibit seam thickness in excess of 10 feet. According to information gathered from the WVGS, as well as discussions with WVGS personnel, the project area has no records indicating it to be undermined; but given the historical nature of coal mining in the area, it is likely that a portion of the site has been mined. To further review the undermining extent, and the likelihood for subsidence potential, further subsurface exploration, down-hole camera work, and additional research would be necessary. However, given the fact that the building is metal framed, a more forgiving structure to vertical displacements, and the hard sandstone that generally overlies the Pittsburgh seam, no additional services were requested of POTESTA.

CIVIL AND GEOTECHNICAL ENGINEERING FOR DEVELOPMENT OF MARCELLUS WELL PADS

Stone Energy Corporation
Various Sites, Wetzel County, West Virginia

Potesta & Associates, Inc. (POTESTA) has been working with Stone Energy Corporation to provide civil and geotechnical engineering services related to the development of Marcellus production well pads and other infrastructure improvements in northwestern West Virginia. POTESTA has worked with Stone Energy consultants and contractors to evaluate current geotechnical construction practices and design procedures to development standard details and procedures which will be implemented in the field to implement proper installation and earthwork construction techniques to minimize geotechnical failures associated with not only well pad construction sites but other support facilities such as compressor/treatment sites, pipelines, haulroads, stream crossings, etc.

POTESTA has also been providing review of current permitting packages to determine if adequate environmental due diligence has been provided with regard to environmental permits. Relevant permits include USACE 404 certification, WVDEP 401 certification, WVDEP Construction Stormwater Permit coverage, County Floodplain Ordinance Applications, etc.

POTESTA has also worked on several large projects for Stone Energy to provide primary design, general technical consulting, and environmental permitting services. These projects have ranged from new pad construction and permitting to geotechnical exploration, design consulting, and field construction observation/testing services for several large slope stability projects. These projects include:

- Pribble Storage Tank Slope Stability Evaluation and Repair – The project included a large active slide area (250,000 CY) which was impacting the foundation of a large aboveground storage tank used for the recirculation and storage of water for hydraulic fracturing operations in the well field. The slide extended to the foundation of a secondary containment tank resulting in the undermining of approximately 100 of the foundations. Work included completion of a geotechnical study and exploration of the site, development of a regrading plan based on the results of laboratory soils testing and slope stability models, and construction observation and

field compaction testing of the fill material during construction. POTESTA was also responsible for preparing and gaining approval of a Construction/Stormwater Permit for the work.

- Potts Well Pad Slope Stability Evaluation and Repair – This work included a subsurface exploration study, stability evaluation, and construction observation of a section of failed fill slope associated with the completed well pad. The failed slope required the excavation of toe material to install a shot rock toe buttress to protect a water line and gas transmission line near the toe of the slope.

- Mills/Wetzel No. 3 Well Pad Design and Permitting – POTESTA worked with Stone Energy to prepare site grading plans and details for a new production pad site. The work included access roadway design and layout, pad subgrade preparation, cut/fill quantities to result in an earthwork balance of the site, and construction observation and field compaction testing during the work.

- Conley Well Pad Design – POTESTA conducted subsurface site exploration work and developed a site grading plan for the proposed pad area, as well as the site access road and a required stream crossing (bridge). POTESTA also prepared the required permits including the environmental permits such as USACE 404 and WVDEP 401 certification for the planned bridge construction, as well as the preparation of appropriate floodplain and hydraulic models for the County Floodplain Ordinance Application.

- Schupbach Ridge Road Rehabilitation Project – POTESTA worked with the WVDOH to provide construction plans for an approximate 0.9 mile section of Schupbach Ridge Road (CR 20) in Wetzel County, West Virginia. This project included a pavement design that implemented the use of a Full Depth Reclamation (FDR) overlain with the hot-mix asphalt.

- Morris Access Road and Pad Design – POTESTA worked with Stone Energy to provide a site grading plan with cut/fill quantities balanced over the site. POTESTA also provided construction observations and field compaction testing during the construction of the pad and access road.

GEOTECHNICAL EVALUATION
MONONGALIA GENERAL HOSPITAL EXPANSION

Alpha Associates, Inc.
Morgantown, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Alpha Associates, Inc. (Alpha) to provide geotechnical evaluation services for the expansion of the Monongalia General Hospital (Hospital) in Morgantown, West Virginia. POTESTA performed a subsurface exploration, which included 36 subsurface test borings and are elaborated as follows:

- Five of these borings were completed to make earthwork recommendations related to the possible excavation of the hillside adjacent to the Hospital.
- Three borings were conducted to allow for recommendations related to a proposed Mechanically Stabilized Earth (MSE) wall.
- Four borings were conducted at corner locations of the proposed central plant expansion.
- Nineteen borings were conducted at locations along the perimeter and within the proposed foundation footprint of the proposed main hospital addition.
- Five borings were located within the area of the proposed parking lot addition.

Rock coring was also performed on eight of the aforementioned borings to assist in the geotechnical recommendations. Samples were gathered and tested to provide more information pertaining to the subsurface conditions. Using the data from the subsurface exploration, POTESTA was able to provide recommendations pertaining to, but not limited to, fill material to be used, the MSE wall, earthwork excavation, groundwater, specific shallow foundations, as well as general foundations, settlement, pavement, and provided general geotechnical considerations.

GEOTECHNICAL EVALUATION
MONONGALIA GENERAL HOSPITAL
ACCESS ROAD

Alpha Associates, Inc.
Morgantown, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Alpha Associates, Inc. (Alpha) to provide geotechnical evaluation services for the Monongalia General Hospital access road in Morgantown, West Virginia. POTESTA performed a subsurface exploration, which included nine subsurface test borings and are elaborated as follows:

- Four of these borings were terminated before refusal encountered where a minimum required depth of 5 feet below the proposed road surface elevation was achieved.
- Two borings were terminated upon refusal and no rock core was collected.
- The remaining three borings went to refusal and included rock coring to assist in the geotechnical recommendation.

Samples were gathered and tested to provide more information pertaining to the subsurface conditions. Using the data from the subsurface exploration, POTESTA was able to provide recommendations pertaining to, but not limited to, fill material to be used, compaction, earthwork excavation, groundwater, site preparation and development, possible retaining walls, slopes in the road, and provided general geotechnical considerations.

LANDSLIDE STABILIZATION PROJECT

Columbia Gas Transmission
Blue Creek, West Virginia

Columbia Gas Transmission (Columbia) operates and maintains a natural gas storage field north of Charleston, West Virginia at Blue Creek. Potesta & Associates, Inc. (POTESTA) was contacted during the fall of 2004 to provide professional geotechnical services related to the preparation of a stabilization plan for a localized soil slope failure approximately one acre in size. The affected area was associated with a valve set and feeder line servicing a storage field well which was unhooked taking the well out of service.

POTESTA worked with Columbia over the winter of 2004-05 to design a regrading plan for the slide mass which included perimeter ditches and drainage control, as well as the construction of an underdrain and toe-key for the slide. A high-pressure gas main located immediately above the top of the slide had to remain in service. During the work, the slide mass continued to move up the hill threatening the integrity of the active high-pressure gas main. POTESTA worked with Columbia and the contractor during the regrading to provide an emergency plan to stabilize the gas main which included the excavation of sandstone riprap from an area immediately adjacent to the site which was utilized as buttressing material stabilizing the gas main and the slide area.

The project, which was finalized during the late winter months, resulted in many field changes which were coordinated with both the owner and the contractor to insure the integrity of the gas main resulting in the continued service of natural gas produced from the field during peak demand months.

FALLAM DRIVE LANDSLIDE REPAIR

Travelers Insurance
Malden, West Virginia

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

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

RESIDENTIAL LANDSLIDE
GORDON DRIVE

Jerry Ware
Charleston, Kanawha County, West Virginia

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

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

GIGER STREET LANDSLIDE REPAIR

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

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

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

GEORGE'S CREEK (LUCAS) LANDSLIDE MAINTENANCE

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

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

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

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

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

PRIBBLE STORAGE TANK LANDSLIDE STABILIZATION

Stone Energy Corporation
New Martinsville, Wetzel County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Stone Energy Corporation to develop a stabilization plan for a failed soil fill slope immediately adjacent to two primary 2.5-million gallon storage tank structures. The failed slope impacted and undermined the concrete foundation of the secondary containment tank which surrounded both primary storage tanks. The primary tanks served to store recirculated water utilized for hydraulic fracturing efforts in the associated Marcellus Shale reserve. POTESTA's services included exploration of failed slope which included several subsurface borings, field testing, and sample collection for laboratory testing. Following completion of the field exploration, POTESTA prepared several regrading alternatives which were analyzed for long-term stability. The final alternative was developed to provide a final slope configuration which included a toe buttress, several rock toe keys/underdrains, and a surface drainage channel to collect, control, and convey surface and groundwater seepage from the regraded fill slope.

Following completion of the stability evaluation, POTESTA prepared construction documents which included construction plans and details, as well as a bid sheet and specifications for the work. Since the unsupported section of tank wall was situated near the top of the slope, the work was completed in two distinct phases, the initial phase included preparation of a site access road, clearing and grubbing, removal of saturated failed soil material near the mid-slope and toe, and excavation and establishment of the toe key foundation at the toe of the regraded slope. Upon completion of the toe excavation and placement of the slope buttress fill, off-site borrow material was imported to the site for placement and compaction of the slope. This work continued with 15 of the unsupported tank foundations, at which time work was suspended until the affected portion of the tank was disassembled and removed using a crane. Following removal of the tank, fill placement and compaction operations continued until the reconstructed slope reached the target final elevation. Once the slope was completed, the replacement tank foundation was installed and the replacement tank walls were erected. POTESTA provided full-time construction observation and field testing services during the entire duration of the slope reconstruction.

WILLIAMSON (HATFIELD) NURSING HOME LANDSLIDE MAINTENANCE

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

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

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

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

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

BOWSER STREET LANDSLIDE REPAIR

Town of Granville
Granville, West Virginia

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

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

Slide Before Repair

During Construction of Repair

RIDGEWOOD ROAD SUBDIVISION – SOLDIER BEAM AND LAGGING RETAINING WALL

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

Potesta & Associates, Inc. (POTESTA) was retained by the City of Huntington Department of Public Works (Huntington) to complete a subsurface exploration and design of a retaining wall to stabilize a failed soil slope situated within a former road right-of-way. The failed slope was threatening an adjacent private property and residence. POTESTA worked with a local contractor through a design/build process to design and install a soldier beam and lagging retaining wall along the upper extent of the failed slope.

POTESTA designed the retaining wall to limit further encroachment of the slope failure onto the adjacent private parcel with soldier pile beams extending into pre-drilled sockets within the bedrock. POTESTA also provided construction observation services which included field measurements, soils and concrete testing, and project management services. Following completion of the wall installation, POTESTA provided the City of Huntington with a project record report that included project records and testing results.

ARTISAN HEIGHTS TOWNHOUSE DEVELOPMENT STABILITY REVIEW - SOLDIER BEAM AND LAGGING RETAINING WALL

Community Equity Fund XIII Limited Partnership
Huntington, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Community Equity Fund XIII Limited Partnership (CEFLP) of Raleigh, North Carolina to conduct a field review of an existing series of retaining walls which were installed to stabilize an excavated slope behind a series of multi-unit townhouse units in Huntington, West Virginia. CEFLP provided funding for the construction project and indicated their concern as to the long-term stability and performance of the installed retaining wall system. POTESTA was asked to document in the field through field measurements and observations the current condition of the wall and then to provide a professional opinion as to the long-term performance of the system.

POTESTA's work included field measurements of 39 individual steel H-piles. These measurements included center-to-center pile spacing, vertical plumbness, and pile deflection. Sections of the completed wall were repaired and anchored following the initial work by the contractor. This subsequent work included the addition of helical tie-back anchors at several locations. The work also included an evaluation of the anchor design and installation processes.

The findings of the study were summarized in a technical report which included a table presenting the field measurements and deflections for each of the piles. Those piles with unacceptable excessive deflections were listed and highlighted. Additional opinions and comments were offered related to items such as inadequate backfill and drainage, pile spacing, tie-back installation/spacing, secondary bracing, and overall quality of construction. The findings were documented with attached photographs of the wall structure which were included in the technical summary report.

Per your request in "General Terms and Conditions" Part 8, here you will find copies of our various Insurance Coverages.

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/19/2018

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 Paull Associates 1311 Chapline Street P. O. Box 990 Wheeling, WV 26003-0123	CONTACT NAME: PHONE (A/C, No, Ext): 304.233.3303 FAX (A/C, No): 304.233.3333 E-MAIL ADDRESS: PRODUCER CUSTOMER ID #:
INSURED McKinley & Associates, Inc. The Maxwell Centre 32-20th Street Wheeling, WV 26003	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: Cincinnati Insurance Co. — 10677 INSURER B: Brickstreet Ins — Brick INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: 2018-2019 COI's REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC			EPP/EBA0146335	06/15/2018	06/15/2019	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 500,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			EPP/EBA0146335	06/15/2018	06/15/2019	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE RETENTION $			EPP/EBA0146335	06/15/2018	06/15/2019	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N/A If yes, describe under DESCRIPTION OF OPERATIONS below			WCB1018014	12/30/2017	12/30/2018	WC STATU-TORY LIMITS X OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
CERTIFICATE ISSUED AS PROOF OF INSURANCE.

CERTIFICATE HOLDER

MCKINLEY & ASSOCIATES, INC.
ATTN: LISA DICARLO
32-20TH STREET
WHEELING, WV 26003

CANCELLATION

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

AUTHORIZED REPRESENTATIVE

Lee A Paull III

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/12/2018

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
The James B. Oswald Company
1100 Superior Avenue, Suite 1500
Cleveland OH 44114

CONTACT NAME: Serena Turchik
PHONE (A/C, No, Ext): 216-777-6134 **FAX (A/C, No):**
E-MAIL ADDRESS: sturchik@oswaldcompanies.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Continental Casualty Company	20443
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED MCKIN-1
McKinley & Associates, Inc.
32 20th Street #100
Wheeling WV 26003

COVERAGES **CERTIFICATE NUMBER:** 1012000108 **REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
								$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N/A (Mandatory in NH)						E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
A	Professional Liability Claims Made Retro Date: 9/10/1981	N	Y	AEH591893924	10/10/2018	10/10/2019	Each Claim Aggregate	$1,000,000 $2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Waiver of Subrogation as designated above is provided when required of the Named Insured by written contract or agreement.

CERTIFICATE HOLDER

Specimen
For Purposes of Evidencing
Coverage Only

CANCELLATION

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

AUTHORIZED REPRESENTATIVE
Serena C Turchik

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: 513928

Doc Description: Martinsburg Facility Renovation Design

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-08	2018-11-27 13:30:00	CEOI 0603 ADJ1900000011	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

**000000206862*
McKinley Architecture and Engineering
32 20th Street - Suite 100
Wheeling, WV 26003
(304) 233-0140

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X **FEIN #** 55-0696478 **DATE** 21 November 2018

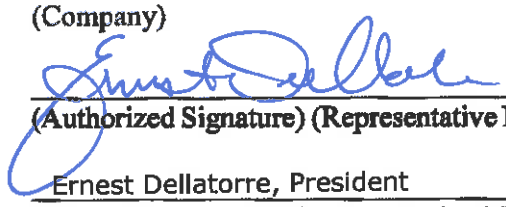
All offers subject to all terms and conditions contained in this solicitation

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)
Ernest Dellatorre, President
(Printed Name and Title)
32 20th Street - Suite 100, Wheeling, WV 26003
(Address)
(304) 233-0140 | (304) 233-4613
(Phone Number) / (Fax Number)
edellatorre@mckinleydelivers.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.

McKinley Architecture and Engineering
(Company)



(Authorized Signature) (Representative Name, Title)

Ernest Dellatorre, President
(Printed Name and Title of Authorized Representative)

21 November 2018
(Date)

(304) 233-0140 | (304) 233-4613
(Phone Number) (Fax Number)

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

(Required by *W. Va. Code* § 6D-1-2)

Contracting Business Entity: McKinley Architecture and Engineering **Address:** 32 20th Street - Suite 100 Wheeling, WV 26003

Authorized Agent: Ernest Dellatorre **Address:** *(same as above)*

Contract Number: CEOI 0603 ADJ1900000011 **Contract Description:** Martinsburg Facility

Governmental agency awarding contract: West Virginia Army National Guard, Construction and Facilities Management Office

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

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

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

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

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

Signature: Ernest Dellatorre **Date Signed:** 11-21-18

Notary Verification

State of West Virginia **County of** Ohio:

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

Taken, sworn to and subscribed before me this 21st day of November 2018.

Amy T. Sipos
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
AMY T. SIPOS
Wilson Kozicki & Gwynn PLLC
32 - 20th Street, Suite 300
Wheeling, West Virginia 26003
My Commission Expires Apr. 26, 2023

Revised October 2017

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

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

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: McKinley Architecture and Engineering

Authorized Signature: _____ Date: 21 November 2018

State of West Virginia

County of Ohio, to-wit:

Taken, subscribed, and sworn to before me this 21st day of November, 2018.

My Commission expires April 26, 2023.

AFFIX SEAL HERE

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
AMY T. SIPOS
Wilson Kozicki & Gwynn PLLC
32 - 20th Street, Suite 300
Wheeling, West Virginia 26003
My Commission Expires Apr. 26, 2023

NOTARY PUBLIC Amy T. Sipos