

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: 451810

Doc Description: EOI - DISTRICT SEVEN, NEW WEBSTER COUNTY HEADQUARTERS

Proc Type: Central Contract - Fixed Amt

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DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

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VI-NDORT 1 Vendor Name, Address and Telephone Number:

ZMM, Inc., Architects and Engineers

222 Lee Street, West

Charleston, WV 25302

(304) 342-0159

FOR INFORMATION CONTACT THE BUYER

Mark A Atkins

(304) 558-2307

mark.a.atkins@wv.gov

Signature X

FEIN#

55-0676608

DATE

7-3-2018

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

Page: 1

FORM ID: WV-PRC-CEOI-001

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.

ALRIL PRINCIPAL
(Name, Title) Adam R. Krason, AIA, LEED AP, Principal
(Printed Name and Title)
222 Lee Street, W., Charleston, WV 25302
(Address)
(304) 342-0159 (304) 345-8144
(Phone Number) / (Fax Number) ark@zmm.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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated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.

ZMM, Inc., Architects and Engineers

(Company)

(Authorized Signature) (Representative Name, Title)
Adam R. Krason, AIA, LEED AP, Principal

(Printed Name and Title of Authorized Representative)

7-3-2018

(Date)

(304) 342-0159 (304) 345-8144

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

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

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

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

DEFINITIONS:

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

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

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

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

STATE OF WEST VIRGINIA
NOTARY PUBLIC
Lisa E. Bowles
2MM, Inc.
222 Lee St., W.
Charleston, WW 25302
My Commission Expires October 6, 2018

WITNESS THE FOLLOWING SIGNATURE:

NOTARY PUBLIC Tusia &. Baurles

Purchasing Affidavit (Revised 01/19/2018)

West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Contracting Busine	ess Entity: ZMM, Inc.		Address:	222 Le	e Stree	t, West
				Charle	ston, W	V 25302
Authorized Agent:	Adam R. Krason		Address:	Same as	s Ahowe	
Contract Number:	DOT1800000002	Co	ntract Descript	Dia tion:	strict	Seven, New
	ncy awarding contract:	Department		Webste	r Co. He	eadquarters
☐ Check here if th	is is a Supplemental Dis	Transporta sclosure	tion			
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	or other entities perform none, otherwise list entity/			• Contract		
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Signature:			Date Signed	l:	2018	
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Taken, sworn to and s	subscribed before me this	3rd	_ day ofJi	les)		2018
To be completed by Date Received by Sta Date submitted to Eth Governmental agency	A - A			c's Signatu	re	

July 5, 2018

Mr. Mark Atkins, Senior Buyer – File #33 State of West Virginia, Purchasing Division 2019 Washington Street, East Charleston, West Virginia 25305



Subject: Expression of Interest – CEOI 0803 DOT1800000002

A&E Services for District Seven, New Webster County Headquarters

Dear Mr. Atkins:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional architectural and engineering services for the District Seven, New Webster County Headquarters. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. Our integrated design approach makes ZMM unique among design firms in West Virginia, and will help to ensure the quality of the services that we will provide.

ZMM's in-house A/E team will be supplemented on this engagement with the specialized expertise of Potesta & Associates. Potesta was founded in Charleston in 1997 to provide quality engineering and environmental consulting services to a wide variety of private and public clients in West Virginia, and has grown to include a large and very diverse staff. Their employees include civil, geotechnical, environmental, mining and chemical engineers, Licensed Remediation Specialists, site designers, surveyors, CADD designers, biologists, toxicologists, ecologists, geologists, hydrogeologists, foresters, stream restoration design specialists, occupational safety and health specialists, field technicians, a land management team and support personnel.

Our team is uniquely qualified to provide professional design services for the New Webster County Headquarters for the following reasons:

- **Experience**. ZMM has provided design services on a variety of DOT/DOH projects in the last several years, including the new Mason County Headquarters Building (in collaboration with Potesta and Associates), the Huntington Welcome Center, and the Bragg Maintenance Building. Additionally, as a sub-consultant to HNTB, ZMM also recently provided services to the Parkways Authority for a new Rest Area at MP69, a new State Police Field Office and Maintenance Building in Beckley, a State Police Field Office in Kanawha City, as well as several storage facilities.
- Quality. ZMM has a history of providing high quality design services on projects throughout West Virginia. Recent award winning designs include the Logan/Mingo Readiness Center, the Joint Interagency Training and Education Center (JITEC) at Camp Dawson, Renovation of the 10th Floor of State Office Building #5 for the Office of Technology, Hacker-Valley PK-8 (in Webster County), and the West Virginia Housing Development Fund Headquarters. All of the projects were honored with statewide design awards by the American Institute of Architects West Virginia Chapter. In fact ZMM's commitment to design quality has been recognized by AIAWV with sixteen design awards in the last decade an achievement unrivaled in West Virginia.

■ Talent. With over thirty-five local (WV) employees ZMM provides an integrated design approach by delivering all building-related design services including architecture, engineering (structural, mechanical, and electrical), interior design, and construction administration in-house. ZMM's team includes seven registered architects, nine professional engineers (civil, structural, mechanical, and electrical), interior and lighting designers, and construction administrators. This expertise will be supplemented by Potesta's eighty-one local employees. Our architects and engineers are industry leaders, and have worked together to deliver projects with similar scope and complexity.

Thank you for taking the time to review the attached prospectus, which has been formatted to meet the requirements of the notice of consulting services. Additionally, please visit our websites at www.zmm.com and www.potesta.com to see the full range of projects that we have designed, and to learn about working with our team from a client's perspective. We appreciate your consideration for this important assignment.

Respectfully submitted,

ZMM, Inc.

Adam R. Krason, AIA, NCARB, LEED-AP

Principal

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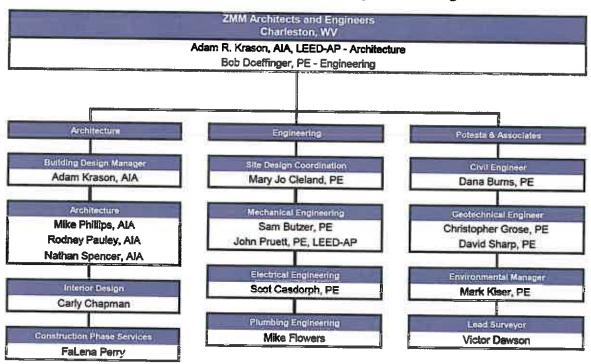
West Virginia DOT/DOH, District Seven, New Webster County Headquarters – Project Approach

The project involves the replacement of the previous Webster County Headquarters, which was destroyed in a fire. The new facility will be located on a site that has already been improved at 32 Sandy Run Road, Webster Springs, WV.

Design Team Structure and Qualifications

The design team that ZMM Architects and Engineers has assembled for the New Webster County Headquarters project has the expertise and capacity to successfully deliver the project for the West Virginia Department of Transportation, Division of Highways. Our team for this project will include ZMM Architects and Engineers, who will serve as the Architect of Record for the project, as well as the Engineer of Record for the Structural Engineering, Mechanical Engineering, Electrical Engineering, and Plumbing Engineering (including Fire Protection). Potesta & Associates will provide Civil Engineering, Geotechnical Engineering, Surveying, Environmental Engineering, as well as provide QA/QC services.

ZMM/Potesta Design Team Organizational Chart



Both ZMM and Potesta also have experience working with the WVDOT/DOH, and previously collaborated on the New Mason County Headquarters, which is currently under construction. Additional joint experience includes work on the Charleston Civic Center, and site development work for Wood County Schools and McDowell County Schools. Both ZMM and Potesta also have experience providing design services in Webster County, which includes work for the Webster County Commission, Webster County Schools, and the Webster County Public Service District.



Project/Design Services Scope

The ZMM/Potesta team understands that this design effort will result in the design of both site and building improvements. Based upon our experience in Mason County, we anticipate that site construction will include an above ground fuel tank, vertical tar tank, a calcium storage tank, a diesel powered generator with an automatic switch gear, fencing, material storage area, and a paved ADA compliant parking lot. Vertical facilities may include a main administrative and maintenance building (office/shop), salt shed, spreader rack shed, tailgate hanger, and mix shed may also be constructed.

Our team understands that the West Virginia Department of Transportation (DOT), Division of Highways (DOH), has developed prototypical plans for headquarter facilities. The ZMM/Potesta approach will be to continue to build upon the effort expended to date, using our experience working on the Mason County Headquarters to continue to improve the site and building design. We anticipate that our team's services will include surveying, geotechnical services, utility coordination and design services, site and building design, project management, and standard construction phase services. More specifically, our team is capable of providing all investigative, design, and construction phase services required to implement the project, including, but not limited to site grading, facility work, drainage, utility coordination and connection, erosion and sediment control, foundation design, building design, and pavement design.

Design Policies, Procedures, Standards and Codes

The ZMM/Potesta team anticipates that the project will be implemented to meet and follow all DOH design policies and procedures, including, but not limited to:

- DOH Design Directives
- Drainage Manual
- Erosion and Sediment Control Manual
- Traffic Engineering Directives
- Standard Details Volumes 1 and 2

Additionally, the proposed design has been reviewed by our team, and will be constructed to meet the following standards and codes:

- AASHTO Policy and Geometric Design of Highways and Streets (latest edition)
- Manual on Temporary Traffic Control for Streets and Highways (2006 Edition)
- West Virginia State Building Code
- West Virginia State Fire Code
- International Building Code (latest edition)
- National Fire Protection Association (NFPA) 101
- Life Safety Code 2009
- NFPA 221 High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls
- ADA Standards for Accessible Design (Federal Register March 15, 2010)
- American with Disabilities Act (ADA)

Proposed Site



The proposed site at 32 Sandy Run Road consists of approximately 4.69 level acres situated on 2 terraces, which are separated by a concrete gravity retaining wall. The site is located just off of State Route 20 in the community of Bolair between Cowen and Webster Springs. The site was graded, the retaining wall installed, and a new access road was constructed in 2016.



Project Communication

During the design phase Adam Krason, AIA, LEED-AP and Dana Burns, PE will serve as the primary contacts for the design team. These key team members as well as all primary WVDOT/DOH contacts would be included on all communication to facilitate an open discussion throughout the projects — in a manner that allows the DOT/DOH to remain actively involved in all design decisions. All correspondence will be copied to this core group. As the project progresses regular bi-weekly meetings will be held to review the design progress, outstanding issues, as well as any regulatory or budget concerns. Meeting minutes will be produced to document discussion items, decisions, and responsibility for follow-up. Our team's recent experience working with the WVDOT/DOH on the Mason County Headquarters will help facilitate this open communication.

During the construction phase additional resources will be added to ensure prompt and efficient responses to any issue that may arise. The project architect, Mike Phillips, AIA will coordinate the effort of the design team, and will be assisted by Falena Perry, CSI-CDT, MS Civil Engineering. Additionally, all submittals, pay applications, and RFI's will be logged and tracked by Lee Turley. Ms. Turley will update the entire project team (WVDOT/DOH, ZMM, and Contractor) weekly regarding outstanding items.



Budget Control

Our team has been providing professional design services in West Virginia for nearly sixty years. Over this time we have developed a thorough understanding of the various construction markets and associated bidding regions that exist throughout West Virginia. Our team for this project will include Win Strock, a former contractor that regularly provides independent estimates to ZMM. Mr. Strock and ZMM have successfully collaborated on the following projects:

Forks of Coal Claudia Workman Fish and Wildlife Education Center



- Beech Fork Lodge
- Coonskin Park Maintenance Building
- Williamstown Elementary School
- Edgewood Elementary School
- Jackson County Armed Forces Reserve Center
- Logan-Mingo Readiness Center
- Morgantown Readiness Center
- State Police Information Services Center
- State Office Building 5 & 6 Renovations Various Projects

The design team, with the assistance of Mr. Strock will evaluate the projected cost at the end of each phase, confirming the estimate with recent experience and historical bidding data. Recent experience demonstrating our ability to control the project budget includes:

- Smith Hall Renovation, Marshall University
 Bid 05/17 \$400K under \$1.2M Budget
- Williamstown Elementary School, Wood County BOE
 Bid 01/18 \$1.3M under \$14.1M Budget
- Oak Hill Pre-K-2, Fayette County BOE
 Bid 01/18 \$1M under \$11.2M Budget



- Shawnee Park, Kanawha County Commission
 Bid 12/17 \$2M under \$15M Budget
- Kenna Elementary School, Jackson County BOE Project was Under Budget, 0.2% Change Orders
- Huntington East Middle School, Cabell County BOE
 Project was \$1.2M Under Budget (\$23M), 1.7% Change Orders



Construction Duration

Nearly every project that our team is engaged to perform design services for has a 'hard' deadline for completion, many times tied to the availability or expiration of project funding. ZMM consistently delivers on projects with challenging schedule constraints. ZMM will ensure that this project will be completed in the agreed construction period utilizing the following methods:

- ZMM has developed Division 1 documents that tie the receipt of all deliverables required to administer the construction phase of the project to payment applications. ZMM will reject any payment application that is not accompanied by all required information including submittal schedules and logs, RF! logs, updated project schedules, etc.
- ZMM monitors all construction phase submittals and correspondence to verify that we are returning information at a pace that will help expedite project completion. ZMM management reviews the status of all RFI's and submittals weekly. ZMM will also staff the construction phase with employees that will be able to provide immediate answers at the project site to expedite the work.



ZMM will work with the WVDOT/DOH to develop a realistic construction schedule that includes anticipated weather days. This schedule will be included in the specifications, and reviewed at the pre-bid meeting to reinforce the critical nature of meeting the schedule, and the intent of enforcing liquidated damages.

Experience with Each Required Discipline

ZMM Architects and Engineers has assembled a team to meet all of the unique requirements of the project. Our team is comprised of some of the leading professionals in West Virginia, and is experienced in each discipline noted below. With over thirty-five local employees ZMM provides an integrated design approach by delivering all building-related design services including architecture, engineering (structural, mechanical, and electrical), interior design, and construction administration in-house. ZMM's team includes seven registered architects, nine professional engineers (civil, structural, mechanical, and electrical), interior and lighting designers, and construction administrators. Our architects and engineers are highly qualified, and have worked together to deliver projects with similar scope and complexity. Additionally, the quality of ZMM's design effort has been recognized by the American Institute of Architects West Virginia Chapter with sixteen design awards in the last decade – an achievement that is unrivaled in West Virginia.

Pre-Design

Planning
Programming
Space Planning
Feasibility Studies
Existing Building Evaluation
Site Evaluation and Analysis
Master Planning
Construction Cost Estimating

Design

Architectural Design
Sustainable Design
Interior Design
Landscape Architecture
Civil Engineering
Structural Engineering
Engineering (MEP)
Energy Consumption Analysis
Net Zero Design

Post Design

Construction Administration
Value Engineering
Life Cycle Cost Analysis
Post-Occupancy Evaluation



For this engagement our in-house A/E team will be supplemented with the specialized expertise of Potesta & Associates. Potesta was founded in 1997 to provide quality engineering and



environmental consulting services to a wide variety of private and public clients in West Virginia, and has grown to include a large and very diverse staff. Their employees include civil, geotechnical, environmental, mining and chemical engineers, Licensed Remediation Specialists, site designers, surveyors, CADD designers, biologists, toxicologists, ecologists, geologists, hydrogeologists, foresters, stream restoration design specialists, occupational safety and health specialists, field technicians, a land management team and support personnel.





Summary

The ZMM/Potesta team possesses the relevant design experience, recent WVDOT/DOH experience, and approach to ensure the successful delivery of the District Seven, New Webster County Headquarters. Our team's previous experience collaborating with the WVDOT/DOH, our commitment to design quality, and our approach to control the project budget and schedule makes us the right partner for this engagement.





LOCATION: 222 Lee Street, West Charleston, WV

CONTACT: Phone 304.342.0159 Fax 304.345.8144 www.zmm.com







ZMM was founded in 1959 in Charleston, West Virginia by Ray Zando, Ken Martin, and Monty Milstead. Since the inception of the firm, ZMM has been dedicated to providing an integrated approach to building design for our clients. ZMM delivers this integrated approach by providing all building related design services, including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration from our office in Charleston. Our integrated design approach makes ZMM unique among architectural firms in West Virginia, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.

Over the last decade, ZMM has become a leader in sustainable or 'green' design in West Virginia. In addition to participating in sustainable design and construction seminars throughout the State (Beckley, Fayette County, Morgantown, Charleston, and Parkersburg), ZMM designed one of the first sustainable educational facilities in West Virginia (Lincoln County High School). ZMM's unique design approach has proven invaluable on projects that employ sustainable design principles, which often require a more integrated approach to building design.

As ZMM enters our second half-century providing professional design services in West Virginia, we remain committed to the ideal of providing high quality, client focused, design solutions that meet budget and schedule requirements. This commitment to quality has been recognized through both State and National design awards, as well as through the long-term client relationships that we have developed.



ZMM has been dedicated to the integrated approach to building design which is unique to architectural firms of our size. Our past successful experience demonstrates that providing multi-disciplined services within one organization results in a fully coordinated project. ZMM has the qualified professionals available to provide services throughout the duration of a project from the initial planning phases through post-occupancy evaluations and beyond.

Advantages of an integrated Design Approach:

- The Owner has a Single Point of Design Responsibility
- Improved Design Schedule
- Improved Coordination of Documents
- Improved Construction Phase Services
- Well Coordinated Documents Lead to Better Bids for the Owner

Additionally, ZMM is constantly working to improve the services we offer by addressing emerging and evolving trends that impact the design and construction market. ZMM has seven LEED accredited Professionals on staff to address the needs of our clients who are interested in designing buildings that meet the US Green Building Council's standards. This continues ZMM's active implementation of sustainable design principles on our projects.

Services Pre-Design

Educational Facility Planning
Programming
Space Planning
Feasibility Studies
Existing Building Evaluation
Site Evaluation and Analysis
Master Planning
Construction Cost Estimating

Design

Architectural Design
Sustainable Design
Interior Design
Landscape Architecture
Civil Engineering
Structural Engineering
Engineering (MEP)
Energy Consumption Analysis
Net Zero Design

Post Design

Construction Administration Value Engineering Life Cycle Cost Analysis Post-Occupancy Evaluation



Award Winning Design



2018

AIA West Virginia Chapter: Citation Award Unbuilt Project
Charleston EDGE
Charleston, West Virginia

2017

AlA West Virginia Chapter: Merit Award Achievement in Architecture Explorer Academy Huntington, West Virginia

AIA West Virginia Chapter: Merit Award Achievement in Sustainability Logan - Mingo Readiness Center Holden, West Virginia

2016

AlA West Virginia Chapter: Merit Award Achievement in Architecture in Interior Design Christ Church United Methodist Charleston, West Virginia

AlA West Virginia Chapter: Merit Award Achievement in Architecture Gauley River Elementary School Craigsville, West Virginia

<u>2015</u>

AlA West Virginia Chapter: Honor Award
Achievement in Architecture in Sustainable Design
Edgewood Elementary School
Charleston, West Virginia

AiA West Virginia Chapter: Merit Award Achievement in Architecture Kenna Pk-5 School Kenna, West Virginia











Award Winning Design



2014

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Sustainable Design

Huntington East Middle School

Huntington, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture

Southern West Virginia Community & Technical College

Williamson, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Interiors/Graphics

Girl Scouts of Black Diamond Council

Charleston, West Virginia

2012

AIA West Virginia Chapter: Honor Award

Excellence in Architecture

West Virginia Housing Development Fund Building
Charleston, West Virginia

2011

AIA West Virginia Chapter: Honor Award

Excellence in Architecture in Historical Preservation

Southside Elementary/Huntington Middle School

Huntington, West Virginia

AIA West Virginia Chapter: Honor Award

Excellence in Architecture

Joint Interagency Training & Education Center

Kingwood, West Virginia

AIA West Virginia Chapter: Merit Award

Excellence in Architecture in Interiors

WV State Office Building #5, 10th Floor Renovation

Charleston, West Virginia











LOCATIONS: Charleston 7012 MacCorkle Ave, SE Charleston, WV 304.342.1400

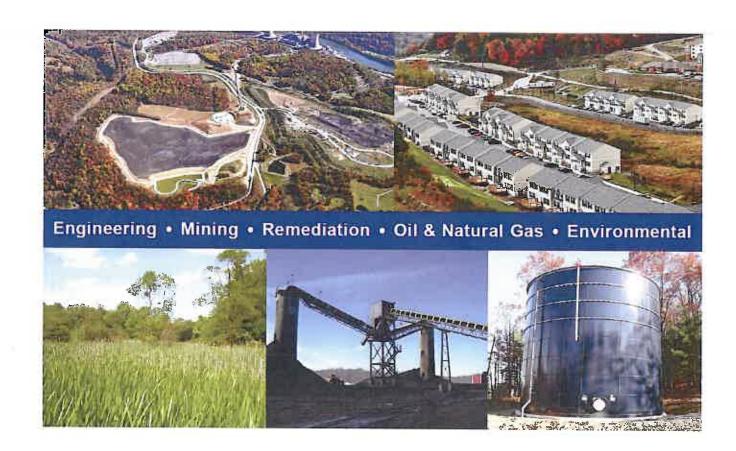
Morgantown 125 Lakeview Drive Morgantown, WV 304.225.2245

Winchester 15 South Braddock Street Winchester, VA 540.450.0180 Providing Innovative, Timely, Cost-Effective Engineering and Environmental Solutions

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.

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.



Countywide Utility Services

Webster County Public Service District



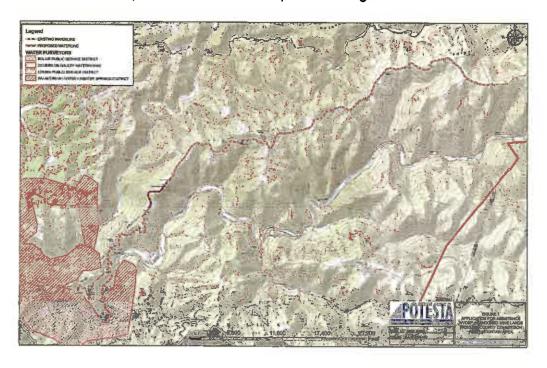
LOCATION: Webster County WV Potesta & Associates, Inc. (POTESTA) was retained by the Webster County Commission to provide various environmental and engineering tasks associated with countywide water supply in Webster County, West Virginia. Tasks have included:

- Inventory of remaining water supply projects to serve unserved areas of Webster County including developing an estimated project cost.
- Provide sampling and testing of selected individual wells within Webster County to determine impacts from mining, natural occurring minerals, and onsite sanitary sewer.
- Prepare an overall report including a priority ranking of service to presently unserved areas regarding public health requirements, cost feasibility, and population.
- Prepare a countywide preliminary engineering report, as well as individual reports for submittal to West Virginia Infrastructure & Jobs Development Council.
- Interacting with various regulatory agencies.

As part of completing the study, POTESTA has had to:

- Complete extensive fieldwork to locate water line pathways, and locate other support structures.
- Utilize GIS to establish horizontal/vertical locations for hydraulic design, and to provide locations on drawings (using ArcView) submitted with permits.
- Interact with wide range of audiences including;
 - The public to be serviced.
 - Property owners, where easements were required.
 - Webster County Commission.
 - Various public service districts and municipalities.
 - West Virginia Public Service Commission (for addressing disputes).
 - West Virginia Department of Health and Human Resources, Bureau for Public Health.

Included in the process is attendance at public meetings.



General Service Division - Surplus Property



LOCATION: Dunbar, WV

SIZE: 4,718 SF Admin Space 14,532 SF Surplus Storage 19,250 SF Total

COMPLETION: Summer 2016

COST:

CONTACT: Mr. Michael Evans State of West Virginia Architect 1900 Kanawha Blvd. E. Building 1, Room MB-60 Charleston, WV 25305



This property consists of a new 20,000 SF metal building storage facility inclusive of 5,000 SF of new administrative offices. The new building will replace the existing structures currently located in the floodplain, and will address several site issues including proper drainage, traffic flow, and correct floor elevations in regard to current floodplain requirements.

The demolition of the existing structures along with the new construction will be phased to maintain continuous operation of the facility.



WV State Police and WV Parkway Authority

Maintenance Building



LOCATION: Beckley, WV

SIZE: 19,400 SF

CONTACT: Cheryl Porterfield Facilities Administrator West Virginia Parkways 374 George Street Beckley, WV 25801 304.256.6685



WV Parkway Authority needed to replace a variety of existing aging buildings with a new maintenance facility. The new 19,400 square foot building includes offices for maintenance staff, training staff, training center and a new WV State Police branch facility. The maintenance portion of the building includes four large bays equipped with overhead crane, truck lift and equipment to maintain the large fleet of trucks. Existing buildings will be removed to allow for the new building to be located on the existing site along with other support buildings.

ZMM, in consultation with HNTB engineers, was selected to design the new facility. The WV Parkway Authority had programmed the building requirements which ZMM developed into a building program to fit the existing restricted site. The four 26 foot high truck bays will be located next to a two story supply and support facility. The second story portion of the building will contain offices, training and meeting rooms along with lockers and exercise areas. The two story State Police facility is located next to the maintenance facilities and we be serviced with common entrance, lobby, elevator, and stairs.







State Police Field Office

WV Parkways Authority



LOCATION: Charleston, WV

SIZE: 2,164 SF

COST: \$500,000

COMPLETION: August 2013

CONTACT: Sergeant Knight WV State Police Parkways Authority P.O. Box 1469 Charleston, WV 25325 304.926.1916



The new one-story State Police Field office for the WV Parkways Authority is located in Charleston, WV in Kanawha City directly off the McCorkle Ave exit. This new facility will serve as a headquarters for State Police Troop 7 and replaces an out-of-date building that had been constructed in the 1950s. The building was dedicated in honor of Cam Lewis, a former State Parkways Authority member and Department of Transportation employee.

The 2,164 SF building consists of a squad room, processing room, day room with attached bathroom, kitchen, office, and garage. This new space offers more room and security for troopers who patrol the northern segment of the Turnpike. Troopers use this space to process arrests and complete paperwork.

The building was largely funded by out-ofstate toll money. The exterior materials consist of brick and stone with a cast stone accent band.







WV State Police Detachment Office



LOCATION: Charleston, WV

COST:

SIZE: 2,164 SF

CONTACT:
Major Gary Tincher
Chief of Staff Services
West Virginia State Police
725 Jefferson Road
So. Charleston, WV 25309
304.746.2115
Gary.r.tincher@wvup.gov



The State Police Field Office is a new 2,164 SF facility. The interior spaces include a processing room, squad room, private office, fully equipped kitchen, and a day room with an attached private bathroom. The exterior materials consist of brick and stone, and the interior flooring material is quarry tile to provide an ease of maintenance for the owner.







Corridor "D" Marrtown

West Virginia Division of Highways



LOCATION: Wood County, WV Potesta & Associates, Inc. (POTESTA) provided surveying services for a segment of Appalachian Corridor D beginning at approximately Station 2225+00 and extending eastward approximately 2.65 miles to approximately Station 2365+00. The project also included interchanges at DuPont Road and Wood County Route 9.

Work included the following:

- Establish a coordinate grid (system) tied to aerial mapping supplied by West Virginia Division of Highways.
- Field edit the mapping along the corridor within approximately 500 feet of the proposed centerline of the mainline and side roads.
- Locate utilities (including elevations) and collect ownership information, pole numbers, and other identifying features of existing utilities.
- Stake out and profile approximately 14,000 linear feet of mainline centerline at 50-foot intervals including setting all centerline control points the PC, PT, SC, ST, and POT points.
- Stake out and profile side roads for approximately 44,500 linear feet at 50-foot intervals.
 - Locate property boundaries/possession lines for the impacted areas of approximately 100 parcels.
- Stake out of approximately 173 planned boring locations.
- Establish reference points and benchmarks outside the anticipated construction limits at 1000-foot intervals.
- Survey 261 sections for design purposes in areas where the mapping provided to POTESTA was determined to be up to 40 feet off in elevation.

Various Structures Scheduled for Demolition on Highway Right-of-Way



West Virginia Department of Transportation, Division of Highways

LOCATION: Various Locations in WV

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.



Corridor "H", Davis-Bismark, Section 6

West Virginia Division of Highways



LOCATION: Grant and Tucker Counties, WV Potesta & Associates, Inc. (POTESTA) provided surveying services for a segment of Appalachian Corridor H for approximately 1.6 miles. The project also included the design of several minor drainage structures for Four Mile Run, as well as an intersection at Brown Road.

- Establish a coordinate grid (system) tied to aerial mapping supplied by West Virginia Division of Highways.
- Field edit the mapping along the corridor within approximately 500 feet of the proposed centerline of the mainline and side roads.
- Locate utilities (including elevations) and collect ownership information, pole numbers, and other identifying features of existing utilities.
- Stake out and profile approximately 8,500 linear feet of mainline centerline at 50 -foot intervals including setting all centerline control points the PC, PT, SC, ST, and POT points.
- Stake out and profile side roads for approximately 2,500 linear feet at 50-foot intervals.
- Locate property boundaries/possession lines for the impacted areas of approximately 35 parcels.
- Stake out of approximately 60 planned boring locations.
- Establish reference points and benchmarks outside the anticipated construction limits at 1000-foot intervals.

North Bridgeport Bypass

West Virginia Division of Highways



LOCATION: Harrison County WV Potesta & Associates, Inc. (POTESTA) was contracted by the West Virginia Division of Highways to provide geotechnical and environmental services for the approximate 1.25-mile North Bridgeport Bypass in Harrison County. This work included documentation of environmental conditions along three alternative routes to assess potential impacts of the construction. The evaluation included a potential "no-build" alternative and considered secondary and cumulative impacts. POTESTA also completed geotechnical evaluation of the planned cut slopes, as well as foundation design for a proposed single span bridge.

Environmental documentation was collected for social and economic impacts, potential impact to farmlands, air quality, noise, water quality, wetlands, vegetation and wildlife, floodplains, threatened and endangered species, historic and archaeological preservation, potential hazardous waste sites, aesthetics, and energy. This work included pedestrian surveys of the alternatives, wetland delineation, noise studies, and evaluation of available housing as it related to residential displacement.

The environmental documentation was summarized in an environmental assessment document that demonstrated that the project qualified for a Categorical Exclusion. Geotechnical recommendations were issued in a geotechnical report for the project, including cut slope recommendations on design cross sections, slope stability analysis of fill slopes and foundation recommendations for the proposed bridge.



Joint Interagency Training & Education Center WARNG



LOCATION: Kingwood, WV

SIZE: 285,000 SF

COMPLETION: 2013

COST: \$78.4M

OWNER: MAJ Dan Clevenger WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.561.6446

AWARD: 2011 AIA Honor Award West Virginia Chapter Excellence in Architecture









ZMM Architects and Engineers, in association with AECOM, is providing architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campusstyle facility for training and operational mission support. Sited on 30 acres at the northern end of Camp Dawson between the Cheat River and the foot of Brier Mountain, this 283,000-SF project includes the design of a new operations building; expansion of the billeting facility; renovation of the training facility; creation of a new base entry checkpoint and visitor center; and design for walkway connectors between all the facilities.

The project began with a review of the existing base master plan, followed by a revision of the master plan concept. JITEC is a training and educational facility – the vision behind the site design and updated master plan is that of a college campus atmosphere. The clients goal was to create a campus environment that integrates existing buildings with new ones, which was accomplished by using compatible, yet distinct building materials.

The new facilities are designed to meet all anti-terrorism/force protection criteria and are slated for LEED-NC Gold Certification from the U.S. Green Building Council. The new 82,000-SF operations building is prominently sited as the main focal point upon entering Camp Dawson through the secure access control point and visitor's center, also designed by AECOM. The building's exterior complements its West Virginia setting. The entire building front, composed of glass and pre-cast concrete walls, is open and inviting with glazing that reflects the surrounding trees and hills.



Joint Interagency Training & Education Center



Security requirements for the command center influenced the design of the attached, copper-clad "black box" that is an homage to the native rock stratification seen throughout the state.

The building consists of four distinct areas: the Joint Operations Center; a suite of secure training rooms; base headquarters and JITEC administrative offices; and a 6,000 SF server and telecommunications room.

Entry to the Joint Operations Center (JOC) is provided by a secure mantrap adjacent to a dedicated security office. Built to SCIF standards, the JOC contains a state of the art command center housing 48 permanent work stations in a theater-style configuration facing a large video wall, flanked by conference rooms and offices for both officers and support staff. Within the JOC is a secure area consisting of workstations, offices, and two divisible conference rooms with secure video conferencing capabilities. The secure area construction dictates a windowless environment, requiring proper lighting and creative use of materials to create an agreeable work atmosphere.

The 180,000-SF billeting (hotel) expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. Designed to relate to the existing architecture with similar scale, materials, textures, and massing, the addition also brings in new elements, such as iconic glazed building corner elements, to integrate the design of the new operations building. A new dedicated lobby with terrazzo tile flooring leads to a monumental stair with terrazzo treads, open risers, and a glass/stainless steel railing for access to the open lounge areas on the second and third floors.

The lobby's design provides a hotel atmosphere, underscored by the new Liberty Lounge, an upscale bar and restaurant area, with wood finishes salvaged from the gymnasium floor in the existing headquarters building. The new six "executive suites", are designed to the full amenities of corporate hotels.

Charleston Civic Center Expansion and Renovation



LOCATION: Charleston, WV

SIZE: 283,000 SF

COMPLETION: Est. 2018

COST: \$75M

CONTACT: Mr. David Molgaard City Manager City of Charleston 501 Virginia Street, E. Room 101 Charleston, WV 25301 304.348.8014



The Charleston Civic Center Expansion and Renovation is a transformational project for both the city of Charleston and West Virginia. Our team is building on the strong authentic character of Charleston to remake the Charleston Civic Center into a more efficient, more sustainable, more dynamic and a more iconic best-in-class destination.

The design of the expansion and renovation of the Charleston Civic Center is inspired by the story of West Virginia. Defined by a rugged landscape, the early history of the state was dominated by extractive industries —salt, coal, timber, trapping. This set the local character. With a foundation rich in resources, manufacturing added value to the raw materials with crafts like glass making and industries like chemicals and energy. This attracted a rich diversity of immigrants and a culture of craftsmanship that set the urban character. The economy is shifting from industry and service to information and technology. Again, the landscape and industry that shaped the region gives Charleston real advantages to exploit. The Creative Class, critical for the information and technology age, can live and work anywhere - what they want is access to the outdoors; real places with real character; and continuous education and entertainment.

Our design starts with an organizational concept inspired by this history. The Kanawha River is the social organizing link throughout the region, with settlement zones developing on whatever flatland the river provided —creating nodes of activities among the hills and valleys.





Charleston Civic Center Expansion and Renovation



The renovated Civic Center is a building that emerges from this iconic landscape, with the architecture and topography working together. The Civic Center will also have distinct active nodes to celebrate each activity; arena, convention, and banquet, and these nodes are connected like the hills and cut rock faces that are seen throughout the state as people work to connect to each other through the landscape.

The first critical design objective is to create separate entries and identities for the arena and convention center. This will allow for simultaneous events and clarity of use. For the convention center to thrive, it needs a real ballroom assembly space. Located overlooking the Elk River, the new ballroom pre-function space will be the most dramatic feature of the center. Together, the three glass enclosed nodes —arena lobby, convention lobby, ballroom —define a unique Charleston event campus. As described above, the spaces that connect these nodes are inspired by the hills and cut rock faces that connect the towns along the Kanawha River. With the building emerging from the landscape and expressed as cut rock walls, the connecting areas are designed to be expressive and economical backdrops to the glass boxed nodes.

While the expansion will transform the southeast to the middle of the northern zone of the site, the existing building mass will still dominate a portion of the northern and eastern campus. The dominant expression along these existing facades is the landscaped berms. As we imagined the new building expression emerging from the landscape, a strategy developed to transform these berms to reflect, at the pedestrian level, the overall design theme. Above the level of the berms, the new concourse level windows will open up the facade and provide a much needed break in the massing. The upper part of the arena will be painted in two tones to match the new building, playing off the different faces. The north, south, east and west faces painted a lighter shade; and the northeast, southeast, southwest and northwest faces a darker shade. Dramatic exterior color-changing lighting on the northeast, southeast, southwest and northwest faces will then transform the look and feel of the center into a fun and festive landmark.

Construction & Facilities Management Office WARNG



LOCATION: Charleston, WV

SIZE: 19,935 SF

COST: \$3.5M

COMPLETION: 2008

CONTACT: MAJ Dan Clevenger WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.561.6539

AWARD: 2009 AIA Merit Award, West Virginia Chapter, Achievement in Architecture



The Construction and Facilities
Management Office (CFMO)
Expansion project will bring all of
the operations of the CFMO
together under one roof. The
branches that will occupy this
facility include: Director of
Engineering, Environmental,
Planning and Programming,
Facility Operations &
Maintenance, Business
Management, Resource
Management, and Design and



Construction. This new facility is located slightly to the front, and adjacent to the existing facility, lending prominence to the new construction, and providing a new aesthetic to the entire complex.

This transitional space was designed to connect the two structures, while maintaining a connection to the outside through use of natural light, direct visual connections to the exterior, large volumes, irregular geometries, and the use of natural materials.

The entry design was coordinated with the Recruiting and Retention building to create an outdoor courtyard, along with new sidewalks, stairs and signage. The entry roof is sloped to provide a greater massing, while a lower canopy provides scale and protection from the elements. Large gathering and work spaces were located on the north elevation to take advantage of large expanses of glazing located to capture indirect light and views of Coonskin Park.



Erbacon Water Line Extension

Cowen Public Service District



LOCATION: Cowen, WV Potesta & Associates, Inc. (POTESTA) was retained by Webster County Commission and Cowen Public Service District for study phase, design phase, bidding phase and construction phase services for a project involving upgrades, water line extensions, and construction monitoring to their water distribution system.

POTESTA prepared a preliminary engineering report and compiled the information necessary for a funding application with the West Virginia Infrastructure and Jobs Development Council and AML. Additional services included final design of the project components, preparation of construction drawings and technical specifications, permit applications, and construction administration/monitoring.

The construction administration phase will not only include providing a resident project representative, but also include reviewing shop drawing submittals, reviewing pay applications, responding to requests for information, attending project meetings, etc.

The project includes the following:

- 34,000 LF of 8" Water Line
- 41,500 LF of 6" Water Line
- 54,000 LF of 2" Water Line
- 36 Fire Hydrants
- 95 Valve Hydrants
- 2 105,000-Gallon Water Storage Tanks
- 1 Hydro Pneumatic Booster Station
- 2 Large Mainline Pressure Reducing Stations
- 7 Railroad Crossings
- 4.000 LF of ¾" and 1" Service Lines
- 185 New Customers
- Reconnection of 50 Existing Customers



Amos Tank in Erbacon

Morgantown Readiness Center WVARNG



LOCATION: Morgantown, WV

SIZE: 54,000 SF

COMPLETION: 2013

COST: \$18.5M

CONTACT: MAJ Dan Clevenger WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.561.6446







The Morgantown Readiness Center is a unique military facility for several reasons. While the Readiness Center supports traditional military functions including the 1-201st Field Artillery, a significant portion of the Morgantown Readiness Center supports the 249th Army Band. To support the band, the Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

To efficiently create the stage and performance area the design team utilized a variety of dual function spaces. The stage is actually a large rehearsal space with an adjacent elevated recording area. Two large operable partitions are used – one to separate the rehearsal area from the remainder of the stage and the auditorium – while the other separates the auditorium from the Drill Hall. This configuration allowed the design team to maximize the West Virginia Army National Guard's investment by utilizing federally authorized space to also function as a large performance area. Acoustically, this challenge was met by creating a Drill Hall with an irregular shape that was contained within a rectilinear sloped barrel arch form. The geometry was complimented by acoustically engineered interior surfaces and finishes to create a vibrant and rich auditorium.

The facility is also unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35 acre tract at the airport. Additionally, the Readiness Center is located approximately twenty (20) miles from Camp Dawson, a large State and Federal training campus. As troops will often be travelling to Camp Dawson through the Morgantown Readiness Center, the facility needed to function as a 'gateway.'

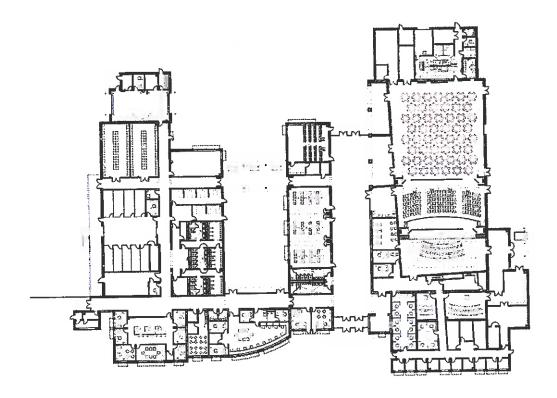




The creation of a 'gateway' facility was accomplished through exterior material choices (compatible with Camp Dawson), as well as the decision to utilize a tower-like feature to mark entry – a very prominent feature of the Regional Training Institute (RTI) at Camp Dawson. Where the RTI utilized a large cylindrical mass, the tower at the Morgantown Readiness Center respects the context of the former runway by reflecting the aesthetic of an airport control tower.

The Morgantown Readiness Center is also a sustainable building, and is in the process of pursuing LEED Certification from the USGBC. The 'U' shaped layout of the facility improves access to daylighting and views, while also limiting public access to the Guard's administrative and storage areas. Additional sustainable features include a reflective roof, the use of regional materials, and efficient lighting and HVAC systems.

While many features are addressed in the design of the Morgantown Readiness Center, the final result is a harmonious composition that reflects both its function and the environment, while deferring to its location on an abandoned runway.



Logan-Mingo Readiness Center WARNG



LOCATION: Holden, WV

SIZE: 54,000 SF

COMPLETION: 2015

COST: \$12M

CONTACT: MAJ Dan Clevenger WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.561.6446

AWARD: 2017 AIA Merit Award, West Virginia Chapter, Achievement in Architecture in Sustainable Design



The design of the Logan-Mingo Readiness center was developed by examining both the program and building site, and developing strategies to design a facility that is functional, responds to site, security, and aesthetic parameters, while requiring minimal maintenance.

The building layout was developed by working closely with the end-users to determine the appropriate configuration of building spaces to maximize the efficiency of the operations, and to respond to the unique missions of the 150th Armored Reconnaissance Squadron and the 156th Military Police (LNO) Detachment. Clear separation of "public" and "private" areas within the facility, unique office configurations related to training requirements, and the addition of State Funded additional spaces.

The exterior (and in many cases the interior) aesthetic of the facility was driven by the location of the Readiness Center within an industrial park on a reclaimed surface mined site. The decision led to the use of reinforced cast-in-place retaining walls that became both a functional and visual focus. Similar pre-cast walls are used to anchor the facility at the Distance Learning Center, while a cast-in-place retaining wall serves as a part of the Anti-Terrorism/Force Protection design.





Webster County Memorial Hospital

Preliminary Site Feasibility Study



LOCATION: Webster Springs, WV

SIZE: 42,000 SF

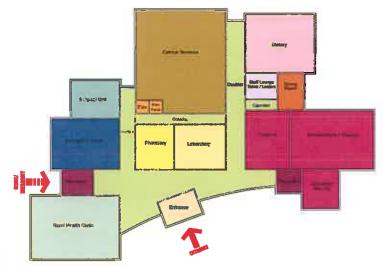
CONTACT: Annette Keenan Chief Executive Officer Webster County Memorial 324 Miller Mountain Drive Webster Springs, WV 304.847.5682 ZMM Architects and Engineers recently assisted Webster County Memorial Hospital with site selection, programming, and conceptual design services for a new 42,000 SF facility. Initial discussions included the potential reuse of the existing site, as well as sites in Webster Springs. Based upon a market analysis conducted by the hospital, ZMM examined four (4) sites in Bolair, WV. These sites included:

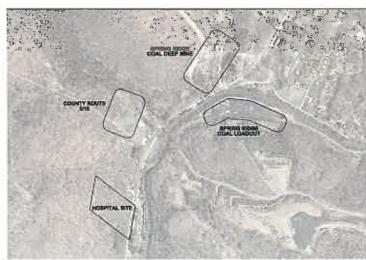
- WV Route 20 JHM Coals
- County Route 15/5
- Mine Site Spring Ridge
- Coal Loadout Spring Ridge

To determine the most suitable site, ZMM examined the pros and cons including:

- Evaluation of the overall usability of the potential sites for the stated facility.
- Site description and information.
- Property ownership information.
- Visibility.
- General advantages and disadvantages.
- Site access evaluation.
- Electric, gas, water and sewer utility analysis.
- Geologic/geotechnical issues.
- Initial environmental review.
- Initial archaeological review.
- Preliminary evaluation for the suitability of a geothermal system.
- Miscellaneous issues.
- List of permits expected to be required for the development of each site.
- Estimated site development costs.

Based upon this analysis a site was selected. To ensure that the selected site would support the new facility, ZMM commenced a programming and conceptual design process that culminated with a preliminary site layout and building plan. The initial design features a compact, two story layout, with separate entries for emergency and outpatient services. The hospital is currently in the process of securing the site.





Hacker Valley PK-8 School

Webster County Schools



LOCATION: Hacker Valley, WV

SIZE: 30,433 SF

COMPLETION: 2008

COST: \$8.2M

CONTACT: Dr. Martha Dean Superintendent 315 South Main Street Webster Springs, WV 26288 304.847.5638

AWARD: 2010 AIA Honor Award West Virginia Chapter Excellence in Architecture







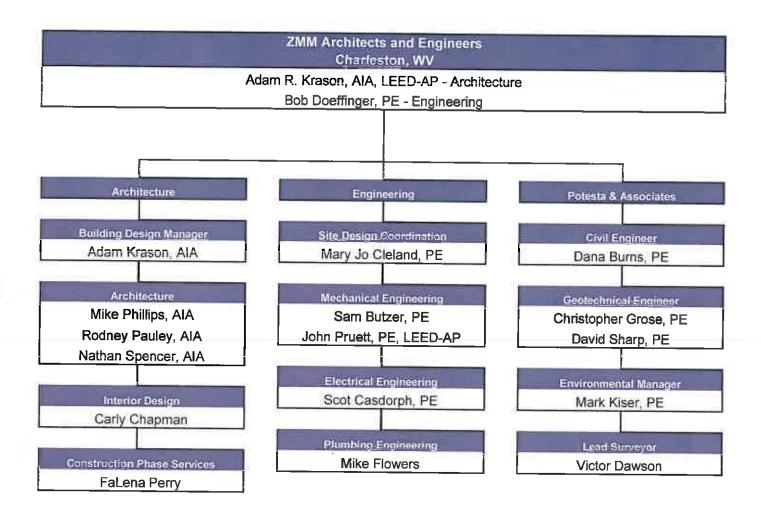
The new Hacker Valley Pre-K-8 School replaces the old outdated modular facilities and metal building. It is constructed on beautiful farm land behind the existing school. The area is rich with community involvement, and home to many professional artisans.

This had an impact on the materials being selected for the building. The building is host to a large curved stone wall and heavy timber frame entrances. The remote area has a low student population which allowed some creative and unique spaces to be designed within the school.

The facility includes a dining room that doubles as a commons area and kitchen. The gymnasium area also has a stage area that serves as the music classroom. The science room serves as a dual purpose room for art classes. The Pre-K and kindergarten are separate classrooms that open directly onto the playground.

ZMM/Potesta Design Team Organizational Chart





Adam R. Krason, AIA, LEED AP, ALEP





Role Principal

Professional Registrations

Registered Architect (WV, OH, KY, VA, MD, NJ) LEED Accredited Professional Accredited Learning Environment Professional NCARB (55,984) Construction Specifications Institute (CSI) Construction Documents Technician (CDT)

Mr. Krason has served in the capacity of Architect and Project Manager for a variety of projects at ZMM. This experience includes Military, Educational (K-12 and Higher Education), Office, Justice (Courthouses, Correctional, Justice Centers), and Multi-Unit Residential projects. Mr. Krason's responsibilities include programming, design, documentation, coordination of the architectural and engineering team, as well as construction administration. Mr. Krason began his career in 1998, working on a variety of educational, commercial office, and correctional projects throughout Ohio, West Virginia, and North Carolina.

Mr. Krason has been an advocate of sustainable design in West Virginia, participating in a variety of sustainable design seminars throughout the State, and serving on the West Virginia School Building Authority Green Schools Sub-Committee. Recently, Mr. Krason helped coordinate the "Making the Business Case for Sustainability" conference at the University of Charleston that included speakers from Armstrong Industries, American Electric Power, CB Richard Ellis, and Interface Raise. Mr. Krason also assisted Habitat for Humanity Kanawha and Putnam County develop a commercial recycling program to fill a void in the sustainable design infrastructure in West Virginia. Mr. Krason has noted that, "I became a LEED Accredited Professional because I believe that good design has value, and the ability to impact our daily lives. Sustainable design showcases the value of design through demonstrated improvements in the performance of the students and employees who occupy our buildings." In addition to his design and project management responsibilities, Mr. Krason serves on the Board of Directors and is responsible for business development at ZMM.

Project Experience

Charleston Civic Center, Charleston, WV

Mr. Krason is serving as principal-in-charge of the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a

Education

Bachelor of Architecture, The Catholic University of America, 1998

Bachelor of Civil Engineering, The Catholic University of America, 1997

Employment History

2007 - Present, Principal, ZMM 2007 - Present, Board of Directors, ZMM 2003 - Present, Architect, Project Manager, ZMM 1998 - 2003, Architect, Project Manager, Charleston Area Architectural Firm

- WV American Institute of Architects, President
- Habitat for Humanity Kanawha & Putnam County, Board of Directors 2011 - 2014
- WV Qualification Based Selections Council, President, 2012/2013
- Leadership WV 2010 2012
- Charleston Rotary
- West Side Main Street, Board of Directors 2008 - 2014
- City of Charleston Land Trust 2008 -2014

collaboration with tvsdesign and BBL Carlton. Mr. Krason is responsible for the overall management of the design team, coordination with the client, and also has input critical project management decisions. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

State Office Building #5, 10th Floor Renovation (Office of Technology), Charleston, WV Mr. Krason led an architectural and engineering team that completed a detailed assessment of State Office Buildings 5, 6, & 7. Once the assessment was complete, ZMM had the opportunity to implement the proposed improvements on the 10th Floor of State Office Building #5 for the Office of Technology. The renovations, aiming for LEED-CI Certification, re-oriented the layout by drawing all private offices into the building core, providing access to daylight and views for all employees. The design also utilized acoustical ceiling clouds and bulkheads to maximize the acoustical performance, while also increasing the volume of the space.

Joint Interagency Training & Education Center (WVARNG), Kingwood, WV Mr. Krason was responsible for the preliminary programming, and participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Krason was also responsible for managing the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. This project received LEED Gold Certification.

Morgantown Readiness Center (WVARNG), Morgantown, WV

Mr. Krason was the project architect on the new Morgantown Readiness Center. This facility is a unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35-acre tract at the airport. This center supports traditional military functions including the 1-201st Field Artillery. A significant portion of the Morgantown Readiness Center supports the 249th Army Band. The Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

Construction and Facilities Management Office Expansion (WVARNG), Charleston, WV Mr. Krason was responsible for the programming, architectural design, and project management of the office expansion. The project included the renovation and addition to an existing pre-engineered metal building. The design, which was honored with a 2009 AIA Merit Award, focused the client's resources on a new entry and corridor that separated the existing office space from the addition.

Bridgemont Community and Technical College - Davis Hall Renovation and Master Plan, Montgomery, WV Mr. Krason led an architectural and engineering investigation into the condition of Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

Edgewood Elementary School, Charleston, WV

Mr. Krason was the project manager on the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. Mr. Krason worked with students from Watts and Robbins Elementary Schools in Kanawha County, assisting them in an effort to actively participate in the design process

Participated on the team that won the following awards and acknowledgements:

2017 WV AIA Merit Award Logan-Mingo Readiness Center, Holden, WV

2016 WV AIA Merit Award Christ Church United Methodist, Charleston, WV

2015 WV AIA Merit Award Edgewood Elementary School, Charleston, WV

2014 WV AIA Merit Award Girl Scouts of Black Diamond Council, Charleston, WV

2011 WV AlA Honor Award Joint Interagency Training and Education Center (JITEC), Kingwood, WV

2011 AIA Honor Award State Office Building #5, 10th Floor Renovation, Charleston, WV

2009 AIA Merit Award WVARNG Construction and Facilities Management Office, Charleston, WV





Role Environmental Manager

Professional Registrations
Professional Engineer (WV, SC)
Licensed Remediation Specialist (WV)

Areas of Specialization

Environmental assessments, environmental sampling and remedial programs, conceptual and final designs for chemical, utility, and municipal solid waste disposal sites, including liner systems, leachate management systems, stormwater management systems, operational plans and capping/closure systems, abandoned mine land reclamation projects, sludge stabilization and basin/pond closure projects, environmental permitting, hydrologic and hydraulic analyses, quality assurance/quality control monitoring.

Project Experience

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

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

Fieldcrest Subdivision – Project manager/engineer for development of a nine lot subdivision in Charleston, West Virginia. Design and permitting/regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater, electric, telephone, cable, and natural gas. Preparation of drawings/specifications for necessary governmental agency approvals and for solicitation of bids.

Education

B.S., Civil Engineering, West Virginia University, 1984

Employment History

1997 - Present, VP, Potesta

1995 - 1997, Terradon

1984 - 1995, GAI Consultants

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

Inspection and certification of completed sanitary sewer system.

Connell Pointe Subdivision – Project manager/engineer for development of an eleven lot subdivision in Charleston, West Virginia. Design and permitting/regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, natural gas service, stormwater, electric, telephone, and cable. Preparation of drawings/specifications for governmental agency approvals and for solicitation of bids. Inspection and certification for completed sanitary sewer systems.

Conner Drive Townhouses – Project manager/engineer for development of 13 townhouse lots just outside of Charleston, West Virginia. Planning, surveying, design, and regulatory approvals for infrastructure, including new street, stormwater management system, sanitary sewer main, water main, electric, natural gas, telephone, and cable.

Gettysburg Subdivision – Project manager/engineer for an 18-lot subdivision located in Kanawha County, West Virginia. Design, surveying, and regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater management system, electric, natural gas, telephone, and cable. Preparation of drawings/specifications for solicitation of bids. Inspection and certification of the sanitary sewer collection system and pump station.

Yorktowne Subdivision – Project engineer for development and construction phase services for a 50-lot subdivision in Charleston, West Virginia. Design of streets, lots, stormwater management systems, sanitary sewer mains and pump stations, water mains, underground electric, natural gas, telephone, and cable.

City of Charleston - Feasibility study for the replacement of the CSX Ramp in Charleston, West Virginia.

Villages at Coolfont – Project manager for project in Morgan County, West Virginia, which included planning, engineering, and permitting associated with developing a second home community on 1.000 acres near Berkeley Springs, West Virginia. Project included:

- Potable water supply source (wells), treatment plant, storage and distribution system
- 0.44 MGD MBR wastewater treatment plant and sanitary sewer collection system
- Community roadways and storm sewer systems
- Detailed plans for the water and wastewater treatment plants and the distribution allocation system serving the first 124 homes
- Permits were obtained for the water and wastewater plants

Project engineer for development of Suncrest Subdivision in Charleston, West Virginia. Project included engineering and permitting for a new residential subdivision including roadway, underground electric, telephone, cable, water, sanitary sewer and storm water. Sanitary sewer system was designed, constructed, and monitored under the terms of an alternate mainline extension agreement with the Charleston Sanitary Board.

Business and Industrial Development Corporation – Preparation of Utility Extension and Roadway Paving Plans for Southridge Centre - Phase 2 area. Project included preparation of bidding/construction drawings to provide natural gas, water, sanitary sewer, telephone, and cable television serving four commercial lots and a 50-lot proposed subdivision. All utilities were underground. The length of the project was approximately ½ mile. The project also included roadway paving and stormwater drainage.





Role Engineering Principal

Professional Registrations

Professional Engineer (WV, VA, PA, OH, TN, KY, NY, NH, ME, NC, SC, FL, NJ, GA)

As ZMM's Principal Engineer, Mr. Doeffinger is in charge of the engineering disciplines, it is his responsibility to ensure that the mechanical and electrical engineering components of ZMM's design are coordinated and integrated into the final product.

After graduate school in Architectural Engineering, Mr. Doeffinger joined ZMM. He has over 35 years design experience in mechanical and electrical systems for buildings. He has a broad range of engineering experience in education, industrial and manufacturing facilities, large retail, correctional and jails, office buildings, and military facilities.

Mr. Doeffinger is responsible for new design and retrofit of chilled water systems for all building types including large regional shopping malls. He is involved daily with the firm's selection of appropriate systems for all building types and performs life-cycle cost analysis and energy studies.

Mr. Doeffinger is a member of the American Society of Heating, Ventilation and Air-Conditioning Engineers. He is the current national Chairman of the Technical Committee on Heating and Air-Conditioning Load Calculation. He is involved in writing the National Standard on the Method of Calculation, which will shape the nature of the future building energy use for the nation.

Project Experience

Charleston Civic Center, Charleston, WV

Mr. Doeffinger is the mechanical project engineer on the expansion and renovation to the Charleston Civic Center project. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018. The mechanical design is expected to reduce the energy requirements defined by ASHRAE 90.1-2013 by an estimated 25% and extensive water savings will be shown. The project includes a new chilled and hot water central plant with extensive replacement and upgrades to the facilities existing mechanical systems. Multiple phases of construction will allow the Civic Center to remain operational throughout the construction progress.

Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

Employment History

2005 - Present, President, ZMM 1976 - 2005, Vice President and Engineering Principal, ZMM

- ASHRAE Member of the Technical Committee Load Calculations Data and Procedures for 15 years, serving as chairman Presently Chairman of the Research Subcommittee
- Advisory Board for the Department of Electrical Engineering Technology, Bridgemont Community and Technical College
- City of Pt Pleasant, WV 2nd Ward
 Councilman for 20 years

State Office Buildings #5, 10th **Floor Charleston, WV** Mr. Doeffinger was the Project Engineer for this renovation project The renovation of the tenth floor of State Office Building #5 on the State of West Virginia Capitol Campus was recently completed for the Office of Technology. The renovation was designed to meet the United States Green Building Council's LEED for Commercial Interiors standard. The renovations also include a low profile cable management system which maximizes the flexibility of the space. To commence the project, ZMM conducted a detailed investigation of State Office Buildings 5, 6, & 7, which included recommendations for improvement of the facilities. The renovation of the 10th floor of Building #5 was the first major interior renovation project that responded to the recommendations.

West Virginia Capitol Complex - Buildings #5, 6, & 7, Charleston, WV Mr. Doeffinger was the Project Engineer for the in-depth analysis of Buildings #5,6,& 7 at the State Capitol Campus. The study included the preparation of as-built plans, as well as an analysis of all building systems, including: Life Safety; Vertical Transportation; Mechanical; Electrical; Data; Façade; Structure; and Roofing. The analysis also included a study related to potential hazardous materials in the facility.

West Virginia Regional Jails, Mr. Doeffinger was the Project Engineer on ten West Virginia Regional Jails. In 2009 he was responsible for the HVAC renovation on four regional jails, including the replacement of rooftop HVAC units and Building Automation Systems.

West Virginia Army National Guard, Joint Interagency Training & Education Center, Camp Dawson, WV Mr. Doeffinger was responsible for the mechanical engineering design of the 600 room billeting expansion to the Regional Training Institute at Camp Dawson. The project is served by a 4 - pipe hot and chilled water system with an energy recovery ventilation system. This project received LEED Gold Certification.

West Virginia Research, Education, and Technology – Building 704, South Charleston WV Mr. Doeffinger is the engineering principal-in-charge of preparing a life safety analysis of the building as well as design services to improve the exterior façade of Building 704 at the WV Research, Education, and Technology Park. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

West Virginia Regional Technology Park (WVRTP) - Building 740, South Charleston WV Mr. Doeffinger is the engineering principal-in-charge of the new Steam Plant for Building 740. This project involves designing and constructing the Interim Steam Heating System throughout Building 740.

Bridgemont (BridgeValley) Community and Technical College Davis Hall Renovation,
Montgomery, WV Mr. Doeffinger led an architectural and engineering investigation into the condition of
Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current
renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope
included remedying several life safety deficiencies, as well as improvements to the building envelope.

NGK Oxygen Sensor and Spark Plug Plant, Sissonville, WV Mr. Doeffinger was in charge of engineering design of the 250,000 SF NGK facility. The most recent 130,000 SF expansion moved NGK's spark plug production for the west coast to West Virginia. For both the oxygen sensor plant and spark plug plant Mr. Doeffinger designed a cycle water system for the manufacturing equipment.

The Plaza at King of Prussia, Pittsburgh, PA One of the largest retail centers in the east. Mr. Doeffinger has performed engineering services for the past 20 years. The project consists of a 5,000 -ton chilled water plant and 1,500,000 cfm variable volume system for tenants and constant volume air system for common areas and an engineered smoke control system. The most recent project is a 2011, 100,000 square foot expansion of tenant spaces, a renovation of the food court, and a 1,250-ton chiller addition to the central chilled water plant.





Role Senior Architect

Professional Registrations
Registered Architect (WV)
LEED AP Accredited Professional
NCARB Certified

Mr. Phillips has served in the capacity of Architect, Project Manager and Senior Project Architect on a variety of project types throughout his career. This experience includes Healthcare, Educational (PK-12), Higher Educational), Corporate Office, Retail, Military, Hospitality and Correctional. Mr. Phillips responsibilities include Programming, Design, Documentation, and Construction Administration.

Mr. Phillips began his career in West Virginia and continued to work throughout his career on a broad range of project in Pennsylvania, Virginia, Florida, and Tennessee.

<u>Project Experience</u> Rainelle Medical Center, Rainelle, WV

CAMC Teays Valley Hospital, Hurricane, WV

Appalachian Regional Healthcare (Multiple Locations)
Beckley, WV - This job consisted of an ICU nurse station
modernization and replacement, HVAC replacement,
psychiatric emergency room bays for the existing hospital,
psychiatric emergency room addition and the preliminary
design of the medical mall doctors suite.

Whitesburg, KY - This job includes a central sterile renovation, MRI replacement coordination, and a laboratory HVAC modernization.

Mountain State Oral Surgeons, Teays Valley, WV New 2-Story 9,000 SF Oral Surgery Center Renovation if a 5,000 SF Medical Office

Previous Work Experience
Boone Memorial Hospital, Boone, WV
75,000 SF Critical Access Hospital with 25 private rooms,
Emergency Room, E.D., 2 Operating Rooms, MRI, CT, Xray,
Imaging, Pharmacy, Physical Therapy, Cardiac Rehab

Education

Bachelor of Architecture, University of Tennessee School of Architecture

Employment History
2016 - Present, Project Architect, ZMM
2011 - 2016, Senior Architect,
Charleston Architect Firm
2001 - 2011, Senior Architect,

Civic Affiliations

Charleston Architect Firm

 West Virginia Chapter, American Institute of Architects, Member **St. Mary's Medical Center**New Entrances Canopies, Hybrid O.R.'s, School of Physical Therapy, New Central Boiler Plant Building, Endoscopy Expansion, Outpatient Therapy

Kings Daughter's Medical Center

New Cath Center, Pharmacy Upgrades and a new Remote Kiosk, Elevator Addition, Ambulance Access Renovations, Cystology Renovations, Laboratory Facilities Upgrades.

St. Agnes School, Charleston, WV

Exterior building envelope modernization upgrade. Project cost \$1.1M

Sacred Heart Early Learning Center, Charleston, WV

Child Care and Multi-School Gymnasium facility Project cost \$1.8M

Yeager Airport, Charleston, WV

Gate evaluation and optimization for new flights. Additional renovations included: the terminal, new pedestrian bridge, elevator, as well as the lobby that connected the garage to the terminals. The project cost was \$2.25M.

Buckhannon Readiness Center, Buckhannon, WV

Design Charrette and a comprehensive feasibility study for 4 buildings and the campus. The project cost was \$53M est.

Lewis County Courthouse, Weston, WV

Performed a feasibility and space planning study for the Judicial Annex Addition. Project Cost was \$7M est.

Additional Project Experience

- Batesville Mississippi Civic Center Renovations/Upgrades/ADA
- WV Emergency Response Center WV Miner's Health Safety and Training (\$5M Facility)
- WV Golf Hall of Fame Museum and Golf Association Offices (\$1.5M)
- Camp Dawson in Preston County Rappel Tower, Field Leadership Reaction Course and Building
- Holiday Inn Express Exterior Renovations and Upgrades, Charleston, WV
- Mountain State University Student Center, Gymnasium, Parking Facility feasibility Study \$20.5M est.
- Marshall University Old Main Renovations
- Pt Pleasant River Museum
- WV State Cultural Center Museum
- Ripley Elementary School Addition
- Fairplain Elementary School Addition





Role Civil Engineer

Professional Registrations
Professional Engineer (WV, IL)
Professional Surveyor (WV)

Areas of Specialization

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

Project Experience

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

- Residential subdivisions
- Commercial developments

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

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

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

- 400 bed housing project
- Biotechnology Center
- Fifth Avenue parking and 6th Avenue parking facility
- Jomie Jazz Center
- Childcare Center
- Mid-Ohio Valley Center
- Campus landscape master use plan
- Campus improvements project

Education

M.S., Civil Engineering, West Virginia University, 1979

B.S., Civil Engineering, West Virginia University, 1978

Employment History

1997 - Present, VP, Potesta

1994 - 1997, Terradon

1979 - 1994, GAI Consultants

1978 - 1979, West Virginia University

- Environmental/Technical Committee member – West Virginia Coal Association
- Environmental Committee member Kentucky Coal Association
- Past Board of Directors member and current Waste Team Chairman on the Environmental Safety and Health Committee – West Virginia Manufacturers Association
- Environmental and Safety Committee member – Independent Oil and Gas Association of West Virginia
- Environmental Committee member West Virginia Oil and Natural Gas Association
- Past President West Virginia Society of Professional Engineers, Professional Engineers in Private Practice
- Past President and past Board of Directors member – American Council of Engineering Companies West Virginia Chapter

- MU Graduate College South Charleston campus
- Student Center and Henderson Center
- Bookstore addition
- University Heights

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

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

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

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

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

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

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

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

Tucker County Industrial Park – Principal-in-Charge for the design which included water and sewer lines, stormwater management design, roadway design, pavement design, site grading plan, master plan, and geotechnical exploration/foundation recommendations.

Principal-in-Charge for site grading plans, stormwater management system, site surveying, roadway/parking lot design, wetland delineation/mitigation, and construction monitoring for the 400,000 square foot Coldwater Creek distribution center in Parkersburg, West Virginia.

Christopher Grose





Role
Site Design and Floodplain Compliance

Professional Registrations Licensed Remediation Specialist (WV)

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

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 included slope stability of both cut and fill slopes in soil and rock for various well production pads in northeastem 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.

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

Education

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

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

Employment History

1997 - Present, Potesta 1994 - 1997, Terradon 1990 - 1994, GAI Consultants

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

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.

Project Experience

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

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.

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.





Role Lead Surveyor

Professional Registrations
Registered Land Surveyor (NC, SC, WV)

Areas of Specialization

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

Project Experience

Merritt's Creek Connector Road, WVDOT —Preliminary route survey of four-lane roadway. Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, stake proposed centerline, tie to properties, set and reference construction control points in Barboursville, West Virginia.

Benton's Ferry Bridge Replacement, WVDOH -Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Fairmont, West Virginia.

Corridor H, WVDOH, Section 16 – Project Manager for route/location/design survey in Elkins, West Virginia.

Tablers Station, WVDOH – Project Manager/Crew Chief for route/location/design survey in Berkeley County, West Virginia.

North Bridgeport Connector Road, WVDOH – Crew Chief/Project Manager for work that included GPS control survey of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points, courthouse research, property owner questionnaires in North Bridgeport, West Virginia.

Corridor H, WVDOH, Section 15 – Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Elkins, West Virginia.

Education

A.S., Land Surveying, Glenville State College

Employment History

1999 - Present, Professional Surveyor, Potesta

1993 - 1998 - Dunn Engineers

- North Carolina Society of Land Surveyors
- South Carolina Society of Land Surveyors
- West Virginia Association of Land Surveyors
- American Congress on Surveying and Mapping
- West Virginia Association of Land Surveyors, Greater Kanawha Valley Chapter, President 2003
- West Virginia Society of Professional Surveyors, Board of Directors 2005-2006

Corridor D, WVDOH, Martown Section – Crew Chief/Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Parkersburg, West Virginia.

Martha Truss Bridge Replacement, WVDOH – Crew Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Milton, West Virginia.

Martha Girder Bridge Replacement, WVDOH –Crew Chief/Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Milton, West Virginia.

Smith Bridge – Project Manager for work that included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Wetzel County, West Virginia.

Opaquen Bridge, WVDOH – Project Manager for work included topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points in Wetzel County, West Virginia.

King Coal Highway, WVDOH - Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Mingo County, West Virginia.

Sharon Heights Connector Road, WVDOH - Project Manager for work that included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points in Mingo County, West Virginia.





Role Project Manager

Professional Registrations Registered Architect (WV)

Mr. Pauley is responsible for overseeing the daily design and production of the building, working in conjunction with in-house architectural, interiors and engineering staff to ensure the building not only meets the program requirements and budget, but meet the long-term needs of the owner. He also works directly with project principals to manage contracts, staffing and project deliverables. Mr. Pauley has a broad knowledge of building materials and services, building codes, and construction techniques, along with extensive experience in architectural detailing.

Mr. Pauley began his career in 1992 with an architectural firm in Atlanta, Georgia, and for the next 12 years rose to the Associate level by designing and managing a wide variety of project types including educational, retail, historic renovation, medical, and entertainment, specializing in office and speculative office design.

From 2005 through 2010, he worked at a number of Atlanta firms designing and managing office, high-rise condominium, and hotel projects. In 2010, Mr. Pauley moved back to Charleston, WV, to take a project management position with ZMM where he supervises the design and production of military, correctional and higher education projects.

Project Experience

Valley Park Community Center, Hurricane, WV

Mr. Pauley is currently serving as the project manager on the new 31,360 SF community center that will be the centerpiece of a multi-million dollar renovation to existing Valley Park in Hurricane, WV. Site work amenities being provided under a separate contract will include new baseball fields, soccer fields, tennis courts, playground space and additional parking. The project is being constructed for the Putnam County Parks and Recreation Commission with funds supplied by the Putnam County Commission. The Community Center entrance is highlighted by a large, exposed wood truss bearing on tall, battered stone columns. These wood beams are featured at all entrances and carry into the meeting room prefunction to provide a fully-exposed, open wood structure. The majority of the building perimeter is brick veneer with the taller meeting room and entrance separated by cast stone banding. Beech

Education

Bachelor of Architecture, University of Tennessee, 1992

Associate of Science, West Virginia Institute of Technology, 1986

Employment History

2010 - Present, Project Manager, ZMM 2008 - 2010, Project Manager, GA Firm 2006 - 2008, Project Manager, GA Firm 2005 - 2006, Sr. Project Architect, GA

Jan 2005 - Aug. 2005, Project Architect, VA Firm

Civic Affiliations

 American Institute of Architects, Member Fork State Park, Lavalette, WV

Mr. Pauley is the project manager for new lodge and conference center at Beech Fork State Park. The facility will include guestrooms and other guest-only facilities in one area and public functions such as the restaurant, lounge, gift shop, and conference rooms in another area. All guestrooms offer a lake view, a 2-story atrium opens up each end of the lobby with curtain-wall glazing, and an indoor pool provides a transparent connection to the outdoors. A high-performance envelope was designed to eliminate thermal bridging and the potential for condensation.

Charleston Civic Center, Charleston, WV

Mr. Pauley is serving as project manager on the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tysdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

Morgantown Readiness Center, Morgantown, WVMr. Pauley was the project manager for the 58,000 square foot multi-use facility which includes assembly rooms, kitchen and dining facilities, military supply storage as well as locker rooms. The building is also designed to house the 249th Army Band and their associated practice and support spaces. This area is highlighted by a 150-seat auditorium and state-of-the-art main rehearsal stage. This project is aiming for LEED Silver Certification.

Valley Health Systems, Wayne, WV

Mr. Pauley was the project manager on the new health clinic in Wayne, WV. ZMM prepared construction documents for a new, one-story medical building operated by Valley Health Systems of Huntington, WV. The building is 15,580SF on a 2-acre site including approximately 100 parking spaces. Valley Health Systems provides primary and preventative care to the medically underserved population of southern West Virginia. The new building will replace an existing undersized facility.

Bridgemont Community and Technical College - Master Plan, Montgomery, WV

As part of an effort to provide overall Master Plan services to Bridgemont CTC, ZMM worked with various stakeholders to develop a Master Plan for Bridgemont's current and future facilities at the Tech Park. The Master Plan incorporated the need to develop a consistency between Bridgemont's Montgomery and South Charleston campuses, while also integrating the Bridgemont brand into the Park. The final design included planning for a new classroom and laboratory building adjacent to Building 704, across from the Advanced Technology Center. Signage, site circulation, parking, and campus amenities were also included in this planning process.

WVU Institute of Technology, Montgomery, WV

Mr. Pauley was the project manager responsible for owner coordination and construction document production for renovations to the Engineering Classroom Building at the WVU Institute of Technology campus in Montgomery, WV. The main project scope included various minor interior renovations to the existing 44,000 SF building in support of the Owner's replacement of the building's two elevators. Coordination was critical between ZMM, WVU, the owner's elevator supplier & installer and the WV Division of Labor.

WV Lottery Headquarters, Charleston, WV

Mr. Pauley is the project manager for a design team that is currently preparing construction documents for renovations to the existing WW Lottery Headquarters complex in Charleston, WV. Renovations to the existing 12-story office building include the demolition and reconstruction of three floors of tenant space and demolition and replacement of the existing roof along with various minor renovations throughout the office tower. The existing 5-story parking deck will undergo an extensive structural renovation, includes: replacing bearing pads, patch & repair of concrete members and the addition of waterproofing protection. The existing warehouse under the parking deck is being enlarged to provide additional storage space.

Nathan Spencer, AIA





Role Architect

Professional Registrations Registered Architect (WV)

Mr. Spencer is responsible for coordinating the efforts of the design team in preparing thorough and clear design documents. He has experience in all phases of design working on a wide range of building types including; military, educational, office, justice, and residential.

He has worked on several projects that are currently pursuing LEED certification. In addition to production, Mr. Spencer, is also experienced in 3d modeling. He has worked on several preliminary concept study models as well as high quality renderings and 3d models later in the design process. Mr. Spencer is also experienced in high quality physical models.

Mr. Spencer began his career in architecture with ZMM in 2003, working as a summer intern. After graduating in 2003, he began working at ZMM full time.

Project Experience

Edgewood Elementary School, Charleston, WV Mr. Spencer participated on the design team that developed the new Kanawha County Elementary School on Charleston's West Side. The school was designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school integrates sustainable design principles to serve as a teaching tool for the students. A dental and health clinic is also on site for all enrolled students in the Kanawha County School District.

Cabell County Bus Transportation Complex, Huntington, WV Mr. Spencer was the project Architect on the Cabell County Transportation Complex is located on the site of the old Cox Landing Junior High School. Challenges on the project involved retrofitting the old school and site to accommodate the new use. The rear portion of the school was demolished to make room for the new maintenance portion of the building. The remaining front section of the school was renovated to include office space, storage areas, and a new staff development room. The new maintenance area includes a

Education

Bachelor of Architecture, University of Tennessee, 2007

Employment History

2009 - Present, Architect, ZMM 2007 - 2009, Intern Architect, ZMM 2003 - 2007, Summer Intern, ZMM

Civic Affiliations

 American Institute of Architects, Member high-bay metal building with 14 back to back workbays, three of which have hydraulic bus lifts. A hand wash bay and a state of the art automatic wash bay were also included in the project. Extensive sitework was also involved in the retrofit project including a fueling station, bus parking, a sediment pond, and an extensive rework of the existing site utilities.

Highland Hospital, Charleston, WV

Mr. Spencer was the project architect on Highland Psychiatric Hospital. Mr. Spencer was responsible for coordinating the production effort for the 60,000+ SF mental health facility. Mr. Spencer also produced several 3-D models throughout the design process. This project consisted of 87,300 SF, \$26M addition to Highland Hospital in Charleston. The addition will include: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge will connect the new facility to the existing hospital.

Logan-Mingo Readiness Center, Holden, WV

Mr. Spencer was the architect on the new Logan-Mingo Readiness Center. The exterior aesthetic of the facility was driven by the location within an industrial park on a reclaimed surface mined site. The building layout was developed by working closely with the end-users to determine the appropriate configuration of building spaces to maximize the efficiency of the operations, and to respond to the unique missions of the 150th Armored Reconnaissance Squadron and the 156th Military Police (LNO) Detachment. Clear separation of "public" and "private" areas within the facility, unique office configurations related to training requirements, and the addition of State Funded additional spaces.

Jackson County AFRC, Millwood, WV

Mr. Spencer participated in the schematic design of the 76,000 SF Reserve Center in Jackson County, West Virginia. Mr. Spencer was also responsible for coordinating the production effort for the project. Mr. Spencer also produced several 3D models throughout the design process. The project is aiming for LEED Silver Certification.

Joint Interagency Education and Training Center (WVARNG), Kingwood, WV Nate participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Spencer was also responsible for coordinating the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. This project received LEED Gold Certification.

Morgantown Readiness Center, Morgantown, WV

Mr. Spencer was a member of the production team for the 58,000 SF project, which housed the Army Band and associated performance spaces. Mr. Spencer also produced several 3d models throughout the design process. He also participated on all production work through all phases. The project is aiming for LEED Silver Certification.

Tucker County Courthouse Annex, Parsons, WV

Mr. Spencer was the project architect for the Courthouse Annex renovation project. The Annex is a 4-story 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

Judge Black Courthouse Annex, Parkersburg, WV

Mr. Spencer assisted with the design and programming of the adaptive reuse of a former commercial space and movie theaters into a modern courthouse annex. The Judge Black Annex included two independent circulation paths – a secure entry and lobby for access to the Family Court and Prosecuting Attorney, and public access to the Assessor and Sheriff's Tax Department. The facility also houses several large public meeting rooms.

Additional Projects:

Charleston Civic Center, Charleston, WV Wayne High School, Wayne, WV Crum PK-8 School, Crum, WV





Role Site Design

Professional Registrations Professional Engineer (WV)

Ms. Cleland is responsible for the site design for ZMM projects. She coordinates with the project architects and mechanical and electrical engineers to integrate the site layout with the building requirements. Ms. Cleland works with the client and the architect to plan the site circulation, parking, and green space. She is responsible for storm water management and utility layout. For sites with environmental concerns, Ms. Cleland coordinates with the appropriate agencies and assists in permit applications.

Ms. Cleland began her career as a 2nd Lieutenant in the US Air Force as a project engineer for aerospace projects. After serving four years in the Air Force, she moved back to West Virginia and began her career in civil engineering. She began assisting lead engineers at an environmental and engineering consultant firm with air quality permitting, utility extension projects, and site development projects. After gaining experience at the consultant firm, Ms. Cleland joined ZMM as the civil engineer for the firm. She has experience with urban and rural site, storm water management system, and site design.

Project Experience

General Services Division – Surplus Property, Dunbar, WV Ms. Cleland was the civil engineer on the Surplus Property. This property consists of a new 20,000 SF metal building storage facility inclusive of 5,000 SF of new administrative offices. The new building replaces the existing structures currently located in the floodplain, and addressed several site issues including proper drainage, traffic flow, and correct floor elevations in regard to current floodplain requirements. The demolition of the existing structures along with the new construction will be phased to maintain continuous operation of the facility.

Tackett Family Readiness Center, Charleston, WV
Ms. Cleland was responsible for site design for a two story
building located on a hillside. Due to the existing slopes,
several analyses to determine the optimal finished floor
elevations of the building. The building was set into the hillside
to allow for on-grade access to both entrances. The access
road was design with handicap parking at both entrances. The

Education

Bachelor of Science in Education, West Virginia State University, 2001

Bachelor of Science in Aerospace Engineering, United States Naval Academy, 1993

Employment History

2016 - Present, Civil, Engineer, Board of Directors, ZMM 2009 - Present, Civil Engineer, ZMM 2002 - 2009, Project Engineer, Potesta & Associates, Inc. 1993 - 1997, Aerospace Engineer, United States Air Force

- National Society of Professional Engineers
- West Virginia Society of Professional Engineers

client wanted the building to have the least impact as practical for the site development. A large segmental block wall was utilized to limit disturbance of cut slopes.

Girl Scouts of Black Diamond Council, Charleston, WV

Ms. Cleland was the civil engineer on the new Volunteer Resource Center and Girl Zone/Urban Camp in Charleston, WV. The 18,000 SF project completely renovated an old car dealership into administrative offices, a community gathering space, and a small hotel (Urban Camp) for Girl Scouts visiting the Charleston area. This new main building brings all the operations of the Girl Scouts of the Black Diamond Council under one roof.

Mary C. Snow Elementary School, Charleston, WV

Ms. Cleland was responsible for the site design and stormwater management for this site located within a city block. The site utilities were readily available and minimal grading was required for this site. The challenge was the stormwater management requirements. The pre-construction site conditions were a small school building and a large play field took up most of the site. The post- construction site conditions were the opposite creating a significant increase in stormwater runoff rate. A stormwater retention system was designed to infiltrate the majority of the stormwater and recharge the groundwater.

Edgewood Elementary School, Charleston, WV

Ms. Cleland was the civil engineer on the new Edgewood Elementary School. Ms. Cleland was responsible for the site development including utility extensions and relocations, stormwater drainage design, site pedestrian and traffic circulation, and parking area layout. The school was designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school integrates sustainable design principles to serve as a teaching tool for the students.

Harts PK-8 School, Harts, WV

Ms. Cleland was responsible for site design and permitting. The site was constrained by the Guyandotte River, State Route 10, and an unmarked cemetery in the middle of the site. The site was laid out to avoid disturbance of the cemetery and create a building pad and access roads to satisfy the client, State Fire Marshall, and vehicular circulation. The site preparation package included building pad grading, rough site grading, and storm water management. Ms. Cleland coordinated with the local utility agencies, WV Department of Transportation, the United States Army Corps of Engineers, the local floodplain manager, and the WV Department of Environmental Protection.

Bridgemont (BridgeValley) Community and Technical College - Master Plan, Montgomery, WV Ms. Cleland was the civil engineer on the overall Master Plan services to Bridgemont CTC, ZMM worked with various stakeholders to develop a Master Plan for Bridgemont's current and future facilities at the Tech Park. The Master Plan incorporated the need to develop a consistency between Bridgemont's Montgomery and South Charleston campuses, while also integrating the Bridgemont brand into the Park. The final design included planning for a new classroom and laboratory building adjacent to Building 704, across from the Advanced Technology Center. Signage, site circulation, parking, and campus amenities were also included in this planning process.

Project Experience with Other Firms: Ms. Cleland assisted with site development projects, utility extensions, pump station design, outlet structure design, and wastewater treatment plant design prior to coming to ZMM. In the eastern panhandle of West Virginia, Ms. Cleland designed the site layout and utilities for a planned hill side community with phased development plans. She assisted on the site utilities and sanitary sewer extension project for a two schools in Southern West Virginia.

Ms. Cleland also has experience with environmental investigations and air quality permitting. She assisted industrial clients with preparation and assembly of air permit application to the West Virginia Department of Environmental Protection. Ms. Cleland coordinated with the agencies through to permit issuance.

Samuel Butzer, PE, LEED AP BD+C





Role Mechanical Project Engineer

Professional Registrations
Professional Engineer (WV, WI, IL)
LEED Accredited Professional

Mr. Butzer is a registered Professional Engineer with design experience in HVAC, Piping (Mechanical, Industrial, Laboratory, Medical Gas), Fire Protection and Plumbing systems. He has been responsible for an extensive range of projects that include Hospitals, Civic Complexes, Laboratories, Medical and Dental Office Buildings, Retail, Military Installations, Churches, Restaurants, K-12 Schools, Higher Education Facilities, Pharmaceutical Manufacturing, Natatoriums and Historical Renovations.

Mr. Butzer began his career in engineering with a mechanical contractor located in Wisconsin. His collective engineering experience includes projects that were design-build, design-assist and plan & spec. His background in engineering and 3D BIM design and coordination has provided him with extensive experience in the "real world" of HVAC and piping constructability. That experience has forged him into a leader at the integration of all construction disciplines into a multitude of building types and space constraints.

Mr. Butzer's dedication to the community and his civic affiliations demonstrates a strong connection to the engineering principles of energy efficiency, sustainability, occupant comfort and health.

Project Experience

Charleston Civic Center, Charleston, WV

Mr. Butzer is the Mechanical Project Engineer on the expansion and renovation to the Charleston Civic Center project. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018. The mechanical design is expected to reduce the energy requirements defined by ASHRAE 90.1-2013 by an estimated 25% and extensive water savings will be shown. The project includes a new chilled and hot water central plant with extensive replacement and upgrades to the facilities existing mechanical systems. Multiple phases of construction will allow the Civic Center to remain operational throughout the construction progress.

Education

Bachelor of Science, Mechanical Engineering, University of Wisconsin at Madison, 2007

Associate of Science, Madison Area Technical College, Madison, WI, 2004

Employment History

2018 - Present, Board of Directors, ZMM 2013 - Present, Project Engineer, ZMM 2007 - 2013, Mechanical Engineer, WI 2005 - 2007, Mechanical Engineer Intern, UW-Madison FP&M

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), President of West Virginia State Chapter
- United States Green Building Council (USGBC), Board Member of West Virginia State Chapter
- Marshall University Engineering Advisory Board Member
- Kanawha City Community Association Board Member

Harrisville Elementary School, Harrisville, WV

Mr. Butzer was responsible for designing the HVAC systems for the renovation and additions to the elementary school. Initial design development consisted of variable refrigerant flow (VRF) systems coupled with dedicated outdoor air (DOAS) systems for the Classrooms and Administration areas. Roof mounted air conditioning and exhaust equipment were provided for the new Cafeteria, Kitchen and existing Gymnasium. Budget and space constraints forced the design to evolve into individual, self-contained, interior air handling units for each Classroom. The units were able to meet ASHRAE 62.1 requirements for ventilation, the Acoustical Society of America's (ASA) requirement for sound, and every other standard such as individual classroom temperature and dehumidification control as set forth by the School Building Authority (SBA).

Appalachian Regional Hospital, Beckley, WV

Mr. Butzer is the Mechanical Project Engineer currently working with the hospital on multiple renovations. The ICU and OR departments will undergo Mechanical and Architectural upgrades in a multiphase project while the hospital remains operational. The existing kitchen will receive a new make-up air unit, and fan coil units to improve pressure and air balance relationships within the hospital. A dedicated HVAC unit was provided for the endoscopy suite to improve thermal comfort and provide code-required ventilation, air-changes and humidity.

Glenwood Elementary School, Princeton, WV

Mr. Butzer was the Mechanical Project Engineer for this successful project that came in under budget, ontime and with zero change orders. The first phase was duct cleaning and sealing that improved indoor air quality and reduced system demand by 8 tons. The second phase was the HVAC improvements which replaced all existing constant volume, single compressor, multizone, air handling units (AHUs) with new variable speed, multi-compressor AHUs. VAV terminal units were installed to create separate zones for each classroom. A new building automation system was provided for system controls and to incorporate the facility into the existing county-wide controls network. All electric heating was abandoned to maximize use of the hot water heating system. Mechanical upgrades saved the school an estimated 18.5% in the electric usage and provided them with over \$13,000 in rebates from the electric utility.

Nicholas County Courthouse, Summersville, WV

The Nicholas County Courthouse is a Historic building constructed in 1898 with an addition executed by the Works Progress Administration in 1940. The courthouse was added to the U.S. National Register of Historic Places in 1991. Mr. Butzer led a project team responsible for upgrading an existing 2-pipe fan coil system into a 4-pipe system to provide simultaneous heating and cooling and meet the climate and comfort needs of specific occupants. A new 4-pipe system, variable speed pumps and 3-way valves were provided in the basement to achieve integration of the new system into the existing. Construction had to be phased to allow installation of the new heating loop while the existing system remained in cooling operation; the new cooling loop would be installed once the building switched over to the new heating loop. Welding and soldering were not allowed so materials such as PEX, pressure-seal copper and mechanical joint steel piping were specified. A new Building Automation System with most of the communication occurring wirelessly was chosen to minimize disturbances to the historical architecture of the building.

Gestamp West Virginia, South Charleston, WV

Mr. Butzer led a design team that was tasked to provide a mechanical system to separate out, or divert hydraulic fluid collected along with chilled water released from immense, automobile component stamping machines. The design included an aboveground oil-water separator, density meters, 3-way valves, storage tanks and a controls system to monitor fluid flow and guarantee separation or storage of non-compliant sanitary discharges.





Role Electrical Engineer

Professional Registrations Professional Engineer (WV)

Mr. Casdorph serves as an Electrical Engineer with ZMM providing electrical design services for a vast number of projects consisting of commercial, educational, correctional, institutional, and military facilities.

Mr. Casdorph is responsible for many facets of the project pertaining to electrical design such as interior and exterior lighting, power distribution, data system design, security, fire alarm, low voltage control systems, equipment specifications and performs electrical assessments during construction prior to the project's substantial completion date. Mr. Casdorph has participated on several LEED registered projects using energy conserving methods and utilizing lighting control systems and other means to meet or exceed ASHRAE 90.1, LEED, and energy code requirements.

Project Experience

Charleston Civic Center, Charleston, WV

Mr. Casdorph is the electrical engineer on the expansion and renovation to the Charleston Civic Center project. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

Southside Elementary and Huntington Middle School, Huntington, WV Mr. Casdorph was the electrical engineer on this 156,000 SF facility. This project encompasses all phases of construction; demolition, major renovation and new construction. The original historic 26,000 SF three story school building was preserved and the remaining less than adequate facility was strategically removed to accommodate the new addition. The existing facility was completely renovated and brought up to new construction standards to blend with the new addition. The project consisted of two distinct school facilities existing on the same piece of property. The new construction blends seamlessly with the older historic structure.

Gauley River Elementary School, Craigsville, WV Mr. Casdorph was responsible for the electrical design of the new elementary school. The project is consolidating Beaver

Education

Bachelor of Science, West Virginia Institute of Technology, 1995

Employment History

2000 - Present, Electrical Engineer, ZMM 1995 - 2000 Electrical Controls Systems Manager, WV Engineering Firm Elementary School and Craigsville Elementary School into a new 375-student school. The school houses 3 Pre-Kindergartens, 3 Kindergartens, 2 first grade, 12 1st-5th grade classrooms, activity room, cafeteria, kitchen, media center, and administration spaces.

Lincoln County High School, Hamlin, WV Mr. Casdorph was responsible for the electrical power distribution throughout the 216,000 SF facility containing high school classes, vocational education, technical community college classes and a community health clinic. The project was a 2007 AIA Honor Award Winner.

Milton Middle School, Milton, WV Mr. Casdorph was responsible for the electrical design of the new 96,000 SF facility housing 700 middle school students grades 6 through 8.

Fort Gay PK-8 School, Fort Gay, WV

Mr. Casdorph was the electrical engineer and was responsible for the electrical power distribution and design. The New Fort Gay PK-8 School replaces the existing facility that has been in disrepair and lacking the spaces and technology delivery system required for 21st century learning skills. The total enrollment for the school is 603 Students. The new grade configuration separates the Elementary students from the Middle School students, but still allows use of the common spaces within the building. They share the Dining Room, Gymnasium, Media Center and a Stage.

Southern WV Community & Technical College, Williamson WV Mr. Casdorph was responsible for the electrical power and lighting distribution design of this 22,000 SF higher education facility. This project is being designed to meet the USGBC LEED Silver.

Joint Interagency Education and Training Center (WVARNG), Kingwood, WV Mr. Casdorph was responsible for the electrical design of the 180,000 SF 3-story billeting/hotel expansion for the Army National Guard campus style facility for training and operational mission support. The expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. This project reached LEED Gold Certification.

West Virginia Research, Education, and Technology – Building 704, South Charleston, WV Mr. Casdorph is the electrical engineer for building 704 and responsible for electrical power and lighting distribution. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

West Virginia Housing Development Fund Office, Charleston, WV Mr. Casdorph was responsible for the electrical design of the 37,000 SF office building which provides natural daylighting into its interior spaces coupled with an automatic dimming system and motorized shade controls. This 2-story administrative facility houses approximately 95 to 100 employees with a flexible open office floor plan utilizing modular under-floor wiring to accommodate any future modifications of the workspace with minimal disruption to the employees. The project is targeted for LEED Silver Certification.

Jackson County Armed Forces Reserve Center, (WVARNG), Millwood, WV Mr. Casdorph was responsible for the electrical design of the 76,000 SF single story military reserve center which serves both the West Virginia Army National Guard and the United States Army Reserves (USAR) units. The multi-use facility provides educational spaces for classrooms, distance learning, physical training and a weapons simulation center. The project is targeted for LEED Silver Certification.

Glen Jean Armed Forces Reserve Center, (WVARNG), Glen Jean, WV Mr. Casdorph was responsible for the electrical design of the 102,000 SF military training facility which houses the Armed Forces Reserve Center (AFRC), Military Entrance Processing Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the administrative and training space for the 77th Brigade Troop Command, the 1863rd Transportation Company, and the 150th Armored Regiment Company. The MEPS houses their administrative, medical, headquarters, testing and storage functions at the facility. A comprehensive 8,500 SF OMS vehicle maintenance shop provides space for six large service workbays for maintaining the military fleet.





Role Mechanical Engineer

Professional Registrations
Professional Engineer (WV, IN)
LEED Accredited Professional

Mr. Pruett is responsible for overseeing the design of the HVAC systems, ensuring that the HVAC systems not only meet the program requirements, but meet the long-term needs of the owner. He performs heating and cooling load calculations and recommends the type of systems to be incorporated into the building. He coordinates with the other disciplines in order to integrate the HVAC systems into the building. Mr. Pruett has participated on several LEED registered projects; one of his key contributions to these projects is conducting energy analyses and recommending energy use reduction alternatives.

Mr. Pruett began his career in engineering with a manufacturing company in 1994. In 1998, he made a career change and joined an engineering consulting firm as an HVAC design engineer. He has a broad range of experience in HVAC systems design, including K-12 schools, higher education facilities, office buildings, libraries, hotels, restaurants, a convention center and several natatoriums. Having served in the Marines for 14 years, Mr. Pruett also led a design team for a "virtual memorial" for the birthplace of the U.S. Marine Corps.

Project Experience

Huntington East Middle School, Huntington, WV Mr. Pruett was responsible for the HVAC systems design. This school features numerous sustainable features, including an air monitoring system for verifiable indoor air quality, variable refrigerant flow (VRF) systems for portions of the school that will operate year-round, preheating of the domestic hot water with the heating hot water return. Mr. Pruett also conducted an extensive energy analysis of the building and all of its systems to maximize the effect of each component, resulting in a projected reduction in energy consumption of 32% compared to a baseline analysis.

Edgewood Elementary School, Charleston, WV Mr. Pruett was the mechanical engineer on the new Kanawha County Elementary School on Charleston's West Side and responsible for the HVAC systems design. The school is being designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium'

Education

Bachelor of Science, Purdue University, West Lafayette, IN, 1993

Employment History

2010 - Present, Project Engineer, ZMM 2007 - 2009, Sr. Mechanical Engineer, IN

2003 - 2007, Mechanical Engineer, IN 1999-2003, Project Engineer, Fort Lauderdale, FL

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Member
- United States Marine Corps 14 Years

that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students.

Wood County Justice Center, Parkersburg, WV Mr. Pruett was responsible for the HVAC systems design for the LEED Silver project comprised of the judicial courts, Sheriff's department and holding cell area. The project utilizes high-efficiency custom air handling units, including an energy recovery unit for the holding cell area, which has helped reduce energy consumption on the project by 18% compared to a baseline analysis.

Tucker County Courthouse Annex, Parsons, WV

Mr. Pruett was the Mechanical Engineer for the Courthouse Annex renovation project and responsible for the HVAC systems. The Annex is a 4-story, 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

Current Education Experience

Explorer Academy
John Adam Middle School
Salt Rock Elementary School

Project Experience with other firms

Southern Indiana Career and Technical Center (SICTC), Evansville, IN Mr. Pruett was responsible for the HVAC systems design for the 262,000 square foot facility. The project features a complex air system necessitated by the diversity of the educational programs featured in the facility: welding, auto shop, building trades, electronics, radio/TV communications, culinary arts, etc. The main mechanical room was also designed to be an educational space, utilizing color-coded piping, a corresponding color-coded equipment schematic and an accessible controls workstation to aid the students in learning about building systems.





Role Interior Designer

Mrs. Chapman serves as the Interior Designer at ZMM. Mrs. Chapman takes pride in her work's originality and always strives to help the client's vision and intent come alive in the design process. Her experience at ZMM includes Education, Municipal, Residential, Healthcare, and Hospitality projects. In her past position she focused on both Corporate and Healthcare design. Mrs. Chapman's responsibilities include conducting design proposals and presentations, as well as producing design documents and specifications relating to all aspects of interior design.

Project Experience

Mrs. Chapman has served as the interior designer for a variety of projects. Projects range from renovations to new construction and is comprised of every industry. Her responsibilities include design concept, presentation, documentation, specification writing, and architectural drafting.

Fayette County Schools, PK-2 & New Collins Middle, Oak Hill, WV

These schools were designed as separate schools sharing the same site and are connected by a mechanical wing. This building called for a challenging design concept. The schools each had their own unique design theme, but were delicately connected in small aspects of color or architectural techniques, allowing the interiors to flow seamlessly.

Charleston Civic Center, Charleston, WV

Mrs. Chapman is currently assisting in the construction administration and interiors of the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. Construction is scheduled for completion in 2018.

ARH Chemotherapy, Beckley, WV

This project was a renovation of a hospital wing to be redesigned for optimal health and wellness for patients undergoing chemotherapy treatment. Both aesthetics and general sanitary design requirements were crucial to making this project successful.

Valley Park Community Center, Hurricane, WV

The new community center will be replacing an existing structure that was recently demolished earlier this year. The

Education

Bachelor of Interior Design, University of Charleston, 2012

Employment History

2016 - Present, Interior Designer, ZMM 2012 - 2016, Project Manager/Interior Designer, Contemporary Galleries, Inc. 2003 - Present, Architect, Project Manager, ZMM 2010 - 2012, Interior Design Intern, ZMM new building will house a commercial kitchen, administration wing, ballroom, and a locker room complex with administration quarters for the attached Wave Pool.

Charleston Edge, Charleston, WV

The Charleston Edge renovation focused on bringing life to an old existing structure in the heart of downtown Charleston. The concept of the design was to create contemporary living quarters for the young urbanites of the city, while also providing a communitive atmosphere by including a rooftop gathering space for locals to enjoy.

CAMC Post Op, Teays Valley, WV

This project was a renovation of a hospital wing to be redesigned for recovery of Post Operation patients. This project included patient rooms, nurse's stations, and designing the space for optimal health and wellbeing.

Clarksburg, Richmond, Huntington, Salem VA Hospitals

During previous employment, Mrs. Chapman was heavily involved with renovations to various VA hospitals. Renovations included redesign implementing DIRTT wall systems, renovations to nurse, admirative and patient areas, as well as common's areas.





Role Plumbing/Mechanical Technician

Mr. Flowers is responsible for the design of Plumbing systems, ensuring that the systems are designed to meet the needs of the owner and utilize the latest plumbing technologies to provide the most energy efficient design possible. Mr. Flowers has participated on several LEED registered projects; one of his key contributions to these projects is selecting plumbing fixtures and accessories in his design that require less utility consumption, so significant utility savings are passed on to the owner and the environment as well.

Mr. Flowers has had extensive experience in the field of construction where he frequently visits ZMM's current projects under construction and thoroughly checks the contractors work to ensure compliance with project specifications and construction documents.

Project Experience

Mr. Flowers has a broad range of experience and knowledge in Plumbing and HVAC systems design. His experience includes K-12 Schools, Higher Education Facilities, Military Facilities, Office Buildings, and Juvenile and Adult Correctional Facilities.

- Morgantown Readiness Center
- Logan-Mingo Readiness Center
- Huntington East Middle School
- Southern WV Community & Technical College
- Lincoln County High School

Jackson County Armed Forces Center (WVARNG): Mr. Flowers was responsible for the plumbing design on this project that utilized plumbing fixtures that reduced the total annual water usage by 30% as compared to using standard plumbing

fixtures.

His design also incorporated 98%efficient water heating technology that dramatically reduced the total utility consumption for water heating.

Education

Associate in Mechanical Drafting and Design, 1990, Ben Franklin Career and Technical Center

Associate in Electronics Technology, 1987, Putnam Career and Technical Center

Associate of Science, 1988, West Virginia State University

Completed Dale Carnegie course in Effective Communications and Human Relations and Skills for Success

Employment History

2001 - Present, Mechanical and Electrical Technician, ZMM 1998 - 2001, Mechanical and Electrical Designer/Manager of CAD Services, ZDS, Inc. 1991 - 1998, Mechanical and Electrical

1991 - 1998, Mechanical and Electrical Technician, ZMM

Civic Affiliations

 American Society of Plumbing Engineers (ASPE), Member Since 2009





Role Geotechnical Engineer

Professional Registrations Professional Engineer (WV)

Areas of Specialization

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:

Project Experience

Family Dollar Store – Berkeley Springs, WV 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 multistory 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

Eikins Dodge Dealership, Randolph County, WV Sam's Club Fueling Station – Clarksburg, WV •

Cheat Lake Elementary School Building Addition, Monongalia County, WV

Wal-Mart Fueling Station - Connellsville, PA

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

Education

M.S., Civil Engineering, West Virginia University, 1995

B.S., Civil Engineering, West Virginia University, 1993

Employment History 2003 - Present, Branch Manager/Senior Engineer, Potesta 2000 - 2003 - CTL Engineers, Inc MEPCO Dock Expansion Project, 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

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





Role
Construction Administrator

Professional Registrations

Mrs. Perry describes her role with ZMM as Construction Administrator as an exciting and invigorating opportunity with new experiences every day. From varying jobsite conditions to the differing professionals she encounters on a daily basis, Mrs. Perry approaches construction administration with a fresh set of eyes and desire to help provide the best outcomes possible for each project.

Mrs. Perry has nearly six years experience working as a Structural Engineer with two of those being a Project Manager. Structural engineering experience includes projects ranging from everything including \$135M university buildings down to residential homes and even historic restoration projects. Project variety includes Educational (K-12 and university), Commercial, Military, Office, Justice (Courthouses, Justice Centers, Police Department and Correctional), Multi-Use Residential, Civic (WWTP), Healthcare (Health Departments), Fitness (Gyms), Religious, Historic Restoration and an Arena. These projects are spread over Kentucky, West Virginia and Ohio.

Project Experience

Valley Park Community Center, Hurricane, WV
Mrs. Perry is serving as Construction Administrator of the new
Community Center building and renovation at Valley Park. The
\$15M construction project includes a new community building,
ball fields and a playground. Mrs. Perry is responsible for the
administrative duties, performing on-site observations and
tracking construction progress. Mrs. Perry collaborates with the
client, design team and contractors to confirm that project
guidelines are satisfactorily met. Substantial completion for the
project is set for May of 2018.

Ravenswood Middle School, Ravenswood, WV

Mrs. Perry is serving as Construction Administrator of the high school addition that will house the two-story Ravenswood Middle School making this the 20th facility in WV that will combine both high school and middle school students. This project is limited with available space as it is to fit into the existing high school footprint.

Midland Trail High School, Fayetteville, WV Mrs. Perry is serving as Construction Administrator of the six room high school addition that will include a STEM lab as well as other

Education

Bachelor of Science, Civil Engineering, University of Kentucky, 2003

Masters of Science, Civil Engineering, University of Kentucky, 2005

Employment History
2017 - Present, Construction
Administrator, ZMM
2009 - 2010, Design Engineer. Moment
Engineers, Charleston, WV
2004 - 2008, Engineer, Project Manager,
BFMJ Inc., Lexington, KY
2003 - 2004, Graduate Assistant,
University of Kentucky College of
Engineering

- Project Coordinator, Forrest Burdette UMC, Family Life Center
- Sunday School Teacher for Young Professionals
- Cub Scout Den Leader Pack 236

classrooms. The large space planned for the STEM lab will encourage hands-on exploration, learning, and technology integration. This addition will address the under utilization of Midland Trail as well as Anstead Middle.

Project Experience Other Firms

University of Kentucky Biopharmacy Building, Lexington, KY

Mrs. Perry worked as team member in the design the new \$134M College of Pharmacy Biopharmacy research building. The research facility builds on the state's initiative to address health challenges and disparities in KY. The building featured expansive auditorium style classrooms and a self-supporting stair, of which Mrs. Perry modeled and designed.

Kentucky Transportation Cabinet, DOH, District Five Office Building, Louisville, KY

Mrs. Perry acted as the Project Manager for this new office space for the Department of Highways. This project consisted of concrete and steel structural members. Mrs. Perry coordinated design efforts with a team of engineers, architects and the owner.

Moses Residence, Huntington, WV

Mrs. Perry was responsible for the structural design of the Moses Residence which includes ICF walls, timber, steel and concrete. This home is a zero net energy home and has platinum LEED certification.

Winfield H. Strock

Role

Construction Management/Estimator

Professional Registrations

Licensed Contractor (WV

Mr. Strock is a licensed contractor in West Virginia. When the West Virginia Contractor Licensing Act was passed in 1990, Mr. Strock was selected as Chairman of the Contractor Licensing Board and served in that capacity until his resignation in 1995. Mr. Strock's has served as Chief Estimator, Field Engineer, and Project Manager on multiple jobs. Mr. Strock has also been the Principal/ Owner of his construction company for 17 years.

Major Projects Estimated 2005-2012

Charleston Area Medical Center

Robert C. Byrd Clinical Teaching Center - \$70M CAMC Cancer Center - \$40M CAMC Memorial 48 Bed Addition - \$30M

West Virginia K-12 Schools

McDowell County Schools Relocation Program - \$50M Putnam County Schools Bond Program - \$65M Greenbrier West High School - \$21M Mingo County High School - \$27M Pikeview Middle School - \$16M Spring Mills Primary School - \$13M Edgewood Elementary School - \$16M

West Virginia Applied Technology Centers

Williamson, WV - \$6M Marion County, WV - \$14M

West Virginia Army National Guard Readiness Centers

Elkins, WV - \$22M Ripley, WV - \$11M Logan/Mingo Counties, WV - \$13M

New River Community College

Lewisburg, WV - \$6M Beckley, WV - \$17M

Employment History

1995 - Present, Principal, Construction Manager, Winfield Strock 1978 - 1995, Owner, President, Kenhill Construction Company 1965 - 1978, Field Engineer, Estimator, Project Manager, Messer Construction, Cincinnati, OH

- Associated General Contractors of America - Past Director
- Contractors Association of West Virginia - Past President/Director
- Kanawha Valley Builders Association
 Past President

References

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350 Capitol Street, Room 313
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Greg Melton (ZMM)
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