



October 14, 2014

Mr. Dean Wingerd, Senior Buyer  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
Charleston, West Virginia 25305-0130

**Subject: Pipestem Resort State Park Construction/Relocation of Park Laundry Facilities**

Dear Mr. Wingerd:

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 relocation of laundry facilities at Pipestem Resort State Park. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. ZMM's team for the project will include laundry consultant Sam Holdren. Mr. Holdren has significant experience working on laundry facilities at Beech Fork State Park, Canaan Valley, Hawks Nest, Twin Falls, and Cass Railroad. Our team will also include EL Robinson, a local firm that has significant experience designing wastewater treatment plants, and is currently teamed with ZMM on the new lodge at Beech Fork State Park. The final member of our team is Win Strock, another Beech Fork team member who will be providing independent cost projections for the Pipestem Laundry Relocation project.

In addition to Mr. Holdren's experience working on various WVDNR laundry facilities, ZMM has recently provided design services on two relevant laundry facility projects – the expanded laundry facility for the Joint Interagency Training and Education Center (JITEC) at Camp Dawson, and a new laundry facility for Highland Hospital that included wastewater capacity issues similar to those at Pipestem Resort State Park:

- The Regional Training Institute (RTI) at Camp Dawson was expanded into the (JITEC) increasing the number of billeting (hotel) rooms from 187 to 560 rooms. As part of the project ZMM and the project team had to investigate the ideal solution to expand the laundry. Laundry expansion in the current location, maintaining two laundry rooms, developing a new laundry room with new and used equipment, as well as a new laundry room with all new equipment were all considered and evaluated. Ultimately a new laundry room with new and used (refurbished) equipment was developed. Phasing of the laundry relocation project including the refurbishment of the existing equipment was critical to the success of the project.
- At the new Highland Hospital in Charleston ZMM's engineering team had to develop a laundry facility that did not place an additional burden on the existing wastewater system in the neighborhood. Ultimately ZMM and the Owner opted for a system that recycled the laundry water (saving both water and energy) as opposed to making expensive improvements to the wastewater infrastructure.

10/14/14 12:46:29PM  
West Virginia Purchasing Division

Thank you for taking the time to review the attached expression of interest which has been formatted per your request, and includes information regarding the history, services, personnel, experience, and qualifications of ZMM Architects and Engineers and our design team. Additionally, please visit our website at [www.zmm.com](http://www.zmm.com) to see the full range of projects that we have designed, and to learn about working with ZMM from a client's perspective. We appreciate your consideration for this important assignment.

Respectfully submitted,

**ZMM, Inc.**

A handwritten signature in dark ink, appearing to read 'A. R. Krason', followed by a long horizontal line extending to the right.

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

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**LOCATION:**  
5088 Washington St  
Charleston, WV

**CONTACT:**  
Phone 304.776.7473

## History

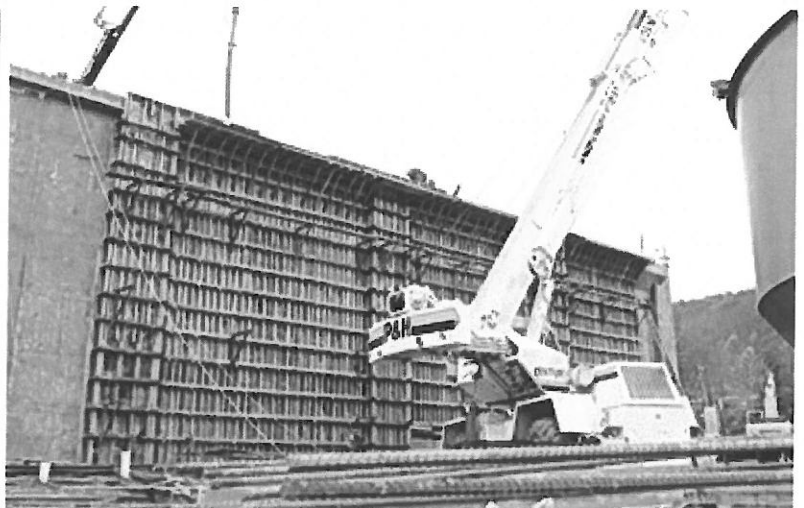
E.L. Robinson is a multi-disciplined engineering /planning firm with a staff of over 125 full-time professionals and support personnel located in seven offices throughout West Virginia (Charleston corporate office, Beckley and Chapmanville), Kentucky, and Ohio. Over the last 30 years, E.L. Robinson has grown to one of the largest firms in the region, offering a diverse scope of services. Since 1978, E.L. Robinson has provided a full range of quality engineering services, from planning and analysis to design and implementation

Named for its founder and president, Edward L. Robinson, P.E., P.S., the firm has based its success on a commitment to quality projects with superior client service. Finding new and creative ways to say yes to challenges has brought the firm's vision of excellence into reality. Along with this "yes, we can do it" attitude, the firm has grown to understand the ingredients of a professional service firm include not only brick and mortar, but also leading edge technology and a talented, motivated staff that is continually growing and advancing their skills. This dedication rewarded ELR with being named one of the **Engineering News Record's** top 500 engineering firms in the country.

The use of technology has allowed the firm to expand engineering capabilities and make use of new resources such as satellite imagery and digital mapping. In addition to the use of technology, E.L. Robinson also continues to strive to invent new and more effective ways to serve our clients. One of these ways is to provide a thorough pre-analysis of every project, saving the client time, money, and legal exposure. When the client is educated on every phase of the job and every challenge, the reputation of the firm grows stronger and attracts business from a larger marketplace.

E.L. Robinson has been providing its clients with quality products and superior service since 1978. Our staff combines state-of-the-art technology, experienced professionals, and innovative methods to help our clients meet their challenges.

- Transportation
- Infrastructure
- Bridge Design
- Structural Engineering
- Geotechnical Engineering
- Environmental Engineering
- Site Development
- Right-of-Way Services
- Construction Administration/Observation
- Surveying/Global Positioning
- Landscape Architecture
- Oil and Natural Gas Systems Development





# History and Philosophy of ZMM



LOCATION:  
222 Lee Street, West  
Charleston, WV

CONTACT:  
Phone 304.342.0159  
Fax 304.345.8144  
[www.zmm.com](http://www.zmm.com)

## History



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.

## Professional Services



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 eight 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.

**ZMM has maintained an average of 35 employees over the last five years. Our team has the expertise to provide the services below:**

### **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  
Structural Engineering  
Mechanical Engineering  
Electrical Engineering  
Civil Engineering  
Lighting Design  
Energy Consumption Analysis

### **Post Design**

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



## Pipestem Resort State Park –Laundry Facilities

### Project Approach

ZMM Architects and Engineers understands that the project includes the relocation of the current laundry facilities from their current location in the recreation building to another location in the park. ZMM recommends an approach that would utilize a decision making matrix to determine the optimal location of the various locations proposed for the new laundry facilities. ZMM recently worked on two projects with similar challenges:

1. When the Regional Training Institute at Camp Dawson was expanded into the Joint Interagency Training and Education Center, ZMM and the project team had to investigate the ideal solution to expand the laundry. Laundry expansion in the current location, maintaining two laundry rooms, developing a new laundry room with new and used equipment, as well as a new laundry room with all new equipment were evaluated. Ultimately a new laundry room with new and used (refurbished) equipment was developed. Phasing of the project including the refurbishment of the existing equipment was critical to the success of the project.



2. When ZMM was designing the new Highland Hospital in Charleston the engineering team had to develop a new laundry facility that did not place an undue burden on the existing wastewater system in the neighborhood. Ultimately ZMM and the Owner opted for a system that recycled the laundry water (saving both water and energy) as opposed to making expensive improvements to the wastewater infrastructure.



The proposed matrix noted above would take into account a review of the advantages and disadvantages of potential locations including available space, required utility improvements, operational concerns, as well as required wastewater treatment plant improvements versus the opportunity of recycling the laundry water. This information will be developed and verified by ZMM in conjunction with our laundry consultant Sam Holdren. Mr. Holdren's experience working on various DNR facilities would be a tremendous asset throughout the investigation and design process. EL Robinson is included on the team to assist in determining the need for and pricing the wastewater treatment plant improvements. Should the plant improvements be more affordable than the the laundry water recycling system, ELR will design the improvements.



### **Project Communication**

During the design phase Adam Krason, Rodney Pauley, Steve Cook, Sam Holdren, and Jeff Nelsen would serve as the primary contacts for the design team. All of these key team members as well as all primary WVDNR contacts would be included on all communication to facilitate an open discussion throughout the project – in a manner that allows the DNR 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 investigation/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. ZMM's current relationship with the WVDNR will help facilitate this open communication.

During the construction phase Glenn Savage will coordinate the effort of the design team. All submittals, pay applications, and RFI's will be logged and tracked by Tess Doeffinger. Ms. Doeffinger will update the design team weekly regarding outstanding items.

### **Budget Control**

ZMM has been providing professional design services in West Virginia for fifty-five 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:

- Beech Fork Lodge
- Brooks Manor Addition and Renovations
- Edgewood Elementary School
- Ripley Readiness Center
- Logan-Mingo Readiness Center
- Morgantown Readiness Center
- State Police Information Services Center
- State Office Building 5 & 6 - 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.

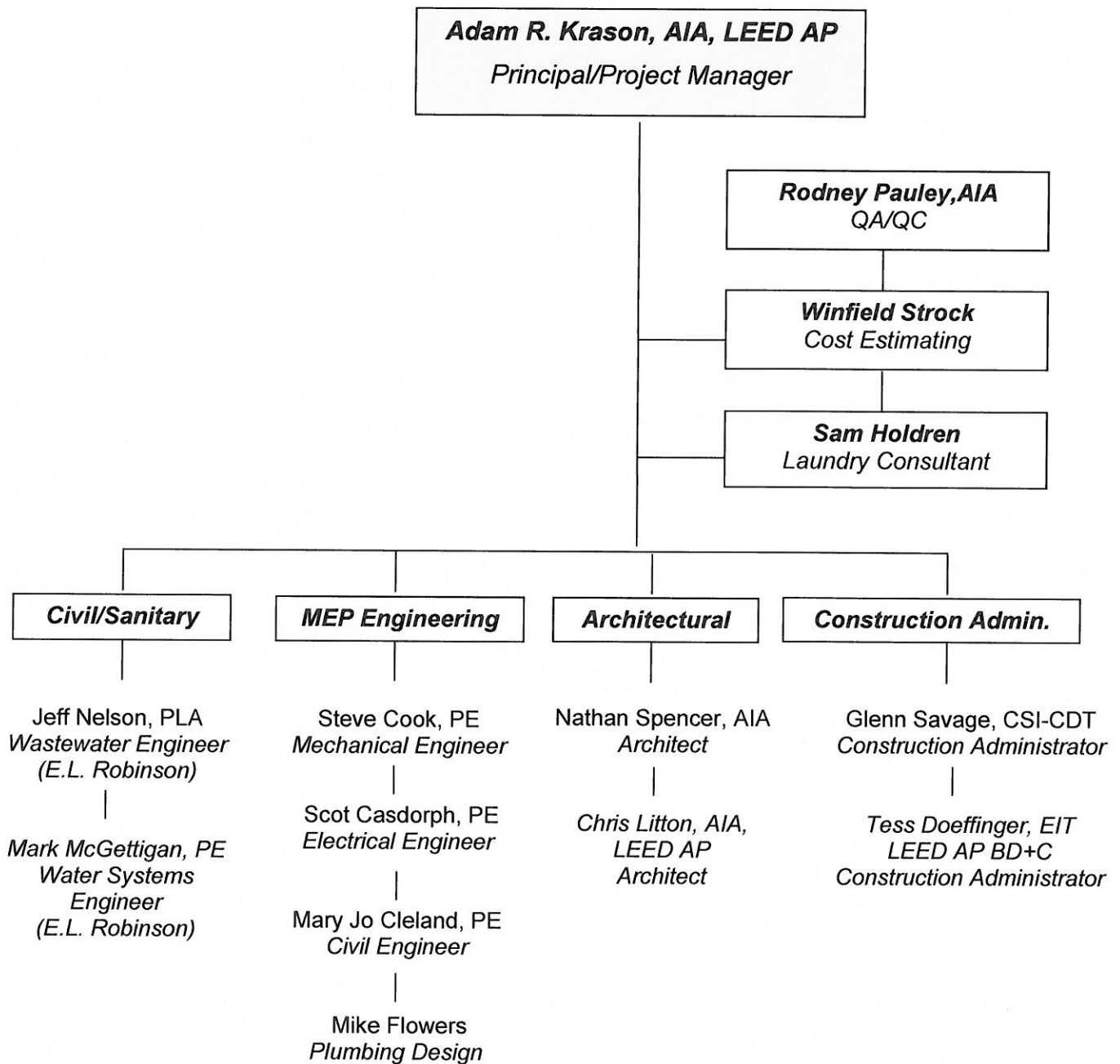
### **Experience with Each Required Discipline**

Our team will include ZMM Architects and Engineers, EL Robinson, Sam Holden, and Win Strock. This team is experienced in each discipline required for the successful completion of the project. Project experience and resumes demonstrating this expertise are contained in the attached proposal. The responsibilities of various members of the design team are noted below:

Project Management	ZMM
QA/QC	ZMM
Architecture	ZMM
Mechanical Engineering	ZMM
Electrical Engineering	ZMM
Structural Engineering (If Required)	ZMM
Laundry Consultant	Sam Holdren
Civil/Wastewater Treatment (Sanitary)	EL Robinson
Estimating	Win Strock
Construction Phase	ZMM



# Organizational Chart



## **Adam R. Krason, AIA, NCARB, LEED AP**



### **Role**

Architect, Principal

### **Professional Registrations**

Registered Architect (WV, OH, KY, VA)

LEED Accredited 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**

**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

### **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

### **Civic Affiliations**

- American Institute of Architects, Member
- 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



for managing the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. The project is aiming for LEED Silver 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 1-201<sup>st</sup> Field Artillery. A significant portion of the Morgantown Readiness Center supports the 249<sup>th</sup> 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.

**Wood County Justice Center, Parkersburg, WV**

Mr. Krason was the Project Manager for this adaptive reuse project. The existing 32,000 SF building creates a new Magistrate Court and Sheriff's Department. The justice center is LEED Silver Certified.

**Tucker County Courthouse Annex, Parsons, WV**

Mr. Krason was the Project Architect for the courthouse annex addition in Parsons, WV. 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.

**Edgewood Elementary School, Charleston, WV**

Mr. Krason is currently participating on a design team that is developing the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21<sup>st</sup> 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 is currently working with students from Watts and Robbins Elementary Schools in Kanawha County, assisting them in an effort to actively participate in the design process.

**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.

**State Office Building #5, 10<sup>th</sup> 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 10<sup>th</sup> 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.

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

2014 WV AIA Merit Award *Girl Scouts of Black Diamond Council, Charleston, WV*  
2011 WV AIA Honor Award *Joint Interagency Training and Education Center (JITEC), Kingwood, WV*  
2011 AIA Honor Award *State Office Building #5, 10<sup>th</sup> Floor Renovation, Charleston, WV*  
2009 AIA Merit Award *WVARNG Construction and Facilities Management Office, Charleston, WV*



# THE AMERICAN INSTITUTE OF ARCHITECTS

DECLARES THAT

*Adam R. Krason*

IS ADMITTED TO ASSOCIATE MEMBERSHIP HAVING BEEN FOUND ELIGIBLE

BY AUTHORITY OF THE BOARD OF DIRECTORS

AND IS ENTITLED TO EXERCISE AND ENJOY ALL THE RIGHTS AND PRIVILEGES

OF THIS CATEGORY OF MEMBERSHIP AS PRESCRIBED IN THE BYLAWS.

DATED MAY 13, 1999

*Michael Smith*  
PRESIDENT

*David Sech*  
SECRETARY

# THE CATHOLIC UNIVERSITY OF AMERICA

UPON THE RECOMMENDATION OF THE FACULTY OF  
THE SCHOOL OF ARCHITECTURE AND PLANNING

WITH THE APPROVAL OF THE ACADEMIC SENATE  
HAS CONFERRED UPON

ADAM R. KRASON

THE DEGREE OF

BACHELOR OF ARCHITECTURE

WITH ALL THE HONORS, RIGHTS AND PRIVILEGES PERTAINING THERETO.  
GIVEN UNDER THE SEAL OF THE UNIVERSITY, BY VIRTUE OF THE  
AUTHORITY VESTED IN THE BOARD OF TRUSTEES BY THE CONGRESS  
OF THE UNITED STATES, AT WASHINGTON IN THE DISTRICT OF COLUMBIA  
THIS SIXTEENTH DAY OF MAY, NINETEEN HUNDRED AND NINETY-EIGHT.

UPON THE RECOMMENDATION OF THE FACULTY OF  
THE SCHOOL OF ENGINEERING

WITH THE APPROVAL OF THE ACADEMIC SENATE  
HAS CONFERRED UPON

ADAM R. KRASON

THE DEGREE OF

BACHELOR OF CIVIL ENGINEERING

WITH ALL THE HONORS, RIGHTS AND PRIVILEGES PERTAINING THERETO.  
GIVEN UNDER THE SEAL OF THE UNIVERSITY, BY VIRTUE OF THE  
AUTHORITY VESTED IN THE BOARD OF TRUSTEES BY THE CONGRESS  
OF THE UNITED STATES, AT WASHINGTON IN THE DISTRICT OF COLUMBIA  
THIS SIXTEENTH DAY OF MAY, NINETEEN HUNDRED AND NINETY-EIGHT.



*Bertha Patrick Ellis, F.S.C.*  
PRESIDENT

*Donald Cardinal Low*  
CHAIRMAN OF THE BOARD OF TRUSTEES

*William E. Kelly*  
DEAN

*G. Kendall Rice*  
REGISTRAR

## Rodney Pauley, AIA



**Role**  
QA/QC

**Professional Registrations**  
Registered Architect (WV, GA)

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**

**WV Division of Juvenile Service (Davis Center Renovations), Davis, WV** Mr. Pauley is the project manager for a design team that is currently preparing construction documents for the renovation to an existing juvenile corrections campus for women. The project scope includes the demolition of two buildings, the interior renovation of the 6,800 SF education building, and a major reconstruction to the 10,000 SF gymnasium which includes two major additions for dining and living facilities. An entrance and parking area will be reconfigured to provide additional spaces, a sally port and perimeter security fencing.

**Morgantown Readiness Center, Morgantown, WV** Mr. 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.

### **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 Firm  
Jan. 2005 - Aug. 2000, Project Architect, VA Firm

### **Civic Affiliations**

- American Institute of Architects, Member

The building is also designed to house the 249<sup>th</sup> 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.

**Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV** Mr. Pauley is the project manager for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,000 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

**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.

**Edgewood Elementary School, Charleston, WV** Mr. Pauley is the project manager for the design team that is currently developing a new 60,000 SF elementary school on Charleston's West Side. The school is being designed as a 21<sup>st</sup> 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.

**Other Project Experience**

**One Federal Place, Birmingham, AL.** Mr. Pauley was the project architect responsible for design, construction documents and construction administration for the 12-story, 466,600 SF speculative office building with attached 5-story, 520-car parking deck. The base of the office tower and parking deck, which are located in the heart of downtown Birmingham, are faced in granite to match the surrounding buildings. The tower is faced with architectural precast concrete panels and an insulated glass curtainwall system. The entrance lobby is highlighted by custom wood paneling and a highly-detailed granite floor.

**North Georgia Technical College for GA Department of Technical and Adult Education**

**Clarkesville, GA.** Mr. Pauley was the project manager for the a major campus renovation which included the demolition of an old automotive classroom building, the renovation of Mobley Hall, the existing administration building, and the construction of two new education buildings, the Visual Technology Center and the Transportation Center.

- Mobley Hall, the main campus entry building, was refaced with new brick veneer and a new gable roof with entry feature was constructed covered in standing seam metal roofing.
- The Visual Technology Center is a 2-story, 28,000 SF state-of-the-art, photography, media and print building that is sited adjacent to existing educational buildings to create a formal "quad" within the campus. It contains a commercial print lab, a large photography shooting room, digital production rooms, a video production studio and is highlighted by a 2-story media gallery with glass façade open to the quad.
- The Transportation Center is a 37,000 SF educational building that is highlighted by three, high-bay spaces with clerestory windows opening into pitched standing seam metal roofs. These bays contain educational space for conducting repair and maintenance for automobiles, boats, large trucks and commercial earth-moving equipment.



The Trustees  
of  
The University of Tennessee

*on the recommendation of the Faculty have conferred on*

Rodney A. Pauley

*the degree of*

Bachelor of Architecture

*with all the Rights Privileges and Honors thereunto appertaining  
In witness whereof this diploma is granted and the Seal of the  
University and the signatures of the President of the University and the  
Secretary of the Board of Trustees are hereunto affixed.*

*Given at Knoxville in the State of Tennessee this fifteenth day of May  
in the year of our Lord nineteen hundred and ninety-two  
and of the University the one hundred and ninety-eighth.*



*Beaumont E. Brogan*  
Secretary of the Board of Trustees

*Joseph Johnson*  
President of The University of Tennessee

## 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

#### **Highland Medical Facility, Charleston, WV**

Mr. Spencer was the Architect on Highland Medical Facility. This project consisted of 87,3000SF, \$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. 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.

#### **Joint Interagency Education and Training Center**

**(WVARNG), Kingwood, WV** 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. The project is aiming for LEED Silver Certification.

### 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



**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 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.

**Tucker County Courthouse Annex, Parsons, WV**

Mr. Spencer is 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.

**Jackson County Armed Forces Reserve Center, Ripley, 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.

**Morgantown Readiness Center (WVARNG), 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.

**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.

**Edgewood Elementary School, Charleston, WV** Mr. Spencer is currently participating on a design team that is developing the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21<sup>st</sup> 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. A dental and health clinic is also on site for all enrolled students in the Kanawha County School District.

## Christopher Litton, AIA, LEED AP



### Role

Architect

### Professional Registrations

Registered Architect (WV, KY)  
LEED Accredited Professional

Since joining ZMM in 2009, Mr. Litton has utilized his design experience to help lead the architectural and engineering team effort on many educational projects with the Project Architect. Mr. Litton has assisted in the design and production of projects that included renovations, additions, and new construction.

Mr. Litton's responsibilities include: programming design, documentation, architectural/engineering coordination and construction administration.

### Project Experience

#### General Service Division - Surplus Property, Dunbar, WV

Mr. Litton is currently the Project Architect 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 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.

#### Huntington East Middle School, Huntington, WV

Mr. Litton assisted with the programming, design, and project management for the new 800 student, 94,000 SF facility. This is projected to be the first LEED Silver Middle School in West Virginia and encompasses the latest in technology and distance learning within the classroom. The building will be used as a teaching tool along with large interactive monitors throughout the building. Students will be able to learn how the building operates through hands on learning and monitoring the buildings systems.

#### Culloden Elementary School (Addition), Culloden, WV

Mr. Litton led the design effort on this 20,000 sq. ft. addition to this facility addition. This project encompasses all phases of construction; demolition, major renovation and new construction. The original single story school building was demolished and students were housed in temporary modular classrooms as the new addition was being constructed.

### Education

Bachelor of Architecture;  
University of Kentucky; 2005

Bachelor of Science;  
Morehead State University; 2005

### Employment History

2013 - Present, Architect, ZMM  
2009 - 2013, Intern Architect, ZMM  
2005 - 2009, Intern Architect, KY Firm  
Summer 2005 & 2006, CADD Instructor,  
Spencerian College

### Civic Affiliations

- American Institute of Architects  
Member -2013
- CANstruction Design Team - 2010

This facility houses 250 PK thru 5 Elementary Students. The new facility will consist of a new "safe schools" entrance adjacent to the new Administrative Complex and School Clinic. A new Media Center and Computer lab will be constructed to replace the older modular classrooms currently being used on site. A new Multipurpose Space will be built to better serve the student population during the lunchtime activities in the Cafeteria. A new Parking area will also be located in close proximity to the school entrance and measures will be taken to ensure the safety of the students in the daytime hours to reduce the amount of vehicular traffic through the campus.

#### **Evans Elementary School, Ripley, WV**

Mr Litton is responsible for the programming and design of the four classroom addition. Chris assisted with the master planning of this facility and worked with the owner and civil engineers to resolve site drainage issues that have plagued the school site since its beginning.

#### **Harts PK-8 School, Harts, WV**

Mr Litton is responsible for the design, project management, and construction documents for the new 71,000SF facility. This school has the latest technology and boasts of a stage off the cafeteria. The music and art room are close by to support any effort required for a stage performance. The two level classroom wing surrounds a media center and computer lab. The new PK-8 school is the latest addition to the Lincoln County School System.

#### **Roane Jackson Technical Center, Jackson County, WV**

Mr. Litton is responsible for the programming and design for the new automotive paint booth and welding shop renovations. Chris worked with the owner to resolve budget issues and to ensure the owner could construct their vision within a very limited budget. Chris was also present during construction issues to provide the owner with a successful project.

#### **Edgewood Elementary School, Charleston, WV**

Mr. Litton is the project architect and leading the effort for all the production work and bidding documents for the new school. This facility is termed the "School of the Future" for its new innovative teaching methods. The new facility reflects this in the building floor plan and exterior design.

#### **Comprehensive Educational Facility Plan (CEFP)**

Mr. Litton provided field analysis for several county school systems. The information collected was used in the development of the Comprehensive Educational Plans. Chris also assisted in the implementation of the documentation in several other counties.

#### **Current Education Experience**

Fort Gay Pk-8 School, Fort Gay, WV

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

2014 WV AIA Merit Award *Huntington Middle School, Cabell County Schools, Huntington, WV*

## Steve Cook, PE



### Role

Senior Mechanical Engineer

### Professional Registrations

Professional Engineer (WV)

Mr. Cook started his career in 1972 as a designer for an engineering firm in Charleston, West Virginia. He is a Professional Engineer registered in West Virginia and has designed and engineered multiple projects throughout the state.

Mr. Cook has had a full range of engineering design experience including: Plumbing, HVAC, Electrical, Fire Protection and Site Utilities. He has worked on Jails, K-12 Schools, Armories, Hospitals, Office Buildings, Churches, and a variety of other building types.

Other responsibilities include, Serving as a liaison between clients and utility companies, designs of sanitary and gas site utilities, review of plumbing, sprinkler systems, fire pumps and water pumps as well the equipment selection - air handling units, pumps, and boilers, site visits, observation reports and punch lists.

### Project Experience

#### **West Virginia Regional Technology Park - Building 740, South Charleston, WV**

Mr. Cook worked as part of the Design-Build Team to survey the existing building; did preliminary location and layout for the proposed Boiler Building; designed layout and piping for steam boiler system; did electrical design for the proposed Boiler Building. Also did mechanical and electrical design for Buildings 742, 743, and 8736

**West Virginia Regional Jails:** Mr. Cook was responsible for electrical design on 10 Regional Jails. The design included lighting, power distribution, emergency power systems, fire alarm and security. In 2009 he was project manager for HVAC renovation on four regional jails. This project included replacement of rooftop HVAC units and Building Automation Systems. Mr. Cook has also been responsible for site utility upgrades including sewer augers and on-site sewage treatment plants and lift stations.

**Jackson County Armed Forces Reserve Center, Millwood, WV** Because of the variety of space types and occupancy patterns, Mr. Cook designed multiple roof mounted air handling

### Education

Master of Arts in English and Humanity  
Marshall University Graduate School,  
2004

Bachelor of Arts in English and  
Humanity, West Virginia University,  
1972

### Employment History

1989 - Present, Senior Mechanical  
Engineer, ZMM

Present, Board of Directors, ZMM

1976 -1989, Project Manager, WV Firm

1972 -1976, Designer, WV Firm

### Civic Associations

- American Society of Heating,  
Refrigeration and Air Conditioning  
Engineers (ASHRAE), Member

units, to take advantage of unoccupied scheduling to save energy. The main shower /toilet area is served by a 100% outside air unit with a plate type heat exchanger for energy conservation. The large Drill Hall, which also serves the community with space for up to 2000 people, is served by two rooftop units. One will run during Drill weekends, the second will run only during public events. There are two high efficiency scroll type chillers with primary/secondary pumps to meet part load conditions. The boilers are 95% efficient stainless steel condensing type with variable speed pumps.

#### **Lincoln County High School, Hamlin, WV**

Mr. Cook was responsible for HVAC design on this project, which included a 500 ton chilled water system with primary and secondary pumping. The chillers had a heat recovery feature which was used for reheat on VAV air systems. The gas boilers were condensing type with 95% efficiency and variable speed pumps. The school also had vocational shops for which he designed welding fume exhaust and dust collection systems. In addition to this, Mr. Cook was responsible for site utilities including coordination of a water line river crossing and an aerial sewer suspended from the bridge serving the school, which eliminated the requirement for a lift station.

#### **Hacker Valley PK-8 School, Hacker Valley, WV**

This project, located in rural Webster County adjacent to a trout stream, was built on a small site where municipal water and sewer were not available. Mr. Cook was responsible for designing a new Water treatment System for the existing domestic well, and a variable speed booster pump to deliver water to the school building. An onsite sewage treatment plant with outflow was not acceptable because of the trout stream, so he designed a "Green" peat bed underground injection system for the school's sewage disposal. The school also required fire protection, and Mr. Cook designed a 64,000 gallon storage tank with a diesel fire pump for distribution. He was also responsible for HVAC design.



## Mike Flowers



### 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

**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.

Mr. Flowers has a broad range of experience in Plumbing and HVAC systems design, including K-12 schools, higher education facilities, Military Facilities, office buildings, and juvenile and adult correctional facilities.

### 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 Technician, ZMM

### Civic Affiliations

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

## Scot Casdorff, PE



### Role

Electrical Engineer

### Professional Registrations

Professional Engineer (WV, OH *pending*)

Mr. Casdorff 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. Casdorff 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. Casdorff 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

#### **Joint Interagency Education and Training Center**

**(WVARNG), Kingwood, WV** Mr. Casdorff 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. The project is targeted for LEED Silver Certification.

#### **Jackson County Armed Forces Reserve Center,**

**(WVARNG), Millwood, WV** Mr. Casdorff 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. Casdorff 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

### 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



administrative and training space for the 77<sup>th</sup> Brigade Troop Command, the 1863<sup>rd</sup> Transportation Company, and the 150<sup>th</sup> 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.

**Southside Elementary and Huntington Middle School, Huntington, WV** Mr. Casdorff 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.

**Craigsville Elementary School, Craigsville, WV**

Mr. Casdorff was responsible for the electrical design of the new elementary school. The project is consolidating Beaver Elementary School and Craigsville Elementary School into a new 375-student school. The school houses 3 Pre-Kindergartens, 3 Kindergartens, 2 first grade, 12 1<sup>st</sup>-5<sup>th</sup> grade classrooms, activity room, cafeteria, kitchen, media center, and administration spaces.

**Fort Gay PK-8 School, Fort Gay, WV**

Mr. Casdorff 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 21<sup>st</sup> 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.

**Lincoln County High School, Hamlin, WV** Mr. Casdorff 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. Casdorff was responsible for the electrical design of the new 96,000 SF facility housing 700 middle school students grades 6 through 8.

**Southern WV Community & Technical College, Williamson WV** Mr. Casdorff 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.

**West Virginia Research, Education, and Technology – Building 704, South Charleston, WV**

Mr. Casdorff 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. Casdorff 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.

**Current Education Projects**

Oak Hill Elementary, Fayetteville, WV  
Valley High School, Smithers, WV  
Divide Elementary School, Lookout, WV

## Mary Jo Cleland, PE



### **Role**

Civil Engineer

### **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 2<sup>nd</sup> 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**

#### **Highland Hospital, Charleston, WV**

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.

Ms. Cleland also coordinated with the City Engineer to meet local requirements for stormwater management, zoning ordinances, and driveway layout. In addition to coordinating with the City, Ms. Cleland was responsible for permitting required by state agencies for site development.

#### **West Side 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

### **Education**

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

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

### **Employment History**

2009 - Present, Civil Engineer, ZMM

2002 - 2009, Project Engineer, Potesta &  
Associates, Inc.

1993 - 1997, Aerospace Engineer,  
United States Air Force

### **Civic Affiliations**

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

runoff rate. A stormwater retention system was designed to infiltrate the majority of the stormwater and recharge the groundwater.

#### **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.

#### **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 21<sup>st</sup> 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.

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

Ms. Cleland is 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.

#### **Wood County Justice Center, Parkersburg, WV**

Ms. Cleland was responsible for site design for this adaptive reuse project in Parkersburg WV. The existing 32,000 SF building will create a new Magistrate Court and a Sheriff's Department. The project is LEED Silver Certified.

#### **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, Ms. Cleland performed 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 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.

**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.

## Glenn Savage, CSI-CDT



### Role

Construction Contract Administrator

Mr. Savage is responsible for overseeing the construction of ZMM projects. He is the liason between the Owner and Contractor. Responsible for biweekly site visits, attend progress meetings, certify applications for payment, change order processes, Request for information.

Mr. Savage has performed construction administration services on a variety of building types including: Educational Facilities, Correctional Facilities, and Office/Light Industrial Facilities.

Mr. Savage's past experience in the construction testing and environmental fields is a benefit to clients during the site preparation and foundation installation.

### Project Experience

- West Virginia State Police Office, So. Charleston, WV
- Edgewood Elementary School, Charleston, WV
- Divide Elementary School, Charleston, WV
- Craigsville Elementary School, Craigsville, WV
- Oak Hill Elementary, Oak Hill, WV
- Bridgemont CTC – Davis Hall Renovation
- Mountaineer Middle School, Clarksburg, WV
- Nicholas County High School, Summersville, WV
- East Greenbrier High School, Lewisburg, WV
- Southern WVCTC, Williamson, WV
- CAMC Teays Valley IUC, Teays Valley, WV
- Highland Hospital, Charleston, WV
- Beech Fork Lodge, Wayne, WV
- The Retreat at Glade Springs, Daniels, WV
- WV State Police Office, South Charleston, WV
- WV State Office Building #5, 10<sup>th</sup> Floor, Charleston, WV
- Wood County Justice Center, Parkersburg, WV
- West Virginia Western Regional Jails
- Alderson Federal Prison Camp, Alderson, WV
- Jean Dean Safety Building, Huntington, WV
- Summersville Hospital Medical Building, Summersville, WV
- Cacapon State Park, Berkeley Springs, WV
- Blackwater Falls State Park, Davis, WV

### Education

Bachelor of Science, University of Charleston, 1997

Associate of Science, West Virginia State University, 1992

### Employment History

1998 - Present, Construction Contract Administrator, ZMM

1997-1998, Geotech

1992 -1997, Battle Ridge Construction

1981-1992, H. C. Nutting Geotechnical

Testing Engineers

### Civic Affiliations

- Member CSI
- Kanawha Valley Leadership Course Graduate
- Maintained all certifications for WVDOT testing materials



## **Tess Doeffinger, EIT, LEED AP BD+C**



### **Role**

Construction Administrator / Engineer

### **Professional Registrations**

LEED Accredited Professional

Ms. Doeffinger is responsible for overseeing the construction contract administration and sustainability aspects of ZMM projects. She is a liaison between the Owner, Contractor, and Construction Administrator. She is responsible for processing RFI and submittals, attending site meetings, and LEED Documentation.

Ms. Doeffinger has performed construction administration services on a variety of building types including: Educational Facilities, Correctional Facilities, and Armories.

Ms. Doeffinger's past experience in environmental, health, and safety as well as sustainability is a benefit to clients during the design and construction phase.

### **Project Experience**

- Edgewood Elementary School, Charleston, WV
- Jackson County Sheriff's Office, Ripley, WV
- CAMC Teays Valley IUC, Teays Valley, WV
- Bridgemont CTC – Davis Hall Renovation
- Logan Mingo Readiness Center, Holden, WV
- Huntington East Middle School, Huntington, WV
- Morgantown Readiness Center, Morgantown, WV
- WV State Police Information Center, So. Charleston, WV

### **Education**

Bachelor of Science, Embry-Riddle  
Aeronautical University, 2011

Master of Science, Carnegie Mellon  
University, 2012

### **Employment History**

2013 - Present, Construction  
Administrator, ZMM  
2012, Green Building Alliance  
2011 – 2012, Carnegie Mellon  
2009 – 2010, Embry-Riddle  
2008, Century Aluminum

### **Civic Affiliations**

- Member WV Provisional Chapter of  
USGBC



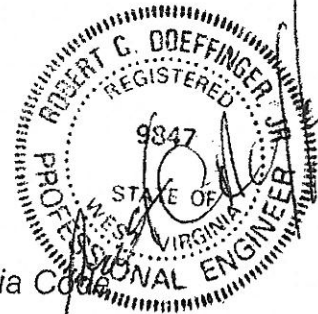
**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**ZMM INC  
222 LEE ST W  
CHARLESTON, WV 25302-2225**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1040-0001**

This certificate is issued on: **06/21/2011**

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



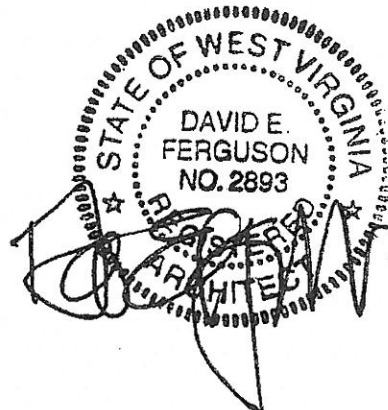
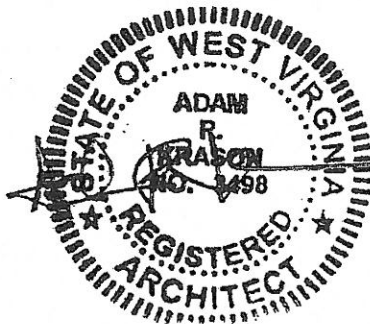
*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.  
This certificate shall be permanent until cessation of the business for which the certificate of registration  
was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

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

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

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# Beech Fork State Park Lodge

## Lodge Design

LOCATION:  
Wayne, WV

COMPLETION:  
Est. 2015

COST:  
Est. \$34M

CONTACT:  
Bradley Leslie, PE  
Assistant Chief  
WVDNR  
State Parks Section  
324 4th Avenue  
So. Charleston, 25303  
304.558.2764 x 51823



The goal of the lodge study was to help determine the feasibility for a new lodge at Beech Fork. This objective was achieved through the development of a concept for a 75-room lodge located on the banks of Beech Fork Lake in Wayne County, West Virginia, which is designed to benefit a variety of visitors. The form of the building was influenced by the site configuration as well as the functions contained within it.



The floor plan is arranged in a way to separate the guestrooms and other guest-only facilities from the more public functions of the building such as the restaurant, pub, gift shop and meeting room. This allows visitors who may not be staying at the lodge to use these areas without encroaching on the privacy of lodge guests. All of the guestrooms are arranged to have access to views of the lake. Those views are also shared by the restaurant, meeting room and the recreation areas.

The exterior of the building is designed to simulate the craftsman style to evoke a more relaxed, comfortable and informal feel for guests and visitors. The brick, stone, siding and roof materials are common to the area and offer low maintenance and durability to provide a long-lasting, attractive structure.



# Highland Hospital

Healthcare / Rural Clinic Design



LOCATION:  
Charleston, WV

SIZE:  
87,300 SF

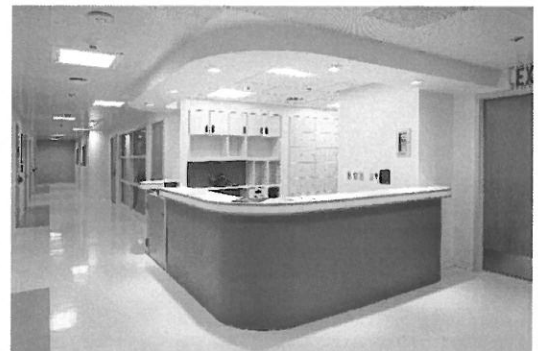
COMPLETION:  
2012

COST:  
\$26M

CONTACT:  
Jim Strawn,  
Director of Marketing &  
Community Education  
300 56th Street  
Charleston, WV 25304  
304.348.1417



When designing the new Highland Hospital in Charleston, ZMM Architects and Engineers was confronted with the challenge that the Charleston Sanitary Board's infrastructure in Kanawha City could not support the additional wastewater load. To reduce the wastewater load, and therefore the new hospital's impact on the existing infrastructure, ZMM designed and specified a system that recycles laundry water for reuse. This system saves both water and energy, and can help reduce the need for costly infrastructure improvements. If a similar system is utilized for Pipestem Resort State Park, the actual load on the existing wastewater treatment facility would be reduced, even if the laundry operations re expanded.



Information about the system utilized at Highland Hospital is attached. The AquaRecycle EMI 15 Laundry Water Recycle System uses state-of-the-art technology to reclaim 100% of the wastewater from the wastewater trench. Once the water is reclaimed it undergoes a process to remove lint, solids, organics, detergents, oil, and grease. The recycled water is disinfected and ready to use again for both the hot and cold water supply. In fact, the only water typically lost is the water that evaporates (+/-10%). The recycled water can be used for both hot and cold water for the washing machines.

# Joint Interagency Training & Education Center

WVARNG - Billeting (Hotel)



LOCATION:  
Kingwood, WV

SIZE:  
285,000 SF

COMPLETION:  
2013

COST:  
\$78.4M

OWNER:  
COL David Shafer  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539

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



ZMM, in association with AECOM, is providing architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campus-style 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 design intent is to create a campus environment that integrates existing buildings with new ones by using compatible, yet distinct building materials.

As the scale of the project includes several miles of roads, parking, and utility upgrades affecting the entire base, the project is being phased over a four-year construction period. Simultaneous construction of all of the new facilities, as well as phased construction in existing buildings, will minimize the disruption to current operations.

The new facilities are designed to meet all anti-terrorism/force protection criteria and are slated for LEED-NC silver 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. 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.





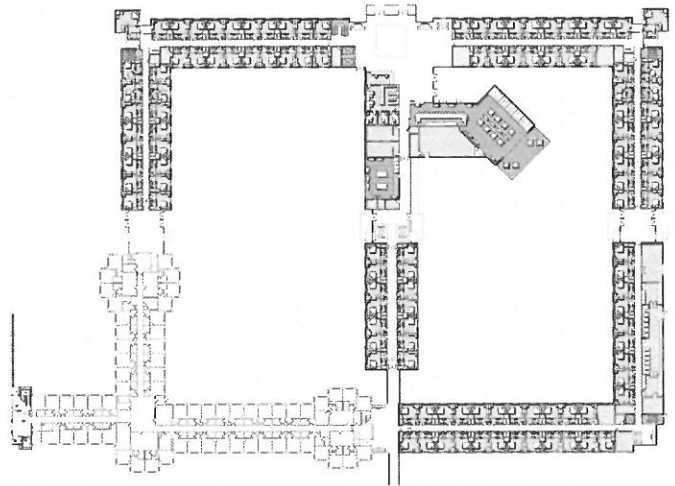
# Joint Interagency Training & Education Center

WVARNG - Billeting (Hotel)



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.

Adjacent to the JOC are three large training rooms, capable of seating 70 persons each. Lining the front of each room are LCD video walls with large, open areas for workstations, desks, and office equipment, as well as space for private offices. These rooms function primarily as training areas; however, their close proximity to the JOC allows maximum flexibility in securing the entire area from the rest of the building by means of card access-only doors.



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.



# Southern Wayne County Water System Upgrades and Extensions

Wayne County Commission



**LOCATION:**  
Wayne County, WV

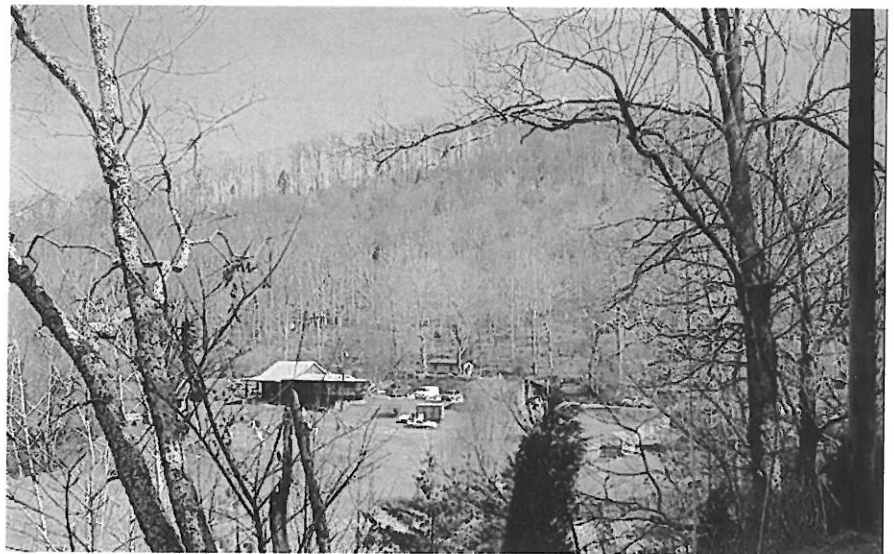
**COMPLETION:**  
2006 - 2016 (9 Projects)

**COST:**  
\$52M

**OUR ROLE:**  
Design and Construction  
Observation

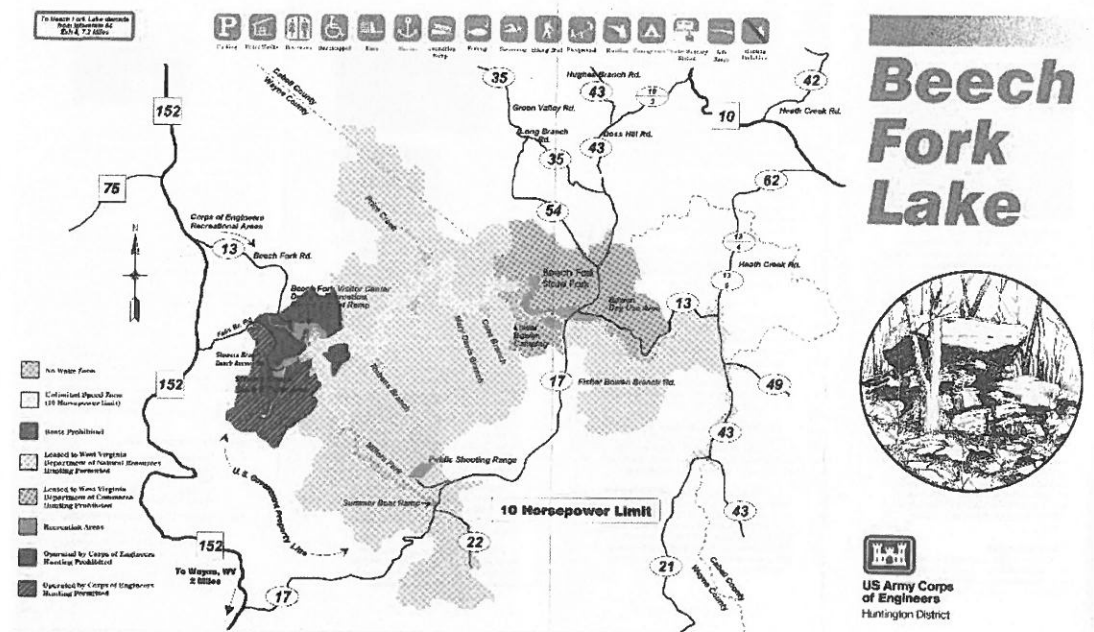
**ADDITIONAL MEMBERS:**  
Lavalette PSD  
Crum PSD

**CONTACT:**  
Bob Pasley, President  
Wayne County Commission  
700 Hendricks St.  
Wayne, WV 25570  
304.272.6592



E.L. Robinson provided engineering design services and geo-technical services to areas of Wayne County for water system upgrades and extensions. The scale of this project is tremendous. It is divided into nine separate projects and will be performed sequentially. The entire project covered 517 square miles and will service approximately 6,000 residents when complete. The total coverage for the County will be approximately 90%. The project costs an estimate total of nearly \$52 million. The first project started in 2006 and is continuing with 3 completed, 2 under design and one bidding at present (2012).

The scope of work included construction drawings, preparation of funding application and personal meetings with the client. E.L. Robinson not only provided services such as design and funding guidance, but provided a team of trained construction inspectors available to observe the work until final completion.





## The New Retreat at Glade Springs Resort

### Multi-Unit Housing

**LOCATION:**  
Daniels, West Virginia

**COMPLETION:**  
TBD

**COST:**  
\$249,000 - \$269,000  
(per unit cost)

**CONTACT:**  
Mr. Doug Pauley  
Encore Management Co.  
1591 Washington Street, E  
Charleston, WV 25311  
304.343.3535



The New Retreat at Glade Springs is a gated community located in a wooded area near the 3<sup>rd</sup> hole of the Stonehaven Golf Course. Several townhouses had already been constructed on the site by a previous developer. The objective of the new developer was to provide a design that met his vision while also blending with the existing townhouses. Due to the wooded hillside site the new 2 and 3 bedroom units were designed to resemble a mountain lodge, while colors and material choices blended with the existing townhouses.

The material palette was selected to help define the lodge aesthetic and for ease of maintenance, and includes a stone veneer, prefinished composite siding and trim, as well as natural wood doors. The layout of the units was developed to provide end unit master suites with no second level, and a core that includes an open floor plan with a two story living room. Additional bedrooms and loft space are located on the upper level. Each unit has a distinct and well defined entry, while the overall grouping of townhomes resembles a mountain lodge.

ZMM's services included the preparation of a preliminary site design, as well as full architectural, engineering, and interior and lighting design services for a variety of units that could be configured in various manners to fit the site conditions. ZMM also assisted the client in determining a base finish, plumbing, lighting fixture, and appliance package for the units. Construction of Phase I of the townhouse development began in fall 2011.





## Holly River State Park Wastewater Treatment Plant

*WV Division of Natural Resources*

LOCATION:  
Davis, WV

COMPLETION:  
1999

COST:  
\$66,000

OUR ROLE:  
Design and Construction  
Observation

CONTACT:  
Brad S. Leslie, PE  
Assistant Chief  
State Parks Section  
324 4th Avenue  
So. Charleston, WV  
304.558.2764 x 51823



E.L. Robinson was retained by the West Virginia Division of Natural Resources, Parks and Recreation to provide planning, design and construction administration services for a new waste water treatment plant for Holly River State Park in Webster County, West Virginia.

The existing treatment plant was replaced by a 2,000 gallon per day package plant, with new controls and electrical equipment. The new plant serves part of the campground.



# Cacapon Resort State Park

WV Division of Natural Resources



**LOCATION:**  
Berkeley Springs, WV

**SIZE:**  
7,600 SF New  
8,100 SF Renovated

**COMPLETION:**  
1998

**COST:**  
\$3,200,000

**CONTACT:**  
Tom Ambrose  
Superintendent  
818 Cacapon Lodge Drive  
Berkeley Springs, WV  
304.258.1022

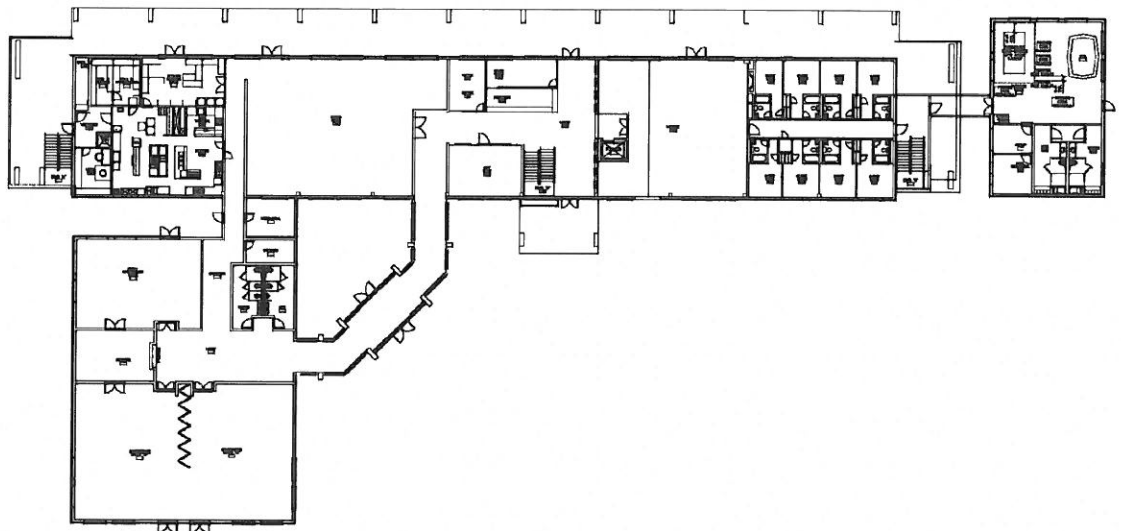


In 1998 ZMM completed an addition and renovation project to Cacapon State Park Lodge Building. This project included a new 7,600 SF conference center, providing a large 3,000 SF dividable conference room, a smaller 1,000SF conference room with connecting entrance lobby, toilets and storage facilities.

The existing kitchen facility was enlarged and renovated to provide banquet capabilities. An elevator was added to improve access to upstairs bedrooms and downstairs multi-use areas. The downstairs multi-use and meeting area were renovated along with the reception and office area.



Bid documents were prepared for a 2,500 SF health spa addition to the lodge building, but this portion of the project was not constructed. Other ZMM projects completed at Cacapon State Park include life safety compliance renovations to the WPA Old Inn building and a 4 bedroom cabin that is ADA accessible.





# Tygart Lake State Park Wastewater Treatment Plant

*WV Division of Natural Resources*



**LOCATION:**  
Davis, WV

**COMPLETION:**  
2008

**COST:**  
\$118,000

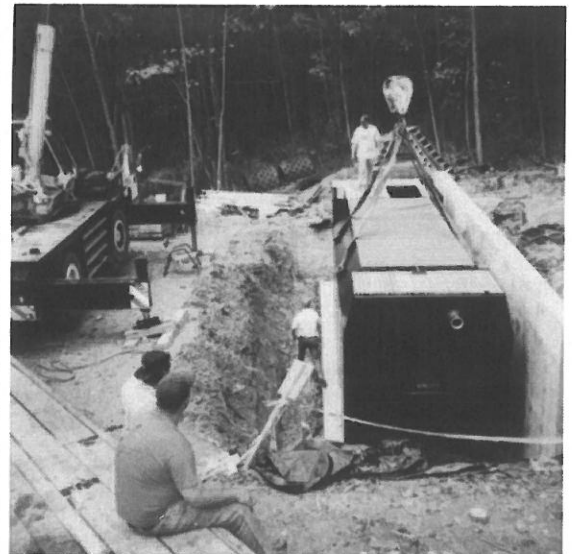
**OUR ROLE:**  
Design and Construction  
Observation

**CONTACT:**  
Brad S. Leslie, PE  
Assistant Chief  
State Parks Section  
324 4th Avenue  
So. Charleston, WV  
304.558.2764 x 51823



E.L. Robinson Engineering Co. was retained by the West Virginia Division of Natural Resources, Parks and Recreation, to provide planning, design and construction administration services for a new waste water treatment plant for Tygart Lake State Park near Grafton, West Virginia.

The existing treatment plant was replaced by an 8,000 gallon per day package plant, with new controls and electrical equipment. The new plant serves the lodge. A concrete retaining wall was also constructed due to poor soil conditions at the plant site.







## Blackwater Falls State Park

WV Division of Natural Resources

LOCATION:  
Davis, WV

COMPLETION:  
1998

COST:  
\$2,600,000

SIZE:  
10,400 SF Addition

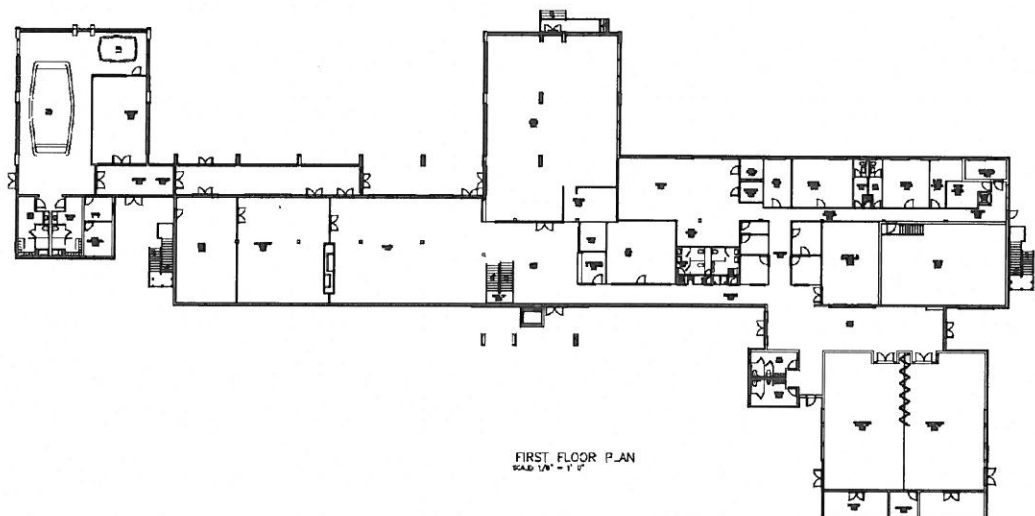
CONTACT:  
Robert Gilligan  
Park Superintendent  
P.O. Drawer 490  
Davis, WV 26260  
304.259.5216



ZMM completed an addition and renovation to the historic Blackwater Falls State Park lodge building. This project included a 5,400 SF conference center addition providing a large 3,000 SF dividable conference room, entrance, lobby, toilets, and storage facilities.

To meet the owner's intent of reducing the visual impact of the construction, ZMM utilized existing building roof lines and materials for the building addition, which compliments to the original lodge design.

A 5,000 SF spa addition was added to the North Western end of the building provide a swimming pool, large Jacuzzi and a glass walled exercise area with locker rooms/showers. Interior office areas were also renovated with upgrades to mechanical, electrical, and fire alarm systems.



# Blackwater Falls State Park Sewage Treatment Plant Replacement

*WV Division of Natural Resources*



**LOCATION:**  
Davis, WV

**COMPLETION:**  
2008

**COST:**  
\$600,000

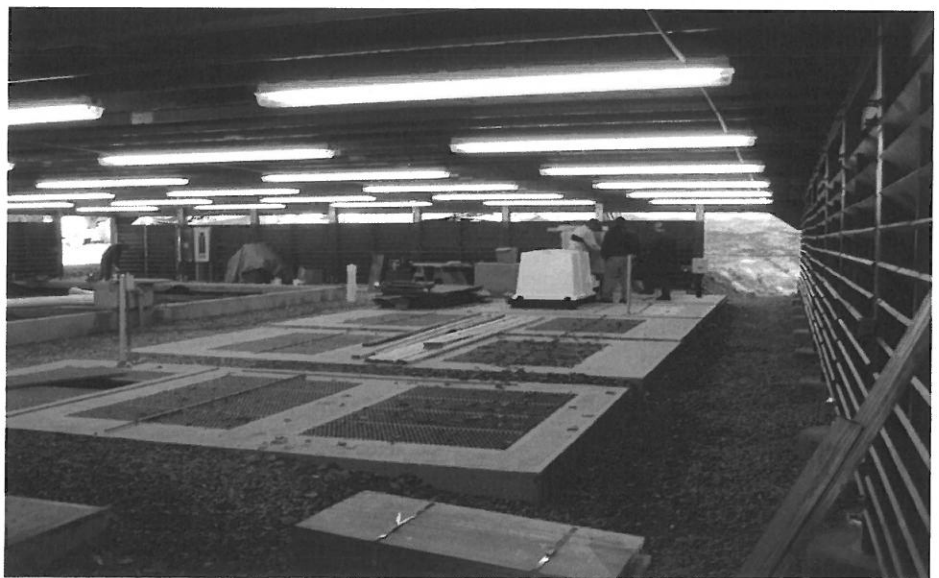
**OUR ROLE:**  
Design and Construction

**CONTACT:**  
Brad S. Leslie, PE  
Assistant Chief  
State Parks Section  
324 4th Avenue  
So. Charleston, WV  
304.558.2764 x 51823



E.L. Robinson Engineering Co. was contracted by the West Virginia Division of Natural Resources, Parks & Recreation to design a new concrete sewage treatment plant which eliminates the potential for rust. The new plant also uses ultraviolet disinfection and provides a sand filter prior to discharge into the Blackwater Canyon.

The new plant was constructed adjacent to the existing plant. E.L. Robinson's design kept the existing plant in service during construction. A new building was also designed to match the building housing the existing plant.



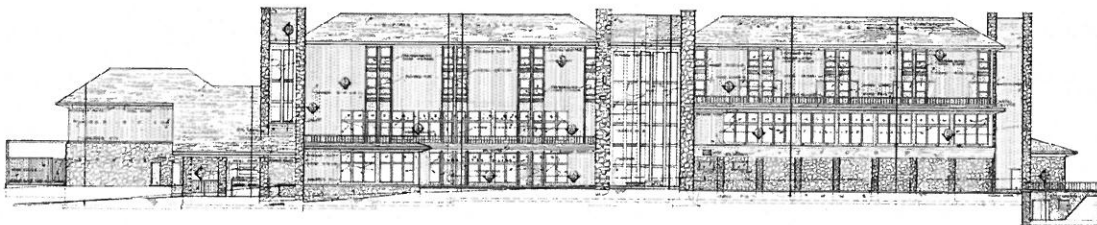
# Canaan Valley State Park, State Park Lodge

WV Division of Natural Resources



LOCATION:  
Davis, WV

COMPLETION:  
Un-Built Project

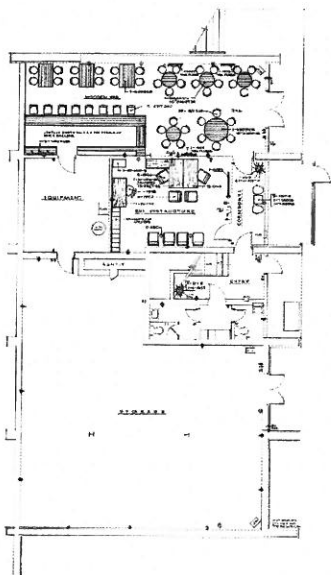


In 1968 ZMM was selected to provide design services for a variety of facilities at Canaan Valley State Park. Many of the facilities remain actively utilized. A description of the various components can be found below.

## Lodge Facility

An original design for a four-story lodge and convention facility containing 60 guest rooms, dining, and kitchen facilities, a conference facility seating 300, an indoor pool and support space, was not constructed. Funding restraints required the construction of a lodge of reduced scope.

The original design concept utilized masonry bearing walls and a precast floor system with exterior materials of stone and wood to reflect the natural environment and concept of the park. Each guest room was designed to contain two double beds, bath, and toilets facilities.

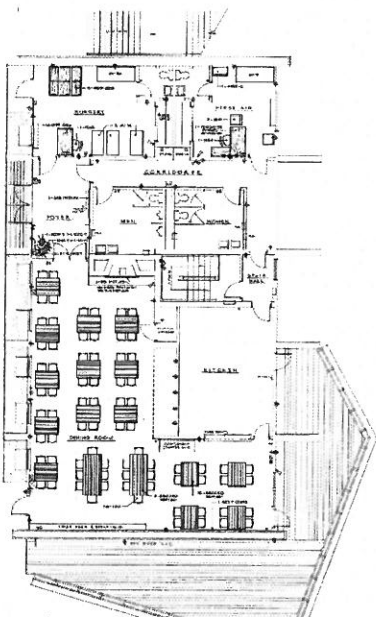


## Other Facilities

- New Park Cabins
- Golf Club House
- Ski Base Facility
- Park Headquarters Building

These one and two-story buildings were designed to withstand the harsh winter climate of Canaan Valley and are of wood frame and stone masonry construction. Exposed laminated wood beams are used in selected areas for aesthetic and structural purposes. Native materials, both for interior and exterior applications, have been used to help the buildings blend in with their surroundings.

Each building has its own, energy efficient, heating and cooling system, which on concert with the well insulated walls and roof keep overall energy costs to a minimum. The buildings were, each, situated on their respective sites to create a minimum of site disruption.





## Camp Virgil Tate Sanitary Sewer Improvements

*Kanawha County Commission*

LOCATION:  
Kanawha County, WV

COMPLETION:  
2000

COST:  
\$53,000

OUR ROLE:  
Design and Construction  
Observation

CONTACT:  
Jennifer Sayre  
County Manager  
Kanawha Co. Courthouse  
Charleston, WV  
304.357.0101



E.L. Robinson Engineering co. was retained by the Kanawha County Commission to provide planning, design and construction administration services for a sanitary sewer line replacement at Camp Virgil Tate in Kanawha County, West Virginia.

Several old, deteriorated sewers were replaced with PVC pipe and manholes were added. Existing buildings were reconnected to the new sewer lines.





# Town of Wayne Combined Sewer Separation

*Town of Wayne*

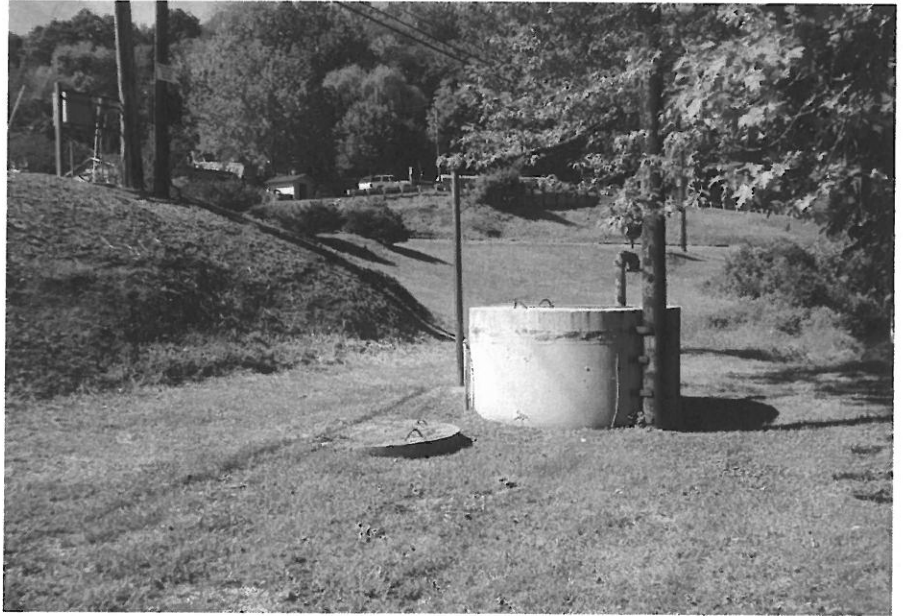
LOCATION:  
Wayne County, WV

COMPLETION:  
Bidding 2012

COST:  
\$3M

OUR ROLE:  
Design, Bidding,  
Construction Inspection, and  
Contract Administration

CONTACT:  
Mayor Mike Sanders  
PO Box 25  
Wayne, WV 25570  
304.272.3221



Portions of the existing sanitary sewer collection system in the Town of Wayne are Combined Sewers, which convey both sanitary sewage and storm water. During the periods of heavy rainfall, the storm water exceeds the capacity of the combined sewers and overflows into Twelve-pole Creek.

E.L. Robinson Engineering conducted a Sanitary Sewer Evaluation Study to determine which sewers are combined. We prepared plans to eliminate the combined sewers by constructing new, separate storm and sanitary sewers. Also, the existing sanitary sewers will be upgraded in several areas to replace lines that have been maintenance problems. Many of the older sewers do not have manholes and have deteriorated over the years. These lines will be replaced and upgraded to current standards.

Also, several pump stations will be renovated with new pump bases, guide rails and level transducers to replace existing floats.



**Role**

Laundry Consultant

Mr. Holdren has worked in various Hotels/Motels, Nursing Homes, Hospitals, Prisons and WV State Parks in the design and layout of commercial laundry facilities. Mr. Holdren has over 15 years' experience in management. His responsibilities have included Project Manager and Project Engineer on projects with Dow Chemical, Bayer Crop Sciences, Ashland Oil, M&G Polymers, BASF

**Project Experience****Canaan Valley DNR Facility**

- Canaan Valley Laundry facility redesign from original hotel layout to a new more efficient layout separating the soiled laundry from the clean laundry.
- Took the actual linen usage and converted to total lbs. of laundry per day and then looked at the current size of washers determining that they were undersized using Laundry Analysis Formulas.
- New layout Design Drawing submitted and approved by DNR.
- Electrical, Water, Drain size and Dryer venting were all considered in the design. We also had to design the concrete pad the washer sets on.
- Current Installation is set for October 2014.

**Beech Fork State Park DNR Facility**

- Designed and laid out the New Hotel Laundry room.
- Used the standards in the UniMac Laundry Engineering and Planning Handbook for the basis of the design.
- Calculated the size of the washers and dryers in the Layout drawing.
- Considered not only the size of the washers and dryers but the flow of the linens, folding the linens and the storage of the linens.
- Being a new facility we were able to spec. the electrical requirements as well as the water and air flow for the dryers.

**Hawks Nest State Park DNR Facility**

- Hawks Nest was outsourcing their laundry and they were not happy with the results. I showed them that by bringing the laundry into their facility they would have control of the results.

**Education**

Bachelor of Science in Engineering  
West Virginia Tech

Accounting and Finance, University of  
Kentucky

**Employment History**

2004 - Present, Laundry Consultant, CDI  
Corporation

- We took an existing room and converted into a Commercial Laundry room that is operating more efficient.
- The existing utilities were a challenge. With some out of the box thinking we were able to make everything work. From the size of the washers and dryers to the above ground trough for drainage.

#### **Twin Falls State Park DNR Facility**

- When Twin Falls upgraded their facility they called me to assist with the design and layout of the laundry facility.
- Again existing utilities had to be considered.
- The design of the washers and dryers took into account the % occupancy on their current facility and then projected future.
- Designed the laundry room for additional laundry equipment for the future as the facility grew.

#### **Cass Railroad DNR Facility**

- Worked with the DNR on locating just the right location for their new laundry facility.
- Took an old structure on their property and turned it into a usable facility.
- Challenges were the existing utilities, second floor location and limited access for flow of the laundry.
- Designed the concrete pad for the washers with the future in mind for future expansion. This was a major undertaking.
- Cass had some existing equipment that we used as well as new washers and dryers.

**Role**

Wastewater Engineer

**Professional Registrations**

Registered Landscape Architect (WV, OH, VA, MD, IN)

Mr. Nelsen has practiced landscape architecture for over 30 years principally in West Virginia but also has completed projects in Ohio, Indiana and Pennsylvania. His professional experience has afforded him opportunities to assist clients with park and recreation planning and design, community and urban planning, streetscape design, campus planning for elementary, secondary and higher education facilities and site planning and design for residential, commercial and public places. He has been involved in environmental planning and restoration especially lands degraded from past mining practices. He has managed site development on significant projects such as the Stonewall Jackson Resort and the Tamarack Art Center yet enjoys working with clients and communities assisting them visualize the improvements for their parcels and neighborhoods.

**Project Experience****Beech Fork State Park Lodge Development - Wayne, WV**

Provided feasibility studies of three different sites for new lodge for the state park beginning in 2008 through 2011. Working with WVDNR and the architectural firm ZMM of Charleston to develop a conceptual plan for the lodge and site improvements for a 75 room lodge near the lake's beach area with a total construction cost of approximately \$29 million.

**Clay Center for the Arts and Sciences - Charleston, WV**

Prepared construction and bidding documents and provided construction administration for a new public plaza space at the corner of Leon Sullivan Way and Washington Street for Charleston's premier performing arts and science center. The site's design called creating a cool green zone for people to gather informally and as an entertainment venue for special events. The relative flat site consisted of a circular plaza and fountain surrounded by a concentric ring of granite seat walls at the edge of the pavement radiating outward into the lawn area. Large 4" and 6" caliper Linden and Honeylocust trees were planted to create a shaded canopy for the space in front of the center.

**Washington Street Streetscape - Charleston's East End,**

**WV.** Prepared master plan, construction and bidding documents and provided construction administration services for the remaining segment of the Washington Street streetscape from the state Capitol grounds to Charleston Area Medical Center which entailed a ½ mile of sidewalk

**Education**

Bachelor of Science in Landscape Architecture, West Virginia University, 1976

**Civic Affiliations**

- West Virginia Chapter American Institute of Architects, Member

replacement, new street lighting, brick accent pavements, street trees, landscaping, utility line relocation and burial and new underground electrical service for 30 structures. Total budget for the project was approximately two million dollars.

#### **Rich Mountain, Laurel Hill and Corricks Ford Civil War Battlefields, Randolph, Barbour and Tucker Counties, WV**

These are three distinct battlefields but are all related to each other because they are a progression of the first major conflict in northwestern Virginia in July, 1861 between approximately 9000 Union soldiers led by General George McClellan and 5000 Confederate troops led by General Robert Garnett. The armies engaged each other at these three locations over a week's time resulting in the defeat of the Confederate forces. This early Union victory allowed Union sympathizers in the western counties of Virginia to organize a secessionist movement to form the new state of West Virginia. Provided master planning, interpretation recommendations, signage and trail development for each of these sites with archeological and historical consultants on the team. The planning and design efforts of these new public lands were focused on preservation and interpretation of each site's story about West Virginia's role in the Civil War.

#### **Stonewall Jackson Resort - Roanoke, WV**

In the most recent major expansion of a West Virginia State Park, assisted the developer in an unique public private partnership to build new facilities at the park which included master planning for a lodge, golf course, expanded campgrounds, cabins, expanded day use facilities, trails and other site features. Prepared documents for regulatory review by the USACOE, WVDEP, and WVDNR. Managed the development of site preparation construction documents for the lodge, golf clubhouse, cabin area, and future campground areas. Assisted the golf course design team with storm water management and permitting issues. After the completion of new facilities have continued to assist the developer on future proposed amenities for the resort.

#### **Tamarack Art Center - Beckley, WV**

Working with the architect for the project prepared the site master plan and managed design for all exterior improvements including access road, bus and car parking, earthwork, stormwater management, utility design, pedestrian walkways and plaza spaces, fountain design, landscaping, and irrigation design. This \$20 million facility is widely recognized in West Virginia and surrounding states as one of the finest venues for West Virginia artisans.

#### **BOPARC Master Plan Update - Morgantown, WV**

Due to the significant growth in Morgantown, assisted the Morgantown Board of Park and Recreation Commission with an update of the existing and proposed park facilities maintained by the City of Morgantown. This involved site review of approximately 20 facilities, development of a needs analysis survey and interpretation of its findings, preparation of new master plans for each park, preparation of cost opinions and phased recommendations for the planned \$12 million of improvements.

#### **Aspen Village, Timberline Resort - Canaan Valley, WV**

Provided master planning and managed site design, permitting and engineering for a new 50 lot subdivision near Timberline. The development involved grading layout for lots, roads, drives, utilities, pond enlargement, and site amenities. Project entailed 30 duplex and triples units and 20 single family lots. Coordinated utility extensions with each respective company and assisted several of the property owners with site planning of their home sites.

#### **West Side Community Renewal Plan - Charleston, WV**

Working with the Charleston Urban Renewal Authority, Charleston Planning Department and community leaders on the West Side developed the largest urban renewal plan within the city encompassing 228 acres and almost 900 buildings. With assistance of a public facilitation consultant held a series of meetings with residents and business owners to gain input into their vision for the plan. The adopted recommendations identified significant public and private recommendations with the strongest focus on a new home ownership zone around the new elementary school planned on Florida Street.

**Role**

Water Systems Engineer

**Professional Registrations**

Registered Professional Engineer (WV)

Successfully worked on and managed numerous Phase I and II ground water quality investigations and feasibility studies for the West Virginia Department of Environmental Protection.

Mr. McGettigan has taken many large water and wastewater projects from the initial development phase through the construction phase. This includes writing the preliminary engineering report, developing funding scenarios, designing the system, developing the plans and specifications, developing the bid documents/overseeing the bid process and managing the construction inspection.

Developed specifications and managed construction inspection for land development and utility construction projects.

**Project Experience**

- **Dingess Phase I & II Water Distribution System Extension.** Managed all phases of the project including preliminary design, permits, etc.
- **US Route 52 Waterline Extension Project.** Managed all phases of the project including preliminary design, permits, etc.
- **Crockett and Millers Fork Waterline Extension.** Managed all phases of the project including preliminary design, permits, etc.
- **Route 37 Waterline Extension Project.** Managed all phases of the project including preliminary design, permits, etc.
- **Nestlow Phases I & II Waterline Extension Project.** Managed all phases of the project including preliminary design, permits, etc.
- **Crum Mill Creek Waterline Extension Project.** Managed all phases of the project including preliminary design, permits, etc.
- **Crum Route 152 Phase I Waterline Extension Project.** Managed all phases of the project including preliminary design, permits, etc.

**Education**

B.S. Civil Engineering, West Virginia University, 1981

**Civic Affiliations**

- American Society of Civil Engineers



- **Delbarton Sewer Line Replacement project.** Worked on all phases of the project including preliminary design, permits, etc.
- **Town of Pax Waterline Relocation project.** Designed and managed project through construction phase.
- **Glen Rogers Waterline Extension project for WVDEP-AML.** Worked on design, hydraulics, permits, specifications, etc.
- **Charles Pointe North Landbay Phase I Infrastructure project.** Developed specifications and managed construction inspection for this commercial land development project.
- **Charles Pointe South Landbay Phases I & II Infrastructure project.** Developed specifications and managed construction inspection for this commercial land development project.

# Winfield H. Strock

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## Role

Cost Estimating Consultant

## Professional Registrations

Licensed West Virginia Contractor - WV000010

## Experience

Mr. Strock is responsible for estimating, scheduling, and value engineering services to architects and engineers. He has performed project feasibility studies, conceptual estimates and performance prospectus for owners and developers. Mr. Strock is also responsible for on-site projects analysis, scheduling, and management.

- Experienced in all facets of construction estimating, scheduling, purchasing and project management.
- 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 has lectured (*in conjunction with the Cambridge Institute*) on the use of arbitration in construction contract disputes.

## Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

## Employment History

1995 - 2011, Principal, Self Employed  
1978 -1995,  
Owner/President/Consultant, Kenhill Construction Company, Charleston, WV  
1965 - 1978, Field Engineer/Estimator/ Chief Estimator/ Project Manager, Messer Construction Company, Cincinnati, OH

## Civic Affiliations

- Associated General Contractors of American, Past Director
- Contractors Associated of West Director, Past President Director
- Kanawha Valley Builders Association, Past President
- American Arbitration Association, Panel of Arbitrators

## References

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**Bradley Leslie, PE, Assistant Chief**

WVDNR  
State Parks Section  
324 4th Avenue  
So. Charleston, WV 25303  
304.558.2764

## 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



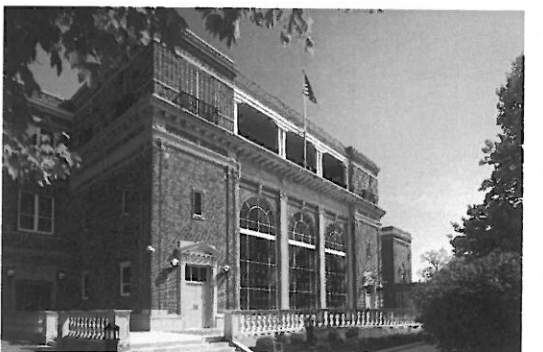
### 2012

#### **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



## Additional Award Winning Design



### 2010

**AIA West Virginia Chapter: Honor Award**

*Excellence in Architecture*

Hacker Valley PK-8 School  
Hacker Valley, West Virginia

### 2009

**AIA West Virginia Chapter: Merit Award**

*Excellence in Architecture*

Construction & Facilities Management Office (CFMO)  
Charleston, West Virginia

### 2008

**AIA West Virginia Chapter: Honor Award**

*Excellence in Architecture*

Erma Byrd Center  
Beaver, West Virginia

### 2007

**AIA West Virginia Chapter: Honor Award**

*Excellence in Architecture*

Lincoln County High School  
Hamlin, West Virginia

### 2006

**AIA West Virginia Chapter: Merit Award**

*Excellence in Architecture*

Gene Spadaro Juvenile Center  
Mt. Hope, West Virginia





RFQ No. DNR 150000007

STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

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

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

**DEFINITIONS:**

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

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

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

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: ZFM, Inc.

Authorized Signature: [Signature] Date: 10/14/2014

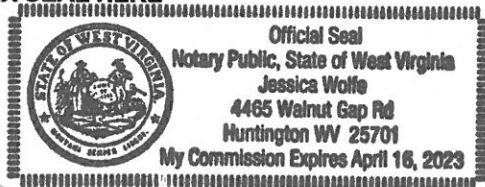
State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 14 day of October, 2014.

My Commission expires April 16, 2023.

**AFFIX SEAL HERE**



**NOTARY PUBLIC**

[Signature]  
Purchasing Affidavit (Revised 07/01/2012)

### CERTIFICATION AND SIGNATURE PAGE

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

ZMM, INC.  
(Company)

AR ADAM R. KRASON, AIA, NCARB, LEED-AP  
(Authorized Signature) (Representative Name, Title) PRINCIPAL

304.342.0159 / 304.345.0144 10/14/2014  
(Phone Number) (Fax Number) (Date)



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

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

Proc Folder: 18835

Doc Description: Parks - Pipestem - A/E Laundry Facilities

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2014-09-05	2014-10-14 13:30:00	CEOI 0310 DNR1500000007	1

#### BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

#### VENDOR

Vendor Name, Address and Telephone Number:

#### FOR INFORMATION CONTACT THE BUYER

Dean Wingerd

3045580468

dean.c.wingerd@wv.gov

Signature X

*AD RV*

FEIN #

55-0676608

DATE

10/14/2014

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