Expression of Interest for:

Coonskin Park Maintenance Complex Building Design

West Virginia Army National Guard

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January 6, 2015

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January 5, 2015

Ms. Tara Lyle, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street, East
Charleston, West Virginia 25305-0130

Subject: Coonskin Park Maintenance Complex Building Design
West Virginia Army National Guard

Dear Ms. Lyle:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate both our experience and our capability to provide professional architectural and engineering services for the new Coonskin Park Maintenance Complex Building Design, which will be located at Coonskin Park. ZMM is one of few full service A/E firms in West Virginia, and is noted for design excellence and client focus. Please note that as on several recent projects completed for the WVARNG, ZMM will collaborate with Capitol Engineering, Inc. for site and civil design. CEI is a small, locally owned, service oriented, civil engineering firm located in Charleston. Projects demonstrating ZMM's recent collaborations with CEI are included in the attached information.

Our team has the right combination of experience to successfully assist the West Virginia Army National Guard with this effort. That experience includes the design of:

- **Storage and Maintenance Buildings**
  In addition to the storage and maintenance facilities that we have designed for the West Virginia Army National Guard, ZMM has recently completed the design of a new storage facility for the West Virginia State Agency for Surplus Property in Dunbar. The facility was designed with a focus on meeting a challenging budget, and is nearly the same scope as the proposed Coonskin Park Maintenance Complex. ZMM, in collaboration with HNTB, also recently completed the design of a similar maintenance facility for the Parkways Authority in Beckley.

- **West Virginia Army National Guard Buildings**
  ZMM has a history of assisting the West Virginia National Guard that spans more than fifty years. Our recent experience includes several projects at the Coonskin Complex including the CFMO Expansion, the Tackett Family Readiness Center, and the Air Guard Headquarters Complex. Other recent experience includes the Joint Interagency Training and Education Center at Camp Dawson, the Jackson County AFRC, the Morgantown AFRC, and the Glen Jean AFRC. Each of these projects contained elements similar to the scope of this project including storage facilities, wash points, fuel points, and infrastructure upgrades.

- **Kanawha Valley Buildings**
  ZMM is a trusted resource for design projects in the Kanawha Valley. Some of our recent experience includes the two new Elementary Schools on Charleston's West Side, the proposed Charleston EDGE project, the West Virginia Housing Development Fund Headquarters, the Girl Scouts of Black Diamond Council Headquarters, Highland Hospital, and several projects at the West Virginia Capitol Complex. Several of these local projects have been recognized with state-wide design awards.

222 Lee Street, West • Charleston, West Virginia 25302
304.342.0159 office • 304.345.8144 fax
www.zmm.com

We are confident that the our recent experience designing storage and maintenance facilities, our experience working with the WVARNG at the Coonskin Complex, and our depth of experience providing services in the Kanawha Valley make our team the most qualified to assist with the design of the Coonskin Park Maintenance Complex Building Design.

Thank you for taking the time to review the attached information that details our firm history and philosophy, experience, qualifications, personnel, and references. Additionally, please visit our website at www.zmm.com to learn more about our firm from the perspective of our clients. We look forward to the opportunity to discuss your project and our qualifications in more detail, and appreciate the opportunity to be considered for this important assignment.

Respectfully submitted,
ZMM, Inc.

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

222 Lee Street, West • Charleston, West Virginia 25302
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www.zmm.com

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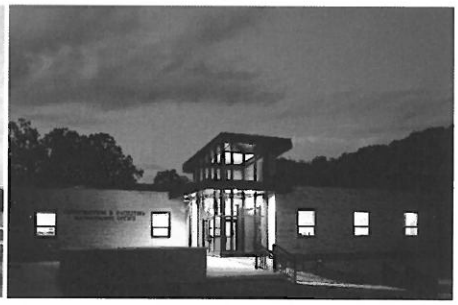
Coonskin Park Maintenance Facility

Project Approach and Methodology

ZMM Architects and Engineers understands that the West Virginia Army National Guard is seeking the services of a qualified professional design firm to assist in the development of a new 9,000-11,000 SF maintenance facility for Coonskin Park. It is anticipated that the design will take into account the close proximity of the construction of the Coonskin Park Bridge. ZMM has extensive experience designing storage and maintenance facilities – most recently for Surplus Property in Dunbar and the Parkways Authority in Beckley. Our team has also provided design services on several projects at the Coonskin Campus, and our partner CEI has experience designing many of the infrastructure and site related elements such as the wash point, fuel point, paving, and gates.

Project Management Plan

ZMM Architects and Engineers proposes to provide services on the project with a team of design professionals that have worked together on a variety of WVARNG facilities throughout the State. The team will be led by Adam Krason, an architect and principal of the firm. Mr. Krason has led ZMM's effort on all of the recent work for the WVARNG, including the Jackson County AFRC, the Morgantown Readiness Center, the JITEC, the CFMO Expansion, the Tackett Family Readiness Center, and the Parkersburg Readiness Center.



Other key team members will include:

Nathan Spencer, AIA	Project Architect
Robert Fuller, PE – CEI	Civil Engineer
Steve Hedrick, PE	Structural Engineer
Scot Casdorph, PE	Electrical Engineer
Steve Cook, PE	Mechanical Engineer
Mike Flowers	Plumbing Designer
Mark Epling, AIA	Specifications Writer

The entire team has successfully collaborated on multiple projects for the WVARNG, and each team member is familiar with the standards, requirements, and processes that are utilized by the Guard.

ZMM Quality and Cost Control Plan

Every project completed by ZMM Architects and Engineers undergoes a QA/QC process that is led by David Ferguson, an architect and principal of the firm who has more than 30 years of experience designing buildings in West Virginia. ZMM has a standard template for this QA/QC process, and reviews are conducted at the end of each design phase. ZMM also utilizes BIM software (Autodesk REVIT), which helps identify potential conflicts during the design phase.

As part of our effort to ensure our ability to meet the WVARNG's budget, ZMM will rely on both historic bidding data as well as independent estimates to verify the project budget. For this project ZMM would utilize Win Strock to provide the independent estimate.

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ZMM and Mr. Strock have successfully collaborated on a number of projects, including:

- Logan-Mingo Readiness Center
- Parkersburg Readiness Center
- Beech Fork Lodge
- West Virginia State Police Information Services Center
- Edgewood Elementary School
- West Virginia State Lottery Headquarters Renovation
- Brooks Manor Addition and Renovation
- WVRTP Building 740 Improvements

Design Approach

Our team would commence the design effort be verifying the project scope, budget, and the WVARNG's expectations for the project. This verification will set the baseline for the project, and inform all design decision moving forward. Following this process, ZMM and CEI would visit the site to review all potential design constraints, including the adjacent bridge construction, and the availability of site utilities.

Once all of the preliminary information has been verified, our team will commence the conceptual/schematic design process. Design is an iterative process, and we would welcome several points of end-user feedback to ensure that we deliver your vision for the project. The design process would be influenced by our recent experience designing similar facilities for Surplus Property (in Dunbar) and the Parkways Authority (in Beckley). At the end of each design phase ZMM will conduct an internal QA/QC review, incorporate owner review comments, and deliver and independent cost estimate with value engineering suggestions for consideration. Our goal will be to deliver the highest value through the design process.

The efforts of ZMM's architects and engineers will continue through the construction phase until the final completion of the project. ZMM continues to focus on quality throughout the construction phase by utilizing a dedicated construction administrator to coordinate the design team's effort throughout the construction process. This approach will improve the communication and coordination between ZMM, the WVARNG, and the contractor, and will ultimately lead to an improved construction process.

One of our clients once commented that when you hire ZMM, you hire us for the life of the building. We appreciate that sentiment, and commit to being a long-term resource for building owners and operators. Our full service team of architects and engineers has been providing design services from our office in Charleston for more than fifty-five years. We commit to seeing your project through to completion, and to remaining a resource for our clients for the life of the building.

History and Philosophy of ZMM

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
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

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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

ZMM Community Support

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In addition to our design efforts, ZMM is supportive of institutions and organizations that contribute to the cultural and educational landscape in West Virginia.

ZMM offers financial support to several community and state-wide institutions which reflect the superior quality that we strive to achieve on each of our projects. The following organizations also impact the educational environment through their support of local artisans, performances, broadcasts, and community service:

GIRL SCOUTS

CLAY CENTER

Kanawha County Public Library

WEST VIRGINIA PUBLIC BROADCASTING

WEST VIRGINIA POWER

ZMM ARCHITECTS & ENGINEERS POPS

West Side main street

imagine Charleston
your dream. our future.

"One of the joys of being in West Virginia is discovering the incredible commitment to quality that many institutions here have, and we have been able to partner with ZMM an incredible architectural and engineering firm based here in Charleston, which shares our commitment to quality. We believe that quality is the way to the future. It is the way that we see what is possible, with our people, with our resources, and indeed we are going to build together a brighter future for everybody by these partnerships."
Maestro Grant Cooper, Artistic Director and Conductor
WV Symphony Orchestra

The ZMM project team will be led by Adam Krason, AIA, LEED-AP. Adam has been involved with several local community organizations and initiatives, including West Side Main Street, the Charleston Area Alliance Economic Development Committee, Charleston Rotary, the Charleston Area Alliance Gateway Committee, the Advisory Council for the Sustainability Institute at Bridgemont CTC, and has previously been active with the Charleston Land Trust. Most recently Mr. Krason served as the Co-Chair of the Imagine Charleston Neighborhoods Committee.

Award Winning Design

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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

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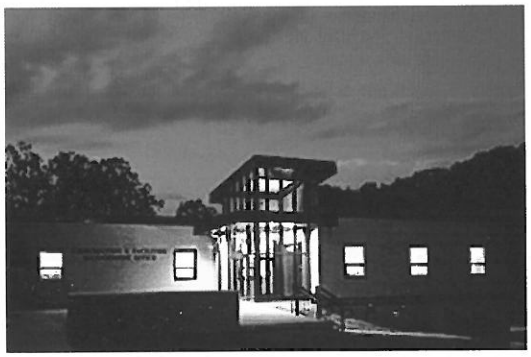
2010
AIA West Virginia Chapter: Honor Award
Excellence in Architecture
Hacker Valley PK-8 School
Hacker Valley, West Virginia

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



History of Capitol Engineering, Inc.

CEI

LOCATION:
1206 Kanawha Blvd., E
Charleston, WV 25301

CONTACT:
Phone 304.344.0720
capitolengineering.com

History

Capitol Engineering, Inc. (CEI) proposes to perform civil engineering services for the West Virginia National Guard to develop planning and programming documents for various facilities. We have experience planning, designing, specifying, preparing contract documents, bidding and performing contract administration on many types of military facilities including Readiness Centers, Airfields, Training Areas and Ranges. Our experience and resources give us the ability to handle both complex and routine projects.

Why CEI?

CEI offers the highly specialized experience, attention to minute detail, and the unparalleled level of personal client support provided by a small boutique firm. We are particularly attractive because:

- Our management, engineering and professional staff has a combined total of over 120 years of experience – much of it acquired while working on military facilities.
- Staff has participation and completion of 50 National Guard projects in West Virginia.
- Management team has 30+ years and over 100 projects total specialized experience providing timely, cost effective construction documents for military facilities.
- Experience to successfully handle all design situations and problem types anticipated to occur under this contract.
- Construction and Facilities Maintenance Office satisfaction with prior work/ projects performed by key staff members.

Services

- Civil Engineering
- Environmental Engineering
- Surveying & Mapping
- Construction Administration
- Mining Engineering

SIGNIFICANT POINTS

- Site investigation experience with undesirable/difficult sites - Glen Jean, Lewisburg, Fairmont, Elkins, Mingo/Logan Readiness Center
- Glen Jean civil design - nice use of site for both function and aesthetics - USPFO property has same potential
- AASF construction observation - worked with CFMO to maximize impact with the dollars available

Adam R. Krason, AIA, NCARB, LEED AP

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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

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-

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

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.

Joint Interagency Training & Education Center (WVARNG), Kingwood, WV Mr. Krason was responsible for the preliminary programming, and participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Krason was also responsible for managing the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. 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 1-201st Field Artillery. A significant portion of the Morgantown Readiness Center supports the 249th Army Band. The Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

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 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. Mr. Krason 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, 10th Floor Renovation (Office of Technology), Charleston, WV
Mr. Krason led an architectural and engineering team that completed a detailed assessment of State Office Buildings 5, 6, & 7. Once the assessment was complete, ZMM had the opportunity to implement the proposed improvements on the 10th Floor of State Office Building #5 for the Office of Technology. The renovations, aiming for LEED-CI Certification, re-oriented the layout by drawing all private offices into the building core, providing access to daylight and views for all employees. The design also utilized acoustical ceiling clouds and bulkheads to maximize the acoustical performance, while also increasing the volume of the space.

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, 10th Floor Renovation,* Charleston, WV
2009 AIA Merit Award *WVARNG Construction and Facilities Management Office*, Charleston, WV

The West Virginia Board of Architects

certifies that

ADAM R. KRASON

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

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

Certificate Number [redacted]

The registration is in good standing until June 30, 2015.

Leta C. Lewis

Board Administrator

Robert M. Fuller, PE

CEI

Role
Civil Engineer, Site Design

Professional Registrations
Professional Engineer (WV, PA, OH)
OSHA 40-Hour Health Safety Training
OSHA Supervisor Training

Project Manager with over twenty (20) years of experience with site investigation, planning, design and contract administration services on military, site development and mine reclamation projects. Mr. Fuller has been fully responsible technically, managerially and administratively for the planning, investigation, design and contract document preparation for over seventy (70) projects in the State of West Virginia. Mr. Fuller has served as Associate Professor of Civil Engineering Technology at West Virginia University Institute of Technology on a full-time, part-time and adjunct basis.

Mr. Fuller was principal or project manager for the following West Virginia Army National Guard Projects completed by Capitol Engineering, Incorporated:

Project Experience
Joint Interagency Training and Education Center (JITEC)
Morgantown Readiness Center
Jackson County Armed Forces Reserve Center
Fairmont Armed Forces Reserve Center
Elkins Armed Forces Reserve Center
Glen Jean Armed Forces Reserve Center
Summersville Readiness Center
Lewisburg Readiness Center
CFMO Office Expansion
Elkins AFRC Utility Extensions
AASF #1 Apron Expansion/Rehabilitation and Taxiway Replacement
Camp Dawson Runway Extension
Camp Dawson Range Renovations
Camp Dawson Qualifications Training Range Preliminary Design Drawings
AASF #1 Emergency Taxiway Repair
JISOTF Initial Planning Study
Camp Dawson Range Renovations

Education
M.S. Engineering, Marshall University Graduate College, 1997

B.S. Engineering Technology, West Virginia Institute of Technology, 1989

Military Background
Service:
1988 - 2010, Lieutenant Colonel (Retired), WV Army National Guard
1988 - 1985, Enlisted, US Army Reserve

Key Tours:
2007 - 2008, Lieutenant Colonel, EN, Design Engineer, Operation Iraqi Freedom
2003 - 2004, Major, EN, Plans Officer, Operation Enduring Freedom/Operation Iraqi Freedom

Civic Affiliations
- Society of American Military Engineers
- American Society of Civil Engineers
- American Institute of Architects
- Construction Specifications Institute

Robert Doeffinger, PE

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Role
Engineering Principal

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

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

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

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

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

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

Education
Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

Employment History
2010 - Present, President, ZMM
1976 - 2010, Vice President and Engineering Principal, ZMM

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

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

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

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

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

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

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

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

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

The Boulevard at 2412, Charleston, WV Mr. Doeffinger was on the design team for the proposed Kanawha Boulevard Condominium project. The sixty unit project, located in the East End Historic District, included a design that increased in height as it stepped back from the Kanawha River, providing the opportunity for a series of outdoor living areas, while also respecting the massing of the adjacent residences in the Historic District.

CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

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

ZMM, INC.
C00689-00

Engineer in Responsible Charge: ROBERT DOEFFINGER - WV PE 009847

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

July 1, 2012 – June 30, 2013

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

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

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

BOARD PRESIDENT

Nathan Spencer, AIA

ZMM
ARCHITECTS & ENGINEERS

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 87,300 SF, $26M addition to Highland Hospital in Charleston. The addition will include: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge will connect the new facility to the existing hospital. 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 Mr. Spencer 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 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. A dental and health clinic is also on site for all enrolled students in the Kanawha County School District.

The West Virginia Board of Architects

certifies that

NATHANIEL HAROLD SPENCER

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

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

Certificate Number [redacted]

The registration is in good standing until June 30, 2015.

Leda C. Lewis

Board Administrator

Joe Sinclair, AIA, LEED AP BD+C, NCARB

ZMM ARCHITECTS & ENGINEERS

Role
Architect

Professional Registrations & Certifications
Registered Architect - WV #4244
NCARB
LEED AP Building Design + Construction
Building Performance Institute (BPI) Certified Professional

Joe returned to West Virginia in 2010 after pursuing a Master of Architecture degree from the Savannah College of Art and Design and working as both an Intern and Project Architect in Atlanta, GA. Before joining ZMM as a Project Architect, Joe worked as the Program Director for Sustainable Building Technology at Kanawha Valley Community & Technical College (KVCTC). Joe continues to teach as an Adjunct Professor for BridgeValley Community & Technical College.

An Iraq War veteran, Joe is a Registered Architect and LEED Accredited Professional with a specialization in Building Design and Construction. As a graduate student in Savannah, Joe explored sustainability as form-giver in architecture. As an architect in Atlanta, Joe worked on both commercial and residential LEED-registered projects and was an in-house resource for building science and moisture management analysis. Since returning to WV, Joe has earned multiple BPI certifications for Home Energy Auditing and Retrofitting. Joe brings a passion for sustainability in the built environment as well as a command of building science and of the building envelope.

ZMM Project Experience

Beech Fork Lodge and Conference Center, Lavalette, WV
Joe was the project architect and designer for a new lodge and conference center for the WV Department of Natural Resources at Beech Fork State Park. Designed on a peninsula, the plan is arranged to separate the guestrooms and other guest-only facilities from the public functions of the building such as the restaurant, lounge, gift shop, and conference rooms. All guestrooms offer a lake view, a 2-story atrium opens up each end of the lobby with curtain-wall glazing, and an indoor pool provides a transparent connection to the outdoors. A high-performance envelope was designed to eliminate thermal bridging and the potential for condensation.

Education
Master of Architecture, Savannah College of Art and Design, Savannah, GA, 2006

Bachelor of Science Engineering Technology, Fairmont State College, Fairmont, WV, 2002

Employment History
July 2012 - Present, Project Architect, ZMM, Charleston, WV

2011 - 2012, Program Director/Instructional Specialist Sustainable Building Technology Kanawha Valley Community & Technical College, Charleston, WV

2006 - 2011, Project/Intern Architect, Niles Bolton Associates, Atlanta, GA

Civic Affiliations
- American Institute of Architects (AIA)
- U.S. Green Building Council, West Virginia Chapter
- Adjunct Professor of Building Design and Construction at BridgeValley Community & Technical College

Restoration and Reuse of the Houston Coal Company Store, Kimball, WV
As project manager, along with historian Mike Gioulis, Joe performed a building assessment and restoration plan for a historic coal company store for the McDowell County Economic Development Authority. The plan provided multiple phases of work including exterior and interior restoration pieces. Projected energy use will be reduced by air-sealing the envelope and adding insulation in a manner that does not obstruct the historic character of the building. The facility will be reused as a museum and event center.

Energy Retrofit of The Tiskelwah Center, Charleston, WV
Joe was the project manager for an energy-efficiency retrofit that included window replacement, attic insulation and ventilation, and new HVAC. The building is a historic elementary school now used by Kanawha Valley Senior Services as a community and respite center. The retrofit will result in increased comfort, improved indoor air quality, and thousands of dollars of annual energy savings.

South Charleston Pediatrics, Charleston, WV
Joe was the project architect for a proposed contemporary pediatric outpatient facility designed to maximize day-lighting while minimizing solar heat gain in the summer. The high-performance thermal envelope was designed to meet and exceed current WV state energy code.

Single-Family Residential Projects
The Dorsey House, Charleston, WV
Joe was the architect for a new residence built on a pre-existing foundation in Charleston, WV. Basement knee walls and interior walls were built using salvaged materials from the existing home deconstructed on the site. Exterior walls (thermal envelope) were erected using a Structural Insulated Panel System (SIPS). Fresh-air whole-house ventilation was installed in the form of an energy recovery ventilator (ERV). Winner of the 2013 Placemaker Award for Sense of Place.

Laurel Run Guest House, Morgantown, WV
A residential project currently under construction, the guest house is built atop a pre-existing foundation. All exterior walls, interior walls, floors, and roof are built from materials salvaged from the deconstruction of an adjacent structure. Advanced framing and insulating techniques, air-tight construction, and passive- and active-solar orientation are used to create a high-performance envelope in a cold climate.

Previous Project Experience
Reception Station Barracks, Ft. Benning, GA
LEED Silver Registered Project
As project architect and LEED AP, Joe designed the building envelope to meet and exceed LEED NC V2.2 energy standards. The envelope was also carefully designed to eliminate thermal bridging and the potential for condensation.

Carlisle Barracks Military Housing, Carlisle, PA
Picatinny Arsenal, NJ
LEED for Homes
As project architect and LEED AP, Joe integrated a LEED for Homes Silver rating into the design, construction drawings, and specifications of the project.

Naval Housing, Southeastern United States
Joe participated in building design and community development on numerous Naval Stations throughout the Southeast United States. All homes were built with a thermal envelope and air barrier exceeding local codes and standards.

The West Virginia Board of Architects

certifies that

RYAN JOSEPH SINCLAIR

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

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

Certificate Number [redacted]

The registration is in good standing until June 30, 2015.

Leda C. Lewis

Board Administrator

Stephen Hedrick, PE

ZMM ARCHITECTS & ENGINEERS

Role
Structural Engineer

Professional Registrations
Professional Engineer (WV)

Mr. Hedrick is responsible for overseeing the design of the Structural systems, ensuring that the structural systems not only meet the building code requirements, but meet the long-term needs of the owner. He performs the analysis and design of the structural components to resist the loads from lateral and gravity forces. He coordinates with the other disciplines in order to integrate the Structural system into the building, working with the architects to determine the most economical way to construct the components of the building. Mr. Hedrick has participated on several LEED registered projects. Mr. Hedrick also oversees the work of other engineers and coordinates the office structural standards.

Mr. Hedrick began his career in structural engineering by designing large scale residential and light commercial structures for hurricane force winds. He has a broad range of experience in masonry, concrete, steel and timber design. In 2007, Mr. Hedrick moved back to Charleston, WV, to take a structural engineering position with ZMM where he supervises the design and production of the structural engineering projects, as well as serving on the Board of Directors.

Project Experience

Joint Interagency Training and Education Center (WVARNG) Kingwood, WV Mr. Hedrick was responsible for the overall structural design of the three story billeting addition. The project met the requirements of the building code along with the additional requirements of the Department of Defense for blast and progressive collapse resistance.

Jackson County Armed Forces Reserve Center, (WVARNG) Millwood, WV Mr. Hedrick was responsible for the overall structural design of the single story armory type structure. The project included the design of light weight metal trusses and long-span steel joists in the drill hall.

Wood County Justice Center, Parkersburg, WV
Mr. Hedrick was responsible for the structural 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 received LEED Silver Certification.

Education
Master of Science, Civil Engineering, University of Tennessee, 2003

Bachelor of Civil Engineering, West Virginia Institute of Technology, 2001

Employment History
2013 - Present, Board of Directors, ZMM
2007 - Present, Structural Engineer, ZMM
2003 - 2007, Structural Engineer, McCall Engineering, Inc.

Civic Affiliations
- American Institute of Steel Construction, Member

Tucker County Courthouse Annex, Parsons, WV
Mr. Hedrick was responsible for the structural design 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.

Girl Scouts of Black Diamond Council, Charleston, WV
Mr. Hedrick was the structural Engineer on the new Volunteer Resource Center and Girl Zone/Urban Camp in Charleston, WV. The 18,000 SF project will completely renovate an old car dealership into administrative offices, a community gathering space, and a small hotel (Urban Camp) for Girl Scouts visiting the Charleston area. This new main building will bring all the operations of the Girl Scouts of the Black Diamond Council under one roof. Steve was responsible for site visits and examining the exterior structure of the existing building.

Edgewood Elementary School, Charleston, WV Mr. Hedrick is involved with structural design on the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students.

Huntington East Middle School, Huntington, WV Mr. Hedrick was responsible for the overall structural design of the single story school building. The design included masonry wall, metal panel walls and storefront glazing in order to allow additional light for the LEED designed project.

Kenna Elementary School, Kenna, WV
Mr. Hedrick is responsible for the structural design for the new Kenna Elementary School.
The new school will serve approximately 375 students in grades Pre-Kindergarten through 5th Grade. The new facility replaces the existing school that was falling into disrepair and lacked the essential spaces for a thriving 21st Century learning environment. The site includes a separate bus drop-off area and parent drop-off area. There is also a designated Pre-K drop-off. A fenced Pre-K/K play area is provided, as well as a play area for the Grades 1-5. Several playing fields will be located on site as well.

Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV
Mr. Hedrick was responsible for the structural design for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,215 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

Southern West Virginia Community and Technical College, Williamson, WV Mr. Hedrick was responsible for the structural design of the new 22,000 SF Applied Technology Center. The building featured large, flexible teaching areas that can adapt as the curriculum changes for each program. The project is targeting LEED Silver Certification.

West Virginia Housing Development Fund Building, Charleston, WV Mr. Hedrick was responsible for the overall structural design of the two story steel frame and masonry building. The structure consisted of a composite concrete floor slab supported by steel beams and columns supported on a deep pile foundation.

Other Firm Experience:
Mr. Hedrick has researched and developed design criteria for structural insulated panels, prepared designs for earthquake and wind on FRP tanks. His role has also included supervising the work of design engineers in preparation of construction documents.

Scot Casdorph, PE

ZMM ARCHITECTS & ENGINEERS

Role
Electrical Engineer

Professional Registrations
Professional Engineer (WV)

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

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

Project Experience

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

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

Glen Jean Armed Forces Reserve Center, (WVARNG), Glen Jean, WV Mr. Casdorph was responsible for the electrical design of the 102,000 SF military training facility which houses the Armed Forces Reserve Center (AFRC), Military Entrance Processing Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the

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 77th Brigade Troop Command, the 1863rd Transportation Company, and the 150th Armored Regiment Company. The MEPS houses their administrative, medical, headquarters, testing and storage functions at the facility. A comprehensive 8,500 SF OMS vehicle maintenance shop provides space for six large service workbays for maintaining the military fleet.

J.M. Chick Buckbee Juvenile Center, Romney, WV Mr. Casdorph was responsible for the electrical design of the maximum security juvenile detention center. The single story 26,000 SF facility houses intake, medical care, recreation, food service and offers educational programs to help rehabilitate young individuals.

Gene Spadaro Juvenile Center, Mt. Hope, WV Mr. Casdorph was responsible for the electrical design of the minimum security juvenile detention center which offers a softer approach to rehabilitation relying more on the affection from the caregivers than the restraints of lockdown helping young individuals make better life decisions.

Lakin Correctional Facility for Women, Lakin, WV Mr. Casdorph was responsible for the electrical design of a dormitory style expansion on site of an existing correctional facility built exclusively for women. The new 124 bed, 24,000SF dormitory style housing unit provides ample amenities and a culinary arts program for the inmate population. An additional 9,500 SF Correctional Industries building was located near the dormitory and offers a garment, sewing and embroidery factory and manufactures inmate clothing, linens and office chairs.

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

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

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

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

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

Current Education Projects:
Valley High School, Smithers, WV
Divide Elementary School, Lookout, WV

Mary Jo Cleland, PE

ZMM
ARCHITECTS & ENGINEERS

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

Project Experience

General Service Division – Surplus Property, Dunbar, WV
Ms. Cleland is currently the Civil Engineer on the Surplus Property. This property consists of a new 20,000 SF metal building storage facility inclusive of 5,000 SF of new administrative offices. The new building 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.

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

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

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

Employment History
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

operations of the Girl Scouts of the Black Diamond Council under one roof.

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.

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 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 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school integrates sustainable design principles to serve as a teaching tool for the students.

Bridgemont (BrideValley) 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.

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

Mike Flowers

ZMM ARCHITECTS & ENGINEERS

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.

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

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

Mark T. Epling, AIA, LEED AP

ZMM ARCHITECTS & ENGINEERS

Role
Specifications Writer

Professional Registrations
Registered Architect (WV, OH,)
LEED Accredited Professional
NCARB Certification
Construction Documents Technologist (CDT)

Mr. Epling is responsible for the creation and coordination of Project Manuals including specifications for all ZMM projects. The coordination duties include the incorporation of specifications from several design disciplines including structural, plumbing, HVAC, and electrical specifications.

Mr. Epling's duties also include determining the type and number of bid packages and resulting construction contracts for a particular project, and following through with the incorporation of the appropriate contract forms and contract conditions into the Project Manuals.

Mr. Epling began his career as a licensed Architect in October 1982 and has acquired experience in all aspects of the architectural practice working on a variety of building types including single-family homes, medical clinics, industrial facilities, theatre restoration, commercial-retail buildings, and college dormitory and elementary school remodeling.

Mr. Epling began working at ZMM in February 1998 and has worked in preparation and coordination of working drawings, construction contract administration, and beginning in June of 2006, took on the role of specifications writer and has remained in that capacity.

Project Experience
Mr. Epling's recent project experience includes the preparation of Project Manuals for the following ZMM projects:

Wood County Justice Center
Tucker County Courthouse Annex
Capitol Roof Replacement
WV State Office Building #5, 6, & 7
WV Housing Development Fund
CFMO Expansion
Houston Company Store
Erma Byrd Center
Joint Interagency Training & Educational Center (JITEC)

Education
Bachelor of Architecture;
Virginia Polytechnic Institute and State University; 1977

Employment History
1998 - Present, Project Architect & Specifications Writer, ZMM
1997 - 1998, Project Architect, OH Firm
1982 - 1997, Architect, Self Employed, Located in OH
1978 -1982, Intern Architect, OH Firm

Civic Affiliations
- American Institute of Architects, Member
- West Virginia Symphony Chorus, Member

Huntington East Middle School
Southern WV Community & Technical College
Bridgemont Community & Technical College
Milton Middle School
Barboursville Middle School
Kenna Elementary School
Craigsville Elementary School
Southside Elementary/Huntington Middle School
Iaeger - Big Creek High School
Lincoln County High School
St. Albans High School
Bradshaw Elementary School
Edgewood Elementary School
Hacker Valley Pre K –8 School
Beech Fork Lodge
CAMC Teays Valley
Highland Hospital
WV Army National Guard - Glen Jean Armed Forces Center
WV Army National Guard - Jackson County Armed Forces Reserve Center
WV Army National Guard - Morgantown Readiness Center
WV Army National Guard - Logan-Mingo Readiness Center

Winfield H. Strock

Role
Construction Management/Estimator

Professional Registrations
Licensed Contractor (WV 000010)

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

Major Projects Estimated 2005-2012

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

West Virginia K-12 Schools
- McDowell County Schools Relocation Program - $50M
- Putnam County Schools Bond Program - $65M
- Greenbrier West High School - $21M
- Mingo County High School - $27M
- Pikeview Middle School - $16M
- Spring Mills Primary School - $13M
- Edgewood Elementary School - $16M

West Virginia Applied Technology Centers
- Williamson, WV - $6M
- Marion County, WV - $14M

West Virginia Army National Guard Readiness Centers
- Elkins, WV - $22M
- Ripley, WV - $11M
- Logan/Mingo Counties, WV - $13M

New River Community College
- Lewisburg, WV - $6M
- Beckley, WV - $17M

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

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

Construction & Facilities Management Office

WVARNG

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Charleston, WV

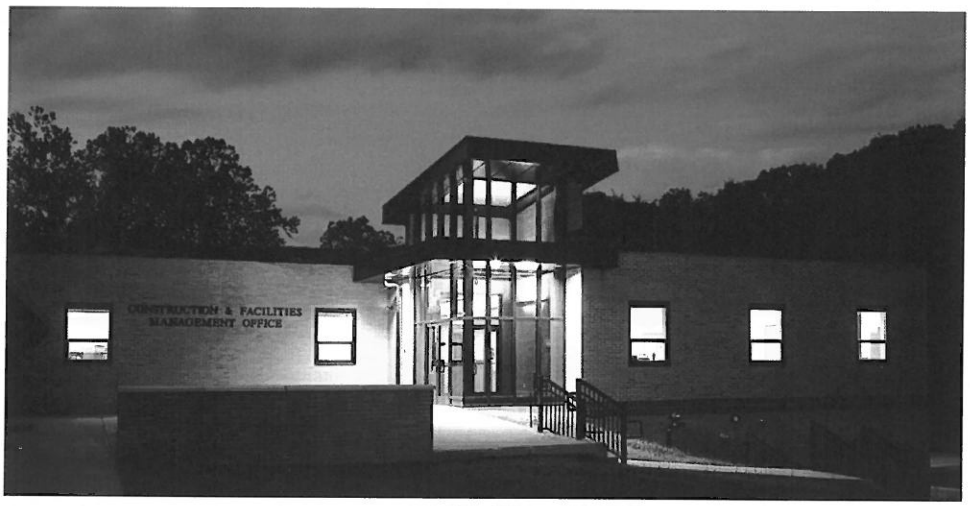
SIZE:
19,935 SF

COST:
$3.5M

COMPLETION:
2008

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

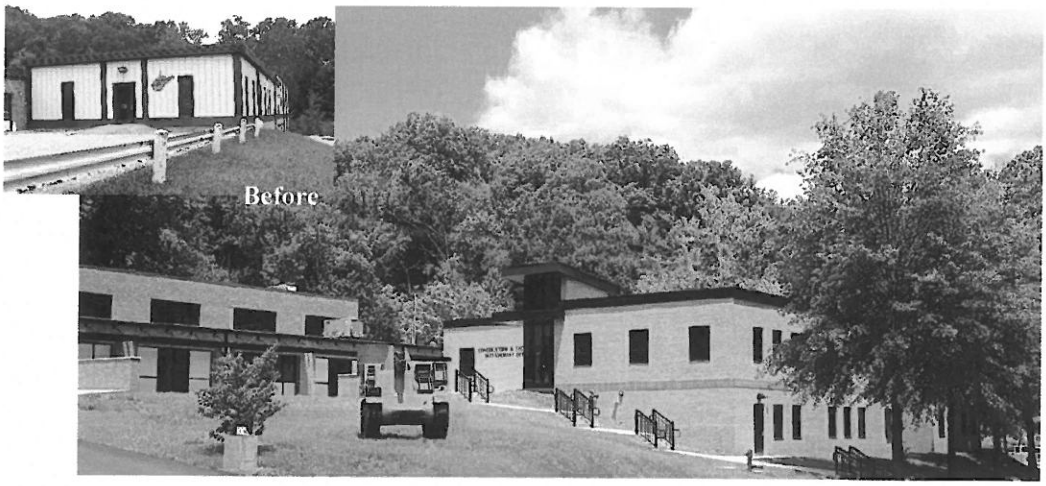
AWARD:
2009 AIA Merit Award,
West Virginia Chapter,
Achievement in Architecture



The Construction and Facilities Management Office (CFMO) Expansion project will bring all of the operations of the CFMO together under one roof. The branches that will occupy this facility include: Director of Engineering, Environmental, Planning and Programming, Facility Operations & Maintenance, Business Management, Resource Management, and Design and Construction. This new facility is located slightly to the front, and adjacent to the existing facility, lending prominence to the new construction, and providing a new aesthetic to the entire complex.

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

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



Tackett Family Readiness Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

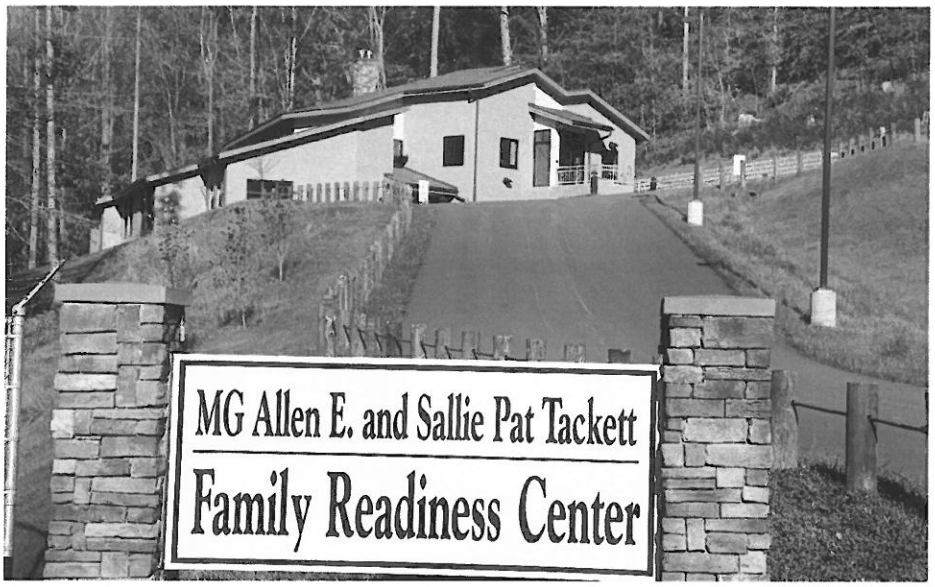
LOCATION:
Charleston, WV

SIZE:
7,400 SF

COMPLETION:
February 2011

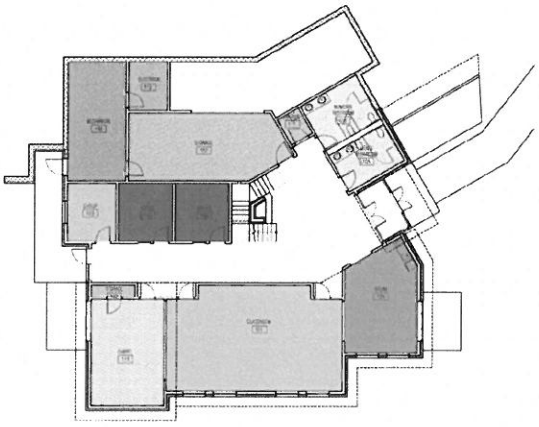
COST:
$1.57M

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

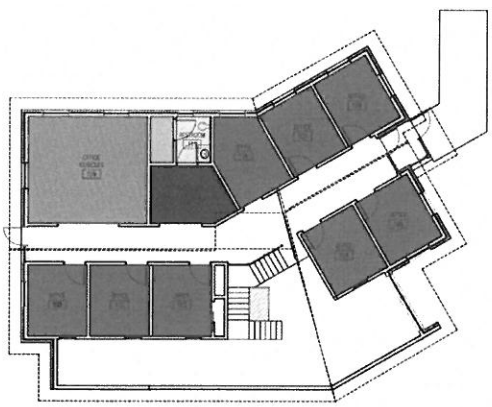


The Family Support Center is a two - story brick building with a sloped roof stepped into the wooded hillside adjacent to the Army National Guard facilities in Charleston, West Virginia. The building is designed to provide for a multitude of military family assistance, guidance, education, training, and mentoring programs.

The support center contains 11 office spaces, a chapel, and a variety of classroom and meeting spaces for various programs. The building provides an abundance of natural light and a central fireplace to project a warm, comforting and supportive atmosphere.



Lower Level



Upper Level

Jackson County Armed Forces Reserve Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

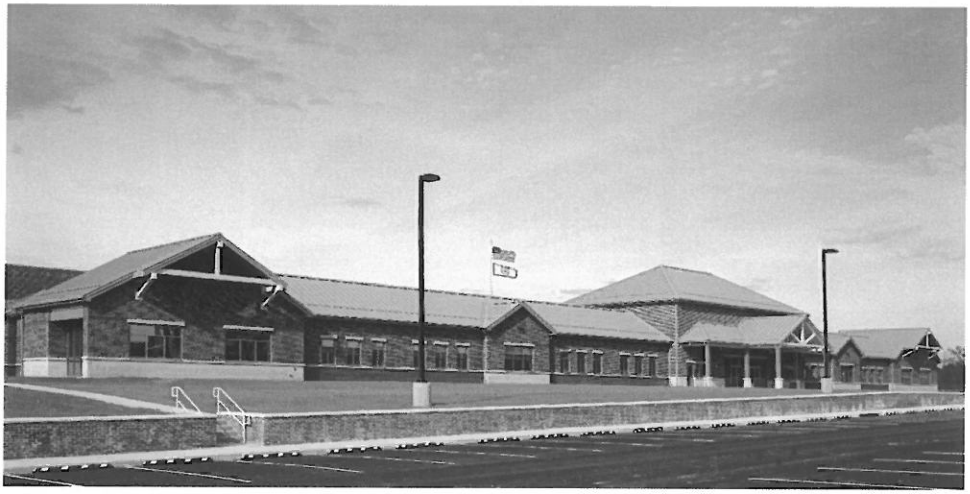
LOCATION:
Millwood, WV

SIZE:
75,000 SF

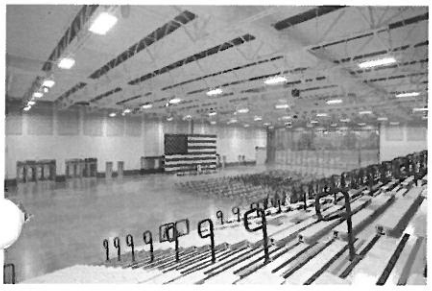
COST:
$20M

COMPLETION:
Fall 2011

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



The new facility houses both the West Virginia Army National Guard (WVARNG) and the United States Army Reserves (USAR). The primary user for the WVARNG will be DET 1 821st Engineering Company, who will be supported by a FSC of the 1092nd. USAR occupants will include PLT AMMO 261 OD and PLT 1 (Postal) and PLT 6 (Postal) of the 44th Personnel Company. The facility also includes an expanded Drill Hall that can serve as a convention and meeting space, which is being funded by the Jackson County Commission, additional federal appropriations, and the State of West Virginia National Guard.



The relationship between the structures became crucial to the site layout. The new facility is centered on the existing house, increasing the exposure of the facility from Route 2 - the major route of vehicular travel that parallels the Ohio River. Once the aesthetic of the building was established, the massing of the new facility was defined by breaking-down the facility into smaller mass elements that more closely reflected the Georgian Style, and that of many Army posts, such as Fort Meyer in Northern Virginia. The larger programmatic elements such as the Drill Hall and the storage areas employ an aesthetic that more closely implies their function.

The layout of the facility includes a main entry with the USAR and WVARNG Recruiting, Family Support, and Administrative areas located on separate sides (USAR to the left, WVARNG to the right). A transverse wing on the left houses all functions that have the potential for public use, such as the Drill Hall and the Educational component, while all primary military spaces developed along a similar perpendicular wing on the right. This allows for separate entries to be developed for public functions, while the remainder of the facility can be secured. The layout also creates a large central courtyard or parade field that would be located at lower grade to define the edge facing the river. This edge is defined by a canopy that connects storage and locker areas to the expanded Drill Hall.

Glen Jean Armed Forces Reserve Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

CEI

LOCATION:
Glen Jean, WV

SIZE:
110,000 SF

COST:
$17M

COMPLETION:
2004

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

The Glen Jean Armed Forces Center contains three distinct military functions: a facility for routine maintenance of over-the-road and tracked military vehicles, an armory housing four West Virginia National Guard units, and the Southern West Virginia Military Entrance Processing Station, where new recruits officially enter the military system.

The brick exterior walls are highlighted with limestone and metal trim accents. A large assembly hall, plus classroom and training space, enhance the ability of the armory building to provide training for military personnel to provide space for community functions.

Joint Interagency Training & Education Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Kingwood, WV

SIZE:
285,000 SF

COMPLETION:
2013

COST:
$78.4M

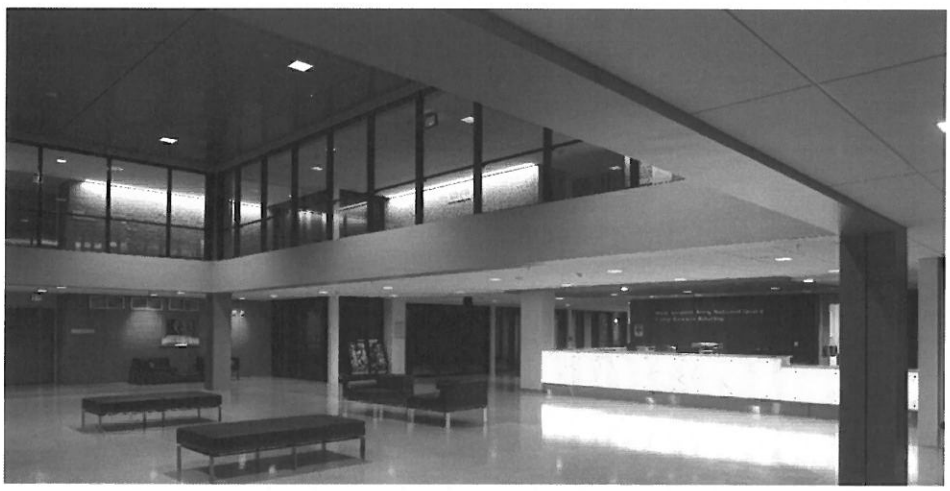
OWNER:
COL David Shafer
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6539

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

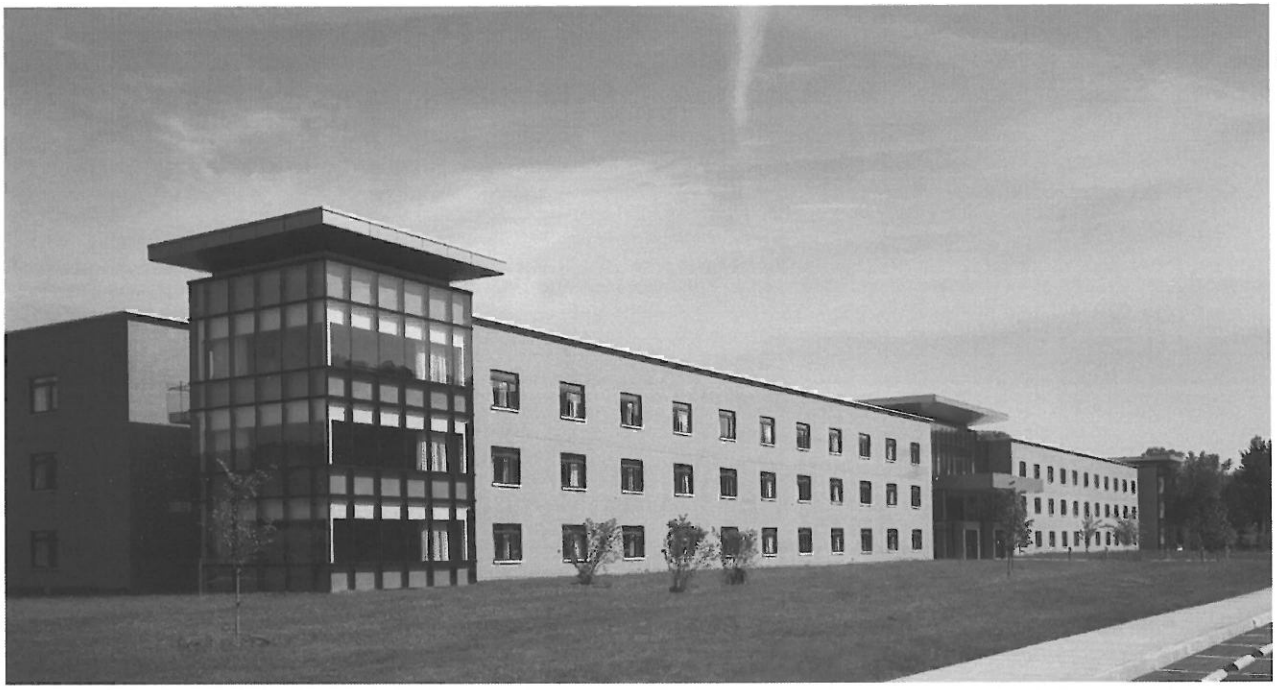
ZMM Architects and Engineers, in association with AECOM, is providing architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campus-style facility for training and operational mission support. Sited on 30 acres at the northern 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 clients goal was to create a campus environment that integrates existing buildings with new ones, which was accomplished by using compatible, yet distinct building materials.

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



Joint Interagency Training & Education Center



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

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

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

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

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

Morgantown Readiness Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Morgantown, WV

SIZE:
54,000 SF

COMPLETION:
2013

COST:
$18.5M

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

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

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

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

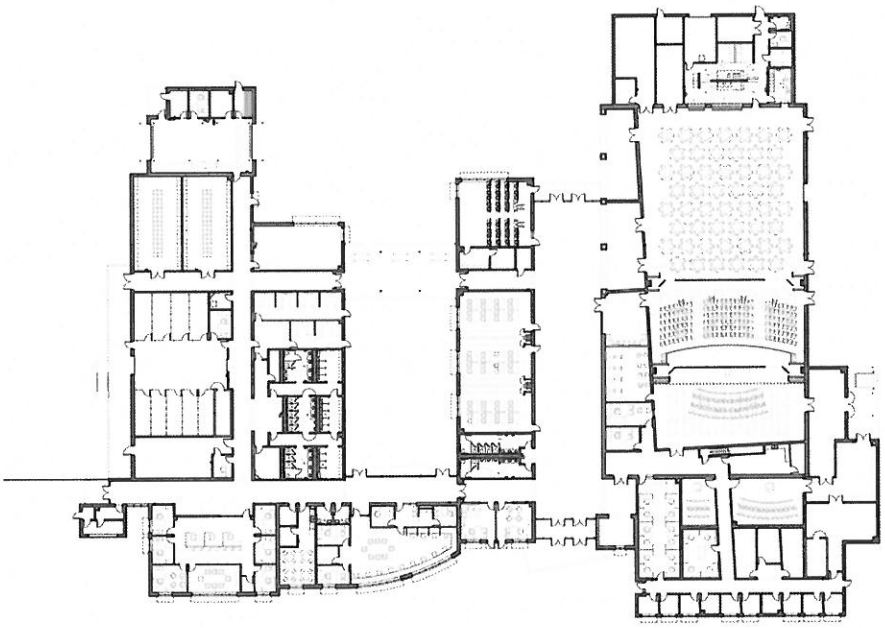
Morgantown Readiness Center

WVARNG

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

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

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



Robert C. Byrd - Regional Training Institute

WVARNG

ZMM
ARCHITECTS & ENGINEERS

CEI

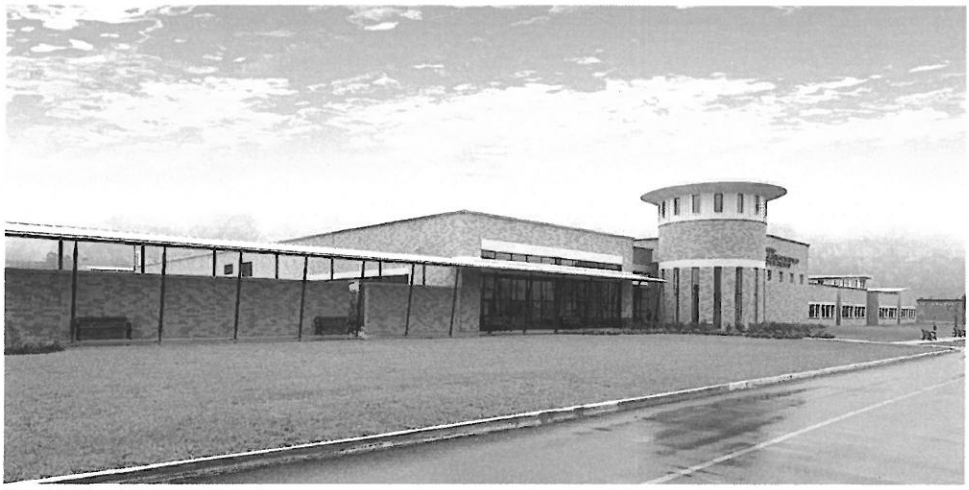
LOCATION:
Kingwood, WV

SIZE:
148,000 SF

COMPLETION:
2002

COST:
$21 Million

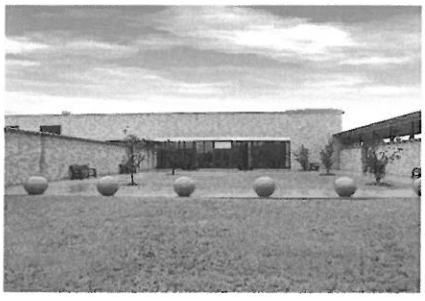
CONTACT:
LTC David Shafer
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6539



The Robert C. Byrd Regional Training Institute at Camp Dawson is a 148,000 SF facility designed to provide training, dormitory, dining, and recreational facilities for the West Virginia Army National Guard. The facility, which includes 183 private dormitory rooms in addition to a wide range of training spaces is designed to accommodate a variety of both military and civilian training functions.

The goal of the owner was to provide a campus within a building, with clear circulation and for various uses. ZMM accomplished this objective by employing a large cylindrical mass that marks the main entry where guests can coordinate both their housing and educational needs.

Additionally, the housing wing is joined to the recreational and educational components with a large gathering/transitional space that often serves as an informal meeting area. Due to the success of the project, and growing use of the facilities, ZMM is currently assisting the West Virginia Army National Guard with training and dormitory expansions.



Logan-Mingo Readiness Center

WVARNG

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Holden, WV

SIZE:
54,000 SF

COMPLETION:
2014

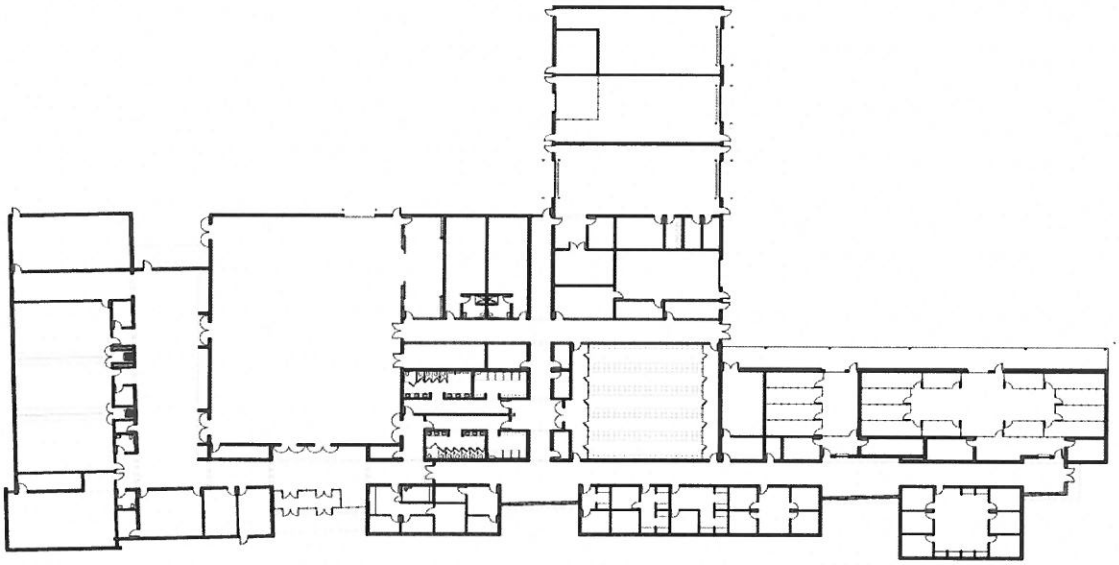
COST:
$12M

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

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

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

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



General Service Division - Surplus Property

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Dunbar, WV

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

COMPLETION:
Est. February 2016

COST:
Est. $4M

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


Existing Building

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.

The Cabell County Transportation Complex

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Huntington, WV

SIZE:
21,950 SF New

COMPLETION:
2014

COST:
$7,482,285

CONTACT:
Mr. Bill Smith
Superintendent
Cabell County Schools
PO Box 446
Huntington, WV 25709
304.528.5030

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.
A small portion in the rear of the building was removed, storage rooms were added and a link to the new bus maintenance facility. The new high bay bus maintenance facility will accommodate fourteen buses.

This full service garage is outfitted with lifts and all services to make this a state of the art facility. Along with the new service building its home to an automatic bus was bay and a separate hand washing facility. Site amenities include parking with charging locations for every bus along with parking for dormant buses on standby. There is also a fueling station for all bus traffic.

The existing school facility was renovated into the transportation administration area along with conferences rooms, driver break rooms and rest rooms for staff and drivers. The building also plays host to a new Staff Development room that is designed with technology and distance learning capability. This will accommodate all bus drivers at one time for training and safety seminars. Principals and teachers throughout the county can also use this for a staff training facility.

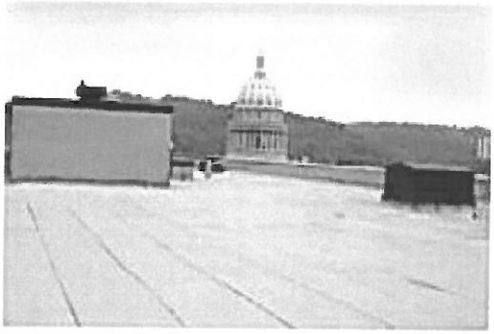
State Office Buildings 5,6, & 7

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Charleston, WV

COMPLETION:
On-Going

CONTACT:
Greg Melton
Director of General Services
Capitol Complex Building
Building 1, Room MB-60
1900 Kanawha Blvd., E.
Charleston, WV 25305
304.558.2317



"More than forty (40) years ago, ZMM (as Zando, Martin, and Milstead) designed the original State Office Buildings 5, 6, & 7. Over the last several years, ZMM has been assisting the State of West Virginia General Services with various improvements to the buildings. These improvements have ranged from substantial renovations to maintenance and repair type projects, and include:

Roof Replacement
ZMM assisted the General Services Division with a roof replacement for all three buildings. The roof replacement utilized a white EPDM roofing material, with consideration being given to sustainability. The existing ballast, roof membrance, and rigid insulation were also salvaged as part of the roof replacement project. Several unused mechanical penthouses, antenas, and other abandoned equipment was also removed.

Electrical Courtyard Improvements
ZMM assisted the General Services Division with a project to expand the electrical courtyard adjacent to Building 7, and simultaneously improve the electrical service entry to buildings 5, 6, & 7. This project required both historical (matching the existing granite panels), as well as very technical electrical engineering design considerations.

Door and Window Replacement
ZMM has assisted with two separate projects, one to replace the windows in Buildings 5 & 6, and the second the replace the doors at the entries to Buildings 5, 6, & 7. These projects included building envelope and security considerations. The projects were designed and staged to minimize disturbance to the buildings occupants.

State Office Buildings 5,6, & 7

Major Renovations
ZMM provided design services for the renovation of the 10th Floor of Building 5 for the Office of Technology - a project that was recognized with a design award from the West Virginia Chapter of the American Institute of Architects. The project focused on demonstrating the potential that exists in State Office Buildings 5 & 6 if the floors are renovated in a more contemporary manner that moves the open office spaces to the perimeter, and pulls the offices adjacent to the building core. The project also involved close coordination with the State Fire Marshal, the introduction of a new sprinkler service and fire pump into the building, demolition, construction management, and hazardous material abatement. The project was delivered considerably under the anticipated project budget. ZMM has also assisted on renovations to the 8th Floor of Building 6 for the Department of Education and the 2nd, 3rd & 4th Floors of Building 6 for the Department of Education and Division of Personnel. Work on the 8th Floor of Building 6 is the only additional renovation constructed to date. ZMM has recently been released to provide design services for Floor 7, 8 & 9 of Building 5 and the 7th Floor of Building 6.

Caulk Replacement
ZMM provided design services to remove and replace all of the caulk located between the limestone and precast panels on the exterior of Buildings 5, 6, & 7. The project also included cleaning of the building's exterior along with some repair work. The project was coordinated with the Capitol Building Commission, although to date, the construction for this improvement has not commenced.

Valve Replacement
ZMM assisted with a valve replacement project to isolate mechanical risers in Building 5 & 6. This technically intensive mechanical project will give the General Services Division greater control over the system, and will help isolate various risers in the event of significant system failures in the future."

The Houston Coal Company Store

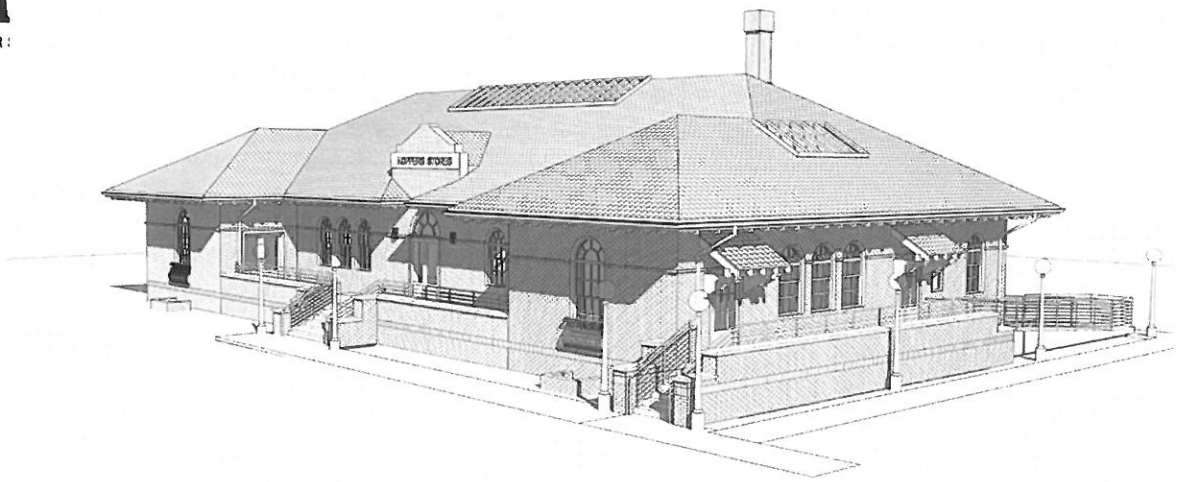
ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Kimball, WV

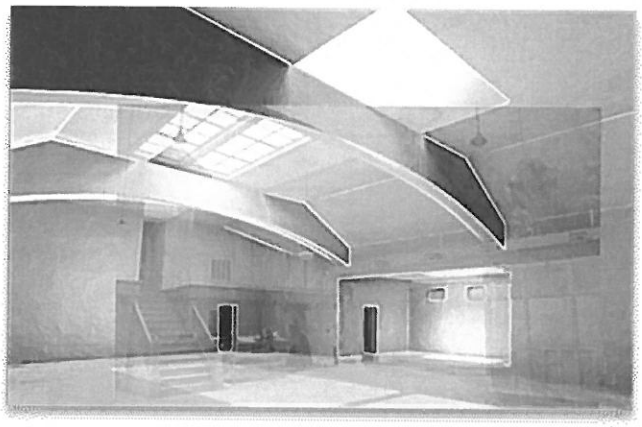
SIZE:
7,100 SF

COMPLETION:
Est. 2015

COST:
Est. $1.8M



ZMM Architects and Engineers, in association with Mike Gioulis, Historic Preservation Specialist, have been assisting the McDowell County Economic Development Authority with the restoration of the Houston Coal Company Store. The Company Store, located in Kimball, WV, is at the intersection of Route 52 and Carswell Hollow Road. It was constructed in 1923 and served as a coal company store until the 1940's. The building has since served as a dairy company, office and storage facility for a construction company, and currently sits vacant.



The 7,100 square foot facility includes a full basement, storage sheds, and a loading dock. The main portion of the building is 5,750 square feet, excluding the storage sheds and loading dock. The project team began by investigating all available historical documentation for the original facility. ZMM and Mr. Gioulis also visited the building site several times to assess the conditions of the architecture, structure, building systems, and surrounding cultural landscape.

To ensure the accuracy of the proposed improvements, a building information model (BIM) was created for analysis and documentation. The model was created based upon measurements and documentation performed on-site by the project team. Once the documentation was complete, a proposed floor plan was developed that included office space for the McDowell County Economic Development Authority staff, display areas for coal heritage artifacts, public restrooms, a gift shop, and a coffee shop. There are also plans to convert the outdoor storage sheds into an artisan's row.

Based upon the investigative results of the facility's existing conditions and its proposed use, recommendations and a proposed cost estimate were created. All proposed improvements were developed based upon the Secretary of the Interior's Standards for Rehabilitation (Department of Interior regulations, 36 CFR 67), and were reviewed with the State Historic Preservation Office.

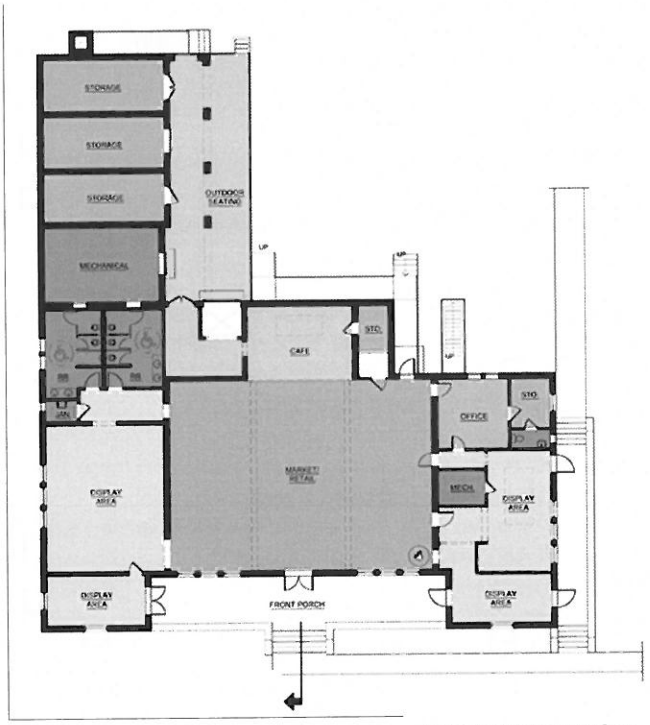
A final draft of the report was issued that prioritized the recommendations:

- Phase I – Building Shell Restoration (stabilize and restore)
- Phase II – Building Systems Integration (mechanical, plumbing, and electrical systems)
- Phase III – Interior Restoration and Reuse (Including the removal of construction not original and not historically significant to the building)

The Houston Coal Company Store

Based upon the availability of the initial funding, ZMM prepared bidding documents for Phase I. Once this documentation was complete, funding became available for the remaining phases of the work. The improvement package will bid in the summer of 2014, and all work will be completed by the spring of 2015.

TRANSVERSE SECTION



Proposed Floor Plan

WV State Police and WV Parkway Authority

Maintenance Building

ZMM
ARCHITECTS & ENGINEERS

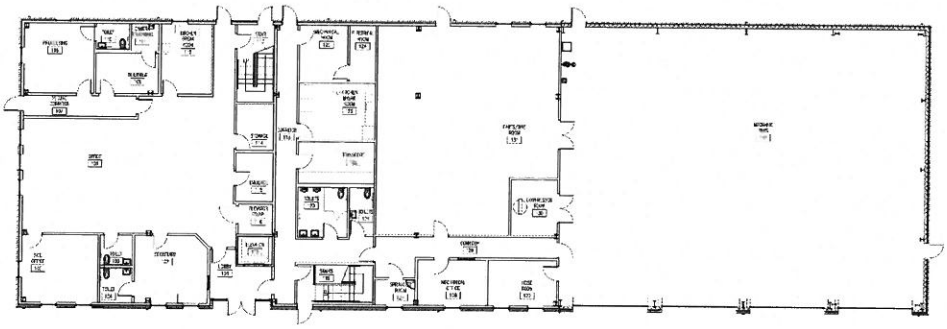
LOCATION:
Beckley, WV

SIZE:
19,400 SF

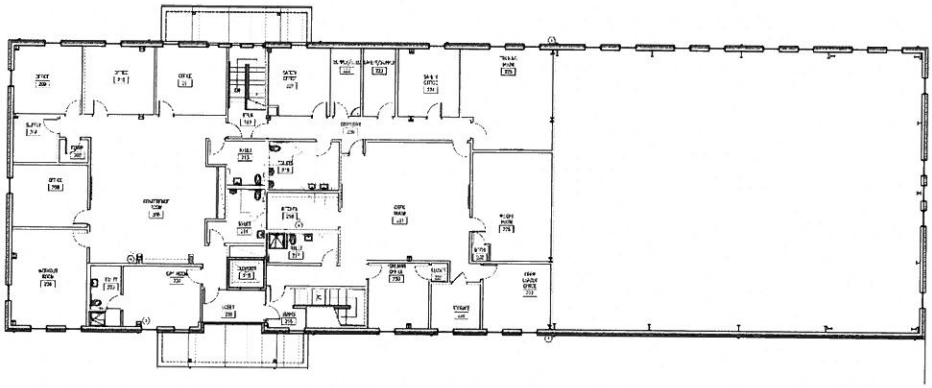
CONTACT:
Cheryl Porterfield
Facilities Administrator
West Virginia Parkways
374 George Street
Beckley, WV 25801
304.256.6685

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

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



First Floor



Second Floor

West Virginia University at Parkersburg

Activity Center

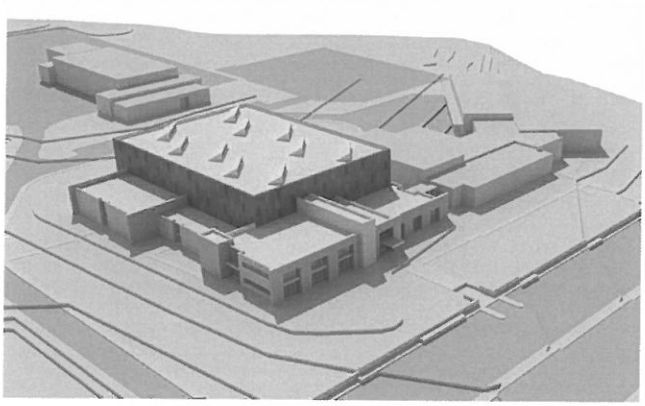
ZMM
ARCHITECTS & ENGINEERS

LOCATION:
Parkersburg, WV

SIZE:
60,000 SF

COMPLETION:
TBA

CONTACT:
Dr. Marie Gnage
President
West Virginia University
at Parkersburg (WVU-P)
300 Campus Drive
Parkersburg, WV 26104
304.424.8000



ZMM is currently working with West Virginia University at Parkersburg and the West Virginia Army National Guard on the design of an Activity Center at the WVUP campus in Wood County. The new facility will include a large multi-purpose gathering space that can be used for commencements, athletic events, trade shows, and performances. The space will be able to seat over 4,000 people with a central stage, and 3,500 people with a stage as the focal point. The space can also seat more than 800 people in a banquet setting, or hold more than 120 booths in a trade show configuration. Additional functions will include flexible classroom space, a veteran's assistance office, as well as a large fitness area. The total facility will include nearly 60,000 SF, and will serve as a focal point for student and community activity on the campus.

The proposed building has been designed to complement the existing structures on the campus, which include the Main Building, the Caperton Center, and the new Applied Technology Center. The face of the building will include brick walls with punched openings. The brick façade is separated from the main volume of the assembly area with metal panel and glass walls that are recessed. The stairway is utilized to provide a large vertical stone element to match a shear wall on the main building. The new assembly space is covered with a tapestry of blue/grey metal panels. The assembly area also contains a number of north facing monitors on the roof to introduce natural light into the space, and to help meet the sustainable design requirements for the project.

The project is currently in the design phase, with construction expected to commence in the Summer of 2014.

West Virginia State Police

Information Services Center

ZMM
ARCHITECTS & ENGINEERS

LOCATION:
So. Charleston, WV

SIZE:
14,000 SF Renovation
4,000 SF New Construction

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

The West Virginia State Police is currently renovating a structure that previously served as the State Medical Examiner's Office, and prior to that, an elementary school. The building is located adjacent to the State Police's main campus in South Charleston, WV. The building is currently undergoing extensive renovation, with the intent of transforming it into an Information Services Center. The divisions are currently housed in the main state police headquarters building.

The scope of the work includes a complete renovation to the 14,000 SF, two-story main building with a new 4,000 SF, one-story addition on the back. The old exterior masonry façade will be enveloped with a thin-brick veneer facing Jefferson Road and an exterior insulation and finish system in rear of the facility. New aluminum windows, high-performance glazing and new single-ply roof membrane complete the exterior. The interior will be converted into professional office space on both floors housing their Communications Division, Criminal Records Division and Traffic Records Division. The space was maximized by utilizing the wide corridors as office space, and creating new, appropriately scale corridors in a loop pattern through the existing classrooms

References

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

Greg Melton, Director
General Services Division
Capitol Complex Building
Charleston, WV 25305
304.558.2317

Major Gary Tincher, Chief of Staff Services
West Virginia State Police
725 Jefferson Road
So. Charleston, WV 25309
304.746.2115

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

ZMM
ARCHITECTS & ENGINEERS

Testimonial

Major General Alan Tackett
Retired Adjutant General – West Virginia National Guard

Description: Testimonial / ZMM Architects & Engineers

"When you look at the design work and the construction that was done on our facilities there is none better in the United States of America so why wouldn't we use local talent and local companies to do that. I don't think anybody could have done a better job for the West Virginia National Guard than what ZMM and our other people have done in constructing and building the National Guard into the 21st Century.

We've built nearly a billion dollars worth of facilities in the State of West Virginia and ZMM was one of our major Architects through all of that construction and not one project did we have problems with, or have anything bad to say and their all well built. Their all built to last for years and years and years, into the future. All will provide excellent facilities for men and women who are serving in the West Virginia National Guard for centuries to come. The facilities built were built in a way to where the communities get the maximum benefit from the tax payer's dollars that paid for those projects, and your design and set up has made those economic tools. When you look at the Armories that we've built, or the Armed Forces Reserve Centers, they have become economic tools for those communities and it was just fabulous the way we worked together as a team to make sure everything got done on time. The things that you all went out of your way to do to make sure that we got the kind of buildings that we wanted was far and above the call of duty.

I would recommend ZMM above any Architect that I have ever worked with. Your work, your dedication to your customer, and bringing a project in on time and in budget is probably the best I have ever seen."

ZMM
ARCHITECTS & ENGINEERS

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI - ADJ1500000003

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[✓]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

ZMM Architects & Engineers
Company

Authorized Signature

January 6, 2015
Date

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

RFQ No. ADJ1500000003

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

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

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

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

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

[WIT]NESS THE [FOL]LOWING SIGNATURE:

Vendor's Name: MM, Inc.

Authorized Signature: _____ Date: 06 · JANUARY · 2015

State of West Virginia

County of Kanwaha, to-wit:

Taken, subscribed, and sworn to before me this 6 day of January, 2015.

My commission expires April 16, 2023.

AFFIX SEAL HERE

NOTARY PUBLIC _____

Official Seal
Notary Public, State of West Virginia
Jessica Wolfe
4465 Walnut Gap Rd
Huntington WV 25701
My Commission Expires April 16, 2023