

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

State of West Virginia Centralized Expression of Interest Architect/Engr

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BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

09/29/22 12:25:18 WW Purchasing Division

VENDOR

Vendor Customer Code:

Vendor Name: ZMM Architects and Engineers

Address: 222 Lee Street, West

Street:

City: Charleston

State:

WV

Country:

USA

Zip: 25302

Principal Contact :

Adam Krason

Vendor Contact Phone: 304.342.0159

Extension:

234

FOR INFORMATION CONTACT THE BUYER

Crystal G Hustead (304) 558-2402

crystal.g.hustead@wv.gov

Vendor

Signature X

FEIN# 550676608

DATE

9/28/22

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

Date Printed: Sep 9, 2022

Page: 1

FORM ID: WV-PRC-CEOI-002 2020/05

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

1 /. . . .

(Name, Title)	Ad RE			
(Printed Name and Title) Adam Krason, Principal				
(Address) 222 Lee Street, West, Charleston, WV 25302				
(Phone Numbe	r)/(Fax Number)	(304) 342.0159	/ (304) 345.8144	
(email address)	ark@zmm.com			

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

ZMM Architects and Engineers

(Comparation (Representative Name, Title)

Adam Krason, Principal 9/28/22

(Printed Name and Title of Authorized Representative) (Date)

(304) 342.0159 (304) 345.8144

(Phone Number) (Fax Number)

ark@zmm.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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 rec	ceived)
 X Addendum No. 1 X Addendum No. 2 ☐ Addendum No. 3 ☐ Addendum No. 4 ☐ Addendum No. 5 	☐ Addendum No. 6 ☐ Addendum No. 7 ☐ Addendum No. 8 ☐ Addendum No. 9 ☐ Addendum No. 10
I further understand that any verbal represe discussion held between Vendor's represe	eipt of addenda may be cause for rejection of this bid entation made or assumed to be made during any oral ntatives and any state personnel is not binding. Only d to the specifications by an official addendum is
ZMM Architects and Engineers	
Company	
Authorized Signature	
9/28/22	
Date	
NOTE: This addendum acknowledgement	should be submitted with the bid to expedite

document processing.

In implementing the prohibition under Public Law 115–232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

State of West Virginia Department of Health & Human Resources	Vendor Name:
Ву:	By:
Printed Name:	Printed Name: Adam Krason
Title:	Title: Principal
Date:	Date:9/28/22















STATEMENT OF QUALIFICATIONS:

THE CHILDREN'S CRISIS CENTER ELKINS, WV
BSS2300000001



September 28, 2022

Ms. Crystal Hustead, Senior Buyer Department of Administration, Purchasing Division 2019 Washington Street, East P.O. Box 50130 Charleston, West Virginia 25305-0130



Subject:

Statement of Qualifications to Provide Architecture and Engineering

(A/E) Services for the Children's Crisis Center in Elkins, WV

(BSS2300000001)

Ms. Hustead:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional planning, architectural, engineering, and construction phase services for the proposed Children's Crisis Center, which will be located on the campus of the current West Virginia Children's Home. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. Our team's integrated design approach, our commitment to quality and sustainability, as well as our experience designing both juvenile centers and behavioral and mental health facilities makes ZMM the right team to ensure the successful completion of this project for the West Virginia DHHR (WVDHHR).

ZMM understands that the WVDHHR intends to build a 12-16 bed children's behavioral and mental health facility (Crisis Center) to provide short term crisis care for West Virginia children. The facility will be designed to meet all licensing and regulatory standards for a behavioral and mental health facility for children. The WVDHHR anticipates that the facility will be approximately 6,400 SF and will be constructed adjacent to the West Virginia Children's Home in Elkins. The facility will provide services from intake and triage, including "crisis assessment, stabilization and intervention, nursing assessment and intervention, psychiatric intervention, peer support, ongoing assessment, and disposition and discharge planning." It is anticipated that the project will be a hardware and staff secured facility designed to withstand a high degree of intentional damage and "wear and tear."

Below, please find information about ZMM's qualifications that are relevant to the proposed Children's Crisis Center project, and demonstrate our ability to assist the West Virginia DHHR with the project:

Relevant Design Experience

ZMM has extensive experience providing design services on medical facilities including behavioral and mental health facilities. This experience includes the design of Highland Hospital in Charleston. Our team also has extensive experience designing both hardware and staff secured Juvenile Centers, including the J.M. "Chick" Buckbee Juvenile Center, the James H. "Tiger" Morton Juvenile Center, the Gene Spadaro Juvenile Center, the Robert Shell Juvenile Center, the Vickie Douglass Juvenile Center, and the Davis Center. ZMM has also helped to improve the Commonwealth Center for Children and Adolescents in Staunton, Virginia. The improvements included NFPA life safety and behavioral health upgrades, a new playground, a classroom storage area, as well as a stage area ligature resistance study.

Quality

ZMM has a history of providing high quality design services throughout West Virginia. *In fact, ZMM's commitment to design quality has been recognized by the American Institute of Architects West Virginia Chapter with twenty-four design awards since 2005 – an achievement unrivaled in West Virginia.* Five of the projects, including the Gene Spadaro Juvenile Center located in Mount Hope, were completed for state agencies.

Talent

With sixty-five local employees ZMM employs an integrated design approach by providing all building-related design services including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration in-house. ZMM's team includes twelve registered architects, twelve professional engineers, interior and lighting designers, and construction administrators. Our architects and engineers are highly qualified, and have worked together to deliver projects of similar scope and complexity.

Thank you for taking the time to review the attached expression of interest that includes information regarding the history, services, personnel, experience, and qualifications of the ZMM team. Additionally, please visit our website at zmm.com to see the full range of projects that we have designed, and to learn about working with us from a client's perspective. We appreciate your consideration for this important assignment and look forward to working with the WVDHHR to successfully deliver the Children's Crisis Center.

Respectfully submitted,
ZMM Architects and Engineers

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

Principal

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CHILDREN'S CRISIS CENTER, ELKINS, WV

Approach to Meet Goals and Objectives, Project Management Plan, Quality Control Plan, Cost Control Plan

BACKGROUND

ZMM understands that the WVDHHR intends to build a 12-16 bed children's behavioral and mental health facility (Crisis Center) to provide short term crisis care for West Virginia children. The facility will be designed to meet all licensing and regulatory standards for a behavioral and mental health facility for children. The WVDHHR anticipates that the facility will be approximately 6,400 SF and will be constructed adjacent to the West Virginia Children's



Home in Elkins. The facility will provide services from intake and triage, including "crisis assessment, stabilization and intervention, nursing assessment and intervention, psychiatric intervention, peer support, ongoing assessment, and disposition and discharge planning." It is anticipated that the project will be a hardware and staff secured facility designed to withstand a high degree of intentional damage and "wear and tear." The EOI defines the following Goals and Objectives:

- 2.1 Design of Facility.
- 2.2 Delivery of AIA Documents
- 2.3 Construction Bid Assistance
- 2.4 Construction and Site Prep Oversight
- 2.5 Final Commissioning of Completed Facility





ZMM proposes to provide the following services to meet this goal:

During the design phase Mr. Adam Krason, AIA and Mr. Michael Phillips, AIA will serve as the primary contacts for the design team. These key team members as well as all primary WVDHHR contacts would be included on all communication to facilitate an open discussion throughout the project – in a manner that allows the WVDHHR to remain actively involved in all design decisions. All correspondence will be copied to this core group. As the project progresses regular bi-weekly meetings will be held to review the design progress, outstanding issues, as well as any regulatory or budget concerns. Meeting minutes will be produced to document discussion items, decisions, and responsibility for follow-up.

Although a general scope of work has been provided, detailed programming and planning have not been completed. Our programming and planning process will focus on operations, efficiency, safety, and function, to help ensure that we deliver the new Children's Crisis Center on time and on budget.



At the completion of the programming and planning phase, all required needs will be identified, and any scope/budget issues will be resolved. ZMM will then develop conceptual plans and renderings reflecting a new building that meets each need identified, while looking toward potential future growth. The renderings will be used to help communicate your vision for the new clinic to the Charleston community.

Once the conceptual design is approved our team will develop plans, specifications, and bidding documents for the project. The building will be designed to meet all current federal and state codes, including but not limited to building codes, National Fire Protect Agency (NFPA), National Electric Code (NEC), International Building Codes (IBC), and the American Disabilities Act (ADA), as well as any WVDHHR guidelines. The plans will be reviewed with the WV Office of Health Facility Licensure & Certification and the State Fire Marshal at multiple times during the design process. ZMM project manager Michael Phillips has a long-term working relationship with OHFLAC and regularly consults with them regarding ZMM's healthcare project.



Drawings, specifications, and estimates will be submitted for review at 35%, and again at 65%, 95%, and 100%. The 100% submission will include all required AIA Documents. Our previous experience working on other juvenile center and medical projects in West Virginia will help ensure that all documents meet your requirements and standards. ZMM will also submit the drawings and specifications to the OHFLAC and the State Fire Marshal's Office for approval prior to the project going out to bid.

ZMM will provide the following bidding phase services:

- Develop Advertisement for Bid
- Attend Pre-Bid Meeting
- Respond to Contractor Questions
- Prepare Addenda
- Open and Review Bids
- Contractor Recommendation

ZMM will provide the following construction phase services:

- Participation in Pre-Construction Meeting
- Coordination of Construction Phase Testing
- Observation of Construction Progress
- Working Collaboratively with the Owner and Construction Team
- Serve as the Liaison Between the Owner and Contractor
- Participate in Regular Site Visits/Construction Progress Meetings
- Participate in Pre-Installation Meetings
- Certify Applications for Payment by the Contractor
- Process RFI's, Submittals and Change Orders
- Conduct HVAC and Electrical Inspections
- Conduct Punch-List and Final Inspections
- Coordinate Testing & Balancing or Commissioning



- Issue Certificate of Substantial Completion
- Schedule/Coordinate 11 Month Warranty Inspection

Final commissioning of the completed facility will be coordinated by ZMM with the WVDHHR, the contractor, and all regulatory agencies including the WV State Fire Marshal and WV OHFLAC. ZMM will continue assisting WVDHHR through occupancy to ensure the Children's Crisis Center functions as required and meet your expectations.

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 projects throughout the state. The team will be led by Adam Krason (Principal) and Michael Phillips (Project Manager). Mr. Krason and Mr. Phillips have led ZMM's effort on a variety of recent healthcare and clinic projects. Other key team members will include:

Carly Chapman

Grant White, PE

John Pruett, PE

Mike Flowers

Mark Epling, AIA

Joe Doeffinger

Amy Phodos

Interior Designer

Electrical Engineer

Mechanical Engineer

Plumbing Designer

Specifications Writer

Construction Administrator

Amy Rhodes Construction Administrative Assistant



This core team will be supplemented with the expertise of sixty-five local employees. ZMM's team includes twelve registered architects, twelve professional engineers, interior and lighting designers, and construction administrators. Our architects and engineers are highly qualified and have worked together to deliver projects of similar scope and complexity.



ZMM QUALITY CONTROL PLAN

Quality control during the design phase begins with the selection of team members with experience working on projects that are similar to the current effort. ZMM Architects and Engineers staff possesses the kitchen and renovation design experience to ensure the success of the project. Quality control during the design phase will occur through regular, documented, project meetings between the design team and the WVDHHR. In addition to the regular design phase meetings more formal QA/QC will occur at the end of each design phase. A more detailed description of the design phase quality control plan is noted below:

1. Selecting the Project Team

ZMM's diverse staff ensures that each project team is made up of highly qualified members, each dedicated to the project's success. Project team members are selected based upon relevant experience, and ability to help achieve the client's vision.





2. Identifying Project Requirements

Project team members are fully integrated in each phase of the design process, ensuring a quality project from the commencement. The project requirements are included in a 'Basis of Design' that each member of the project team can access. The 'Basis of Design' helps guide important project decisions.

3. Identifying Client Expectations

Knowing and understanding our clients' expectations is our goal. This knowledge gives ZMM a baseline for exceeding expectations. We will commence the design effort with a planning session to help identify your vision for the project.

4. Ongoing Project Reviews

As part of the ongoing project reviews, we conduct quality assurance evaluations during each stage of the project:

Schematic Design Phase (35%)
Design Development Phase (65%)
Construction Documents Phase (95%)
Construction Administration Phase



ZMM has developed a series of QA/QC review documents that are completed during each phase, and include a programmatic review, technical review, and review of the project schedule and budget.

5. Post Project Review

At the completion of every project, ZMM staff members participate in a learning session to gain insight useful for future projects.

Staff Training, Assessment and Enhancement
 Ongoing staff development and training is very important to ZMM, and providing increased
 opportunities for learning and advancement leads to improved employee performance and more
 successful projects for our clients.

ZMM COST CONTROL PLAN

As part of our effort to ensure our ability to meet the WVDHHR'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.

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

- New River Health Clinic
- CAMC Clinic
- Camp Dawson Building 202 Improvements
- WVSP Information Services Center
- Marshall County Readiness Center
- Logan-Mingo Readiness Center
- Parkersburg Readiness Center
- Building 5, 6, & 7 Improvements
- Beech Fork Lodge
- WV State Police Information Services Center
- WW State Lottery Headquarters Renovation
- Brooks Manor Addition and Renovation



ZMM has a history of working to successfully projects under challenging budget and schedule constraints. We commit to working with you to meet the budget and schedule for the proposed improvements to implement the proposed Children's Crisis Center in Elkins.



ABOUT ZMM ARCHITECTS & ENGINEERS

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 with our inhouse team. Our integrated design approach makes ZMM unique among architecture/engineering firms, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.



ZMM has maintained a diverse portfolio since the founding of the firm. Early commissions included higher education projects for West Virginia University and Concord College, State Office Buildings 5, 6, & 7 on the State of West Virginia Capitol Campus, and armories for the West Virginia Army National Guard.

Maintaining a diverse practice for over 60 years has provided ZMM with extensive experience in a variety of building types, including educational facilities, governmental facilities (military, justice, correctional), healthcare facilities, recreation facilities, commercial office space, light industrial facilities, and multi-unit residential buildings.

The original partners transferred ownership of the firm to Robert Doeffinger, PE and Steve Branner in 1986. Mr. Doeffinger and Mr. Branner helped guide and expand the firm to its present size of 35 people. Over the past 20 years David Ferguson, AIA, and Adam Krason, AIA, LEED-AP joined in ownership of the firm. In 2020, Randy Jones also joined in ownership of the firm when ZMM acquired Blacksburg-based OWPR Architects & Engineers to create a regional design firm that employs more than 50 highly-skilled professionals.

ZMM has become a leader in sustainable / energy-efficient design, and a trusted resource on complex renovation projects. ZMM's unique renovation project approach and ability to





About ZMM Architects & Engineers (cont.)

provide comprehensive design services has also led the firm to be selected to improve landmark buildings, including the Charleston Coliseum & Convention Center, the Clay Center for the Arts and Sciences, the State of West Virginia Culture Center, and the West Virginia State Capitol Building. Additional significant projects designed by the firm include the Explorer Academy (Cabell County Schools), the Logan-Mingo Readiness Center, the Manassas Park Community Center and Natatorium, the design of the Fourth High School (Frederick County Public Schools), the new Harrington Waddell Elementary School (Lexington City Schools), CAMC Teays Valley ICU, and Ridgeview Elementary School (Raleigh County Schools). ZMM has also provided design services on more than 300 school projects throughout the region.

ZMM's building-related design services include:

Pre-Design Educational Facility Planning Existing Building Evaluation

Space Planning Master Planning

Design

Architectural Design Interior Design Lighting Design

Engineering
Civil Engineering
Mechanical Engineering
Energy Consumption Analysis

Post-Design Construction Administration Life Cycle Cost Analysis Programming Feasibility Studies Site Evaluation and Analysis Construction Cost Estimating

Sustainable Design Landscape Architecture

Structural Engineering Electrical Engineering Net Zero Buildings

Value Engineering Post-Occupancy Evaluation

As ZMM looks to the future, we remain committed to the ideal of providing high-quality, client-focused design solutions that meet budget and schedule requirements. We listen, we respond promptly with innovative and efficient solutions, and we deliver quality projects and develop lasting relationships. You see us in YOUR community every day.









AWARD WINNING DESIGN

2020

AIA West Virginia Chapter: Merit Award

Achievement in Architecture for New Construction

Mountain Valley Elementary School

Bluefield, West Virginia

AIA West Virginia Chapter: Merit Award Achievement in Architecture Ridgeview Elementary School Crab Orchard, West Virginia

2019

AIA West Virginia Chapter: Honor Award
AIA West Virginia Chapter: Citation Award
AIA West Virginia Chapter: People's Choice Award

Charleston Coliseum & Convention Center

Charleston, West Virginia

2018

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

2017

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

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

2016

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













AWARD WINNING DESIGN

AIA West Virginia Chapter: Merit Award

Achievement in Architecture
Gauley River Elementary School
Craigsville, West Virginia

2015

AIA West Virginia Chapter: Honor Award

Achievement in Architecture in Sustainable Design Edgewood Elementary School Charleston, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture Kenna Pk-5 School Kenna, West Virginia

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















HIGHLAND HOSPITAL

LOCATION | SIZE | COMPLETION | COST CHARLESTON, WV | 87,300 SF | 2012 | \$26M

ZMM provided design services for a five-level, 87,3000 SF, \$26 million addition to Highland Hospital in Charleston.

The addition includes administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge connects the facility to the existing hospital.

The design complements the existing Highland Hospital, and was coordinated with a variety of community organizations, as well as the City of Charleston Planning Department. Site design features include a "pocket-park" that utilizes a permeable pavement system for the walkways, reducing the need for storm water detention.

The floor plan for the mental/behavioral health facility was designed to give direct visual control of the entire facility from the nurses station. In addition, security and safety are monitored through the use of state-of-the-art security systems. The patient floors are designed to allow flexible segregation of patient types based on current patient classifications. Patient toilet room entrances are visible from the nurses stations. Additional security features include secure drywall ceilings in patient rooms, tamper-proof sprinkler heads, security suspended ceilings in the corridors, and bolt-down furniture in the group meeting or "dayroom" area.







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COMMONWEALTH CENTER FOR CHILDREN & ADOLESCENTS PLAYGROUND

LOCATION STAUNTON, VA COMPLETION 2016

COST \$407.000

The Commonwealth Center for Children and Adolescents modified the existing playground to provide a secure area for patients and staff.

The work consisted of modifications to the existing facility's playground to provide a secure, fenced area, that incorporates features to limit maintenance inside the enclosure. A new 15' high mini-mesh, vinyl coated fence was installed which included a fire apparatus access gate. The new fence was designed to limit ligature risks with fasteners turned to the exterior and plates covering gaps in the assembly to limit knotting or bunching opportunities.

A remote dispersal area was included, along with paved maintenance strips around the perimeter. The playground equipment is installed over a synthetic turf field surface to limit mowing around the fixtures and provide a cushioned play surface. A new covered seating area was included for staff and patient use.









NEW RIVER HEALTH CLINIC

LOCATION | SIZE | COMPLETION | COST FAYETTEVILLE, WV | 95,440 SF | 2022 | \$14M

This project involves renovation of a former retail store into a multi-use community health and outreach facility.

A new main entrance and drop-off canopy punctuates the exterior renovations for a clean, new look for NRHA. The renovations include new HVAC, plumbing, electrical, sprinklers, and a new roof with upgraded insulation. As a former retail facility, there is ample parking, as well as ongrade access. The project includes an urgent care, multi-discipline clinic, medical imaging, rehabilitation gym, physical and chiropractic therapy, full-retail pharmacy with drive-through, dietary/healthy lifestyle training facility, retail lab, a community event and conference center, retail café, a large daycare facility, and space for a retail gym. It will also house the new main corporate administrative offices and boardroom for NRHA.

The multi-discipline clinic includes general practitioners, as well as audiology, optometry, podiatry, behavioral health/MAT, dentistry, visiting clinicians, and possible tele-med. The convention center has a large gathering space that can be subdivided. The grand entrance is created by renovating the former retail vestibule and canopy, behind which is a lobby hall. The daycare facility, with brightly daylit rooms, will utilize windows and doors directly off their playground, which was the former fenced garden center. The proximity of this daycare will be a major convenience for parents who need medical treatment, but also need short-term childcare.









GENE SPADARO JUVENILE CENTER

LOCATION MOUNT HOPE, WV COMPLETION

COST \$4.8M AWARDS WV AIA MERIT AWARD

The Gene Spadaro Juvenile Center, located in Mount Hope, Fayette County, proved that the prototype concept can be flexible enough to accommodate a dramatic variation in programming.

Completed in 2004, the building is constructed of load-bearing masonry walls with brick and natural stone veneer. Lighting was carefully designed to supplement natural sunlight and ensure comfortable lighting levels. Staff-secured programming required even greater levels of observation, communication, and control. Sleeping quarters resemble a more institutional feel, educating the youth to look at their future and to stay away from delinquency and crime.

This juvenile facility won the 2005 Merit Award for Achievement in Architecture for American Institute of Architects, West Virginia Chapter.









VICKI V. DOUGLAS JUVENILE CENTER

LOCATION MARTINSBURG, WV COMPLETION 2006 COST \$4.8M

The Vicki V. Douglas Juvenile Center is a 23 bed co-ed, staff secure, juvenile detention center. The original Juvenile Center was enlarged and completely renovated to provide a secure facility.

The original Juvenile Facility was quadrupled in size while leaving the original façade intact on two sides with the new addition wrapping around the remaining two sides.

ZMM provided multiple class rooms, recreation and common areas for educational, behavioral, training, counseling and life skills activities in the enlarged facility. These activities are able to be observed and monitored by staff from a central control area. The construction of the new addition and renovation of the existing was phased to provide minimal interruptions with operation of the original facility.







ADDITIONAL WEST VIRGINIA JUVENILE CENTERS

Following a very successful program of regional jail construction based on ZMM/CRA's prototype design, the West Virginia Regional Jail & Correctional Facility Authority awarded ZMM a contract to design a new prototype for juvenile detention facilities.

The original prototype has undergone several transformations, including a 2-story design and a prototypical staffsecured design. All of the versions of ZMM's juvenile center prototype are designed to allow safe and effective operation with a small staff.

The Robert L. Shell Juvenile Center was constructed on a site just below the new Western Regional Jail in Barboursville, Cabell County, West Virginia. Nearly identical to the Gene Spadaro Juvenile Center, this new center will also use federal IV-E funding and houses minimum-security youth. This facility opened in late 2004.



The J. M. "Chick" Buckbee Juvenile Center, located near Romney, Hampshire County, was the first juvenile center bid under the new program of prototype facilities. This Juvenile Center opened in fall 2003, this single-story, 26,500 square foot building houses a complete program of intake, medical care, education, recreation, food service and administration.

The James H. "Tiger" Morton Juvenile Center was designed on the site of the old Kanawha Home for Youth in Dunbar, Kanawha County, West Virginia. Site constraints led to a 2-story variation of the prototype, housing 24 beds in a total building area of 29,000 square feet. This facility, the second of the prototype structures, and opened in late 2003





CAMC MEMORIAL HOSPITAL 6TH FLOOR CRITICAL CARE UNIT

LOCATION SIZE COM CHARLESTON, WW 37,700 SF 2021

The project involves creating three joined patient care units that are capable of being utilized for either Critical Care Units or Med-Surge Units; utilizing the more stringent requirements of each.

The 37,700 square foot build-out on the 6th floor of Memorial Hospital includes state-of-the-art patient rooms that are equipped with overhead rails for patient lifts as well as headwalls with dialysis boxes. This Critical Care floor includes 48 beds.

The units have Airborne Infection Isolation rooms as well as a pneumatic tube delivery system. The project was completed the first quarter of 2021.









WV HEALTH RIGHT MEDICAL FACILITY

LOCATION CHARLESTON, WV

SIZE 31,200 SF COMPLETION

COST \$6.5M

The project involves creating three joined patient care units that are capable of being utilized for either Critical Care Units or Med-Surge Units; utilizing the more stringent requirements of each.

The 37,700 square foot buildout on the 6th floor of Memorial Hospital includes state-of-the-art patient rooms that are equipped with overhead rails for patient lifts as well as headwalls with dialysis boxes. This Critical Care floor includes 48 beds. The units have Airborne Infection Isolation rooms as well as a pneumatic tube delivery system. The project is currently under construction for an expected completion first quarter of 2021.









ZMM.COM



VALLEY HEALTH SYSTEMS

LOCATION WAYNE, WV

SIZE 15,580 SF COMPLETION 2017 COST \$3.7M

ZMM designed the one-story medical building in Wayne, WV operated by Valley Health Systems of Huntington, WV. The building is 15,580 SF on a two-acre site, including approximately 100 parking spaces.

Valley Health Systems provides primary and preventative care to the medically underserved population of southern West Virginia. The building replaces an existing undersized facility.

Within the healthcare facility, medical experts will provide Optometry, Dentistry, Behavioral Health, and Internal Medicine services. A large pharmacy, fitness center, and community conference room will also be provided. The largest suite, Medical, is highlighted by 16 exam rooms, a large nurse's station, and many support rooms, including a laboratory. The Dental Suite has five exam rooms with supporting space, while Optometry and Behavioral Health will contain exam rooms, assessment areas, and professional offices. An adjacent space with a separate entrance will be provided for the WV Women, Infants, and Children (WIC) program. WIC is designed to provide quality nutrition, breastfeeding counseling, and education, as well as health monitoring and nutritious foods.









CAMC HURRICANE UROLOGY CLINIC

LOCATION HURRICANE, WV

SIZE 5,350 SF COMPLETION 2021

COST \$2.1M

This 5,350 SF stand-alone facility opened in 2021 and was designed to accommodate two practitioners and includes a minor procedure room with a clean, sterile processing facility.

There are phlebotomy lab and testing facilities immediately off the waiting room. The design incorporated CAMC's corporate vision and branding as translated onto a smaller scale, with a prominent high-bayed, glass-walled waiting area, drive-under canopy and premium exterior and interior finishes.









CAMC TEAYS VALLEY HOSPITAL ICU

LOCATION | SIZE | COMPLETION | COST HURRICANE, WV | 8,215 SF | 2013 | \$3.5M

ZMM provided design services for the state-ofthe-art Intensive Care Unit (ICU) addition to the existing CAMC Teays Valley Hospital.

The facility consists of 8,215 SF and houses ten private patient rooms and marks the latest addition to the hospital's expansion effort. The addition has a host of features that the staff and administration had desired during the planning effort. These features include direct access to the helipad, a nutrition services station for meal preparation, a true isolation room, and two more specially-equipped rooms for dialysis patients.

The patient rooms line the outside walls along two long, central nurses stations. The ICU has a 2-to-1 nurse to patient ratio at all times. The patient rooms have a full-glass front with sliding doors for ease of access to the rooms, which also allows the nursing staff a view of every patient all of the time. The private patient rooms allow for the families to stay with the patient 24/7 and is also much quieter, which helps with the healing process and allows the patient the rest they need. The design of the facility also allows the ICU to keep all of their beds open. The design of the single private rooms greatly decreases risk of spreading infection to other patients.

The facility hosts all required support spaces, such as a visitor waiting room, storage rooms, restrooms, doctor dictation areas, areas for equipment and supplies, staff lounge, and locker area for the nurses.







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Adam R. Krason, AIA, LEED AP, ALEP





Role Principal

Professional Registrations

Registered Architect (WV, OH, KY, VA, MD, NJ) LEED Accredited Professional Accredited Learning Environment Professional NCARB

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

Highland Hospital, Charleston, WV

Mr. Krason was the project architect on Highland Psychiatric Hospital. This project consisted of 87,300 SF with \$26M dollar addition to Highland Hospital in Charleston. The addition

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

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

included: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge connects the new facility to the existing hospital.

Charleston Coliseum & Convention Center, Charleston, WV

Mr. Krason served as principal-in-charge of the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. Mr. Krason was responsible for the overall management of the design team, coordination with the client, and also has input critical project management decisions. The design commenced in the spring of 2015, and construction was complete in 2018.

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

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

Morgantown Readiness Center (WVARNG), Morgantown, WV

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

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

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

Edgewood Elementary School, Charleston, WV

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

Participated on the team that won the following awards and acknowledgements: 2019 WV AIA Honor Award Charleston Coliseum & Convention Center, Charleston, WV



Michael M. Phillips, AIA, LEED AP



Role Project Manager

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

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

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

Relevant Project Experience Appalachian Regional Healthcare

Beckley, WW multiple projects – Primary Pharmacy renovation and expansion to meet new USP 797 and 800 requirements, new Chemotherapy Infusion suite, ICU nurse station modernization and replacement, HVAC replacement, psychiatric emergency room bays for the existing hospital, psychiatric emergency room addition and the preliminary design of the medical mall doctors suite.

Summers County, Hinton, WV - Pharmacy Design Options Whitesburg, KY multiple projects - Central Sterile renovation, MRI replacement coordination, and a laboratory HVAC modernization.

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

- CAMC Teays Valley Hospital, Teays Valley, WV
- CAMC Primary Medical Clinic, Hurricane, WV
- Jackson General Hospital, Ripley, WV
- Rainelle Medical Center, Rainelle, WV

<u>Previous Work Experience</u> Boone Memorial Hospital, Boone, WV

Education

Bachelor of Architecture, University of Tennessee School of Architecure

Employment History

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

Civic Affiliations

 West Virginia Chapter, American Institute of Architects, Member 75,000 SF Critical Access Hospital with 25 private rooms,

Emergency Room, E.D., 2 Operating Rooms, MRI, CT, Xray, Imaging, Pharmacy, Physical Therapy, Cardiac Rehab.

St. Mary's Medical CenterNew Entrances Canopies, Hybrid O.R.'s, School of Physical Therapy, New Central Boiler Plant Building, Endoscopy Expansion, Outpatient Therapy

Kings Daughter's Medical Center

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

St. Agnes School, Charleston, WV

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

Sacred Heart Early Learning Center, Charleston, WV

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

Yeager Airport, Charleston, WV

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

Buckhannon Readiness Center, Buckhannon, WV

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

Lewis County Courthouse, Weston, WV

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

A. Hunter Wilson, AIA





Role Project Architect

Professional Registrations Registered Architect (WV, VA) NCARB Certification

Since starting work in the Architecture industry in 2009, Mr. Wilson has been actively involved in the design of a wide array of new structures and renovations to include per-forming arts centers, municipal offices and maintenance facilities, healthcare facilities, higher education buildings, K-12 education buildings, water and wastewater treatment facilities, visitor centers, museums, park facilities, clinics, police headquarters, fire and rescue stations, downtown revitalizations, accessibility improvements, public housing, historical structures, and a multitude of maintenance and repairs projects. Serving a variety of clients and program types has aided in broadening Mr. Wilson's understanding of the practice of Architecture, and as a result; allows Mr. Wilson to approach each pro-gram with an open mind to the myriad of design solutions available to meet the clients needs.

<u>Project Experience</u> Concord University, Athens, WV

Beasley Student Center Reroofing Phase 1 Beasley Student Center Reroofing Phase 2 Carter Center Reroofing

Roanoke College, Salem, VA

Colket Center Patio Addition Colket Cavern Dining Renovation Alumni Gym Housing Conversion

Emory & Henry College, Emory, VA

Carriger/Matthews Hall Historic Structure Exterior Improvements*
Sullins Hall Band Practice Facility PAR*

Bluefield State College, Bluefield, WV

Campus-Wide Roof Replacement Project*

Virginia Tech., Blacksburg, VA

Tobacco Barns at Glade Spring Southwest AREC *

Virginia Community College System, Richmond, VA

Southwest Virginia Community College
Sustainability Center (unbuilt)*
Wind Turbine*
Electronic Entrance Sign*

Education

Bachelor of Architecture, Virginia Polytechnic Institute and University, 2009

Employment History 2015 - Present, Architect, Project Manager

Mountain Empire Community College, Big Stone Gap, VA

Dalton-Cantrell Hall Renovation*

Wytheville Community College, Wytheville, VA

Smyth Hall Tiered Classroom and Library HVAC Improvements*
Grayson Hall Workforce Development Renovations and HVAC Improvements*
Grayson Hall Welding Lab Renovations*
Grayson Hall Computer Lab*
Bland, Carroll, Fincastle, Galax, and Grayson Halls Window Replacements*
Breezeway Construction Project*
Carroll Hall Tiered Classroom and Ground Floor Improvements*
Bland, Fincastle, and Grayson Halls Bathroom Renovations*
Electronic Entrance Sign*

New River Community College, Dublin, VA

Art Program Renovation*
Nursing Program Renovation*
College ADA Accessibility Upgrade

Patrick Henry Community College, Martinsville, VA

West Hall Window Replacement

Lord Fairfax Community College, Warrenton, VA

Middletown Campus Fairfax Hall Library Limited Area Renovation Fauquier Campus Electronic Door Access

^{*} Work Performed at Previous Employer

David E. Ferguson, AIA, REFP





Role QA/QC

Professional Registrations Registered Architect (WV, OH) Recognized Educational Facility Planner (REFP)

Mr. Ferguson has served in the capacity of Architect, Project Manager, and Principal in Charge for a variety of projects at ZMM. This experience includes Educational (PK-12, Vocational and Higher Education), Retail, Corporate Office, Industrial, Military, Medical Office Facilities, General Healthcare Hospital and Psychiatric Hospital Projects. Mr. Ferguson's responsibilities include programming, design, documentation, architectural/engineering coordination and construction administration.

Mr. Ferguson is a Recognized Educational Facility Professional (REFP) and has been involved in planning, designing and the construction of over 200 educational facilities in West Virginia. As the architect for the first "green" school building in West Virginia Mr. Ferguson has been an advocate for sustainable design and was involved starting the first US Green Building Chapter in West Virginia.

Mr. Ferguson has also participated in developing West Virginia Department of Education's Policy 6200 *Handbook on Planning School Facilities* and the West Virginia School Building Authority's *Handbook of Quality and Performance Standards*.

Project Experience Highlights Highland Hospital, Charleston, WV

Mr. Ferguson was the project architect on Highland Psychiatric Hospital. This project consisted of 87,300 SF, \$26M addition to Highland Hospital in Charleston. The addition includes: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. The floor plan was designed to give direct visual control of the entire facility from the nurses station. In addition to the direct visual control, security, and safety are monitored through the use of state of the art security systems. A pedestrian bridge will connect the new facility to the existing hospital.

CAMC Teays Valley ICU Addition, Teays Valley, WV

Mr. Ferguson was the project manager for the new Intensive
Care Unit (ICU) Addition to the existing hospital. The new facility

Education

Bachelor of Science; Industrial Technology/Architectural Design; West Virginia State University, 1979

Employment History

2007 - Present, Vice President, Secretary/Treasurer, ZMM 2002 - 2007, Vice President, ZMM 2001 - Present, Board of Directors, ZMM 1996 - Present, Architect, Project Manager, ZMM 1984 -1996, Designer, ZMM

Civic Affiliations

- A4LE Southeast Region Board of Directors – WV State Governor
- West Virginia Chapter, American Institute of Architects, Past President
- West Virginia Chapter, American Institute of Architects, Board Director
- American Institute of Architects, Member
- Member, Association for Learning Environments(A4LE)
- Recognized Educational Facility Planner (REFP) by the A4LE
- Professional Member, US Green Building Council

consists of 8,215 SF and houses ten large private patient rooms and marks the latest addition to the hospitals expansion effort. The new features include: direct access to the heli-pad, a nutrition services station for meal preparation, a true Isolation Room and two more specially equipped rooms for dialysis patients. The new Facility also hosts all required support spaces such as a Visitor Waiting Room, Storage Rooms, Rest Rooms, Doctor Dictation Areas, areas for equipment and supplies along with a Staff Lounge and Locker Area for the nurses. CAMC is very proud of their new facility and hopes that this is a start of expanding their services and health care at this hospital.

CAMC Surgery Suite Renovations & Addition to the CAMC Teays Valley Hospital

The Surgery Suite Renovations and Additions consists of a new Operating Room and the renovation of an existing space into a new Cysto Room. All support spaces and adjacent areas were renovated to accept the new patient flow between the newly renovated Recovery and Short Stay Areas. This was inline with the most recent master plan for the hospital.

St. Francis Hospital Medical Office Building Addition to the Outpatient Surgery Center
The new three-story Medical Office Building is attached to the Existing Outpatient Surgery Center. This facility is adjacent to the hospital and works in conjunction wit the hospital facility

CAMC Teays Valley Hospital Master Planning

CAMC Teays Valley Hospital has had several Master Planning reiterations. As the growth of the area has increased the hospital has expanded to keep up with the needs of the area. ZMM has provided several master planning scenarios.

Nicholas County Schools

Mr. Ferguson is currently leading the recovery effort for the of \$160 million dollar school system. On June 23, 2016 a flood destroyed three schools. These facilities were left unsafe and un-inhabitable. ZMM has worked with the County Board of education, FEMA, and the State of WV to design and program temporary schools and develop a long range plan to rebuild. ZMM is working on the programming and design for the two new facilities. A community school which will include spaces for the community to access, and a comprehensive High School/Middle School which will include a Career Technical Center. Mr. Ferguson has conducted community Meetings, established goals and priorities, created overall budgets and a project scope all stakeholders will support.

Explorer Academy, Huntington, WV Mr. Ferguson was the project manager/architect on the this new Expeditionary Learning Incubator School. The new Academy is the consolidation of Peyton Elementary and Geneva Kent Elementary in the east end of Huntington. The schools were combined and housed in the former Beverly Hills Middle School facility that will be remodeled to fit the mold of the Expeditionary Learning model. The curriculum for the program is very hands on, and is a real-world way of learning. Students will be working a lot with community partners, people who are experts in their fields.

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

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

Robert Doeffinger, PE





Role Engineering Principal

Professional Registrations

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

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

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

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

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

Project Experience

Appalachian Regional Hospital, Beckley, WV

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

Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

Employment History

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

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

USP 797 / 800 Pharmacy, Beckley ARH Hospital, Beckley, WV

Mr. Doeffinger was the lead mechanical project engineer for the new USP 797 / 800 Pharmacy at the Beckley ARH Hospital in Beckley, WV. The United States Pharmacopeia (USP) issued new 797 and 800 Guidelines for production, compounding and packaging of hazardous drugs, primarily related to chemotherapy. The guidelines set forth strict requirements for air change rates, temperature, humidity, and differential pressure control. The three new primary rooms had to be created from existing spaces within the hospital and included an ANTE room, Non-Hazardous Buffer Room, and the Hazardous Drug Buffer Room. The mechanical design included a variable air volume (VAV) air handling unit (AHU) with electric pre-heat, steam humidifier, split-DX cooling, hot water reheat, MERV-13 filters, variable speed plenum fan, and UV-C lights which was installed atop a structural steel platform above the existing roof. VAV Terminal Units with hot water reheat coils, and stainless steel, ceiling mounted HEPA supply diffusers were provided for each space. These ISO Class 7 buffer areas (clean rooms) required a minimum of 30 air changes per hour, a temperature range of 66-68°F, and a relative humidity range of 35-60%. Recirculating, HEPA filtered, Laminar Air Flow Workbench (LAFW) hoods were provided in Non-HD, while Compounding Aseptic Containment Isolator (CACI) hoods requiring 100% exhaust were provided in the HD room. The plumbing design included a stainless steel, hand's free sink with an integral emergency eyewash. ZMM collaborated with SonicU, the Owner's preferred vendor, on the design and installation of all temperature, humidity, and differential pressure sensors required for monitoring, trending, and reporting of space conditions for Pharmacy Board documentation.

Charleston Coliseum & Convention Center, Charleston, WV

Mr. Doeffinger was the lead mechanical project engineer on the expansion and renovation to the Charleston Coliseum and Convention Center. The \$100M, 530,000 SF project included 154,000 SF of new meeting room, kitchen, and support spaces. The project achieved LEED Silver with 22 out of 50 credit points related to energy and water conservation. Over \$143,000 in electric utility rebates were achieved for the Owner. The mechanical design reduced the total electrical usage by 26% when compared to an ASHRAE 90.1-2007 baseline building and reduced it by over 45% when compared to pre-construction demand; natural gas bills were reduced by over 35%. The heart of the new mechanical system was the main central plant which included (3) 1000-ton chillers (N+1), and (3) 8,000 Mbh condensing boilers (N+1), (2) 1250-ton stainless steel cooling towers, and a 130-ton heat recovery chiller. Additional energy conservation measure included increased wall/roof insulation, fret spandrel glass with low U-value and SHGC, variable speed air distribution, 16°F ∆T coil design, economizer cooling, kitchen hoods with variable speed exhaust and makeup air, all LED lighting, daylighting, and EPA WaterSense low-flow plumbing fixtures which reduced water consumption by 45% when compared to an ASHRAE 90.1-2007 baseline building. Over 90%+ of all mechanical systems were replaced or upgraded for the project. Construction had to be performed in phases to allow the facility to remain operational. The design-build project commenced in the spring of 2015 and was completed in October 2018. This project is an excellent example of how ZMM effectively collaborates with companies that share our commitment to quality, such as tysdesign, BBL Carlton and Nitro Construction Services.

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

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

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

John Pruett, PE, LEED AP





Role Senior Mechanical Engineer

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

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

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

Project Experience

Valley Health Systems, Wayne, WV

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

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

Education

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

Employment History

2021- Present, Board of Directors, ZMM 2010 - Present, Project Engineer, ZMM 2007 - 2009, Sr. Mechanical Engineer, IN

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

Civic Affiliations

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

Tucker County Courthouse Annex, Parsons, WV

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

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

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

Cabell County Schools

Barboursville Middle School - Additions and Renovations
Huntington East Middle School
Huntington High School - Controls system replacement for
Explorer Academy
Cabell County Bus Garage
Southside Elementary/Huntington Middle School
Huntington High School - Cooling tower replacement
Cabell Midland High School - Cooling tower replacement
Martha Elementary School- Addition
Salt Rock Elementary Renovations
Cabell County Career & Technical Center - HVAC Replacement
Huntington High School Wrestling Room Addition
Milton PK - Additions and Renovations

Fayette County Schools

New River Primary / Oak Hill Middle School
Valley High School - Gym addition
Oak Hill High School - Renovations
Fayetteville PK-8 - Renovations
Midland Trail High School - Renovations
Valley PK-8 - Renovations
Meadow Bridge Elementary - Renovations
Divide Elementary - Additions and Renovations

Putnam County Schools

Hurricane High School - Renovations Putnam Career & Technical Center - Welding Shop

Carly Chapman





Role Interior Designer

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

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

Relevant Project Experience

CAMC General Division (C Suite), Charleston, WV CAMC Memorial Hospital (6th Floor Critical Care Unit), Charleston, WV CAMC Hurricane Urology Clinic, Hurricane, WV Rainelle Medical Center, Rainelle, WV Valley Health, Wayne, WV Valley Health, Milton, WV Mountain State Oral Surgeons, Charleston, WV

Appalachian Regional Hospital, Beckley, WV

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

CAMC Post Op, Teays Valley, WV

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

* Clarksburg, Richmond, Huntington, Salem VA Hospitals During previous employment, Mrs. Chapman was heavily involved with renovations to various VA hospitals. Renovations included redesign implementing DIRTT wall systems,

Education

Bachelor of Interior Design, University of Charleston, 2012

Employment History

2016 - Present, Interior Designer, ZMM 2012 - 2016, Project Manager/Interior Designer, Contemporary Galleries, Inc. 2010 - 2012, Interior Design Intern, ZMM renovations to nurse, admirative and patient areas, as well as common's areas.

Pipestem Resort State Park Lodge, Pipestem, WV

Mrs. Chapman is currently the interior designer on the renovations to 88 guestrooms on first floor, bathroom expansions on the 7th floor, renovations to the dining area with a bar addition, renovations to all conference rooms, finish selections and renovations in the lobby. ZMM will be replacing the ceilings and lightings in all public spaces and guestroom corridors in the main McKeever lodge building. Mountain creek lodge that sits below McKeever Lodge will receive a new roofing on the guestroom buildings and restroom will be renovated in the main tram building. The newly renovated lodge is set to open this summer 2021.

Charleston Coliseum & Convention Center, Charleston, WV

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

Valley Park Community Center, Hurricane, WV

The new community center replaced an existing structure that was recently demolished earlier this year. The new building houses a commercial kitchen, administration wing, ballroom, and a locker room complex with administration quarters for the attached Wave Pool.

Bluefield Primary School, Bluefield, WV

The new school is the result of a consolidation of two local schools in the Bluefield area. The county wanted to bring in architectural elements from both of the former schools. This was accomplished by oval vaulted ceilings and circular windows throughout the building. The school will house Pre-k-2nd grade students. Keeping the Bluefield Beavers in mind, the school colors are found throughout the design with the addition of complimentary colors to creates a colorful learning environment for the students. No school can be designed without a little fun in mind... A large dry erase mural spans the length of the media center allowing students to express their imaginations.

Ravenswood Middle School, Ravenswood, WV

Ravenswood Middle School is an addition to Ravenswood Highschool. The project allows for both schools to share one cafeteria and improve the exterior of the existing high school with the new entrance of the middle school. The interiors were clean and pattern filled using the school colors, insuring an easy transition from one school to the other.

New River Primary/Oak Hill Middle School, Oak Hill, WV

These schools were designed as separate schools sharing the same site and are connected by a mechanical wing. This building called for a challenging design concept. The schools each had their own unique design theme, but were delicately connected in small aspects of color or architectural techniques, allowing the interiors to flow seamlessly. The PK-2 is community driven in the design. House facades and custom glass adorn the halls drawing the eye to the exposed structure above. The ceilings reflect the sky and are divided by clouds. Collins Middle also was design with the environment in mind. Using biophilic design, wood planked feature walls are found in the entrance corridor and expand to the open structure above.

Williamstown Elementary School, Williamstown, WV

When designing a new school built on tradition, the initial thought of school colors and clean lines comes to mind. This was not the case with the new Williamstown Elementary School. Using the school colors as our basis of design, the county was open to adding complimentary colors to entice the students for a bright and exciting learning environment. Colorful floor pattern adorns the corridors, using the tile for wayfinding and structure for students. In the media center you will find a custom designed tree, dripping in lights mimicking fireflies and a perfect campfire setting for storytelling. The tradition is kept alive with the pops of Maroon and Gold throughout the cafeteria and gym.

^{*} Previous Employer

Grant H. White, PE





Role Electrical Engineer

Professional Registrations Professional Engineer (WV)

Mr. White brings more than 14 years' experience and serves as the Electrical Engineer at ZMM. Mr. White provides electrical design services for a vast number of projects consisting of commercial, educational, correctional, institutional, and military facilities.

Mr. White 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.

Project Experience

Valley Health Systems, Huntington, WV

Keith Albee Theater - Renovations, Huntington, WV
WV School of Osteopathic Medicine, Lewisburg, WV
Braxton County Cooler Freeezer
Jefferson County Schools - Transportation Technology Center
Jefferson County Schools - Ranson Elementary School
Jefferson County Schools - Sheperdstown Elementary School
Jefferson County Schools - Washington High School Aux Gym
Woodrow Wilson High School Renovations/Additions
Braxton County Middle School Renovations
WVDNR Tomblin Wildlife Management
Frederick County Public Schools -Old Aylor Middle School HVAC Renovations
Frederick County Public Schools Board Office - Corridor and
Restroom Renovations

Education

Marshall University Graduate College, South Charleston, WV – Completed Project Management and Engineering Law classes in the Engineering Management Program, 2007 - 2008

Bachelor of Science in Electrical Engineering, West Virginia University Institute of Technology, 2007

Employment History

2021 - Present, Electrical Engineer, ZMM 2018 – 2021, Electrical Engineer, CDI Engineering 2017 – 2018, Controls Engineering Specialist, Trane 2014 – 2017, Electrical Engineer, CDI Engineering

Benjamin S. McMillan, PE, LEED AP





Role Civil Engineer

Professional Registrations Professional Engineer (WV, VA, KY) LEED Accredited Professional

Mr. McMillian has 13 years' experience and knowledge in land development throughout Virginia. Mr. McMillan has experience in creating site plans and producing reports and specifications for institutional, commercial, residential, utility-scale solar, and one utility-scale wind project. Site plan preparations included layout, utility plans, grading, drainage, stormwater management, and erosion and sediment control.

Mr. McMillan also attends meetings, interacts with clients and contractors, performs various construction administration duties, and visits projects throughout the design and construction phases. Additional experience includes:

- Experienced in land development for institutional, multifamily residential, commercial, industrial, and utility-scale solar projects.
- Knowledgeable of all phases of land development from schematic design through project close-out.
- Complied with and obtained approval from many different municipal and state agencies in multiple states.
- Proficient in AutoCAD Civil 3D and familiar with other engineering design programs such as Autodesk Storm & Sanitary Analysis, HydraFLOW, HydroCAD, Flowmaster, and PondPack.
- Coordinated site designs with other design disciplines including Architects, Landscape Architects, Mechanical Engineers, Electrical Engineers, Structural Engineers, and Geotechnical Engineers.

Project Experience

Jackson General Hospital Expansion, Ripley, WV
New River Medical Mall, Fayetteville, WV
Health Right Medical Clinic, Charleston, WV
WV Department of Agriculture Lab Building, Charleston, WV
Salvation Army, Beckley, WV

Education

Bachelor of Science in Civil Engineering, Minor in Public and Urban Affairs, Virginia Polytechnic Institute and State University, Blacksburg, VA, 2007

Employment History

2020 - Present, Civil Engineer, ZMM 2013 - 2020, Senior Project Engineer, Timmons Group, Richmond, VA 2008 - 2013, Civil Engineer, OWPR, Blacksburg, VA 2007 - 2008, Project Engineer, Anderson & Associates, Blacksburg, VA

CLIENT REFERENCES

New River Health Clinic

John Schultz, CEO P.O. Box 337 Scarbro, WV 25917 304.465.2258

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Valley Health Systems

Wayne, Milton, and Huntington, WV Locations Mary-Beth Brubeck, VP of Finance, CFO 3375 US Rt. 60 Huntington, WV 25705 304.525.3334

CAMC Memorial Hospital, Charleston, WV 6th Floor Critical Care Unit

David Childers, Corp. Director of Construction Services 3101 MacCorkle Avenue, SE Charleston, WV 25304 304.388.4930

WV Health Right Medical Facility

Dr. Angie Settle, CEO, Executive Director 1520 Washington Street, E. Charleston, WV 25311 304.414.5931

Commonweath Center for Children and Adolescents

Vickie Coyner, Assistant Director, Administration Department of Behavioral Health and Development Services Richmond, VA 804.786.3921

