



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

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

Proc Folder: 308240

Doc Description: EOI Modernization of Building Five Freight Elevator

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2017-03-08	2017-04-12 13:30:00	CEOI 0211 GSD1700000003	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

04/10/17 14:37:43
 WV Purchasing Division

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers
 (304) 558-0246
 jessica.s.chambers@wv.gov

Signature X

AD RK

FEIN #

55-0676608

DATE

4.11.17

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

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

ARK, AIA
(Name, Title)
Adam R. Krason, Principal
(Printed Name and Title)
222 Lee Street, W. Charleston, WV 25302
(Address)
304.342.0159, 304.345.8144
(Phone Number) / (Fax Number)
ark@zmm.com
(email address)

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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated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

ZMM, Inc.
(Company)
ARK, AIA
(Authorized Signature) (Representative Name, Title)
Adam R. Krason, Principal
(Printed Name and Title of Authorized Representative)
4.11.17
(Date)
304.342.0159, 304.345.8144
(Phone Number) (Fax Number)

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 false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: ZMM, Inc.
Authorized Signature: [Signature] Date: 4-11-17

State of West Virginia
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 11 day of April, 2017.
My Commission expires April 16, 2023.

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 08/01/2015)





Expression of Interest
for
Modernization of Freight Elevator Building 5



April 10, 2017



April 10, 2017

Jessica S. Chambers, Buyer
Department of Administration
Purchasing Division
2019 Washington Street, E.
Charleston, WV 25305

Subject: Modernization of Freight Elevator, Building 5 (GSD1700000003)

Dear Ms. Chambers,

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional design services to modernize the freight elevator in Building #5 at the Capitol Complex. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. ZMM possesses significant knowledge regarding State Office Building #5 which will prove beneficial to the General Services Division as you pursue the elevator upgrade. ZMM (operating as Zando, Martin, & Milstead) designed the building in the late 1960's, and over the last decade has been assisting with upgrades to the overall building including the renovation to various floors. Please note the following additional qualifications of ZMM:

- **Experience.** ZMM has experience providing design services on elevator upgrade projects throughout West Virginia. This experience includes elevator upgrades in high rise buildings as well as in historic structures. Recent elevator upgrade experience includes elevator upgrades at the WVU-Tech Engineering Classroom Building for West Virginia University (7 story high-rise), elevator upgrades and new elevators at the Charleston Civic Center, elevator upgrades at City Center East (12 story high-rise), and elevator upgrades at the Kanawha Valley Building (20 story high-rise).
- **Quality.** ZMM has a history of providing high quality design services on Kanawha Valley renovation projects. Recent experience includes the Girl Scouts of Black Diamond Council Headquarters and Volunteer Resource Center, Renovation of the 10th Floor of State Office Building #5 for the State of West Virginia Office of Technology, the CFMO Expansion for the West Virginia Army National Guard, as well as the Renovation and Expansion of St. Albans High School. All four project were honored with statewide and/or national design and planning awards. *In fact, ZMM has been recognized by the West Virginia Chapter of the AIA with fifteen design awards in the past decade – an achievement unrivaled in West Virginia.*
- **Teamwork.** Teamwork is the key to a successful project, and ZMM is committed to the success of this project for the state. To ensure this success, all project stakeholders need to work collaboratively from the initial investigation through construction, with a focus on the General Services Division's vision, budget, and schedule. ZMM commits to a collaborative approach to help ensure the success of your project.

Thank you for taking the time to review the attached expression of interest that has been formatted per the requirements of the request for proposal. Additionally, please visit our website at www.zmm.com to see the full range of projects that we have designed, and to learn about working with ZMM from a client's perspective. We appreciate your consideration for this important assignment, and look forward to the opportunity to assist the General Services Division as you continue to improve State Office Building #5.

Respectfully submitted,
ZMM, Inc.

A handwritten signature in black ink, appearing to read 'A. R. Krason', is written over a horizontal line.

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

Table of Contents

Cover Letter
Table of Contents

1. Concept, Project Understanding and Approach
2. Firm History and Services
3. Qualifications
 - Key Resumes
4. Relevant Experience
 - Elevator and Renovation Projects
5. Client References

Concept, Project Understanding and Approach: Modernization of Freight Elevator Bldg. 5

Background

Due to recent failures in operation of the freight elevator in Building #5, the West Virginia Department of Administration General Services Division is seeking to upgrade/modernize the original 1968 Otis Traction Elevator (Serial #207115, 5,000 lbs., 350 fpm, 12 stops).

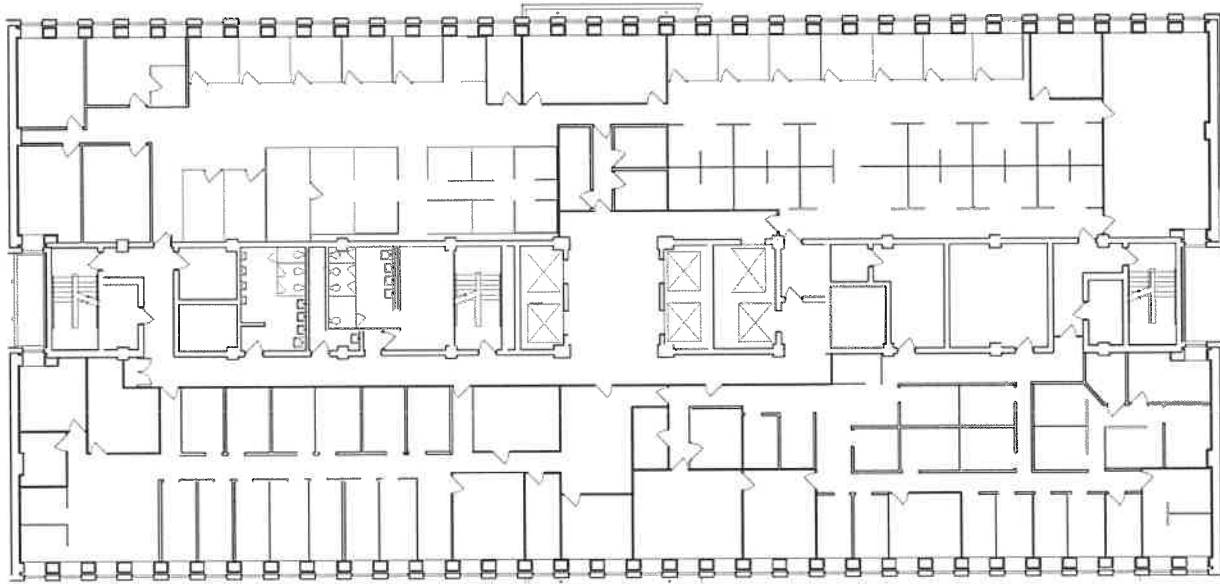
ZMM High-Rise Elevator Upgrade Experience

ZMM has experience providing design services on elevator upgrade projects throughout West Virginia. This experience includes elevator upgrades in high rise buildings as well as in historic structures. Recent elevator upgrade experience includes elevator upgrades at the WVU-Tech Engineering Classroom Building for West Virginia University (7 story high-rise), elevator upgrades and new elevators at the Charleston Civic Center, elevator upgrades at City Center East (12 story high-rise), and elevator upgrades at the Kanawha Valley Building (20 story high-rise). This experience has reinforced the understanding that elevators are not stand-alone systems. Their installation and improvement must be coordinated with the building electrical, mechanical and fire alarm systems, as renovation to these systems may be necessary to support the elevator improvements. Our ability to provide comprehensive architectural and engineering services makes us uniquely qualified to assist with projects that involve the inspection, and potential improvement, of multiple building systems.

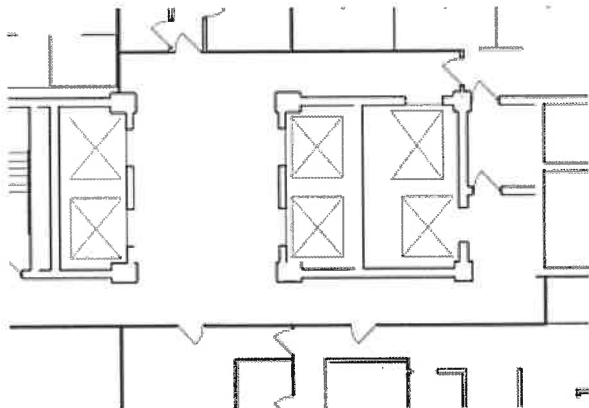


ZMM Building #5 Experience

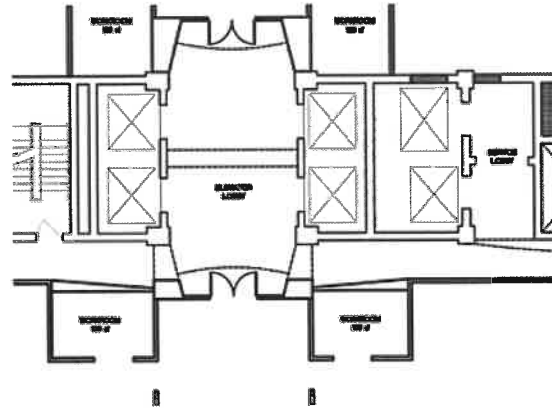
In addition to our elevator upgrade experience, ZMM also possesses a wealth of additional knowledge regarding State Office Building #5. ZMM (operating as Zando, Martin, & Milstead) designed the building in the late 1960's, and over the last decade has been designing upgrades to the overall building and assisting in the renovation to various floors. Improvements have included a roof replacement, window replacement, installation of a generator/fire pump, pressurization of the standpipes, installation of a new electrical service (adjacent to Building #7) and renovations to the 7th-10th floors of Building #5. ZMM's recent work on the building commenced in 2007 with the production of a building assessment. The assessment noted that the placement of the opening to the freight elevator reduces the useable space available on each floor, and recommended an improved layout for this area (as shown below).



Typical State Office Building #5 Floor Layout



Existing Building #5 Elevator Lobby Layout



Elevator Lobby Layout from 2007 Assessment

ZMM Elevator Upgrade Approach

The ZMM engineering staff will commence the process with a review all available building drawings and will perform a full on-site investigation and evaluation of the existing layouts, fire alarm systems, fire protection systems and elevator equipment. The evaluation will include code compliance, ADA, and life safety issues as well as ANSI Elevator requirements. Upon completion of the existing plan and building surveys, ZMM will prepare schematic design drawings of all required upgrades (elevators, electrical systems, fire alarm systems, etc.), and review them with the West Virginia State Fire Marshal's Office Plans Review Department, the West Virginia Division of Labor's Elevator Inspectors, and the Department of Administration General Services Division Architecture/Engineering section. Once there is agreement on the required scope, ZMM will prepare detailed estimates of the proposed improvements.

A detailed list of our recommended services is noted below:

Site Investigation Phase



- Review all Existing Information
- Equipment Survey and Field Measurements
- Development of a Modernization Report, which will include:
 - Schedules
 - Accessibility Upgrading Requirements
 - ANSI 17.3 and WV Code Compliance
 - Budget

Documentation Phase

- Conduct Pre-Design and Design Review Meetings
- Prepare Schematic Design and Design Development Documents
- Prepare Bid Documents and Specifications to Meet General Services Division Standards
- Develop an "After" Modernization Owner Based Continuing-Maintenance Contract

Bidding Phase

- Participate in Pre-Bid Meeting
- Answer Addendum Questions
- Review Contractor Bids
- Assist in Preparation of Agreement (if Required)

Construction Phase Services

- Shop Drawing/Submittals Review
- Conduct Regular Progress Inspections, Reviews and Reports
- Respond to RFI's
- Review Proposal Requests
- Prepare Contract Change Orders, Monitor and Analyze CO's and Project Budget
- Certify Payment Requests
- Perform Final Equipment Inspections and Tests

- Review Contract Close-Out Documents
- Issue Final Equipment Acceptance Letter
- Prepare As-Built Documentation

Schedule

As one of the largest A/E firms in West Virginia, ZMM has the capacity to commence the project immediately upon selection. As noted above our team already has significant experience with the building, which will help lead to an efficient investigation and design effort – providing the West Virginia Department of Administration General Services Division the best opportunity to achieve the proposed 12 month schedule. Upon selection the project will be immediately staffed with designers experienced working on Building #5, and working on elevator upgrades to high-rise buildings in West Virginia.

Summary

ZMM's relevant Building #5 and elevator upgrade experience on high-rise facilities in West Virginia, as well as the approach outlined above, will help ensure the success of the project. Additionally, ZMM commits to working collaboratively with the General Services Division to meet the proposed schedule and as well as the proposed project budget – with the intent of continuing the successful rehabilitation of State Office Building #5.



LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
www.zmm.com

History of ZMM



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

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

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

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

Advantages of an integrated Design Approach:

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

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

Services

Pre-Design

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

Design

- Architectural Design
- Sustainable Design
- Interior Design
- Landscape Architecture
- 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



Adam R. Krason, AIA, LEED AP, ALEP



Role

Principal

Professional Registrations

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

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

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

Project Experience

Charleston Civic Center, Charleston, WV

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

Education

Bachelor of Architecture, The Catholic University of America, 1998

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

Employment History

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

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

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

State Office Building #5, 10th Floor Renovation (Office of Technology), Charleston, WV

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

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

Morgantown Readiness Center (WVARNG), Morgantown, WV

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

Construction and Facilities Management Office Expansion (WVARNG), Charleston, WV

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

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.

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

2017 WV AIA Merit Award for Sustainability Logan-Mingo Readiness Center, Holden, WV
2016 WV AIA Merit Award Christ Church United Methodist, Charleston, WV
2015 WV AIA Merit Award Edgewood Elementary School, Charleston, WV
2014 WV AIA Merit Award Girl Scouts of Black Diamond Council, Charleston, WV
2011 WV 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

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

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

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

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.

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.

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.

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.

Samuel Butzer, PE, LEED AP BD+C



Role

Mechanical Project Engineer

Professional Registrations

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

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

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

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

Project Experience

Charleston Civic Center, Charleston, WV

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

Education

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

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

Employment History

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

Civic Affiliations

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

Appalachian Regional Hospital, Beckley, WV

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

Glenwood Elementary School, Princeton, WV

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

Nicholas County Courthouse, Summersville, WV

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

NGK Oxygen Sensor Plant, Sissonville, WV

Mr. Butzer was responsible for expansion and improvements to the existing cycle water piping system used to cool NGK's manufacturing equipment. The design included variable speed, vertical turbine pumps located above a concrete manhole and polypropylene piping was used to connect to the existing system and limit corrosion of the open piping system. Existing heat exchangers were scrutinized and approved for new flow conditions, and the fluid cooler/cooling tower was replaced with an improved, upgraded model. A controls system expansion and integration was needed to incorporate all equipment, valves, and sensors into a single, seamless communication protocol.

Gestamp West Virginia, South Charleston, WV

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

Rodney Pauley, AIA



Role

Project Manager

Professional Registrations

Registered Architect (WV)

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

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

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

Project Experience

Charleston Civic Center, Charleston, WV

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

WV Lottery Headquarters, Charleston, WV

Mr. Pauley was the Project Manager for a design team that prepared construction documents for renovations to the existing WV Lottery Headquarters complex in Charleston, WV. Renovations to the existing 12-story office building include the demolition and reconstruction of three floors of tenant space and demolition and replacement of the existing roof along with various minor renovations throughout the office tower. The

Education

Bachelor of Architecture, University of Tennessee, 1992

Associate of Science, West Virginia Institute of Technology, 1986

Employment History

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

Civic Affiliations

- American Institute of Architects, Member

existing 5-story parking deck will undergo an extensive structural renovation, includes: replacing bearing pads, patch & repair of concrete members and the addition of waterproofing protection. The existing warehouse under the parking deck is being enlarged to provide additional storage space.

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

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

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

Valley Health Systems, Wayne, WV

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

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

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

WVU Institute of Technology, Montgomery, WV

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

Beech Fork State Park, Lavalette, WV

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



Role

Electrical Engineer

Professional Registrations

Professional Engineer (WV)

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

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

Project Experience

Charleston Civic Center, Charleston, WV

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

Southside Elementary and Huntington Middle School, Huntington, WV

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

Gauley River Elementary School, Craigsville, WV

Mr. Casdorff was responsible for the electrical design of the new elementary school. The project is consolidating Beaver

Education

Bachelor of Science, West Virginia Institute of Technology, 1995

Employment History

2000 - Present, Electrical Engineer, ZMM
1995 - 2000 Electrical Controls Systems Manager, WV Engineering Firm

Elementary School and Craigsville Elementary School into a new 375-student school. The school houses 3 Pre-Kindergartens, 3 Kindergartens, 2 first grade, 12 1st-5th grade classrooms, activity room, cafeteria, kitchen, media center, and administration spaces.

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

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

Fort Gay PK-8 School, Fort Gay, WV

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

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

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

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

Mr. Casdorff is the electrical engineer for building 704 and responsible for electrical power and lighting distribution. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

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

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

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



Role

Structural Engineer

Professional Registrations

Professional Engineer (WV, KY, IN, TN, OH, SC)

Mr. White has more than 10 years of Civil/Structural design and engineering experience. Project experience includes new construction and renovation work involving the design and analysis of reinforced concrete, wood, structural steel, masonry and cold formed steel.

Project Experience

- WVDNR Forks of Coal
- Milton PK School
- Midland Trail High School
- Valley Park Community Center
- Marshall County Readiness Center

Other Jobs from Past Employers:

- Monongalia County Justice Center - Morgantown, WV
- Lewis Co. Judicial Annex - Weston, WV
- Charleston Correctional Work Release Center - Charleston, WV
- Stevens Correctional Facility - Welch, WV
- Marsh Fork Elementary School - Naoma, WV
- WVANG Camp Dawson, Multi-Purpose Building - Kingwood, WV
- Bridge Valley Advanced Technology Center - South Charleston, WV
- New River Community and Technical College Headquarters Building - Beaver, WV
- Lewisburg Elementary School - Lewisburg, WV
- Rainelle Elementary School - Rainelle, WV
- Boone County Honors Academy Addition - Madison, WV
- WVU Parkersburg Center for Early Learning - Parkersburg, WV
- WVU Parkersburg Applied Technologies Center - Parkersburg, WV

Education

B.S., Civil Engineering, West Virginia University Institute of Technology, Montgomery, WV, 2006

Employment History

- 2016 - Present, Structural Engineer, ZMM
- 2016, Civil/Structural Lead, Jacobs Engineering Group
- 2013 - 2016, Structural Engineer, Chapman Technical Group
- 2010 - 2013, Structural Engineer/Project Manager, Moment Engineers
- 2007 - 2010, Structural Engineer/Project Manager, Advantage Group Engineers, Inc. (Cincinnati, OH)

Mike Flowers



Role

Plumbing/Mechanical Technician

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

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

Project Experience

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

Jackson County Armed Forces Center (WVARNG): Mr.

Flowers was responsible for the plumbing design on this project that utilized plumbing fixtures that reduced the total annual water usage by 30% as compared to using standard plumbing fixtures.

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

Education

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

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

Associate of Science; 1988, West Virginia State University

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

Employment History

2001 - Present, Mechanical and Electrical Technician, ZMM

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

1991 - 1998, Mechanical and Electrical Technician, ZMM

Civic Affiliations

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

Charleston Civic Center Expansion and Renovation



LOCATION:
Charleston, WV

SIZE:
283,000 SF

COMPLETION:
Est. 2017

COST:
\$75M

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



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

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

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



Charleston Civic Center Expansion and Renovation



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

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

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

State Office Buildings 5,6, & 7



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 membrane, and rigid insulation were also salvaged as part of the roof replacement project. Several unused mechanical penthouses, antennas, 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.

Construction & Facilities Management Office

WVARNG



LOCATION:
Charleston, WV

SIZE:
19,935 SF

COST:
\$3.5M

COMPLETION:
2008

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

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



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



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

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



Wood County Justice Center



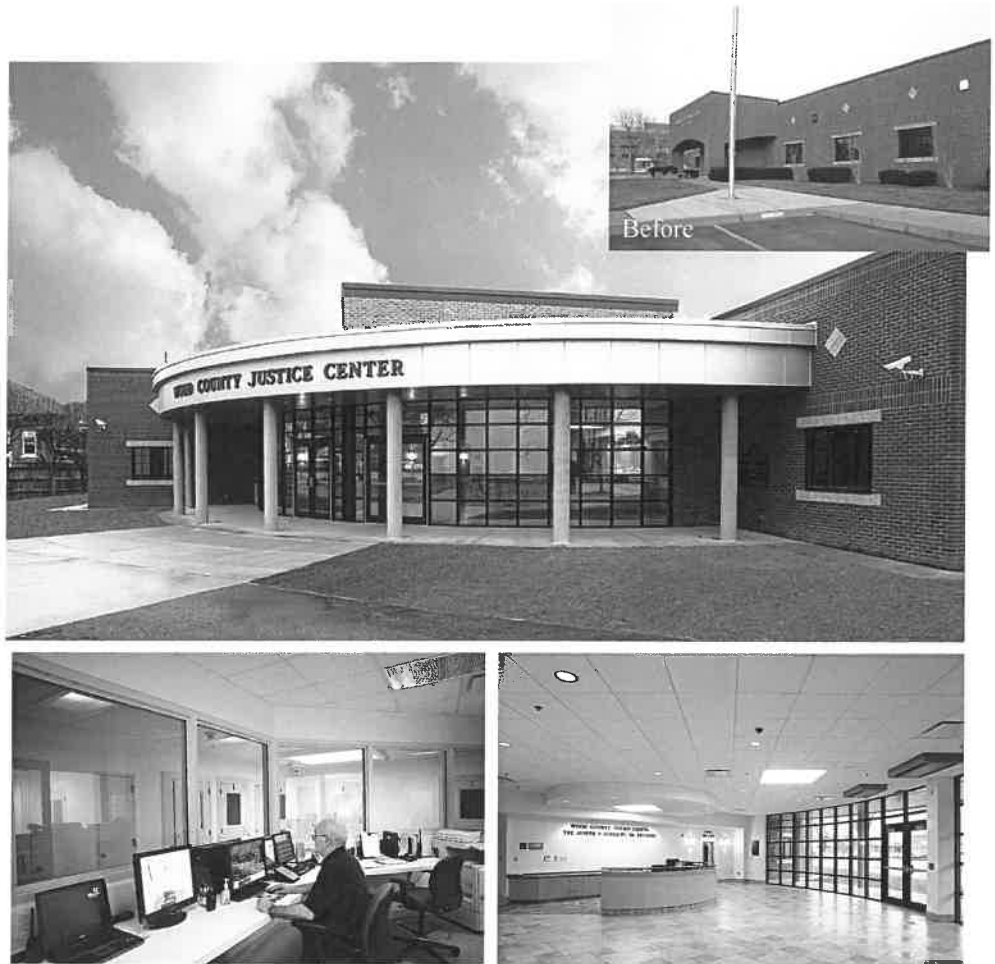
LOCATION:
Parkersburg, WV

SIZE:
32,000 SF

COMPLETION:
2011

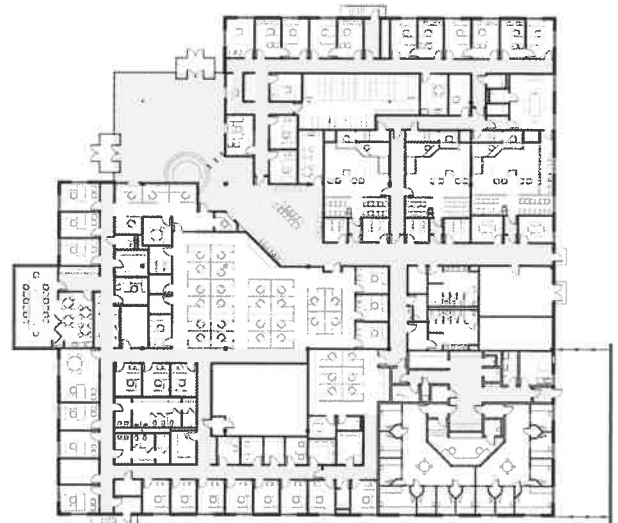
PROJECT COST:
\$5M

CONTACT:
Mr. Blair Couch
Commissioner
No. 1 Court Square
Suite 205
Parkersburg WV 26101
304.424.1984
dbc@woodcountywv.com



This project was an extensive renovation of a 15 year old, 32,000 square foot, single story office building located in downtown Parkersburg, West Virginia. The building was purchased by the Wood County commission with the purpose of bringing together 3 government functions that had outgrown the 3 separate buildings that they occupied.

The renovated building consists of offices and 3 Courtrooms for the County's Magistrate Court system, public service windows for document pick-up and payment of fines, offices for the Sheriff's Department and Home Confinement and a 12-hour Inmate Holding Center.



Due to the building's new use, the interior was completely demolished leaving only the shell. The building's main entrance was relocated and redesigned to provide a new, more prominent identity to the building and to align with the new parking area created by the demolition of the adjacent existing magistrate court building. The old HVAC system was removed and replaced with a more energy efficient system and new, energy efficient lighting was installed. The project was designed around the U.S. Green Building Council's New Construction and Major Renovation Guidelines and is LEED Silver Certified.

West Virginia State Police

Information Services Center



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



Tucker County Courthouse Annex Renovation



LOCATION:
Parsons, WV

SIZE:
21,000 SF

COST:
\$4M

COMPLETION:
2013

CONTACT:
Mr. Joel Goughnour
Tucker Cty Commission
211 1st Street, Suite 307
Parsons, WV 26287
304.478.2866 Ext 207
tuckergwa@gmail.com



The Tucker County Courthouse Annex is 4-story, 21,000 square foot building located adjacent to the Tucker County Courthouse in Parsons, WV. The annex sits on the same lot as the courthouse with the original jailor's residence between the two. The location of the existing jailor's residence, which is listed on the National Register, created a challenging planning dilemma. ZMM explored three options for developing the Courthouse Annex. The first option, the original concept proposed by Tucker County, anticipated connecting the Annex at multiple levels via a connector.

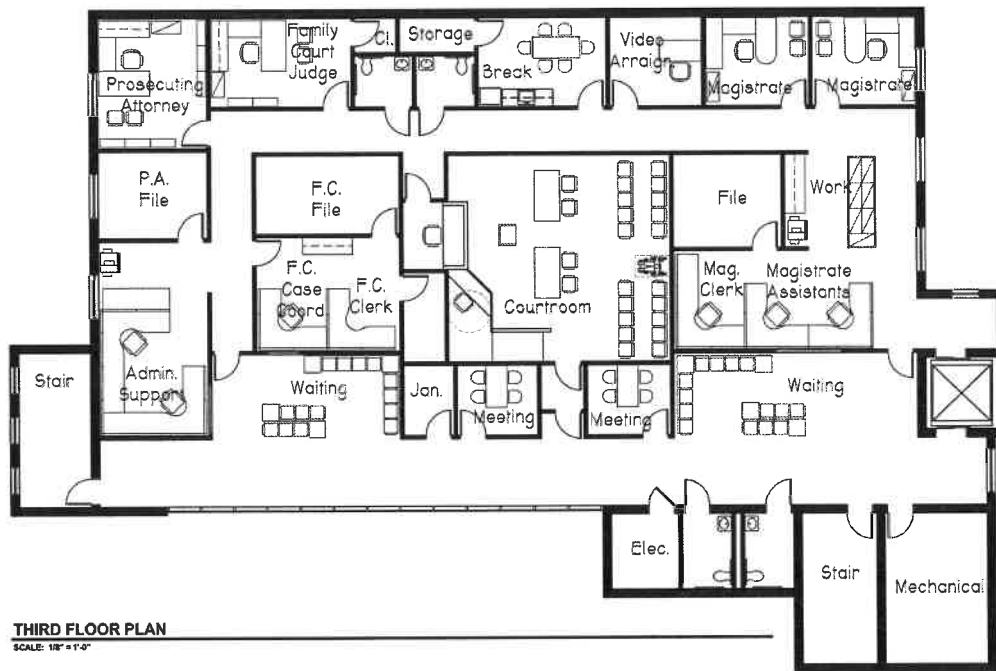
The problem with this approach was that the jailor's residence appeared like a building stuck within a larger complex, as well as the cost of the connector structure. ZMM also explored the option of relocating the jailor's residence, an approach that proved not feasible as the location of the facility justifies it's historical quality. The final solution that was examined, and is currently being implemented, involved adding a separate elevator to the existing Tucker County Courthouse, and connecting the entry to the two facilities with an enclosed single level connector. This approach is the most efficient use of the County's resources, and also the best approach for the overall Courthouse site. 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.

The Tucker County Sheriff, currently housed in leased space, will occupy the space that is being vacated in the original Courthouse.

Tucker County Courthouse Annex Renovation

The office and courtroom spaces occupy the upper three floors, with enclosed parking on the ground floor. The enclosed parking on the ground level will ensure that all occupied spaces are located outside of the floodplain.

The architecture of the annex is meant to complement the existing Romanesque and Flemish styles of the Courthouse and jailor's residence. The red brick, stone base, brick banding, arched openings, and sloped rooflines help to create a unified feel, while the wall of glass adjacent to the public corridor that overlooks the courthouse brings a touch of modernity to the campus and provides natural light to the interior of the building.



Girl Scouts of Black Diamond Council

Volunteer Resource Center and Girl Zone/Urban Camp



LOCATION:
Charleston, WV

SIZE:
27,928 SF

COST:
\$5M

COMPLETION:
Fall 2013

CONTACT:
Beth Casey, CEO
GSBDC
321 Virginia Street, W.
Charleston, WV 25302
304.345.7722

AWARDS:
2014 AIA Merit Award
West Virginia Chapter
*Achievement in
Architecture
in Interiors/Graphics*



Interior Before Pictures



The New Girl Scouts of Black Diamond Council Volunteer Resource Center and Girl Zone/Urban Camp is located on the West Side of Charleston, WV. The 24,650 SF project completely renovates and upgrades the existing buildings at 321 Virginia Street. The buildings were built in the early and mid-1900's, and were used as a car dealership showroom and parts building until 2008. By the time the Girl Scouts took possession of the building, it had fallen into a state of disrepair. The facility required environmental remediation, and the entire roof structure was damaged and had to be removed.

The Girl Scouts of Black Diamond Council purchased the vacant buildings in 2011 with the intent of converting them into a girl-centered facility for members and a volunteer-enrichment center for program resources and training. The program for the facility includes administrative offices, community/meeting gathering spaces, as well as a small hotel (Urban Camp) for Girl Scouts visiting Charleston. The Girl Scouts undertook the effort to transform the facility, creating an architectural style that would appeal to girls and young women, while utilizing colors and materials that would not become dated.

The main building brings all of the operations of the Girl Scouts of Black Diamond Council together under one roof and on one level. This building includes a volunteer meeting room, employee office space, flexible conference spaces, and a retail shop. The Virginia Street façade of the existing facility was removed, and more contemporary elements are utilized to speak to each of the functions. The Girl Zone/Urban Camp reflects a more residential/outdoor tone with the use of a wood veneer, while the retail store has floor to ceiling storefront.



The storefront is etched with images of girl scouts and scouting slogans. The storefront is backlit in the evening, allowing the entire façade to reflect the function of the building. The entry is accentuated with a more vertical element and signage, giving hierarchy to the various elements, while the office areas are recessed from the corner with smaller openings, and a masonry veneer. Each zone has a unique identity.

The adjacent Girl Zone/Urban Camp conveys the feeling of a hotel or hostel and offers a place that Girl Scouts can stay during a visit to Charleston. While the main entry to the building faces Virginia Street, the entry for the Girl Scouts will be at the rear of the building. A small addition was developed to create a “check-in” area similar to a hotel. Adjacent to the “check-in” area is a great room where troops can gather to cook, congregate, and socialize. The “hotel rooms” utilize a dormitory arrangement, while the finishes and furnishings will be more like a youth hostel than a camp. The rear of the Girl’s Zone/Urban Camp will reflect a more traditional camp environment, and includes an outdoor dining area and a fire pit.

With the mixed-use functions of retail, office, and residential, this unique project will be a vibrant addition to the emergent West Side community. The modern aesthetic of the facility will appeal to Girl Scouts and reflect the one of the Girl Scout’s Journeys – “It’s Your World – Change It!”

Goodwill Prosperity Center

Historic Renovation



LOCATION:
Charleston, WV

SIZE:
10,200 SF

COMPLETION:
2015

COST:
\$960,000

CONTACT:
Cheri Bever, President
Goodwill Industries
215 Virginia Street, W.
Charleston, WV 25302
304.346.0811



Goodwill's newly renovated Prosperity Center is located on Virginia Street (West) in Charleston. This facility will help prepare members of the community for the workforce, and will expand Goodwill's outreach opportunities. Inside the facility is several classrooms, a computer room, and a Career Center that is equipped with all the tools needed to prepare and apply for a job. A spacious and colorful lobby provides a relaxed atmosphere for visitors. Inside the center is a "Suited for Success" room where work-appropriate clothing will be available to those who need it.

The building, which was once the Charleston Transit Authority's bus garage, underwent a major exterior transformation. Layers of stucco were removed to open up the old garage bays, and glass was infilled into these openings to give the center a tremendous amount of natural light. The original brick was exposed, repointed, and painted. The improvements made to the exterior showcase the historic nature of the building while upholding the modern amenities needed for today.

Christ Church United Methodist

Educational Wing / Choir Rehearsal Renovation



LOCATION:
Charleston, WV

COMPLETION:
April 2013

CONTACT:
Rev. David Donathan,
Minister of Music & Arts
And Organist
1221 Quarrier Street
Charleston, WV 25301
304.342.0192 Ext. 210

AWARDS:
2016 AIA Merit Award
West Virginia Chapter
Achievement in
Architecture in Interior
Design



The education wing at historic Christ Church United Methodist was in need of modernization, both in infrastructure and aesthetics. ZMM's interdisciplinary team succeeded in meeting the challenges of creating the owner-requested "wow factor" in an existing building, and in coordinating construction that was phased while the building was continuously open to the public. ZMM coordinated asbestos abatement, multiple prime contracts and the owner's direct-pay items. Infrastructure design work included window replacement, new elevator, new variable refrigerant system and rooftop mechanical unit to serve the gymnasium, electrical panel and receptacle upgrades, emergency lighting and fire alarm systems.

The interior design reflects the church's various functions within the education wing, which include a daycare, classrooms, music and choir facilities, special teens area, and high quality decorative lighting in the Narthex. "The Growing Place" daycare features an expanded corridor with a winding path leading to each classroom. The classrooms are cheerful yet modern and functional, and there is a new kitchen and gathering space for parents and Sunday morning visitors. The expanded music and choir rooms were inspired by salvaged stained glass windows and provide higher levels of acoustics and storage. The lower level teen area, also known as the Wolfe-Omega Room, features hip, bright colors, kitchen, and special worship area.

West Virginia Lottery Headquarters

Office Building and Parking Garage

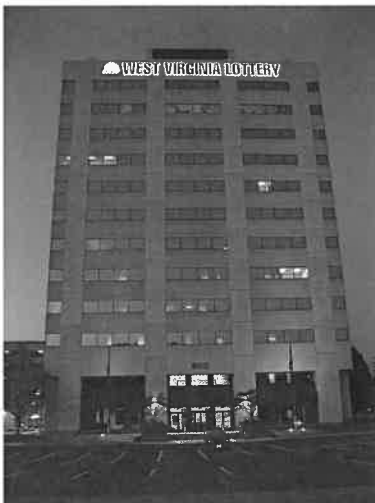


LOCATION:
Charleston, WV

CONTACT:
John Myers
Cabinet Secretary for
Administration
900 Pennsylvania Ave
Charleston, WV 25302
304.558.0500



The project is an extensive renovation of an existing 13-story office building and 7-story parking garage in downtown Charleston, WV. The building is currently owned and operated by the WV Lottery but also houses many other state government agencies.



Major renovations within the office building consist of the demolition and renovation of three existing tenant floors, the relocation of the existing fitness center and replacement of the existing roof. The West Virginia Division of Insurance is being relocated from their existing, outdated office space to floors 7, 8 & 9. Off the newly renovated elevator lobbies on each floor is a reception area which leads to an interior space primarily constructed of enclosed offices to better suit current department requirements. To provide contiguous floor space for the Division of Insurance an existing tenant space on the 6th floor is being demolished and renovated into the new fitness center located across from the existing Café. Construction on the roof includes the removal and replacement of the existing roof insulation and membrane and the installation of new roof davits and stainless steel guardrail meeting current OSHA requirements.

The existing precast concrete parking deck will be undergoing a widespread renovation including structural repairs and restoration, major electrical upgrades and an addition to the existing storage warehouse. After vast investigative work it was determined that bearing pads need to be replaced under the existing concrete double-tee framing members, concrete structure and topping slabs needed repair and concrete spandrel panels required epoxy injection to repair extensive cracking. Horizontal driving surfaces are receiving new waterproofing, sealant joint replacement and restriping. The circulation connector between the office building and the parking deck is in structural repair also, requiring partial demolition and reconstruction of the existing steel deck and concrete floor slabs. Electrical improvements will consist of new LED lighting throughout and additional pole fixtures on the top level along with power and life-safety upgrades. The one-story storage warehouse located underneath the existing parking deck is being increased by approximately 1,800 sf. The addition will consist of masonry exterior walls clad in EIFS with a sloped steel-framed roof and single-ply membrane system.

Kanawha Valley Bank
Elevator and Fire Alarm Upgrades



LOCATION:
Charleston, WV

COMPLETION:
2014

COST:
\$750,000

Pat McGivern
Real Estate Resources
500 Virginia Street, East
Suite #950
Charleston, WV 25301
304-345-9348

The client had obtained bids from four elevator companies for upgrading the elevators for the high-rise building and requested ZMM evaluate the bids and prepare construction documents for the project. ZMM performed a building electrical, mechanical and fire alarm survey to determine the feasibility of the proposed elevator upgrade. ZMM then prepared a detailed tabulation of the bids highlighting the pros and cons of each proposal and aided the client in determining which company to use for their upgrade.

ZMM met with the local building code officials and the fire department to determine the extent of the electrical, mechanical and fire alarm renovation necessary to support the elevator renovations. It was determined that the modifications to the electrical feeds to the elevators, new penthouse heating and air conditioning, elevator shaft smoke evacuation and replacement of the existing high-rise fire alarm system were necessary. ZMM prepared bidding and construction documents for the electrical upgrades, new elevator penthouse heating and air conditioning systems, an elevator shaft smoke evacuation system and a new addressable high-rise fire alarm system for the building.



Bridgemont Community & Technical College

Davis Hall Renovation



LOCATION:
Montgomery, WV

SIZE:
77,215 SF

COMPLETION:
Summer 2012

COST:
\$4M

CONTACT:
Dr. Jo Harris, Past President
619 2nd Avenue
Montgomery, WV 25136
304.741.4116 (cell)



ZMM was selected by Bridgemont Community and Technical College and the West Virginia Community and Technical College System to provide professional architectural and engineering design services for the Renovation of Davis Hall in Montgomery. Davis Hall is a 77,215 SF classroom and laboratory facility that was constructed in 1970 for WVU-Tech. The exterior of the facility consists of architectural pre-cast concrete panels and a curtain wall system. The interior includes an open two story atrium, a large auditorium, and five levels of office and classroom space that is constructed of demountable partitions.

Prior to commencing the design effort, ZMM completed a thorough assessment of the facility. The assessment revealed significant life safety concerns that had not been previously identified, including the use of non-plenum rated plastic insulated wiring throughout the return air plenums, mechanical units located above ceilings in exit stairs, and a lack of adequate fresh air for building occupants. As part of this initial assessment, ZMM assisted in developing a scope of work for the current project, as well as a long range plan for future improvements to Davis Hall.

The scope of the current project includes life safety upgrades (replace non-plenum rated wiring, new fire alarm system), improvements to the building envelope (curtain wall replacement and re-roofing), hazardous material abatement, mechanical improvements (boiler and chiller replacement, outdoor air ventilation system replacement), and interior improvements (replace ceilings and lighting, upgrade furnishings).

Client References

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

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

Rev. David Donathan, Minister of Music & Arts and
Christ Church United Methodist
1221 Quarrier Street
Charleston, WV 25301
304.342.0192 Ext. 210

Dr. Jo Harris, Past President
Bridgemont CTC - Davis Hall
619 2nd Avenue
Montgomery, WV 25136
304.741.4116

MAJ Dan Clevenger
West Virginia National Guard
1707 Coonskin Drive
Charleston, WV 25311
304.561.6446