



Purchasing Division
 2019 Washington Street East
 Post Office Box 50136
 Charleston, WV 25305-0136

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

Proc Folder: 528243

Doc Description: A&E EOI for Existing Projects at the WV Schools for the Deaf

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	
2019-01-29	2019-02-22 13:30:00	CEOI	0403 DBS1900000002

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WV PURCHASING
 DIVISION

SENDING LOCATION

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

Vendor Name, Address and Telephone Number:

ZMM, Inc. (dba ZMM Architects and Engineers)
 222 Lee Street, West
 Charleston, WV 25302
 304-342-0159

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
 (304) 558-8801
 stephanie.l.gale@wv.gov

Signature X

FEIN # 55-0676608

DATE 2-22-2019

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

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

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

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: ZMM, Inc. (dba ZMM Architects and Engineers)

Authorized Signature: [Signature] Date: 2-22-2019

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 22nd day of February, 2019.

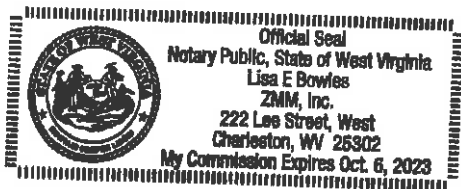
My Commission expires 10-6, 2023

AFFIX SEAL HERE


NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 01/19/2018)



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.



(Name, Title)
David E. Ferguson, AIA, REFP, Principal

(Printed Name and Title)
222 Lee Street, West, Charleston, WV 25302


(Address)
304-342-0159 304-344-8144

(Phone Number) / (Fax Number)
ferguson@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. (dba ZMM Architects and Engineers)

(Company)


(Authorized Signature) (Representative Name, Title)
David E. Ferguson, AIA, REFP, Principal

(Printed Name and Title of Authorized Representative)
2-22-2019

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

(Phone Number) (Fax Number)

West Virginia Ethics Commission
Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Contracting Business Entity: ZMM, Inc. Address: 222 Lee Street, West
Charleston, WV 25302

Authorized Agent: David E. Ferguson Address: Same as Above

Contract Number: CEOI 0403 DBS1900000002 Contract Description: A&E EOI for Existing
Projects at the WV Schools
for the Deaf

Governmental agency awarding contract: West Virginia Schools for the Deaf and the Blind

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

1. Subcontractors or other entities performing work or service under the Contract

Check here if none, otherwise list entity/individual names below.

2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)

Check here if none, otherwise list entity/individual names below.

- ZMM, Inc., Robert Doeffinger
- ZMM, Inc., David E. Ferguson
- ZMM, Inc., Adam R. Krason

3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

Check here if none, otherwise list entity/individual names below.

Signature: 

Date Signed: 2-22-2019

Notary Verification

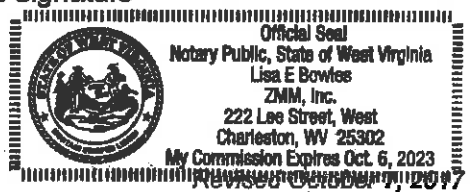
State of West Virginia, County of Kanawha:

I, David E. Ferguson, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 22nd day of February, 2019


Notary Public's Signature

To be completed by State Agency:
Date Received by State Agency: _____
Date submitted to Ethics Commission: _____
Governmental agency submitting Disclosure: _____





February 22, 2019

Stephanie Gale, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street, East
Charleston, WV 25305

Subject: Existing West Virginia Schools for the Deaf and the Blind

Dear Ms. Gale:

ZMM is pleased to submit the attached qualifications that demonstrate our experience and capability to provide architectural and engineering services. ZMM has joined efforts with Dickinson & Partners, a leader in special needs design. This team combines a trusted local resource, ZMM, with the nation's leading designer for educating facilities for the deaf and the blind.

ZMM is one of few full service A/E Firms in West Virginia, and is noted for design excellence and client focus. ZMM and Dickinson & Partners have completed the current CEFP at the WV Schools for the Deaf and the Blind and have intimate knowledge of the campus and all of their facilities. ZMM has completed over 200 educational facilities throughout the state. Our experience in West Virginia spans five decades, and has been recognized with both statewide and national planning and design awards.

Dickinson & Partners (D&P) offers extensive experience in Programming and design of educational and student housing facilities for the deaf and blind, with the goal of enhancing performance and meeting the needs of owners and users. D&P has been recognized as being among the top firms in the country in areas of special needs, designing various educational centers throughout the states of Virginia, Pennsylvania, New York, and most recently Qatar.

As a full service design firm, ZMM employs all of the disciplines in-house to undertake the maintenance projects outlined in the request for expression of interest. If selected to provide services for the project, ZMM would set up teams under the direction of David E. Ferguson, AIA – Project Principal and John Dickinson, AIA – Project Principal, two professionals with considerable experience and a history of working closely with the West Virginia Schools for the Deaf and the Blind (WVSDDB).

Thank you for taking the time to review the attached information that details our project team and approach, as well as our firm profiles, experience, qualifications, personnel. We look forward to presenting our ideas for this project, and appreciate your consideration for this important endeavor.
Respectfully submitted,

ZMM, Inc.

A handwritten signature in blue ink, appearing to read 'David Ferguson', with a long horizontal line extending to the right.

David Ferguson, AIA, REFP
Principal-in-Charge, Architect

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Section 4.1



4.1 Provide the name of the firm, the contact individual and appropriate address and phone numbers. If this a joint proposal, provide said information for each firm in the proposed planning team.

Lead Firm

ZMM Architects and Engineers, Inc.
222 Lee Street, W
Charleston, WV 25302
304342.0159

Contact: David Ferguson, AIA, REFP
Architect, Principal
304.541.8362 (cell)

Consulting Architect

Dickinson + Partners
425 West Capitol Avenue
Suite 1528
Little Rock, AR 72201
720.459.5273 VP

Contact: John Dickinson, AIA, CEFPI
Architect, Principal
720.459.5273 VP



LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
www.zmm.com



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

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

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



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

Advantages of an integrated Design Approach:

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

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

Services

Pre-Design

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

Design

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

Post Design

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



Award Winning Design



2018

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



2017

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



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



2016

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



AIA West Virginia Chapter: Merit Award
Achievement in Architecture
Gauley River Elementary School
Craigs ville, 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

Award Winning Design



2014

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Sustainable Design

Huntington East Middle School

Huntington, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture

Southern West Virginia Community & Technical College

Williamson, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Interiors/Graphics

Girl Scouts of Black Diamond Council

Charleston, West Virginia



2012

AIA West Virginia Chapter: Honor Award

Excellence in Architecture

West Virginia Housing Development Fund Building

Charleston, West Virginia



2011

AIA West Virginia Chapter: Honor Award

Excellence in Architecture in Historical Preservation

Southside Elementary/Huntington Middle School

Huntington, West Virginia

AIA West Virginia Chapter: Honor Award

Excellence in Architecture

Joint Interagency Training & Education Center

Kingwood, West Virginia



AIA West Virginia Chapter: Merit Award

Excellence in Architecture in Interiors

WV State Office Building #5, 10th Floor Renovation

Charleston, West Virginia



American School for the Deaf - New Gallaudet-Clerc K-12 Education Center

CORE EXPERTISE

Dickinson + Partners (D+P) offers extensive experience in programming and design of educational and housing facilities for the deaf and the blind, with the goal of enhancing performance and meeting the needs of owners and users. Although substantial guidelines exist for addressing design needs for persons with mobility impairments, little formal literature exists that describes the special programming requirements for deaf and blind populations. In response to this need, D+P was founded in 2001 to provide facilities programming and design for special needs projects including facilities deaf, blind, and mobility-impaired users. D+P has consulted on projects all over the world and been recognized as one of the top firms in the world in the area of special needs programming and design. Our clients appreciate our ability to meet schedules, honor budgets and solve problems.

The design of innovative living and learning environments has long been a cornerstone of Dickinson + Partners practice. The profile of designing for today's special needs education facilities is changing. State governments and school agencies are upgrading and expanding programs, facilities and systems to meet new standards, set forth by the Americans With Disabilities Act (ADA) and the International Disabled Standard (IDS) guidelines. In addition, continual advancements in technology and the constant need for adaptive reuse require agencies, architects and planners to be forward-thinking and solution oriented. Plans must provide for new and effective visual and functional communication access for special needs students and their staff.

We Listen, Innovate, and Deliver

We Focus on You

One of the truly measurable, tangible attributes we bring to any project is our adept ability to listen, comprehend, and communicate closely with you every step of the way. We communicate in a language and a manner that is meaningful and of value to you. We do not bring our own agenda or prescription for the design of your building. Instead, we develop ideas and solutions that are custom-tailored for you, and are derived from the unique participants and circumstances that frame any given design venture. **You will have at your fingertips a top team with experience and passion for this project type, all whom are committed to elevating the genre of each component each phase of the way.**





4.2 Provide licensed Architects in West Virginia with documented experience in school planning. Firms must be capable of experience in long range comprehensive planning capable of translating educational needs into facility needs. Adequate documentation including the identification of specific individuals, including resumes assigned to the project.

Registered Architects Licensed in West Virginia



David Ferguson, AIA, REFP
Registration Number [REDACTED]



Adam Krason, AIA, LEED AP, ALEP
Registration Number [REDACTED]



Chris Campbell, AIA, LEED AP
Registration Number [REDACTED]

* Documentation and Resumes to Follow



Recognized Educational Facility Professional



David Ferguson, REFP

2008

Has met the standards of excellence and criteria to be registered as a
Recognized Educational Facility Professional
by the Council of Educational Facility Planners International.

John K. Ramsey, CAE, CEFPI Executive Director and CEO

Merle J. Kirkley, REFP, CEFPI President



THE COUNCIL OF EDUCATIONAL FACILITY PLANNERS INTERNATIONAL

June 3, 2008

Mr. David Ferguson , REFP
Architect
ZMM Inc
222 Lee Street West
Charleston, WV 25302
USA

Dear Mr. Ferguson:

Congratulations! You have met the criteria and standards required to maintain CEFPI's professional designation as a Recognized Educational Facility Professional (REFP).


A certificate stating your designation is enclosed. In addition, your name and affiliation information will be included in a list of REFPs posted on the CEFPI Web site. We hope that you will state the REFP designation following your name on business and professional documents.

Under REFP guidelines, you must complete 15 credits of professional development within your three-year cycle to renew your designation. CEFPI will track the activities reported to us and mail you a certificate each year. Please note that you need to self-report training activities or courses that you take to earn REFP points. Please e-mail them to me (sarat@cefpi.org) and I will update your records.

As an organization, we are proud of your professional achievements and pleased to have the opportunity to recognize you as an outstanding professional. Your training, experience, and expertise benefit the CEFPI membership and the field of educational facility planning.

Again, congratulations on your REFP designation. I look forward to working with you in the future. Please let me know if you have any questions or if I can be of further assistance.

Sincerely,


Sarat Fratapchandran
Research and Grants Coordinator
Email: sarat@cefpi.org

Enclosures

The West Virginia Board of Architects

certifies that

DAVID E. FERGUSON

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

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

Certificate Number [REDACTED]

The registration is in good standing until June 30, 2019.



A rectangular box containing a handwritten signature in cursive script, which appears to be "Emily Papadopoulos".

Board Administrator

The West Virginia Board of Architects

certifies that

ADAM R. KRASON

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

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

Certificate Number [REDACTED]

The registration is in good standing until June 30, 2019.



A handwritten signature in cursive script, appearing to read "Emily Repedoginos".

Board Administrator

The West Virginia Board of Architects

certifies that

CHRISTOPHER CAMPBELL

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

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

Certificate Number [REDACTED]

The registration is in good standing until June 30, 2019.



A handwritten signature in cursive script, reading "Emily Repedgales".

Board Administrator

David E. Ferguson, AIA, REFP



Role
Principal

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 began his career at ZMM in 1984 working on a variety of retail, educational and military projects throughout West Virginia, Pennsylvania, Ohio, Virginia, Maryland, New York, North Carolina, South Carolina, Florida, and Washington DC. In 1996 Mr. Ferguson expanded his expertise into the Healthcare and Industrial and Corporate Office facilities and since then has led the effort at ZMM in Educational Design. 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*. In addition to Mr. Ferguson's project management responsibilities, as a principal of the firm he has corporate administrative duties and serves on the Board of Directors.

Project Experience Highlights

Wv Schools for the Deaf and the Blind, Romney, WV

Mr. Ferguson was the Project Architect on various projects at the WV Schools for the Deaf and the Blind as well as their previous CEFP. ZMM combined forces with Dickinson & Partners, an architectural firm specializing in Special Needs Architecture, to have a complete understanding and working knowledge of the

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
- High School Mentoring/Job Shadowing Program for 6 County School Systems
- WV AIA IDP Program Mentor/Advisor

requirements and challenges faced when designing for Deaf and Blind student population.

The purpose of the CEFPP is to provide the owner a long range plan that addresses the requirements for new construction and major renovations. Comprehensive planning is a way of identifying the best route to the future through a workable plan for handling priority related and anticipated changes. The CEFPP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The goals are defined then realized, if necessary, through several phases of construction.

Marshall University - Smith Hall, Huntington, WV

ZMM worked closely with Marshall University professors to determine the correct acoustics to meet the accreditation needs for the college. Being an extension of the Fine Arts Department, the Owner also felt that it was necessary to address the overall aesthetics for a creative mind and inspire the students. Taking inspiration from the Thundering Herd, the building was transformed with a mature palette and pops of green selected by the renovation committee.

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.

Explorer Academy, Huntington, WV Mr. Ferguson was the project manager/architect on 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. The students learn by conducting learning expeditions rather than sitting in a classroom with one subject being taught at a time.

Nicholas County Schools

Mr. Ferguson is currently leading the recovery effort for the \$160 million dollar school system. On June 23, 2016 a flood destroyed three schools. These facilities were left unsafe and uninhabitable. 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.

Lincoln County High School, Hamlin, WV Mr. Ferguson was responsible for the programming and design effort for this one-of-a-kind facility. This 800 student, 217,000 SF school was a ground breaking facility for the county, West Virginia School Building Authority and the WV Department of Education. This facility was the first school in West Virginia to incorporate "green" design principals. The school was the first school east of the Mississippi River to encompass a fully comprehensive High School, Vocational School, Health Clinic (open 12 months a year), and Community College within one building. This facility is also the proud recipient of the 2007 WV AIA Honor Award.

Cabell County Bond Program: Mr. Ferguson assisted Cabell County in developing budgets, project scopes and passing the largest bond program in West Virginia. This encompassed four projects and with additional funding from the West Virginia School Building Authority exceeded \$72 million dollars. As Principal, Mr. Ferguson led the programming and design effort on all four facilities.

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

2017 WV AIA Merit Award Explorer Academy, Huntington, WV

2016 WV AIA Merit Award Gauley River Elementary School, Craigsville, WV

2015 WV AIA Merit Award Kenna Elementary School, Kenna, WV

2014 WV AIA Merit Award Southern WV Community & Technical College, Williamson, WV

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

2010 WV AIA Honor Award Hacker Valley PK-8 School, Webster County Schools, Hacker Valley, WV

2007 WV AIA Honor Award Lincoln County High School, Lincoln County Schools, Hamlin, WV.

March 2006 Article, Construction Progress, Lincoln County Comprehensive High School, Lincoln County. *West Virginia Construction News Magazine*, West Virginia Contractor's Association

May 2005 Article, Building Blueprints, Science Classroom. *School Planning & Management Magazine*

2005 Nominated for: School Planner of the Year – Southeast Region Chapter CEFPI2004 Education Design Showcase, "Project of Distinction", *School Planning & Management Magazine*. St Albans High School, St Albans West Virginia, Kanawha County Schools.

2004 Impact on Learning Awards, "Effective Transformation", *School Planning & Management Magazine/CEFPI*. St. Albans High School, St. Albans West Virginia, Kanawha County Schools.

Project Team

John C. Dickinson, AIA, CEFPI

Principal of Dickinson + Partners

Curriculum Vitae

Education:

Masters in Business Administration,
University of Phoenix, 1998

Bachelor of Architecture,
University of Kentucky, 1988

Diploma, E'cole des Architecture,
Paris, France, 1987

Professional Affiliations

American Institute of Architects

Colorado School for the Deaf and
the Blind, Chair of the Board of Trustee

Council of Educational Facility
Planners International (CEFPI)

National Association of the Deaf

National Autism Association

John Dickinson is one of International's most prominent deaf architects. A recognized expert in his field, John is often invited to speak, write and participate in conferences and lectures. Mr. Dickinson is the founder of Dickinson + Partners, a consulting firm that offers collaborative visioning, programming, design and planning expertise to schools throughout the country. A wide range of rich experiences have deepened John's perspective, allowing for a holistic approach virtually unparalleled in the industry. Creating architecture with some of the most renowned educational architecture firms, he collaborates as an educational facility planner with some of the country's most thoughtful clients.

For over 30 years, John has planned and designed meaningful places for learners across the country. Through an exceptionally creative approach, he has designed schools and living spaces with both focused and playful spaces. As you review his portfolio, you will notice the breadth of artistic expression that results from listening to his client's desires. Working with a focus on community, John is a master at bringing together the school community, parents, students, and the larger community to create consensus and engagement.

Prior to founding Dickinson + Partners, John was Principal and Director of Special Needs Studio at Winter & Company an Architectural and Urban planning firm in Boulder, Colorado.

Professional Experience



AEC New K-12 Deaf School for Girls and Boys
Campus Master Plan, New K-12 Education Center
Doha, Qatar
(Photo left)



Ohio State School for the Blind
Campus Master Plan, New Education Center and Residence Halls
Columbus, OH



American School for the Deaf
New K-12 Educational Center
West Hartford, CT
(Photo left)

Virginia Rehabilitation Center for the Blind
Addition & Renovation
Richmond, VA

Cave Springs Training Center for the Deaf and the Blind
Campus Master Planning, New Training Center and Residence Hall
Cave Springs, GA
(Photo left)



Adam R. Krason, AIA, LEED AP, ALEP



Role

Principal

Professional Registrations

Registered Architect (WV, OH, KY, VA, MD, NJ)

LEED Accredited Professional

Accredited Learning Environment Professional
NCARB (55,984)

Construction Specifications Institute (CSI)

Construction Documents Technician (CDT)

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

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

Project Experience

Charleston Civic Center, Charleston, WV

Mr. Krason 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

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

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:

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

Chris A. Campbell, AIA, LEED AP BD+C



Role
Project Architect

Professional Registrations
Registered Architect (WV)
LEED Accredited Professional
NCARB (53,302)

Mr. Campbell joined ZMM in November of 2017. Prior employment experience includes serving in the capacity of Architect and Project Manager for a variety of projects. This experience includes Educational (K-12 and Higher Education), Commercial Offices, Automotive Dealerships, Justice (Homeland Security and Department of Justice Offices), and Religious spaces. Mr. Campbell's responsibilities include programming, design, documentation, coordination of the architectural and engineering team, and construction administration. Project responsibilities comprised all duties from project inception to completion. Mr. Campbell began his career in 1996 and until 2006 was primarily working on K-12 educational projects throughout West Virginia. From 2006 until present the majority of his projects were Higher Education.

Project Experience
BridgeValley CTC, Montgomery, WV
– Staats Building Assessment
Williamstown Elementary School, Williamstown, WV

Project Experience – (With Another Firm)
Arthur Weisberg Applied Engineering Complex, Marshall University, Huntington, WV
Mr. Campbell was the project architect on the new Applied Engineering Complex. The \$52M, 145,000 SF five-story facility houses six academic and research programs. The facility was designed to promote collaboration and communication between departments, programs, faculty and students. Mr. Campbell was responsible for the overall management of the design team, construction documentation and construction administration. This project was awarded LEED Gold certification which was the first LEED certified building on Marshall University's campus. The sustainable design features include stormwater management which is also utilized as an educational tool. A green roof was utilized over the advanced materials testing laboratory. Stormwater is collected from the green roof and

Education
Bachelor of Architecture, University of Tennessee, 1996

Employment History
2017 - Present, Architect, ZMM
2006 - 2017, Architect, Project Manager, Charleston Area Architectural Firm
1996 - 2006, Architect, Project Manager, Charleston Area Architectural Firm

Civic Affiliations

- WV American Institute of Architects, President, 2006-2007
- WV American Institute of Architects, Executive Committee, 2001-2009
- WV American Institute of Architects, Intern Development Coordinator, 2000-2005
- University of Charleston, Interior Design Advisory Board (2014 - 2016)

samples can be collected in a lower level laboratory allowing opportunities to study ecological effects of various plantings.

New Headquarters Building, Blue Ridge Community and Technical College, Martinsburg, WV

Mr. Campbell was the project architect for the new headquarters building for one of West Virginia's fastest growing Colleges. The \$16M, 45,000 SF facility relocated several of the College's programs from an existing campus which could no longer support the growing student population. The three-story facility is comprised of classrooms, faculty offices, administration, science laboratories, allied health laboratories, and associated student support spaces. Mr. Campbell was responsible for the overall management of the design team, construction documentation and construction administration. In 2016, this project received a Merit Award from AIA West Virginia for the exterior massing of elements and the design intent to incorporate the historic buildings and factories/mills located in Martinsburg. A couple years after the completion of this project, Mr. Campbell presented the College's ten-year master plan to the State Council for the Community and Technical College System of West Virginia. Mr. Campbell was responsible for conducting on-site facility evaluations for all 3 campuses, conducted steering and vision meetings with the College's stakeholders, reported analysis, and prepared the final report.

Virginia Thomas Law Center for the Performing Arts, West Virginia Wesleyan College, Buckhannon, WV

Mr. Campbell was the project architect for the new \$7M performing arts center. The design of the facility reflected the historic administration building while providing a vision for the future. The facility consists of a 374-seat performance hall, gathering spaces, dressing rooms, and building support spaces. The performing arts center was designed to be utilized by the and Theatre and Dance Department as well as offering a public facility for events and conferences. Mr. Campbell's project duties included facility programming, schematic design, overall management of the design team, construction documentation, and construction administration.

University High School, Monongalia County Schools, Morgantown, WV

Mr. Campbell was the project architect for the new 217,000 SF high school. The design of the \$29M, 1,500 student facility was a throwback to the traditional school buildings with a large frontage presence consisting of classrooms. Mr. Campbell's project duties included facility programming, schematic design, overall management of the design team and construction documentation.

Ram Stadium, Shepherd University, Shepherdstown, WV

Mr. Campbell was the project manager for the new 2,100 seat home side bleachers and press box/concessions building. The design of stadium and facility complimented the historic Shepherdstown and campus architecture. Mr. Campbell's project duties included, programming, overall management of the design team and construction documentation. In 2002, this project received a Merit Award from AIA West Virginia for the exterior massing of elements and the design intent to incorporate the historic buildings and factories/mills located in Martinsburg.

Erma Byrd Art Gallery, University of Charleston, WV

Mr. Campbell was the project architect for the Erma Byrd Art Gallery on the campus of University of Charleston. The existing library space in the main administration building had been vacant for several years and the University's goal was to transform the existing space into a multi-user, multi-function space that could be utilized for campus events as well as rented to the public. Mr. Campbell's project duties included facility programming, schematic design, overall management of the design team, construction documentation and construction administration.

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

2016 WV AIA Merit Award Blue Ridge Community and Technical College Headquarters, Martinsburg, WV
2002 AIA Merit Award Ram Stadium, Shepherd University, Shepherdstown, WV

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.

Project Experience

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

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 create 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.

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

Education

Bachelor of Interior Design, University of Charleston, 2012

Employment History

2016 - Present, Interior Designer, ZMM
2012 - 2016, Project Manager/Interior Designer, Contemporary Galleries, Inc.
2003 - Present, Architect, Project Manager, ZMM
2010 - 2012, Interior Design Intern, ZMM

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.

Mountain Valley Elementary School, Green Valley, WV

Mountain Valley is a new facility currently under construction and set to open fall of 2019. The concept for the school was simple – fundamentals. Primary colors and geometric shapes create a fun and easy way to keep the students engaged and ready to learn, while sticking to the basics. A large wall in the media center allows for quiet areas to study or play with built in casework depicting the word “READ” allowing for shelving and seating within the oversized letters. The scheme continues throughout the school seen in the polished concrete floor pattern and 3D shapes protruding above the main entrance for a guaranteed jaw dropping design.

PK-2 & New Collins Middle, Oak Hill, WV

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

Charleston Civic 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.

ARH Chemotherapy, Beckley, WV

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

Valley Park Community Center, Hurricane, WV

The new community center 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.

Charleston EDGE, Charleston, WV

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

CAMC Post Op, Teays Valley, WV

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

Clarksburg, Richmond, Huntington, Salem VA Hospitals

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

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

Charleston Civic Center, Charleston, WV

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

Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

Employment History

2005 - Present, President, ZMM

1976 - 2005, Vice President and Engineering Principal, ZMM

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, Bridgmont Community and Technical College
- City of Pt. Pleasant, WV – 2nd Ward Councilman for 20 years

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

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

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

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

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

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

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

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

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

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 was the Mechanical Project Engineer on the expansion and renovation to the Charleston Civic Center project. The \$75M, 283,000 SF design-build project was completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is complete in October 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 included a new chilled and hot water central plant with extensive replacement and upgrades to the facilities existing mechanical systems. Multiple phases of construction allowed the Civic Center to remain operational throughout the construction progress.

Education

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

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

Employment History

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

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

Harrisville Elementary School, Harrisville, WV

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

Appalachian Regional Hospital, Beckley, WV

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

Glenwood Elementary School, Princeton, WV

Mr. Butzer was the Mechanical Project Engineer for this successful project that came in under budget, 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.

Gestamp West Virginia, South Charleston, WV

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



Role

Specifications Writer

Professional Registrations

Registered Architect (WV, OH,)

LEED Accredited Professional

NCARB Certification

Construction Documents Technologist (CDT)

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

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

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

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

Project Experience

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

- Charleston Civic Center - Expansion and Renovation
- WV State Capitol Roof Replacement
- WV State Office Building #5, 6, & 7
- WV Housing Development Fund
- CFMO Expansion
- Houston Company Store
- Erma Byrd Center
- Joint Interagency Training & Educational Center (JITEC)
- Huntington East Middle School
- WV Army National Guard - Glen Jean AFRC

Education

Bachelor of Architecture,
Virginia Polytechnic Institute and State
University, 1977

Employment History

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

Civic Affiliations

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

WV Army National Guard - Jackson County AFRC
WV Army National Guard - Morgantown Readiness Center
WV Army National Guard - Logan-Mingo Readiness Center
WV Army National Guard - Marshall Readiness Center
Wood County Justice Center
Tucker County Courthouse Annex
Southern WV Community & Technical College
Bridgemont Community & Technical College
Milton Middle School
Barboursville Middle School
Kenna Elementary School
Craigsville Elementary School
Southside Elementary/Huntington Middle School
laeger - Big Creek High School
Lincoln County High School
St. Albans High School
Bradshaw Elementary School
Edgewood Elementary School
Hacker Valley Pre K-8 School
Beech Fork State Park Lodge
CAMC Teays Valley
Highland Hospital

Scot Casdorff, PE



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 was 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 was complete in October 2018.

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.

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

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

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.

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, Craigs ville, WV

Mr. Casdorff was responsible for the electrical design of the new elementary school. The project is consolidating Beaver Elementary School and Craigs ville 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.

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.



Role

Construction Administrator

Professional Registrations

EIT

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

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

Project Experience

Valley Park Community Center, Hurricane, WV

Mrs. Perry served as Construction Administrator on the new Community Center building and renovation at Valley Park. The \$15M construction project included a new community building, ball fields and a playground. Mrs. Perry was responsible for the administrative duties, performing on-site observations and tracking construction progress. Mrs. Perry collaborated with the client, design team and contractors to confirm that project guidelines are satisfactorily met. The facility reached completion in May 2018.

Ravenswood Middle School, Ravenswood, WV

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

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

Education

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

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

Employment History

2017 - Present, Construction
Administrator, ZMM

2009 - 2010, Design Engineer, Moment
Engineers, Charleston, WV

2004 - 2008, Engineer, Project Manager,
BFMJ Inc., Lexington, KY

2003 - 2004, Graduate Assistant,
University of Kentucky College of
Engineering

Civic Affiliations

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

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

Project Experience Other Firms

University of Kentucky Biopharmacy Building, Lexington, KY

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

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

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

Moses Residence, Huntington, WV

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

Michael J. White, PE



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
BridgeValley 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)

Section 4.2. Experience in School Planning



ZMM Architects and Engineers is a firm that is built around planning and designing educational facilities in West Virginia, and since our founding in 1959 ZMM has provided planning and design services on more than two hundred and fifty schools throughout the state (including many SBA funded projects). This experience has led our full service architectural and engineering team to develop a thorough understanding of the educational programming, planning, and design challenges (and opportunities) unique to West Virginia.

ZMM has been involved in the production of Comprehensive Education Facilities Plans (CEFP's) since the State of West Virginia began using them following the creation of the West Virginia School Building Authority to help guide school planning and construction in WV. In both 2000, and again in 2010, ZMM has participated in the creation of CEFP's for long-term clients. In 2010 ZMM prepared CEFP's for the following county school districts:

- Lincoln County Schools
- Cabell County Schools
- Wayne County Schools
- Fayette County Schools
- Nicholas County Schools
- Logan County Schools
- West Virginia Schools for the Deaf and the Blind



The development of each of these CEFP's included the establishment of the CEFP team, and the development of goals and objectives for the CEFP. Each of the CEFP's required the completion of all tasks required by Policy 6200 and the policies of the SBA - including the development of probable construction costs that were based upon current planning documents and parametric estimates developed through our participation in relevant projects.



Since the completion of the plans in 2010, ZMM Architects and Engineers has also assisted multiple counties by updating their plans to accommodate yearly CEFP amendments, and for project budgeting required for the NEEDS and MIP project submissions. This work has included CEFP updates for Wood

County Schools, Putnam County Schools, Mason County Schools, Braxton County Schools, Wayne Jackson County Schools, and the West Virginia Schools for Deaf and the Blind.

The success of an educational project is driven by the early planning process. The curriculum delivery model must be established early in the planning process to maximize the opportunity to improve student wellbeing and achievement; therefore, one of our major responsibilities as architects and educational planners is to listen and interpret the needs of the educators to help create appropriate learning environments. This early planning process commences with the development of the CEFP, which serves as a guide through the design process. Some samples of our educational planning and design experience can be found at the end of this section.

Committee engagement is the key to any successful school planning effort. ZMM utilizes the following strategies to improve committee engagement:

- Start by Discussing the Process (Not Bricks and Mortar)
- Provide Opportunities for Structured Engagement
- Have Critical Meetings in Attendance Zones
- Meet with Focused Groups for Specific Input
- Actively Facilitate Community/Stakeholder Guided Meetings



In addition to helping to translate educational needs into facility needs, one of the major responsibilities in the development of the CEFP is the evaluation of existing facilities. With over thirty-five local employees ZMM employs an integrated design approach by providing all building-related design services, architecture, interior design, and engineering (structural, mechanical, and electrical) in-house. ZMM's team includes seven registered architects, eight professional engineers (structural, mechanical, and electrical), as well as interior and lighting designers, and construction administrators. Our architects and engineers are highly qualified, and have worked together to deliver projects with similar scope and complexity. The depth and quality of our team will help to ensure that the evaluation of your existing facilities provides an accurate assessment of both the current condition and required preventative maintenance.



In addition to our work on the 2010-2020 CEFP's, ZMM's education planning experience includes the coordination of a variety of successful bond issues over the past several years. This experience includes:

- Wood County Bond (2016)
- Wayne County Bond (2014)

- Greenbrier County Bond (2008)
- Cabell County Bond (2005)

ZMM attributes the success of these bond issues to several items. The first step in each bond planning effort is to build the right committee. Establishing the right committee helps to ensure ongoing community engagement and participation. One key aspect of community engagement is to “Get on the bus!” Having community members visit schools outside their attendance zone helps when prioritizing needs. Once the committee has prioritized the needs it is critical to establish a realistic scope and budget for each project, and for the overall bond call. In each case, however, the bond was successful due to a community led election effort – supported by tools developed to help communicate the vision of the bond.



ZMM's educational planning experience extends beyond PK-12 facilities, and has included the development of Campus Development Plans (often referred to as Master Plans) for a variety of institutions throughout West Virginia, including:

- West Virginia State University
- New River Community and Technical College
- Southern West Virginia Community and Technical College
- BridgeValley Community and Technical College



We are confident that ZMM's past experience developing CEFP's in WV, as well as our related educational planning and design experience will provide WV Schools for the Deaf and the Blind with the best opportunity for a successful 2020-2030 CEFP process.

Bond Planning Experience



Wood County Bond Program (2016): ZMM assisted Wood County Schools in passing their bond to fund the new Williamstown Elementary, additions/renovations to Williamstown High School, and additions and renovations to the Wood County Vocational Center.

Wayne County Bond Program (2014): Recently ZMM assisted Wayne County Schools in passing an \$18,000,000. The passage of the bond will create a New Crum PK-8 School, a New Ceredo-Kenova Elementary School and Additions and Renovations to Wayne High School. The overall process involved community meetings, establishing goals and priorities, creating overall budgets and a project scope that the citizens would support. ZMM assisted Wayne County Schools with distributing information, working with the bond committee and Bond Council to establish the actual Bond Call and assisting with public awareness throughout the county. ZMM worked facilitated meetings with the WV School building Authority and Wayne County Schools to create an overall project Budget of \$42,200,000.



Cabell County Bond Program (2005): Most recently ZMM was instrumental in assisting Cabell County in passing the largest school bond program in West Virginia. The overall process involved putting together a county wide committee, establishing goals, facilitating community meetings, developing project budgets, and working with the committee and Bond Council to establish the actual Bond Call. The final Bond amount was \$60,500,000, with the additional Bond Interest, an SBA grant and some additional local funding the total project funding was approximately \$72,000,000.

The outcome of the proposed bond was 4 projects, Martha Elementary School, Southside Elementary and Huntington Middle School (combined facility), Barboursville Middle School, and Milton Middle School. In five years time, from the first meeting of the Bond Planning Committee until the last project was completed, Cabell County Schools built 402,726 sq. ft. All projects were completed on time and within the projected budget.



Bond Planning Experience



Fayette County Bond Program (2009): ZMM was involved with Fayette County's most recent School Bond attempt. The goal of the county was to reduce the number of school facilities the system manages from 23 to 16. The county projected to build a new consolidated High School and provided renovations/improvements to eight other facilities. The overall process involved putting together a county wide committee, establishing goals, facilitating community meetings, developing project budgets, and working with the committee and Bond Council to establish the actual Bond Call. Fayette County introduced a public relations firm to distribute information and assist with public awareness throughout the county. The projected Bond amount was \$48,839,083; with the assistance of an SBA grant, the total project funding was estimated to be \$73,839,083.



Greenbrier County Bond Program (2008): ZMM was involved in developing Greenbrier County's most recent School Bond Program. The new program included two new elementary schools and renovations to three existing facilities. The overall process involved putting together a county wide committee, establishing goals, facilitating community meetings, developing project budgets, and working with the committee and Bond Council to establish the actual Bond Call. ZMM assisted Greenbrier County Schools with distributing information and assisting with creating public awareness throughout the county. The projected Bond amount was \$39,041,857; with the assistance of an SBA grant, the total project funding was estimated to be \$49,671,807.

Section 4.3



4.3 Specify the individuals who would be assigned to this project and their specific role.

<u>Name:</u>	<u>Role:</u>	<u>Firm Representing:</u>
David Ferguson, AIA, REFP	Principal-in-Charge, Architect	ZMM
John Dickinson, AIA, CEFPI	Consulting Architect	Dickinson + Partners
Adam Krason, AIA, ALEP	QA/QC, Architect	ZMM
Chris Campbell, AIA	Project Architect	ZMM
Carly Chapman	Interior Design	ZMM
Bob Doeffinger, PE	Mechanical Engineer	ZMM
Sam Butzer, PE	Mechanical Engineer	ZMM
Scot Casdorff, PE	Electrical Engineer	ZMM
Mark Epling, AIA	Specifications Writer	ZMM
Mike White, PE	Structural Engineer	ZMM
Falena Perry, EIT	Construction Administration	ZMM

Section 4.4 Firm Experience



4.4 Firm Experience

ZMM, Dickinson + Partners has extensive knowledge of the existing facilities of The WV Schools for the Deaf and the Blind and has a full understanding of the campus and their needs. ZMM, Dickinson + Partners also has previously completed the first Comprehensive Educational Facilities Plan (CEFP) for the entire campus. ZMM conducted a multitude of meetings and extensive field investigations and reviews of all buildings and building systems on the campus, as a part of the original CEFP process. ZMM, Dickinson + Partners also conducted a second revised CEFP document a couple of years later as the campus administration changed the direction of the campus.



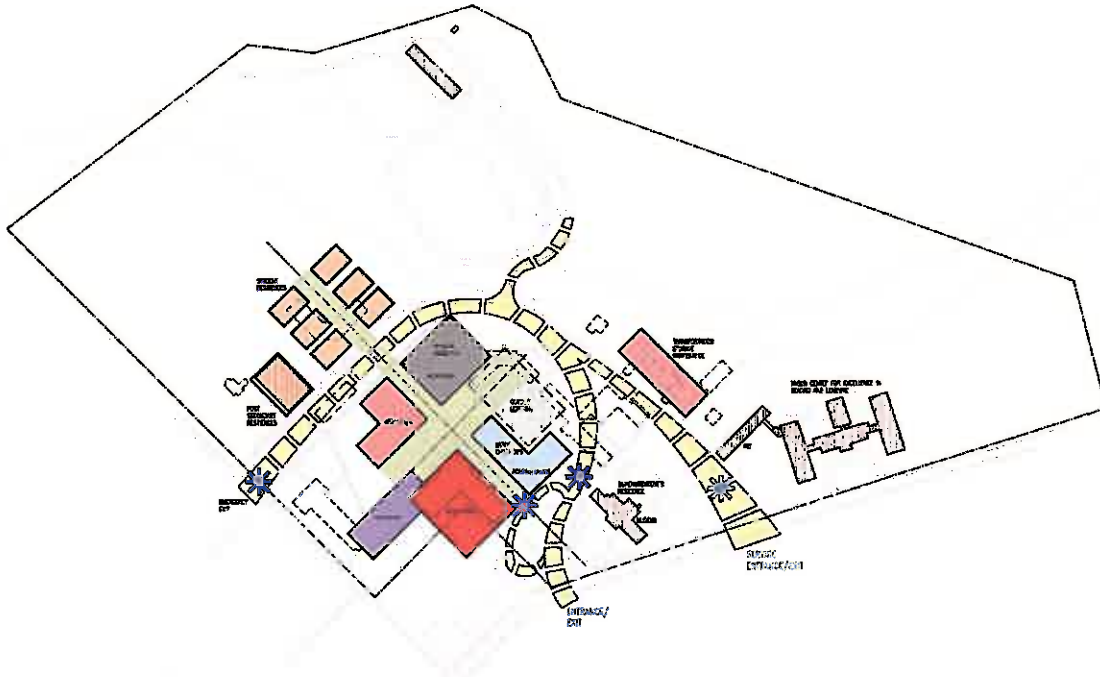
ZMM has extensive experience providing CEFP services:

- Lincoln County Schools
- Cabell County Schools
- Wayne County Schools
- Fayette County Schools
- Nicholas County Schools
- Logan County Schools
- West Virginia Schools for the Deaf and the Blind

As a full-service design firm, ZMM employs all of the disciplines in-house to undertake the new CEFP process maintenance projects outlined in the request for expression of interest. If selected to provide services for the project, ZMM would set up teams under the direction of David E. Ferguson, AIA – Project Principal and John Dickinson, AIA – Project Principal, two professionals with considerable experience and a history of working closely with the West Virginia Schools for the Deaf and the Blind (WVSDDB). The team will be led by Chris Campbell, AIA to undertake and manage all architectural and engineering projects that would be listed in the revised CEFP. This approach will provide the WVSDDB with a single, central point of contact for all of the design work, while simultaneously allowing all of the work to progress on time and within budget.

The efforts of ZMM's architects and engineers will continue through the construction phase until the final completion of the project.

ZMM continues to focus on quality throughout the construction phase by utilizing a dedicated Construction Administrator to coordinate the design team's effort throughout the construction process. The Architects and Engineers on the design team will also provide construction phase services including observation, responding to contractor questions, review of project submittals, attend progress meetings, make interim site visits, and provide substantial and final completion inspections. ZMM will exceed the 8 hours per month required by the WV School Building Authority. This approach will improve the communication and coordination between ZMM, the WV Schools for the Deaf and the Blind, WV School Building Authority, the contractor, and will ultimately lead to an improved construction phase. ZMM also recommends an 11 month inspection to ensure the integrity of the completed improvements.



The new CEFP process will be led by David E. Ferguson, AIA – Project Principal and John Dickinson, AIA – Project Principal, two professionals with a history of working closely on the campus of the West Virginia Schools for the Deaf and the Blind on the two previous CEFP's. This team will lead the new CEFP process and all meetings on campus. At any time during the CEFP process ZMM, Dickinson + Partners will also provide any construction cost estimates and produce any graphic illustrations of the facility needs to the committee or to be included in the final CEFP document. David and John will also lead the building and building systems documentation process throughout the campus. ZMM will also include additional architects and engineers to assist in evaluating the building systems as indicated in the new CEFP process. This will ensure the accuracy of the information provided in the final CEFP product.

West Virginia Schools for the Deaf and Blind

West Virginia Board of Education



Dickinson + Partners

Uniting Education, Special Needs & Architecture
www.dickinsonpartners.com



LOCATION:
Romney, WV

SIZE:
300,000 SF

CONTACT:
Mark Gandolfi
Superintendent/CFO
301 East Main Street
Romney, WV 26757
304.822.4800

CONSULTANT:
John Dickinson
Dickinson & Partners
405 Tarrytown Road
Suite 1389
White Plains, NY
dickensonpartners.com



Per the direction of the WV Board of Education and the WV School Building Authority, the West Virginia Schools for the Deaf and Blind has undertaken the task of creating a *Comprehensive Educational Facility Plan (CEFP)*. ZMM Architects & Engineers combined forces with Dickinson & Partners, an architectural firm specializing in Special Needs Architecture, to have a complete understanding and working knowledge of the requirements and challenges faced when designing for Deaf and Blind student population. ZMM understands the WV school Building Authority's policies and the guidelines of the WV Department of Education, along with the having a working knowledge of other state agencies, makes creating this document easier to navigate through the process.

The purpose of the CEFP is to provide the owner a long range plan that addresses the requirements for new construction and major renovations. Comprehensive planning is a way of identifying the best route to the future through a workable plan for handling priority related and anticipated changes. The CEFP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The goals are defined then realized, if necessary, through several phases of construction.

A planning team was established consisting of citizens, teachers, staff, and business owners. Goals and Objectives were developed and data was compiled concerning enrollment and population growth. Along with the educational plan that was developed, the existing facilities were reviewed for compliance with all state and local codes. The buildings and adjacent sites were also reviewed for any physical deficiencies along with educational deficiencies. The owner's insurance reports were also reviewed and any information outstanding will be incorporated into the document. Public meetings were conducted, and the final meeting was a public hearing for concerned citizens. At that meeting the public will be able to voice concerns of the process or the final outcome of the CEFP document.

The ultimate goal is to develop a comprehensive facility plan for the campus, based on local input, that can be implemented by the school.

West Virginia State University

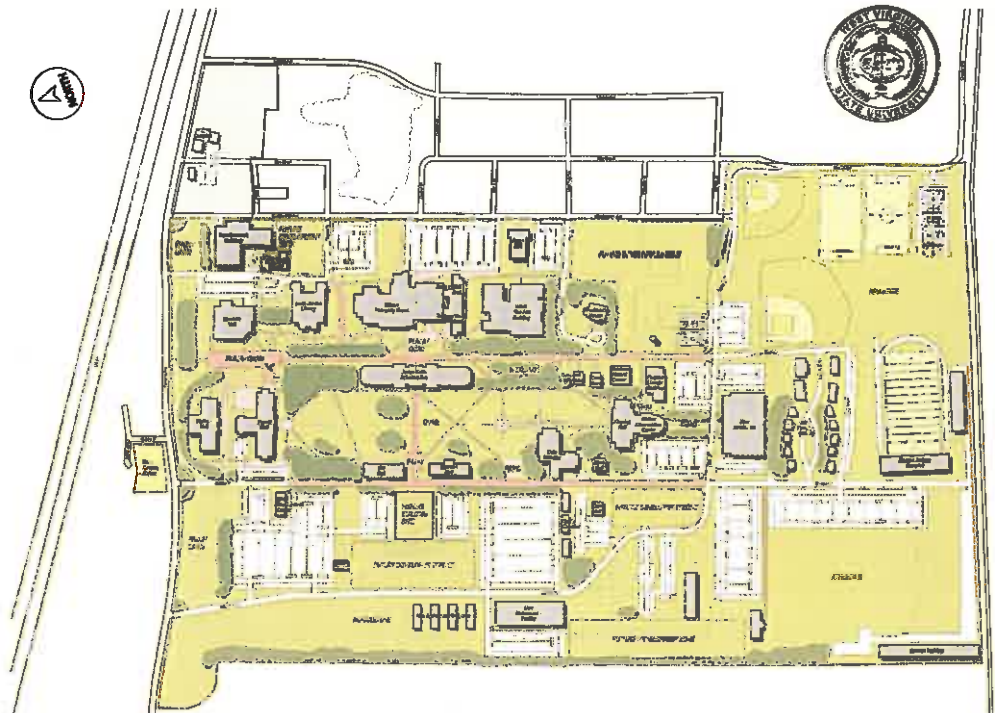
Master Plan



LOCATION:
Institute, WV

CONTACT:
Dr. Brian Hemphill
304.766.3112

OWNER:
West Virginia State University
5000 Fairlawn Ave
Dunbar, WV 25112



ZMM Architects and Engineers, in conjunction with BSP and TERRADON, were selected in 2015 to develop a new ten year campus development plan for West Virginia State University's campus in Institute, WV. The project commenced with a review of all existing information available of the campus and targeted facilities. Following this review the ZMM/BSP team met with the executive committee to establish the overall direction of the master plan. Some of the goals included:

- Due to the recent construction on campus, focus on the maintenance and Rehabilitation of existing structures.
- Determine how to incorporate the recently acquired Rehabilitation Center property into the campus.
- Highlight unique/historical campus assets such as the Quad, Clock Tower, etc.
- Improve signage and both vehicular and pedestrian circulation.

With this direction the team commenced the effort with several meetings with various campus stakeholder groups including students, alumni, and faculty/staff. The stakeholder meetings identified the following priorities:

- Improve the general classroom spaces.
- Provide additional spaces for collaboration and recreational activities.
- Improve/maintain historic structures and academic buildings throughout campus.

Following the stakeholder meetings, ZMM conducted building assessments of the major academic buildings, as well as the kitchen adjacent to the main dining area. This information was supplemented by a recent campus building inventory that had been conducted. The information gathered through these variety of activities was then synthesized into an overall campus development plan. The plan, which covers a ten year period projects the need for new construction, property acquisition, site improvement and building renovation, and includes a phased approach for the implementation of campus improvements. The document is supplemented with a visual master plan that reflect the implemented improvements.



Completion Date: 2018

Total Square Footage: 180,000 GSF

Construction Cost: TBD

Reference:

Dr. David Martin, TSB Superintendent
115 Stewarts Ferry Pike
Nashville, TN 37210
(615) 231-7316

Per the direction of the State of Tennessee and Tennessee Department of Education, the Tennessee School for the Blind has undertaken the task creating Campus-wide Master and Utilization Plan (CMUP).

The purpose of the CMUP is to provide the owner a long range plan that addresses the requirements for new construction, major renovations and utilization issues. Comprehensive master planning is a way of identifying the best route to the future through a workable plan for handling priority related and anticipated changes. The CMUP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The goals are defined then realized, if necessary, through several phases of construction.

Stakeholders team was established consisting of locals, teachers, staff and the community. Goal and Objectives were developed and data was compiled concerning program, enrollment and population growth.

The ultimate goal is to develop a comprehensive facility plan for the campus, based on local input, that can be implemented by the school.

Project is current and will be complete mid of 2018.

New River Community & Technical College

Master Plan



LOCATION:
Summersville, WV

SIZE:
43,000 SF

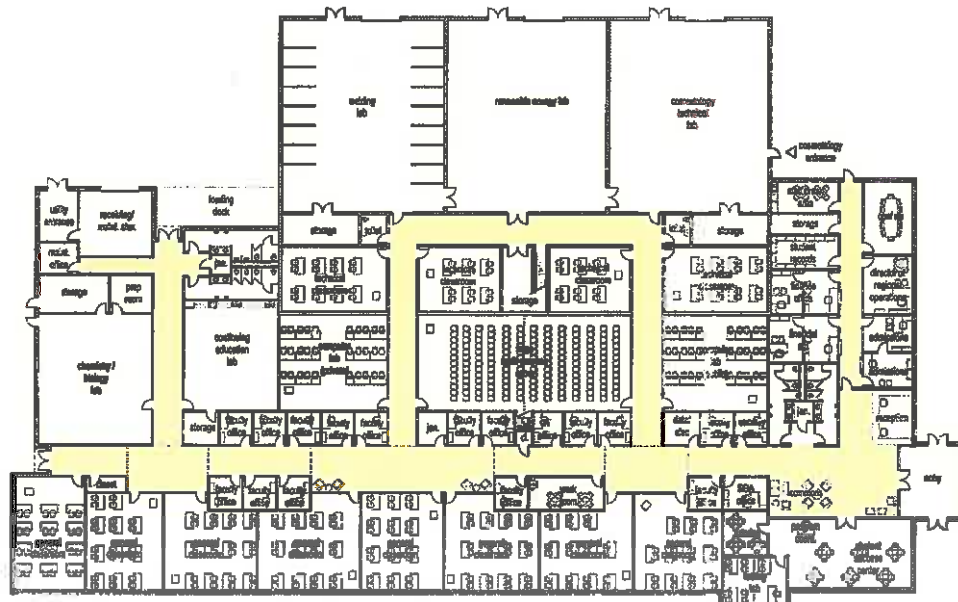
OWNER:
Nicholas County Building
Commission
700 Main Street
Suite #216
Summersville, WV 26651

CONTACT:
L. Marshall Washington,
President
New River Community and
Technical College
280 University Drive
Beaver, WV 25813
304.929.5446



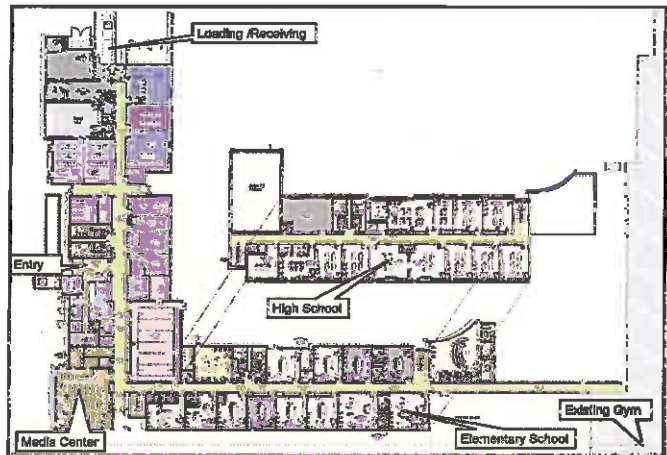
The new educational building will house the operations of New River Community and Technical College. The main program areas for the building are Administration, General Instruction, Workforce/Adult Education, Student Areas, Support Areas, and Technical Labs. Approximately 14,000 SF of the building will house technical programs of the college such as welding, renewable energy, mining, and CDL training. This area will be designed with flexibility for the future. The exterior materials will consist of brick and metal panel, with accents of metal and glass.

The facility will be placed on the site to utilize maximum daylight opportunities. The building's long axis will be oriented from east to west, with all the general instruction classrooms oriented south. A roof overhang on the south elevation will be designed so the low, winter sun will be welcomed while the high, summer sun will be blocked. This will allow the general instruction classrooms to use less energy for lighting, heating, and cooling. The technical labs will be surrounded with high windows, so the technical labs can reduce energy costs as well.





New PreK-12 Education Center and Residence Halls
Ohio State School for the Blind
 Columbus, Ohio



Completion Date: December 2017

Square Footage: 68,000 GSF

Construction Cost: \$26,000,000

Reference:

Mr. Mike Shoemaker
 Ohio Schools Facilities Commission
 10 West Broad Street, Suite 1400
 Columbus, Ohio 43215
 Telephone (614) 466-6290

Cynthia Johnson, OSSB Superintendent
 5220 N. High Street
 Columbus, Ohio 43214
 (614) 752-1152

Ohio State School for the Blind and Vision Impaired had not built new facilities or renovated their campus in over 60 years. Located in the north suburban edge of Columbus, Ohio, the school serves the blind and vision impaired community from all over the State of Ohio. The existing campus, although rich in history, was no longer serving the educational needs of the community.

Dickinson + Partners, along with SHP Leading Design of Columbus (D+P/SHP), was commissioned to design a new K-12 campus on the existing campus. The "vision" of the new was based on an urban principle called "New Urbanism" that attempts to provide all essentials for living in a compact urban setting for the blind community.

Similar to the Ohio School for the Deaf project, major programming elements utilized to create a new unified campus include: consolidated and centralized single administration, relocation of elementary, middle and high school to one location but with separate entrances for different age levels, creation of new campus commons and kitchen to reinforce the unified campus, internal building circulation for blind student safety and control, creation of the family/customer center that provides independent living programs, and expansion of new vocational spaces to meet the curriculum goals for those programs.

Eight residence facilities for the blind and vision impaired were also developed and designed as part of this phase.



BridgeValley Community & Technical College

Master Plan



LOCATION:
Montgomery, WV

COST:
So. Charleston Campus
\$11.25M Est.

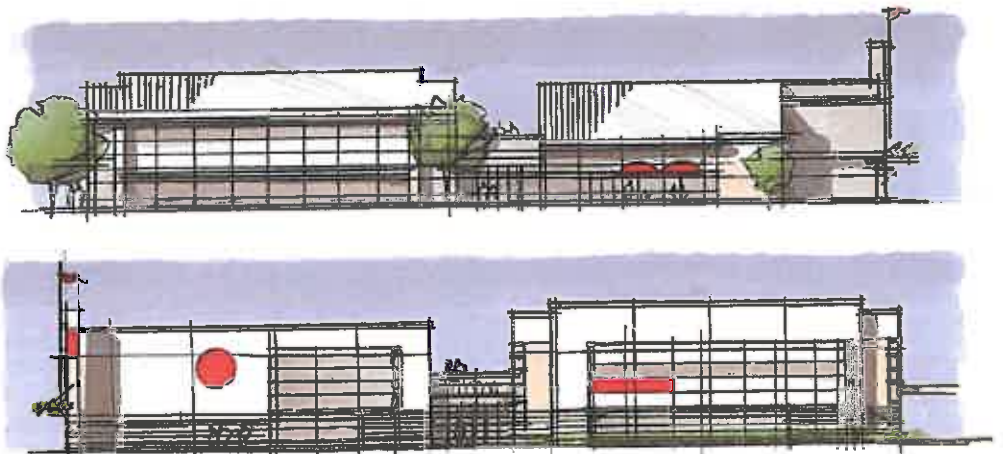
Montgomery Campus
\$12.8M Est.

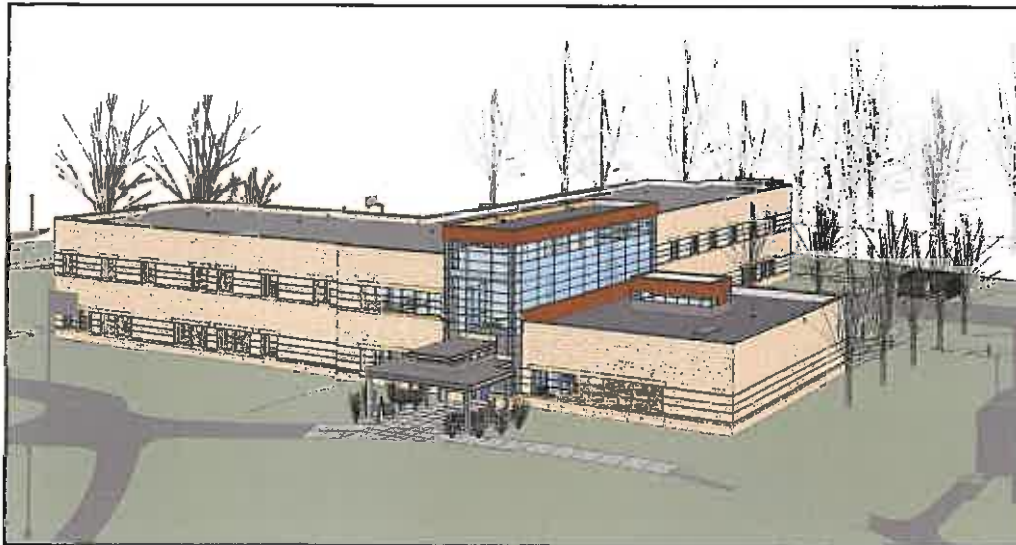
CONTACT:
Dr. Jo Harris, President
619 2nd Avenue
Montgomery, WV 25136
304.741.4116 cell



ZMM provided services to prepare a master plan for the Montgomery and South Charleston Campuses for Bridgemont Community and Technical College. The master plan is in response to the West Virginia Higher Education Policy Commission's standard process for a comprehensive assessment of facilities needs, costs, and priorities. This enables the HEPC to provide future funding to Bridgemont based on justified standards tied to legislative funding agendas. The final plan shall be appropriate to Bridgemont's size, mission, and enrollment and to the fiscal constraints within which it operates.

The master plan includes assessments of existing facility conditions on the Montgomery Campus and South Charleston Campus, including deferred maintenance, building code issues, and energy efficiency. An analysis was included identifies current and future space needs, parking requirements, current land use and future property acquisition, infrastructure development, sustainability, landscaping, and pedestrian circulation. The plan will also include project budgeting and a multi-year capital improvement plan. An assessment of the impact of projected enrollment and demographic changes on facilities will be provided along with a delineation of how the campuses will interact and support each other and improve efficiency.





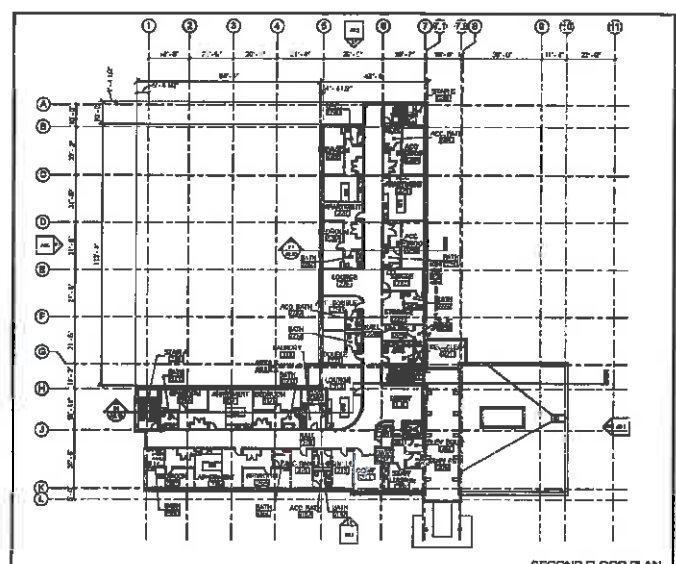
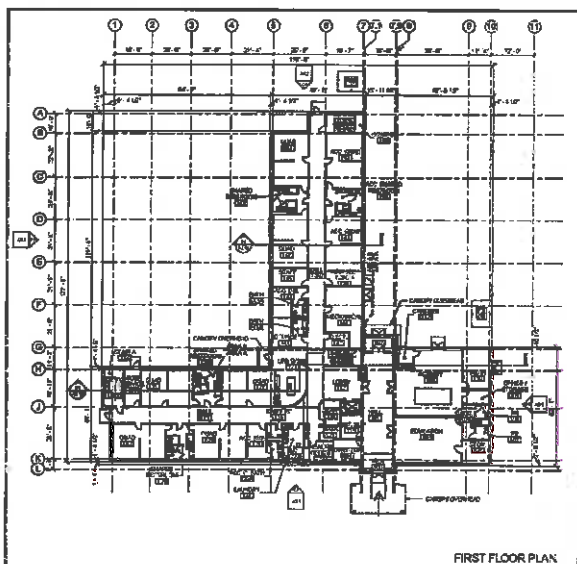
Completion Date: Early 2018

Square Footage: 40,000 GSF

Construction Cost: \$ 11,000,000

Reference:
 Mr. Brad Harper, MSAD Superintendent
 615 Olof Hanson Dr.
 Faribault, MN 55021
 (507) 384.6600

This 60 bed residence hall for the Minnesota State Academy for the Deaf (MSAD) in Faribault, MN consolidates boys and girls together in a single shared facility. Built to replace aging and inefficient existing Frechette Hall, it is the first new residence hall built on campus since the 1960's. Conceived of as a "Go home Go School concept" the building is comprised of two main wings connected by a single story entrance lobby. Beyond housing its students, the new dormitory creates an iconic campus space for the MSAD and strengthens the relationship to the existing campus buildings. The two story building steps with the sites topography to reduce its apparent height and allow for seamless and accessible connection between inside and out. Finished with warm materials, comfortable furniture and flooded with daylight, the residence hall employs the principals of Deaf Space to create a homelike environment that is tuned to deaf sensibilities.



Southern WV Community & Technical College

Master Plan



Southern West Virginia Community and Technical College (Southern) began the campus master planning process in the Fall of 2013. The process commenced with visits by the design team to all of the campuses and sites:

- Logan Campus
- Williamson Campus
- Boone Campus/Lincoln Site
- Wyoming/McDowell Campus

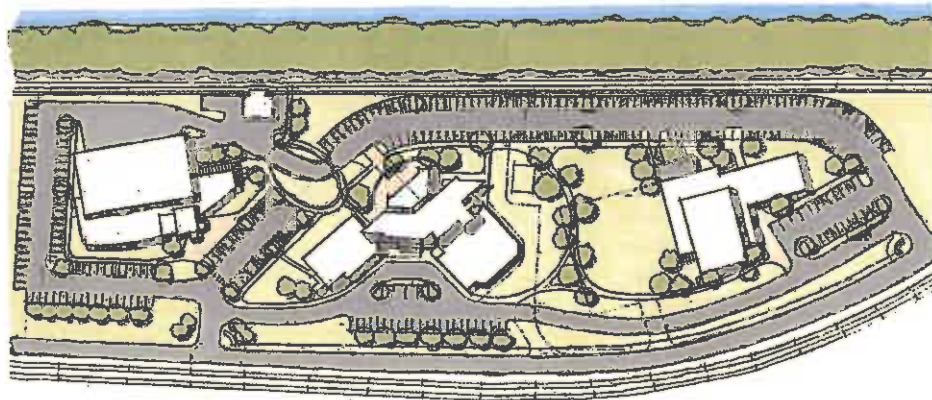
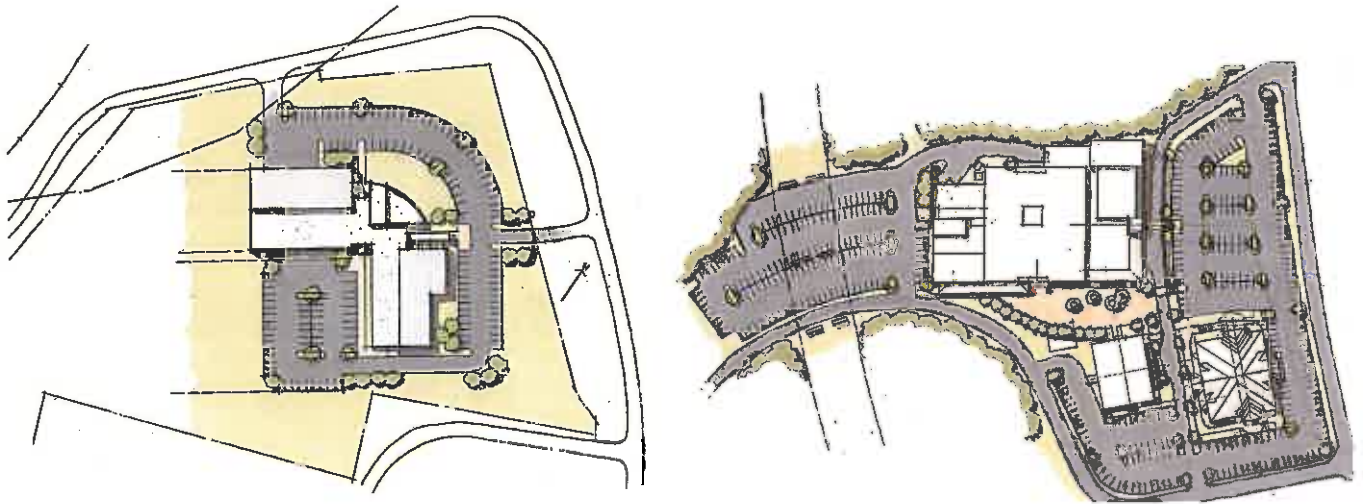
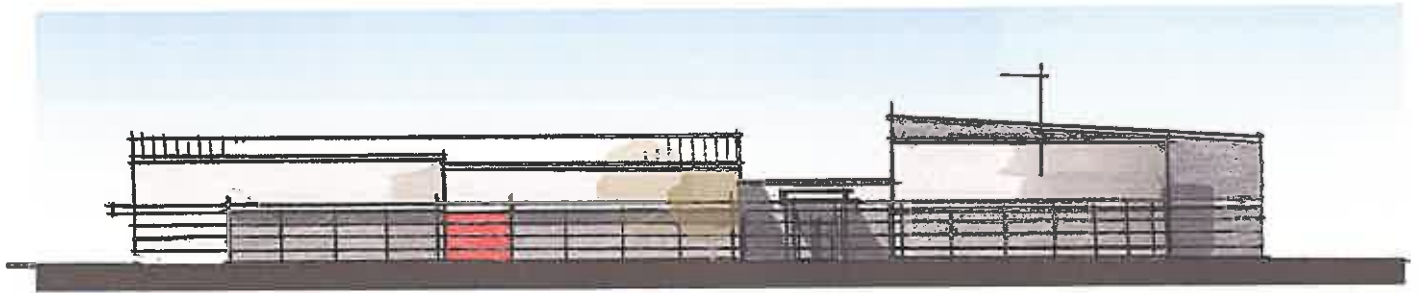
Following these campus visits, ZMM conducted stakeholder meetings at each location. At the meetings stakeholders discussed positive attributes, challenges, and needs for each facility and campus. Following the stakeholder meetings, an Executive Steering Committee was convened to review the outcomes of the stakeholder meetings, and to assist in developing an overall strategy and framework for the plan. Based upon these meetings several themes emerged that helped guide the development of the Master Plan, including:

- Overall Southern's facilities are clean, organized, and well maintained. While there is some consistency on the interior of the facilities, there is little to no consistency between the exterior facilities or signage between campuses. Standards for signage, lighting, and exterior finishes for future projects should be considered.
- The master plan needs to be a realistic document that reflect the current status of the school. Local high school enrollment is declining; however, Southern projects flat enrollment. The declining high school enrollment will be offset with a focus on non-traditional students, and workforce retraining. Due to the projected flat enrollment, the Master Plan will not focus on the development of additional facilities, but rather focus on deferred maintenance, required upgrades, and maximizing the functionality of the existing buildings.
- Although a significant expansion of facilities is not envisioned, the Master Plan will include the potential development of a new facility on property that has already been acquired adjacent to US 119. This new facility will replace the Boone County Campus, which is currently located in a shared facility with the Boone County Career and Technical Center. The new facility would serve as a gateway to Southern's other facilities, and the location on US 119 will give the College the opportunity to draw additional students from the greater Charleston area. Due to the scope of the development of this new facility, the Master Plan includes a strategy to address improvements both with and without the new Boone County Campus.

Southern WV Community & Technical College

Master Plan

- A significant need exists to update Southern's two largest facilities – Building 'A' on the Logan Campus, and the Main Building on the Williamson Campus. The renovations will be comprehensive, and will include improvements to the ceilings, lighting, electrical, mechanical, and building life safety systems. Improvements will also be made the interior environment, as well as to various exterior systems that are failing (spalling concrete in Williamson). These facilities serve as the central education facilities on their campuses, and require improvement so that they may continue to function adequately. Due to the size of the facilities, it is understood that this will require a significant capital investment.
- The Master Plan will include the creation of "Student Success Centers" on all campuses (starting in Logan). These will include space for tutoring, testing, advising, financial aid, counseling, small space for workshops on careers and other topics, and free space for staff who will travel from one campus to another.



Section 4.5 Key Aspects of the Proposed Project



4.5 Project Process

The team has extensive knowledge of the existing facilities of the WV Schools for the Deaf and the Blind, having recently completed the Comprehensive Educational Facilities Plan (CEFP) for the entire facility. ZMM conducted meetings and extensive field investigations and reviews of all buildings and building systems on the campus, as part of the CEFP process. ZMM field measures all the buildings and has all current floor plans in CAD and CEFP records on file.

ZMM and Dickson + Partners commits to delivering both the initial assessment and final bid documents within the time frame set forth by the WV School Building Authority. Our ability to provide all services in-house allows us optimum control of the design schedule, and has led to a history of successful performance on projects with challenging schedules.

The team will continue to provide services with the same team during the bidding phase. Our team will attend the pre-bid meeting, and assist in answering all bid questions.

Renovation projects require a unique approach. The most significant challenge with a complex renovation project is clearly identifying all of the required needs, including code related items, and then verifying that the scope can be completed within the available budget. ZMM will ensure that this scope identification occurs by conducting a detailed investigation of the existing facility with a team of architects and engineers. ZMM would commence the project by meeting with your representatives of the WV Schools of the Deaf and the Blind and their team to discuss the building condition, scope, and vision for the project. The team would also review any historic documentation and existing drawings that exist of each facility.



Following the kick-off meeting, ZMM would conduct the detailed investigation of The School for the Deaf facility with our team that would include (at a minimum) an architect, structural engineer, electrical engineer and mechanical engineer.

Based upon our extensive renovation experience, ZMM Architects and Engineers has developed a comprehensive assessment tool for building renovation projects, and we would employ our knowledge developed on other recent renovation projects to your benefit. ZMM also understands that the following issues specific to The School for the Deaf need to be investigated to help fully develop/reconcile the scope and budget for the project:

- Roof Replacement
- Parapet Repair
- Gutter and Fascia Replacement
- Sprinklers
- Heat Pumps/HVAC
- Replace Parapet Flashing



Based upon the field investigation, ZMM will develop recommended solutions with a focus on durability and maintainability. Itemized cost estimates will also be developed for various options. The recommendations and estimates will then be reviewed with the WV Schools for the Deaf and the Blind along with the WV school Building Authority (funding agency) to develop a strategy to implement the required scope of work.

The result is an assessment that has been reviewed by all project stakeholders and all review agencies, ensuring that the scope of work and budget have been resolved prior to proceeding into the construction document and bidding phase.

CEFP Process

ZMM and Dickinson + Partners commits to the schedule currently issued by the WV Schools for the Deaf and the Blind. For the following CEFP project.

1. Establish a CEFP Planning Team

A key component of any successful planning process is establishing the right team to ensure that all school system personnel and community stakeholders are appropriately engaged in the CEFP development process. "The firm(s) will be responsible for providing guidance to the county regarding organization of sub-committees that will be developing specific portions of the overall plan and coordinating the efforts of all committees into a common goal to complete the CEFP." ZMM and Dickinson +Partners will work with Wv Schools for the Deaf and the Blind to help develop the CEFP planning team and sub-committees, schedule meetings, and coordinate the overall CEFP effort.



2. Establish Goals and Objectives of the CEFP

The team will work with WV School for the Deaf and the Blind to develop goals and objectives for the CEFP, which will include the development of a schedule to track milestone completion dates for certain portions of the CEFP. "The firm(s) will develop, in cooperation with the county, a timeline for the committee and all sub-committees to complete the CEFP. The firm(s) will submit the timeline to the SBA and the WVBE for review and approval.

This timeline must list a preliminary schedule of events and tentative dates for completion of the specific events.” ZMM will ensure the proposed schedule meets the requirements of the SBA and WVBE, while providing adequate opportunity for community and stakeholder engagement.

3. **Community Analysis**

ZMM's previous educational planning efforts have helped us to develop a detailed strategy to help ensure community engagement (see Section 4.4). “During the Educational Planning phase where committees of school administrators, personnel, and community members develop plans for curriculum, instruction, operations, support and personnel, the firm(s) will oversee and facilitate all countywide educational planning meetings.” Our team will be available to help facilitate productive and positive interaction throughout the planning process.

4. **Population and Enrollment Study**

ZMM will help to coordinate the population and enrollment studies (i.e. the data) that will be used (in coordination with the facility assessments) to help drive the educational planning effort. Accurate population and enrollment studies will be critical to helping establish realistic facility needs for the future improvements for Jackson County Schools.

Current School Configuration and Enrollments

School Name	Configuration	Current Enrollment	Capacity	Utilization	Sq. Ft.
School A	PK-8	314	648	48%	54,032
School B	PK-8	337	696	48%	50,989
School C	PK-4	559	613	91%	53,220
School D	5-8	429	655	65%	66,374
School E	9-12	665	1,150	57%	150,175

5. **Establish an Educational Plan**

The team will not engage in the planning process with any preconceptions or foregone conclusions regarding the potential outcome of the CEFP. The educational planning effort will be driven by data, facility assessment, and committee input. “The firm(s) will work cooperatively with the county to complete the CEFP in proper sequence so as not to develop foregone conclusions before all required research data is made available for the analysis and development of effective conclusions and decisions.”



6. **Evaluate and Inventory Existing Buildings (Utilizing School Dude)**

As a fully-integrated architecture and engineering firm, ZMM has extensive experience providing facility assessments. The diversity of our professional staff, which includes architects and interior designers, as well as structural, mechanical, and electrical engineers will help to ensure the quality of our evaluations. ZMM has had significant interaction with Dude Solutions regarding the proposed evaluation and inventory process planned for the CEFP's, and is schedule to attend training to be prepared to fully implement the process. “The firm(s) will work directly with the SBA and WVDE's contractors to learn and facilitate data gathering processes for this digital CEFP template.”



7. Operation and Maintenance Plan

As noted above, ZMM is prepared to employ the electronic templates developed at a statewide level to facilitate the assessment process. It is our understanding that these tools will be available for Jackson County to assist with ongoing operation and maintenance efforts. "Facility evaluations using an electronic template will be required at every district-owned/operated building in the county. The firm(s) will evaluate and inventory existing facilities as well as the condition and life expectancies of building components. This data will be entered by the firm(s) into an electronic database."

8. Translate Educational Needs into Facility Needs

The team will coordinate and facilitate countywide stakeholder meetings to ensure adequate and structured input into the process of translating educational needs into facility improvements. This phase of the planning effort is critical to making sure that the building improvements are designed to support learning, and are structured around anticipated curriculum delivery models. "During the Translating Educational Needs into Facility Needs phase where all information gathered is disseminated and data-driven plans are created, the firm(s) will oversee and facilitate all countywide planning meetings."



9. Inter-County Feasibility Study

As part of the CEFPP process, ZMM will help to coordinate an inter-county feasibility study to determine if there are creative and efficient solutions to meet established educational needs through collaboration with adjacent counties.

10. Financing Plan

ZMM and Dickinson + Partners will also collaborate with WV Schools for the Deaf and the Blind to help develop a financing plan to implement the CEFPP. The finance plan will include ways to address significant capital improvements as well as ongoing and deferred maintenance.

11. **Synopsis of Comments from Public Hearings**
ZMM will document each committee and stakeholder meeting and facility assessment. The information for all elements of this effort will be input into the appropriate digital template and section of the CEFP. "The firm(s) will be responsible for all data collection and input into the digital template. In addition to the facility evaluations, the firm(s) will enter all data from the Educational Planning phase and the Translating Educational Needs into Facility Needs sections."

12. **Objective Evaluation of Implementation**
As we have in during previous CEFP efforts, ZMM and Dickinson + Partners will be responsible for compiling the final CEFP document, and submitting it for SBA and WVBE review. Our team commits to responding to any recommended

improvements and changes proposed to complete the document. The firm(s) will be responsible for compiling and producing the final CEFP for public hearings, initial approval by the CEFP committee, and approval by the county board of education. The locally approved CEFP will then be submitted to the SBA and to the SBE for final approval. All CEFP documents must be submitted digitally in the electronic template form. Should minor modifications be required by the SBA or the SBE in order to obtain an approved CEFP, the firm(s) is responsible for assisting the county in making these changes."

