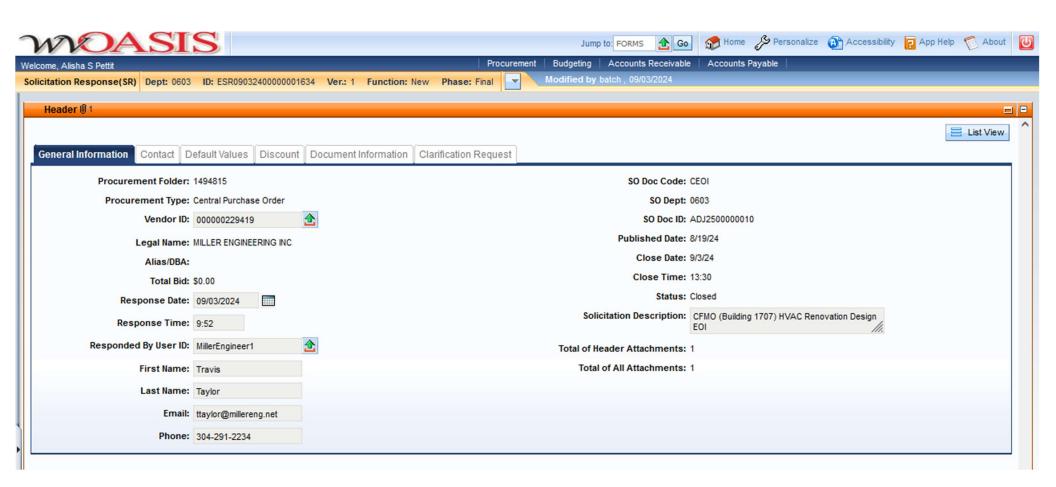
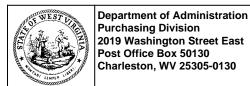


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





## State of West Virginia Solicitation Response

Proc Folder:

1494815

**Solicitation Description:** 

CFMO (Building 1707) HVAC Renovation Design EOI

Proc Type:

Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2024-09-03 13:30	SR 0603 ESR09032400000001634	1

**VENDOR** 

000000229419

MILLER ENGINEERING INC

Solicitation Number: CEOI 0603 ADJ2500000010

Total Bid: 0 Response Date: 2024-09-03 Response Time: 09:52:15

Comments:

FOR INFORMATION CONTACT THE BUYER

David H Pauline 304-558-0067 david.h.pauline@wv.gov

Vendor Signature X

FEIN#

DATE

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

Date Printed: Sep 3, 2024 Page: 1 FORM ID: WV-PRC-SR-001 2020/05

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	CFMO (Building 1707) HVAC Renovation				0.00
	Design EOI				

Comm Code	Manufacturer	Specification	Model #	
81101508				

## **Commodity Line Comments:**

## **Extended Description:**

Provide professional architectural and engineering design services per the attached documentation.



# Expression of Interest West Virginia – Army National Guard CFMO HVAC Renovation Design Charleston, WV CEOI ADJ2500000010

September 03, 2024



Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130



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## The Miller Engineering Difference



We are very pleased to submit our response for CFMO HVAC Renovations project. We have elected to submit as prime as our understanding from the Expression of Interest is that the project is focused on mechanical, electrical, and plumbing (MEP) renovations. MEI has operated in this role many times before, including recent WVARNG HVAC projects including the Camp Dawson Operations Building HVAC Upgrades, ChalleNGe Academy Maclin Hall MAU Replacements, and the currently bidding Child Development Center HVAC Renovations. We have

also served as the prime consultant on many other projects for various clients and state agencies.

We're not your typical MEP firm; we ensure our designs meet very specific, time-tested criteria, including but not limited to being constructible, operable and maintainable. We want to set up our clients to be self-sufficient, but we work to be available every step of the way.

Most every renovation we do requires a phased approach to keep the facility in operations. We routinely deliver phased renovations for educational, institutional, commercial, and government facilities. Every project we do has a particular set of standards which we must apply, and this is no exception. We see our diversity of previous work as an advantage as we do not use "cookie cutter" design or presume we have all the answers when we start.

Our hands-on staff takes great pride in their construction and operations backgrounds, which help us visualize the project as it would be built instead of just lines on paper. We don't sit clients down and lecture to them about what they're going to get; we listen to them so we can strive to deliver exactly what they want and need. It costs too much time and money (for both our clients and us) to not deliver exceptional service every single time, and we work tirelessly to keep projects on time and on budget. We're proud to say that our change order percentage over the last 10 years is less than 0.1%, and that's not just a statistic; it's a proclamation of our commitment and determination to make sure things are done right the first time, every time.

While MEI's portfolio covers all types of construction, the majority of our projects are focused on MEP renovations. We have completed HVAC renovations for various state agencies. Recently, construction was completed on HVAC renovations to WV State Buildings 25 & 54.. Both of these projects replaced HVAC equipment while maintaining owner occupancy during the construction period. To provide Architectural support if necessary, Montum Architecture will be part of this team. MEI and Montum have successfully teamed together on many renovation projects including several WVANG projects including the Bridgeport FWAATS and Buckhannon USPFO restroom renovations along with the aforementioned Child Development Center HVAC project.

We encourage you to contact any of our references to gauge our level of commitment, not only through design but continuing through construction administration, and beyond the warranty period.

I would like to personally thank you for affording Miller Engineering the opportunity to propose on for the CFMO HVAC Renovations project and we look forward to the chance to discuss the project in an interview.

Best Regards and Good Luck on the Project,

Craig Miller, PE President/Owner

Miller Engineering, Inc.

AuxAlath



## **TAB 1 – FIRM QUALIFICATIONS**







## Firm Profile

MILLER ENGINEERING is a solely held (S) corporation owned by Craig Miller PE, President. The corporation maintains a Certificate of Authority with the WV State PE Board and has carried professional liability insurance since its inception.

Neither the firm nor its professional engineers have ever faced disciplinary action in any form from the states in which they are registered.

Our engineered solutions involve a detailed assessment process: investigation, observation, communication with stakeholders, system analysis, building modeling and engagement from our entire team. We approach each and every project with this process and the guiding principle that buildings are designed to be livable and function in their intended purpose.



Our team has unique skill-sets regarding engineered renovation solutions. Each member of the team has hands-on mechanical system experience including installation, construction, design and maintenance.

Miller Engineering takes pride in being **different by design**, and that difference shines through in all phases of our work and continued relationships with our clients.

- Experienced and Licensed Professional Engineers
  - Quality, Value-Engineered Project Delivery
- Qualified Construction Representative on Staff
  - LEED-AP Certified
  - Below Industry Change Order Status
    - Building Information Modeling
    - Emergency Facility Response

# Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction
- Building Information Modeling

## **Aquatic Facility Design**

Public Pools & Areas ADA Compliance Indoor & Outdoor (air flow) Chlorination/Filtration

#### **Construction Administration**

Maintenance/Facility Improvement Plans Contract Administration Code Observation

#### **Communication System**

Intercomm & Public AddressVoice/Data/CATV Urgent Response

## Energy

Power Supply (main & backup) Green & Renewable Consulting Systems Utilization & Upgrades Sustainable Solutions

#### **Facility Utilization**

Systems Assessment & Solutions
Adpative Re-use
Planning/Life-Cycle Control
Engineered Replacement

## Life Safety Inspection/Design

Fire Protection & Alarm Systems
Access Control
Fire & Electrical Investigation

## **Industry Experience**

Education
Local & State Government
Commercial Development
Healthcare











## B. Craig Miller, PE

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction. His experience with a wide range of projects including HVAC, electrical, plumbing, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others, allows him to serve in multiple capacities within a given project. Craig will serve as the "Relationship"

Manager" for Miller Engineering as the main communication interface between the Owner, the design team, contractors and end users.

## <u>Project Role: Relationship Manager - Primary Point of Contact</u>

- Engineer in Responsible Charge
- Design and Project Management of Mechanical, Electrical, Plumbing Projects
- Concept and Construction Design
- Business Operations and Financial Management Oversight
- Quality Assurance and Control

## **Professional Project Highlights**

- Morgantown High School Area 4 HVAC Renovations
- WVANG Child Development Center HVAC Renovations
- WVANG Bridgeport FWAATS Restroom Renovations
- ChalleNGe Academy Maclin Hall Make Up Air Unit Replacement
- Advanced Surgical Hospital
- Camp Dawson FMS4 Fire Protection
- Chief Logan Lodge HVAC Renovations
- Cheat Lake Elementary & Middle School Renovations

## **Professional History**

2003- Present	Miller Engineering, Inc.	President, Relationship Manager
2002-2003	Casto Technical Services	Existing Building Services Staff Engineer
2001-2002	Uniontown Hospital	Supervisor of Engineering
1995-2001	West Virginia University	Staff Engineer
1990-1995	BOPARC	Caretaker – Krepps Park
1983-1988	University of Charleston	Electrician/HVAC Mechanic

#### **Education**

1995 West Virginia University BS- Mechanical Engineering
 1988 University of Charleston BA- Mass Communications

- Professional Engineer (West Virginia, Pennsylvania, Maryland, and Ohio)
- Licensed Master Plumber
- LEED-AP Certified





## Travis Taylor, PE

Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. These include local ASHRAE classes in addition to classes on electrical systems, and also steam systems through Shippenburg Pump Company. As lead engineer he provides HVAC, mechanical,

plumbing, and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both planning and MEP design through construction administration.

## **Project Role: Lead MEP Engineer**

- Design of Mechanical, Electrical, and Plumbing Systems
- Building Information Modeling Revit
- Constructible Materials Evaluation
- Site Evaluation and Mechanical System Review
- Submittal and RFP Review
- RFI Coordination, Review, and Response
- Construction Observation

#### **Professional Project Highlights**

- WVANG Bridgeport FWAATS Restroom Renovations
- WVANG USPFO Buckhannon Restroom Renovations
- Camp Dawson FMS4 Fire Protection
- WVANG Jackson County AFRC Canopy
- WV State Building 25 (Piping, HVAC, Lighting)
- Hawks Nest Lodge Renovations
- Blackwater Falls Lodge Renovations
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement

## **Professional History**

2011-Present Miller Engineering, Inc. Staff Engineer
2006-2011 Tri-County Electric, Co. Project Manager

2006-2006 Schlumberger Field Engineer Trainee - MWD

#### Education

2006 West Virginia University, BS – Mechanical Engineering

- Professional Engineer State of West Virginia, Maryland
- OSHA 10-hour Course: Construction Safety & Health





## **Tyler Trump**

Tyler joined Miller Engineering in August 2022. A recent graduate of West Virginia University, he has been eager to learn the means and methods of MEP consulting. Tyler assists the MEP design team with design calculations and is rapidly learning design software such as Autodesk REVIT and Hourly Analysis Program by Carrier. He is also learning construction administrations along with building, electrical, and plumbing codes and standards. Tyler is currently preparing to take the Fundamentals of Engineering Exam.

## **Project Role: Junior Engineer**

- Design Calculations
- Drafting of MEP Systems
- Assist with Construction Administration

## **Professional Project Highlights**

- Cass Scenic Railroad State Park Campground
- Lost River Campground
- Mountain Line Transit Authority Office Renovation
- WV Building 25 Lighting Upgrades
- Ronald McDonald House Morgantown Addition & Renovations
- McKeever Lodge Boiler Replacement
- Chief Logan Lodge HVAC Renovations
- ChalleNGe Academy Maclin Hall Make Up Air Unit Replacement

## **Professional History**

2022- Present Miller Engineering, Inc. MEP Designer

#### **Education**

2022 West Virginia University, BS - Mechanical Engineering



## Staff – Qualifications and Experience



#### **Jack Jamison**

Jack brings 20 years as an electrical/building inspector and over 25 years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller's complete assessment process.

#### **Project Role: Master Code Official**

• Facility Review, Code Research, Field Observations, Issue Resolutions, and Project Evaluation

## **Professional History**

2010- Present Miller Engineering, Inc. Code and Construction Specialist

1999-2010 Megco Inspections Chief Inspector
1972-1998 Jamison Electrical Construction Master Electrician

## **Education**

1971 Fairmont State College, BS-Engineering Technology-Electronics

- Master Code Professional, IAEI Master Electrical Inspector, Class C Electrical Inspector WV, PA, MD, & OH
- ICC Commercial Building, Building Plans, Commercial Plumbing, Residential Energy, and Accessibility Inspector/Examiner
- WV Master Electricians License
- NCPCCI-2B, 2C, 4B, 4C: Electrical & Mechanical General/Plan Review
- OSHA 30 Hour Course: General Industry
- NFPA Code Making Panel 14 NEC 2014 Edition

## Montum Architecture, LLC Firm Profile

#### Who We Are.

Montum Architecture, LLC was founded in 2017 to provide architectural design and consulting services. Montum Architecture is a Limited Liability Corporation filed in the state of West Virginia. The company is also registered in the State of Maryland as a foreign LLC. Montum is staffed by a licensed principal architect and a design professional. They work manage projects together, from conceptual to construction administration, allowing the utmost coordination of building plans and specifications with minimal potential for miscommunication.

#### **Our Services**

**Financial** 

Government **Planning** Institutional **Building Assessment** K-12 schools **Architectural Detailing Higher Education Specification Writing** Multi-Dwelling Contract Administration Medical Design/Bid/Build Retail Renovation **Emergency Services** Renderings Automotive **Life Safety Evaluations** 

Warehouse Project Management

Design/Build

## Why Choose Us.

## **Communication**

Tom Pritts will be the primary point of contact for Montum's architectural services. Montum will manage communication with the Owner, Contractor, and sub-consulted team of members on this project.

## **Project Budget**

Previous work experience has shown a consistent +/-2%bid-to-budget ratio.

#### **Project Schedule**

Montum will monitor and adjust the design tasks in order to complete the design work in the established timetables. They will also work diligently during project construction to maintain the contractual constraints placed as part of the contractor's bid.

#### **Design Software**

Montum utilizes Autodesk Revit for all design projects incorporating three-dimensional modeling and parametric reporting. Existing condition documentation includes drone imaging, 360 camera shots, and handheld LiDAR telemetry.







## **Thomas Pritts, AIA, LEED-AP, CSI-CCS**

Tom founded MontumArchitecture in 2017. He has more than 15 years experience in design, specification, and project management. During his former employment, Tomhas designed and managed dozens of built projects. His experience encompasses a wide range of projects including K-12 and higher education facilities, financial Institutions, emergency services buildings, and automotive dealerships. A native of Mineral County, Tom is member of the West Virginia Chapter of American Institute of Architects and was involved in the establishment of the US Green Building Council's West Virginia chapter. He is highly skilled in the design of complex building systems, technical construction detailing and specifying, and construction contract administration. These skills were critical in the development and maintaining of many multi-year, multi-project relationships with Clients in his previous employment.

## **Project Role: Relationship Manager - Primary Point of Contact**

- Principal in Charge
- Design and Project Management
- Concept and Construction Design
- Quality Assurance and Control

## **Professional History**

2017- Present Montum Architecture Architect
2004-2017 Alpha Associates Associate and Architect
2003 Marshall Craft Associates Architectural Intern

## **Education**

2004 Virginia Tech Bachelors of Architecture

#### **Licenses and Certifications**

- Licensed Architect (West Virginia, Maryland)
- NCARB Certificate
- Construction Specifier Institute Certified Construction Specifier
- LEED-AP Certified
- Part 107 Remote Pilot
- 30-hour OSHA Card

## **Associations and Memberships**

- American Institute of Architects
- Mineral County Chamber of Commerce 1<sup>st</sup> Vice President

## **Professional Project Highlights**

- Potomac State College Bachelor of Nursing Renovation
- Wyoming East High School HVAC Renovation Wyoming County Schools, WV
- Mountainview and MTEC HVAC Renovation Monongalia County Schools, WV
- Berkeley Springs State Park Pool Bathhouse Roof Replacement
- Berkeley Springs State Park Old Roman Bath Renovation
- Blackwater Falls State Park Boiler Room Renovation
- Our Lady of the Mountains Parish Bathroom Renovation
- Mountain View Assembly of God Rec Hall Ceiling Design





## Professional Project Highlights (former employment built projects)

- Potomac State College ADA Connector Building, Church-McKee Plaza, Shipper Library Façade
- WVU Engineering Sciences Building East Wing Addition, 10th Floor Fit-Out, Basement Renovation
- WVU Engineering Research Building G07 & G08 Renovation
- WVU Equine Education Center
- WVU College of Physical Activities and Sports Sciences/ Student Health Center
- WVU Center for Alternative Fuel Engines and Emissions
- WVU Colson Hall Water Infiltration Repairs
- WVU Mountainlair Water Infiltration Repairs
- WVU Chemistry Research Laboratories Fit-Out
- WVU Creative Arts Center Wheelchair Lift
- Alderson Broaddus University -Pyles Arena Deck Replacement
- Glenville State College -Morris Stadium Skybox
- Washington High School, Jefferson County Schools, WV
- Pineville Elementary School, Wyoming County Schools, WV
- Huff Consolidated School, Wyoming County Schools, WV
- Aurora School Addition, Preston County Schools, WV
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Safe School Entries, Monongalia County Schools, WV
- Morgantown High Elevator, Monongalia County Schools, WV
- 2010 Comprehensive Education Facilities Plan- Monongalia County Schools, Wyoming County Schools
- Clear Mountain Bank Branches, Oakland, MD Reedsville, WV Kroger-Sabraton, WV
- Grant County Bank, Petersburg, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Freedom Ford, Kia, and VolkswagenAutomotive Dealerships, Morgantown and Clarksburg, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Elkins Fordland Renovation Elkins Chrysler Dealership, Elkins, WV
- Harry Green Nissan Design-Build, Clarksburg, WV
- Cool Green Automotive Addition and Renovation, Shepherdstown, WV
- Veteran's Affairs OI&T Office Fit-Out, Shepherdstown, WV
- OPM, Eastern Management Development Center Addition, Shepherdstown, WV
- National Energy Technology Laboratory Building B-8 Roof Replacement, Morgantown, WV
- US Coast Guard Conference Room Renovation, Martinsburg, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- Cacapon State Park Old Inn HVAC and Interior Renovation
- WV National Guard Armory Office Fit-out, Parkersburg, WV
- South Berkeley Fire Station, Inwood, WV
- Jefferson County Emergency Services Agency New Headquarters
- Berkeley County Ambulance Authority South Station Renovation and Addition
- Poolhouse Renovation, McMechen, WV
- Community Center, Ridgeley, WV
- Wastewater Treatment Plant Renovations, Martinsburg, WV
- Public Works Building, Fairmont, WV
- Oatesdale Park Little League Fields, Martinsburg, WV
- St. Luke Canopy Replacement, Morgantown, WV
- Freshwater Institute Aquaculture Building, Shepherdstown, WV
- Clarion Hotel Renovation, Shepherdstown, WV
- Shenandoah Village Apartments Façade and Deck Replacement, Martinsburg, WV
- Regional Eye Associates/ Surgical Eye Center, Morgantown, WV
- Bavarian Inn Infinity Pool/ Pool Bar, Shepherdstown, WV



## Jordyn Henigin, M.Arch

Jordyn joined Montum Architecture in May 2020. A recent graduate of Fairmont State University, She has been eager to enhance her skills in the business field and develop a stronger knowledge of architectural design principals and methods. Jordyn is in the process of perusing her goal to become alicensed Architect.

## **Project Role: Design Professional**

- Concept and Construction Design
- Building Information Modeling Revit
- Architectural Rendering Lumion

## **Professional History**

2020- Prese	ent Montu	m Architecture	Design Professional

## **Education**

2020	Fairmont State University	Bachelors of Architecture
2022	Fairmont State University	Masters of Architecture

#### **Licenses and Certifications**

- LEED-Green Associate
- 30-hour OSHA Card

## **Associations and Memberships**

Assoc. AIA

## **Professional Project Highlight**

- Watters Smith State Park, Lost Creek WV
- Mon Co Schools Transportation Addition, Morgantown WV
- Jackson Co ARFC Wash Bay, Millwood WV
- BUMFS Staggers Recovery, Burlington WV
- BUMFS Knobley Rehab, Burlington WV
- Aging & Family Services of Mineral County Keyser Senior Center, Keyser WV
- Mineral County Detention Center, Courthouse, and Annex addition and renovations, Keyser WV
- New Covenant UMC, Cumberland MD
- Larenim Park Amphitheater, Burlington WV
- Building 25 HVAC, Parkersburg WV
- **WVGSD** Elevator Modernizations
- Westside HVAC and Roof, Clear fork WV
- Ed Kelley Memorial, Keyser WV
- Cass Campground, Cass WV
- Waxler Warehouse, Keyser WV
- Greenbrier SF Headquarters, White Sulphur Springs WV
- FWAATS, Bridgeport WV

## **Staff – Licenses & Certifications**











## **TAB 2 – PROJECT ORGANIZATON**



## Staff – Proposed Staffing Plan

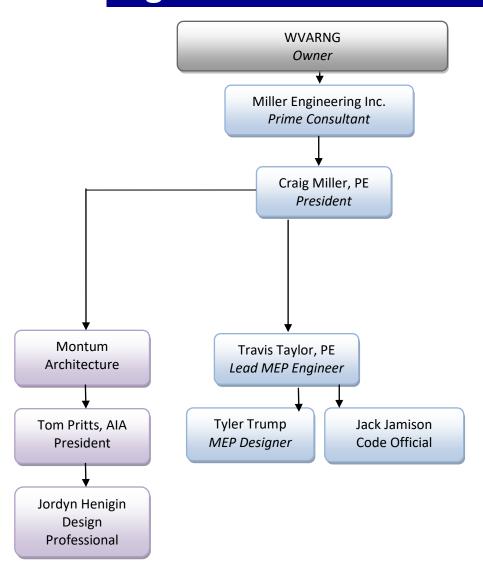
## **MILLER ENGINEERING**

Craig Miller, PE	President, Principal in Charge
Travis Taylor, PE	Lead MEP Engineer
Tyler Trump	MEP Designer
Jack Jamison	Master Code Official

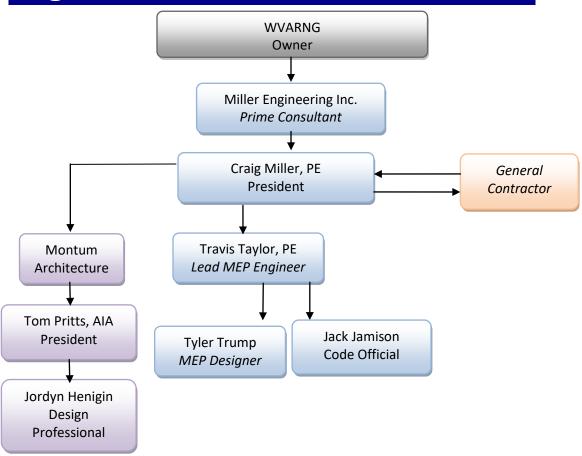
## **MONTUM ARCHITECTURE**

Tom Pritts, AIA	Architect, Owner
Jordyn Henigin	Design Professional

# Organization Chart -Design

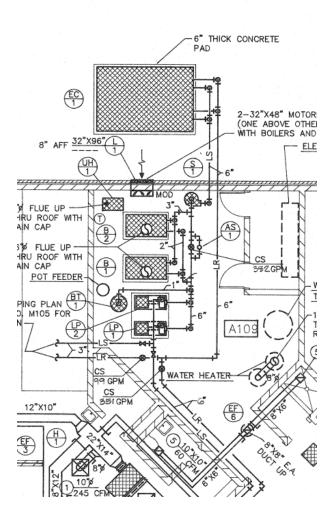


# Organization Chart – Construction





## **TAB 3 – EXPERIENCE**





## **Descriptions of Past Projects Completed – New Construction**

## WVANG Bridgeport FWAATS Restroom Renovations

Bridgeport, WV

#### **Services Provided:**

- Renovation
- MEP Renovation
- Construction
   Administration

Construction Cost: \$1M Facility Area: 1,400 ft<sup>2</sup> Owner: WVANG





MEI designed locker room and restroom renovations to the Bridgeport Fixed Wing Army Aviation Training Site (FWAATS). Montum Architecture was utilized to prepare renovated floor plans for two locker / shower rooms and two restrooms. The goal was to renovate the spaces to meet ADA guidelines and improve efficiency and utilization of the areas. MEI designed renovations to the plumbing, lighting, fire alarm, fire protection, electrical, and HVAC systems to accommodate the changes to the floor plans. The existing boiler was replaced with two, high efficient, modulating boilers. The flooring on the first floor was also replaced under this project. The construction is wrapping up with an anticipated completion in May 2023.

Project Contact: Jim Skaggs WV ANG (304) 561-6550



## **Descriptions of Past Projects Completed – New Construction**

## WVANG ChalleNGe Academy Maclin Hall MAU Replacement

Montgomery, WV

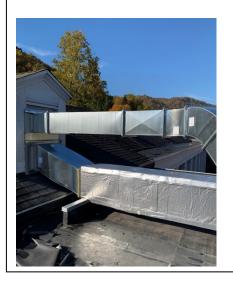
## **Services Provided:**

- Mechanical
- Electrical
- General Trades

**Construction Cost: \$496K** 

**Owner: WVANG** 





Project Contact: Jim Skaggs WV ANG (304) 561-6550 MEI was tasked with replacing two failing make-up air (MAU) units at Maclin Hall. The units provide ventilation air for the facility. The MAU replacement involved installing new rooftop mounting curbs and replacement on rooftop mounted ductwork. New exhaust fans were installed on the roof and tied to the existing exhaust / relief air systems. New electrical feeds were installed to the new MAUs and fans. Montum Architecture assisted with the addition of rooftop railing to improve worker safety and the replacement of roof hatches and access ladders. The project was completed in January 2024 with no disruption to ChalleNGe Academy operations.



## **Descriptions of Past Projects Completed – MEP**

## **South Middle School HVAC** Renovations

## **Services Provided:**

Mechanical

Electrical

Plumbing

Fire Alarm

Contract Amount: \$1.45M Facility Area: 111,800 ft<sup>2</sup>

**Owner: Monongalia County Board of** 

**Education** 



South Middle School was served by a single DX AHU with various terminal devices such as VAV and self-piloted boxes. The school has been suffering from poor air quality and temperature control issues. Additionally, the condensing unit had failed. MEI designed a rebuild of the AHU; replacing the DX coils with HW and CW coils. The two large supply fans were replaced using a fan wall system which allowed the fans to operate at max output

incorporated to communicate under one system.

and minimize noise and vibration issues which plagued the old sled mounted fans. A new boiler serves the hot water coil and two chillers were installed with piping on the roof to serve the AHU cooling coil. The air terminal devices will be rebuilt and retrofitted to provide better control. A new Building Automation System (BAS) main control panel was installed which allowed control systems which were installed under other contracts to be

**Project Contact:** Robert Ashcraft Monongalia County Facilities Phone: (304) 291-9210



## **Descriptions of Past Projects Completed – Renovation**

## **Blackwater Falls State Park Lodge** Renovations

Davis, WV

#### **Services Provided:**

**General Trades** 

**Plumbing** 

Electrical

Mechanical

Pool

Const. Cost: \$4.6 Mil Facility Area: 44,000 ft<sup>2</sup>

**Owner: West Virginia Division of** 



**Project Contact:** Barrow Koslosky, AIA - Chief of PEM **WV DNR** 

Phone: (304) 558-2764



MEI was part of a design team with Paradigm Architecture to design the interior renovations to the lodge at Blackwater Falls State Park. All 54 lodge guestrooms were completely renovated with new finish, HVAC, and bathroom upgrades. Four of the guestrooms were modified to meet modern ADA guidelines. The lobbies, reception area, and dining rooms were upgraded with new HVAC, lighting, and finishes. The original finned tube radiant was replaced with new 4 pipe fan coil units and were tied into the boilers which were recently replaced by a previous MEI project.

A new chiller was installed with pumps and chilled water piping to the fan coil units. The guest rooms HVAC systems are fan coil units with ventilation served by make-up air units. Energy recovery ventilators pre-condition outside air to make the make-up air units operate more efficiently. The lodge was re-opened in January 2022.



## **Descriptions of Past Projects Completed – HVAC, Electric**

## **Withers Brandon Hall**

Philippi, WV

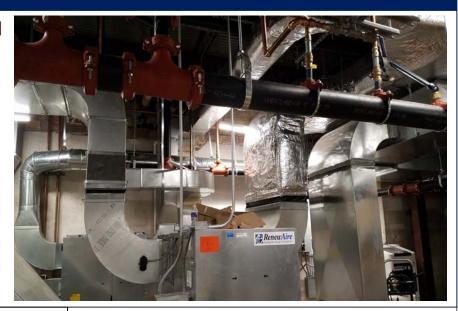
#### **Services Provided:**

- Electrical
- HVAC

MEP Budget: \$700k
Facility Area: 31,800 ft<sup>2</sup>
Owner: Alderson Broaddus

University

**Status: In Construction** 





Project Contact: David Snider, AIA Omni Associates, Inc (304) 367-1417 As part of renovations to Withers Brandon Hall at Alderson Broaddus University, MEI was brought in to evaluate and design upgrades to the HVAC system. The existing chiller and piping insulation had failed. The existing system was a two-pipe system with chiller and boilers serving fan coil units. MEI proposed to reuse the piping and replace the fan coil units with water source heat pumps (WSHP). This allows the existing piping to be re-used and piping insulation would not have to be replaced. The chiller will be replaced with a fluid cooler located outside the building. The three non-condensing boilers will be replaced with a much more efficient modulating condensing "double stack" boiler. The ventilation units are located in the unconditioned attic space and are difficult to perform maintenance on. New ducted heat pumps tied to

boiler. The ventilation units are located in the unconditioned attic space and are difficult to perform maintenance on. New ducted heat pumps tied to energy recovery ventilators will tie into the existing fresh air duct to provide ventilation and relief air. The design limits the amount of modifications outside of the mechanical rooms which will aid with the compressed construction schedule. The project was completed in October 2019.



## **Descriptions of Past Projects Completed – New Construction**

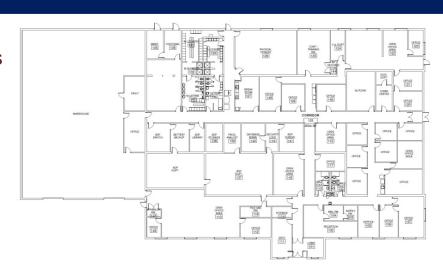
## USPFO Buckhannon Restroom Renovations

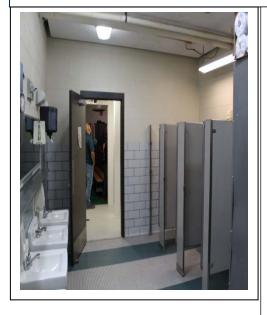
Buckhannon, WV

## **Services Provided:**

- Renovation
- MEP Renovation
- Construction
   Administration

Estimated Cost: \$1.2M Facility Area: 4,000 ft<sup>2</sup> Owner: WVANG





Project Contact: Jim Skaggs WV ANG (304) 561-6550 MEI was the Engineer of Record for the renovations to the restrooms and locker rooms at the United States Property & Fiscal Office (USPFO) in Buckhannon, WV. The front restrooms will be reconfigured into three single use restrooms and one lactation room. The locker rooms will be configured as single use restrooms with showers that share a common locker area. Montum Architecture provided architectural support and selection of finishes. The previously successful Bridgeport FWAATS restroom layout and finishes were the basis for USPFO. Also included are renovations to the break room and select office spaces. Corridor carpeting will be replaced with luxury vinyl tile. The project is currently bidding with an anticipated completion date in Summer 2025.







## **Mineral County Commission**

## Facility Renovations and Additions

## Description of Project:

The Mineral County Commission operates three primary buildings at the Courthouse Complex which are the Courthouse, the Judicial Annex, and Sheriff Building. Additional office space is provided via a second-story addition to the Sheriff Building with elevator access. The Courthouse gains a security checkpoint vestibule, egress stair, and elevator access to all three existing floors. The Judicial Annex improvements include the fit out of the existing second floor, an addition of a security checkpoint vestibule, egress stair, and elevator. The project includes fire alarm and sprinkler system installations for code compliance.

## **Construction Cost**

\$8.5 Million

## **Project Size**

40,000 SF Existing 10,500 SF New

## **Project Location**

Keyser, WV

## **Construction Completion**

Spring 2025

#### Contact

Luke McKinzie County Coordinator 304-788-5921









## **Jackson County Armed Forces Readiness Center**

Wash Bay Canopy

## Description of Project:

MEI and Montum Architecture teamed up to design a new canopy over the wash bay area in the Jackson County Armed Forces Readiness Center. The goal from the WV Army National Guard is to reduce the amount of rainwater draining through the wash bay into the oil/water separator. A new custom manufactured metal canopy was assembled and installed on site by the contractor. New structurally reinforced piers were formed in place and installed to support the new canopy. The rainwater runoff from the canopy roof is collected and routed internally down the posts integral diverters.

## **Construction Cost**

\$255k

## **Project Size**

N/A

## **Project Location**

Mill Point, WV

## **Construction Completion**

April 2022

#### Contact

Jim Skaggs WVANG (304) 561-6550











## **Wyoming County Schools**

Wyoming East High School & Westside High School HVAC & Roof Replacement

## <u>Description of Project:</u>

The West Virginia School Building Authority funded replacement of the HVAC systems and roofing at the existing Wyoming East High School in 2017. The County received ARP ESSER funds through the West Virginia Department of Education for HVAC system upgrades at Westside High School in 2021. The County locally funded the replacement of the EPDM roofing in sequence with this HVAC project. Work was performed within a occupied buildings with close coordination of school daily schedules and calendar of events. Many of the units are being replaced one-for-one with some zones being split into multiple units to allow flexibility of new curriculum within the spaces or needs for additional comfort control. Ceilings are being replaced to meet updated guidelines for educational facility acoustics.

## **Construction Cost**

\$3.2M & \$3.3M

## **Project Size**

130,000 SF Existing, Each

## **Project Location**

New Richmond, WV Clear Fork, WV

## **Construction Completion**

WEHS – Summer 2019 WES – Spring 2023

#### Contact

Robert Lyons Director of Facilities 304-732-6262



Budget History					
Project Name	Description	Budget	Cost	Notes	
Bluestone State Park	Pool Replacement	\$1,000,000	\$935,600	6% Under Budget	
WV State Bulding 25	HVAC Piping	\$650,000	\$533,400	18% Under Budget	
Canaan Valley Resort	Electrical Emergency Repairs	\$225,000	\$129,829	42% Under Budget	
Mapetown Elevator	Elevator Addition	\$650,000	\$440,000	32% Under Budget	
Kanawha State Forest Campground	Electrical Upgrades	\$300,000	\$279,000	7% Under Budget	
WV Wildlife Center	Electrical Upgrages	\$300,000	\$303,000	1% Over Budget	
Pipestem McKeever Lodge	HVAC Piping	\$1,600,000	\$1,776,000	10% Over Budget	



Project Delivery History					
Project Name	Description	Contract	Delivery	Notes	
Bluestone State Park	Pool Replacement	180 Days	180 Days	On Time	
Bridgeport FWAATS Restroom Renovations	Locker / Restroom Renovations	240 Days	196 Days	Expedited Design	
Camp Dawson FMS4 Fire Protection	Fire Protection	150 Days	115 Days	Delivered 1 Month Early	
ChalleNGe Academy Maclin Hall MAU Replacement	HVAC Renovation	180 Days	171 Days	Delivered 9 Days Early	
Mapletown Jr/Sr High School	HVAC Renovation	180 Days	180 Days	On Time	
MTEC Welding Shop	Electrical Renovation	90 Dyas	90 Days	On Time	
Pipestem McKeever Lodge	HVAC Piping	365 Days	365 Days	On Time w/ Extensive Coordination	



## What our satisfied customers have to say...

"Hard working, do-whatever-it-takes, diligent team that provides excellent customer service is what you can expect from Miller Engineering."

--Chris Halterman, Dominion Post, Morgantown

"As a design/build team, working with Miller Engineering, our project involving a private surgical hospital together was a success – completed ahead of schedule and on budget. Miller worked with us throughout the project to consult, engineer and inspect the mechanical systems. Craig Miller, PE and his staff are working with us again, and are very important members of our design/build team. I highly recommend their services.

--Richard J. Briggs

## **Roger Wolfe**

Project Engineer WV Division of Natural Resources 1000 Conference Center Drive Logan, WV 25601 (304) 885-6100 roger.c.wolfe@wv.gov

#### Jim Skaggs

Technical Analyst

WVARNG – Division of

Engineering & Facilities

1707 Coonskin Dr.

Charleston, WV 25311

304-561-6550

Robert.a.skaggsii.nfg@army.mil

## **Cindy Fisher**

Procurement Administrator WV Dept. Of Agriculture (304) 558-2221 cfisher@wvda.us

#### **Bob Ashcraft**

Safety and Ancillary Projects Monongalia County Schools 533 East Brockway Street Morgantown, WV 26501 (304) 657-4079

#### **Dave Parsons**

Energy Program Manager WV General Services 112 California Avenue Building 4, 5th Floor Charleston, WV 25305 (304) 957-7122 David.K.Parsons@wv.gov

#### Richard J. Briggs

Vice President
Lutz Briggs Schultz & Assoc. Inc.
239 Country Club Drive
Ellwood City, PA 16117-5007
(724) 651-4406
||bsa@zoominternet.net

# From Jonathan Miller, Mechanical Project Manager, Nitro Mechanical:

"Miller Engineering is not your average engineering company; they work with the owner AND the contractor to solve all issues that arise throughout the project to make the process as fluid as possible"



## TAB 4 – METHODOLOGY & APPROACH



## **Project Methodology & Approach**

## **Evaluation**

Miller Engineering will begin the design process by reviewing all existing documentation related to the CFMO. Reviewing documents will give MEI an initial understanding of the facilities which will be confirmed or adjusted through an extensive on site evaluation of the facilities. Evaluations of both existing documents and site visits will allow the design team to create initial building models. MEI will utilize building information modeling (BIM) via Autodesk REVIT to create models and therefore drawings of the facilities' areas of impact. Montum Architecture will provide architectural evaluation of affected areas of Building 1707. MEI and Montum also have the ability to utilize LiDAR scanning of spaces if deemed necessary to document existing conditions.

## Schematic

Once the BIM models are accomplished, and MEI grasps the building systems intent and construction, MEI will meet with the owner. The meeting will involve all stakeholders to gain an understanding of the intended project outcomes. MEI will discuss items which will affect the renovation including changes in building usage, current deficiencies and issues, operating methods, operating costs, and construction timeline phasing. Initial schematic design plans will be presented to the WVANG for discussion. MEI will incorporate early on any input from Montum. Miller Engineering's staff has backgrounds in construction, maintenance, and operations which provide a unique perspective as we do not just think "Will it work?" but also consider "How will it be installed?" and "How well can it be maintained to work as intended?" A majority of MEI's past projects include renovations which must be phased as the owner still occupies the facility. MEI will work with the owner to determine the maximum amount of facilities can be taken out of service at one time and the duration of these outages. These ramifications, in addition to any occupancy disruptions anticipated, would be discussed with the owner. The initial schematic design will be the basis of the 35% documents. MEI will provide cost estimates using real material quotes and take-offs to convey projected costs to the owner.

#### **Design Development**

MEI will take input from the owners based upon review of the 35% design documents and proceed. While the requirements of the EOI give specific milestones for progress sets (35%, 65%, 95%, & 100%), MEI will not wait until the next progress set to speak with the stakeholders if questions arise. Our philosophy is that the sooner issues are brought forward and addressed, the less they cost the project in time and money. The estimate will also be updated regularly as MEI treats the estimate as a "living document." Any changes or inputs from the owner, as well as other changes made during proceeding with design development, will be reflected in the estimate. MEI believes in giving the owner the information necessary, including budgetary effects, to make informed decisions regarding the design. The 65% and 95% progress sets will reflect the outcomes of the formal and informal discussions with the owners.



## **Construction Documents**

The construction documents will be completed using both the results of the progress set reviews and internal peer review. MEI understands that while working on a project, engineers and designers can get "tunnel vision", meaning they see what they want to see reflected in the documents. All drawings and specifications issued by Miller Engineering go through a three step peer review internally to ensure the intent of the document is clearly transmitted. The final 100% construction document set will be issued to the owner for bidding, along with our best estimate of probable cost.

## **Bidding**

During bidding, Miller Engineering will assist the owner to successfully procure bids for the upgrades. MEI will be present during the pre-bid meeting to discuss the technical scope of work for the project. Any technical questions from contractors or vendors to the owner during bidding will be answered by MEI. MEI will provide addendum documents as needed. MEI will also assist in reviewing bids and making recommendations to the owner. We have completed many projects through WV State Purchasing, and understand the requirements to successfully bid a project with the state of West Virginia.

## **Construction Administration**

After bids are received and the contract awarded, MEI is not a firm that disappears until the final punch list. MEI will provide thorough construction administration (CA) services as agreed upon with the owner. We will be present for a construction kick-off meeting to make sure the project gets off on the right foot. MEI believes in being present at construction progress meetings and making informal site visits to keep the project on track. Our background in construction and operations allows us to understand the sequencing of construction in the field to better aid the contractors when questions arise. One of MEI's main beliefs is that any requests for information (RFIs) submitted by the contractor should be reviewed and answered within one business day if possible. This is because we understand that delays in RFI responses can lead to additional costs and construction days. If necessary, we will provide an informal answer and follow up with the formal response to keep the project rolling. During progress meetings and site visits, any issues discovered by MEI will be relayed to the owner and contractor immediately to prevent delays. Another company standard is for our staff to be present for testing and balancing (TAB), equipment start-up, and owner training. While these events occur at the very end of the project, they are critical to ensure the new systems operate as designed. MEI will be on hand for these activities to quickly answer any questions and confirm these items are performed properly in accordance with the construction documents.



## **TAB 5 – PROJECT FORMS**





Proc Folder:

304-558-0067

Vendor

david.h.pauline@wv.gov

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

1494815

## State of West Virginia Centralized Expression of Interest

Doc Description:	CFMO (Building 1707) HVA				
Proc Type:	Central Purchase Order				
Date Issued	Solicitation Closes	Solicitation No	)		Version
2024-08-19	2024-09-03 13:30	CEOI 0603	ADJ250000010		1
BID RECEIVING LO	OCATION				
BID CLERK					
DEPARTMENT OF	ADMINISTRATION				
PURCHASING DIV	ISION				
2019 WASHINGTO	NSTE				
CHARLESTON	WV 25305				
US					
WEND OF					
VENDOR					
Vendor Customer	Code:				
Vendor Name :					
Address :					
Street :					
City:					
State :		Country:		Zip:	
Principal Contact	:				
Vendor Contact P	hone:		Extension:		
		23 23 23 23 23			
FOR INFORMATION David H Pauline	ON CONTACT THE BUYER				

Signature X FEIN# -1386

 Date Printed:
 Aug 19, 2024
 Page: 1
 FORM ID: WV-PRC-CEOI-002 2020/05

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

**DATE** 3 Sep 2024

**Reason for Modification:** 

**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.

(Printed Name and Title) Craig Miller, PE - President	
(Address) 54 West Run Rd. Morgantown, WV 26508	
(Phone Number) / (Fax Number) (304) 291-2234	
(email address) cmiller@millereng.net	

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

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

Miller Engineering Inc.	
(Company)	
THIN THE	
(Signature of Authorized Representative)	
Craig Miller, PE - President	
(Printed Name and Title of Authorized Representative) (Date)	
(304) 291-2234	
(Phone Number) (Fax Number)	_
cmiller@millereng.net	
(E!! Address)	<del></del>

(Email Address)