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Header 1

List View

General Information

Contact

Default Values

Discount

Document Information

Clarification Request

Procurement Folder: 2045819

Procurement Type: Central Purchase Order

Vendor ID: 000000229419

Legal Name: MILLER ENGINEERING INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 09/08/2026

Response Time: 9:27

Responded By User ID: MillerEng250

First Name: Craig

Last Name: Miller

Email: cmiller@millereng.net

Phone: 304-291-2234

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ2700000002

Published Date: 8/19/26

Close Date: 9/8/26

Close Time: 13:30

Status: Closed

Solicitation Description: CEOI - Camp Dawson Operations
Building UPS Replacement Desig

Total of Header Attachments: 1

Total of All Attachments: 1



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

State of West Virginia
Solicitation Response

Proc Folder: 2045819
Solicitation Description: CEOI - Camp Dawson Operations Building UPS Replacement Desig
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-09-08 13:30	SR 0603 ESR09082600000001802	1

VENDOR
000000229419
MILLER ENGINEERING INC

Solicitation Number: CEOI 0603 ADJ2700000002
Total Bid: 0
Response Date: 2026-09-08
Response Time: 09:27:51
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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Camp Dawson Operations Building UPS Replacement Design				0.00

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
Camp Dawson OPS Center UPS Replacement
Kingwood, WV
CEOI ADJ2700000002
8Sep26



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



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Jason Decheck, PE, LEED AP

Eaton Engineering Service Firm Profile

Doug Nowatka, PE
Jason Crowson

Montum Architecture Firm Profile

Tom Pritts, AIA
Jordyn Henigin, AIA

Arrow Firm Profile

Mike Howell, PE SE

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The Miller Engineering Difference



We are very pleased to submit our response for the Camp Dawson OPS UPS Replacement project. We have elected to submit as prime due to MEI's past history working with the WVANG as a prime consultant. MEI has operated in this role many times before for WVANG, including the Camp Dawson RTI/Billeting Chiller and HW, and FMS4 Fire protection. Other guard projects include the Patriot Guardens electrical, HVAC renovations to the Mountaineer Challenge Academy Kitchen and Maclin Hall, and the CSMS at Eleanor. We are currently consultants for the Camp Dawson FMS4 Renovations, RTI Boiler Replacement, Bldg. 227, Bldg. 231, and Bldg. 244 renovation. We also view our close proximity to Camp Dawson and experience with the facility as assets to the project.

While we have extensive experience with backup power and UPS systems, we have opted to team on this project to better serve the project. We have asked Claitman Engineering (formerly Lovorn Engineering) of Pittsburgh and Eaton Engineering Services to join our team. This is in addition to Montum Architecture and Arrow Structural Engineering, with whom we have and are doing a number of Guard projects. Claitman has a long history with facilities incorporating backup power and Eaton are hardware application specialists with significant experience in critical applications environments. Coupled with our local experience and presence, we believe this team can well serve the project goals.

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.

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 renovations, repairs, and replacements. The aforementioned renovations to FWAATS, USPFO, and FMS4 include changes to floorplans, HVAC, electrical, plumbing, and fire protection systems. The projects were designed to allow the WVANG to continue operations at the facilities with minimal interruptions, which we see as a concern for this project. Our

maintenance and construction background lends expertise to field evaluations of existing systems to troubleshoot and identify sources of operation problems. MEI's experience in the renovation and replacement fields allows our staff to design a solution that is staged or phased to allow for continued operation with limited disruptions and also tailoring the solution to fit within the constraints of the existing facility and site. If any architectural or structural support are necessary, Montum and Arrow will provide these services. Montum and MEI have teamed together on several WVANG projects including current projects located at Camp Dawson.

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 Camp Dawson OPS UPS Replacement project and we look forward to the chance to discuss the project in an interview.

Best Regards and Good Luck on the Project,

A handwritten signature in blue ink, appearing to read 'Craig Miller', with a long horizontal flourish extending to the right.

Craig Miller, PE
President/Owner
Miller Engineering, Inc.



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, maintainable, and function well in their intended purpose.

*Over the past 23 years Miller Engineering, Inc. (MEI) has engineered solutions for over \$100M plus in MEP system upgrades, repairs and renovations for projects of all scopes and sizes, with clients ranging from private owners to local and state governments. With a strict attention to detail and commitment to delivering a job done well and done right the first time, every time, **MEI has accumulated a change order percentage of less than 0.1% over the past 18 years.***

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 -24/7/365

Engineering Design and Consultation

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

Facility Utilization

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

Construction Administration

Maintenance/Facility Improvement Plans
Contract Administration
Code Observation

Communication Systems

Intercomm & Public
AddressVoice/Data/CATV
Urgent Response

Energy

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

Life Safety Inspection/Design

Fire Protection & Alarm Systems
Access Control
Fire & Electrical Investigation

Industry Experience

Education
Local & State Government
Commercial Development
Healthcare
Public Pools (indoor & outdoor)
Department of Parks & Recreation

Aquatic Facility Design

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



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.

Project Role: Relationship Manager – Primary Point of Contact

- *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
- WVU Life Sciences Building and Student Recreation Center – Owner's Engineer
- 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
- WVANG Child Development Center HVAC Upgrades

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

Licenses and Certifications

- 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)
- Mineral County Commission Facility Additions & Renovations
- Blackwater Falls Lodge Renovations
- WVANG Child Development Center HVAC Upgrades
- 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

Licenses and Certifications

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



MILLER ENGINEERING, INC.

Luke Summerfeldt

MEP Designer

Luke became a member of the Miller Engineering team in July 2026 after earning his degree from West Virginia University. As a recent graduate, he has embraced every opportunity to build his knowledge of MEP consulting and the engineering design process. He supports the MEP design team by performing design calculations and is quickly developing proficiency in industry software, including Autodesk Revit and Carrier's Hourly Analysis Program (HAP). In addition, Luke is gaining valuable experience with construction administration and expanding his understanding of building, electrical, and plumbing codes and standards. He is also preparing to take the Fundamentals of Engineering Exam as he works toward professional licensure.

■ Project Role: Junior Engineer

- Design calculations and system layout on electrical, mechanical and plumbing systems
- Drafting of MEP systems

■ Professional Project Highlights

- PVH ED OBS Addition and Renovation
- WVDNR Reed Fish Hatchery Generator
- WVDNR Elkins Garage HVAC
- WVANG Camp Dawson Billeting HW

■ Professional History

2026–Present	Miller Engineering, Inc.	MEP Designer
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■ Education

2026	West Virginia University	BS — Mechanical Engineering
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■ Licenses & Certifications

- Preparing for the Fundamentals of Engineering (FE) Exam



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
- WVANG Child Development Center HVAC Upgrades
- USPFO Buckhannon Restroom Renovations
- 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

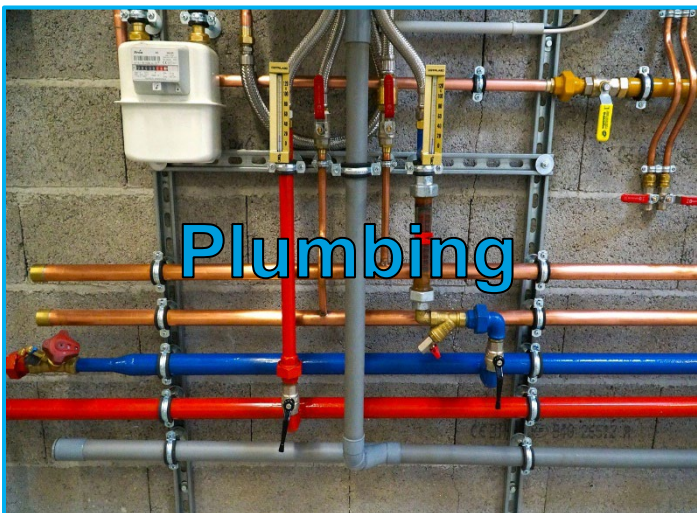
Education

2022 West Virginia University, BS - Mechanical Engineering

Licenses and Certifications



Consulting and Design Engineers



700 Blaw Avenue
Suite 300
Pittsburgh, PA 15238
Phone: (412) 423-2660
www.claitman.com

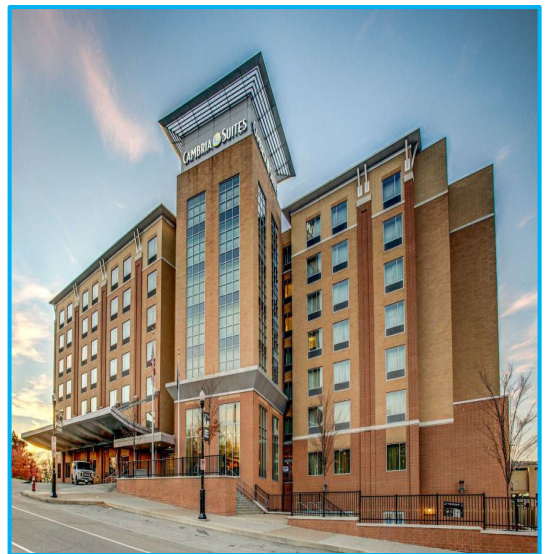
INTRODUCTION TO CLAITMAIN ENGINEERING ASSOCIATES, INC

Claitman Engineering Associates provides mechanical, plumbing, fire protection and electrical engineering solutions to a wide client base throughout Pennsylvania, Ohio, Maryland, Virginia, New Jersey and West Virginia. Established in 1964, our team of professionals has been dedicated to solving our client's most challenging problems with high quality engineering services at cost effective rates.

Claitman Engineering Associates provides engineering services from conceptual planning through completion of construction. Because of our expertise in institutional, commercial, healthcare and light industrial engineering services, we are capable of completing the design and construction processes in an efficient manner. From our beginning, Claitman Engineering Associates has built a loyal customer base. Our resume speaks for itself, with repeat clients and a continually growing project list. A major portion of our design work is in many of the area's health facilities and universities. In addition to our various disciplines, our team of professionals has experience in project management, project controls and estimating.



Claitman Engineering Associates understands that our people are the most important part of our organization. Our staff of experts include mechanical, electrical, plumbing and fire protection engineers and designers. By combining the unique abilities of each individual within the company, we are able to successfully integrate people, planning and quality assurance processes, thus providing the right engineering solution at a reasonable fee for each project. Our investment in our people ensures that our clients get the greatest value from our organization.



ELECTRICAL DESIGN AND ENGINEERING

Arguably, the most noticeable system which impacts the users of your facility is the electrical system. With increased technological capability comes more demand for electrical capacity. In order to remain competitive in today's market, business owners need to upgrade their existing facilities electrical system to support their business functions and future growth.

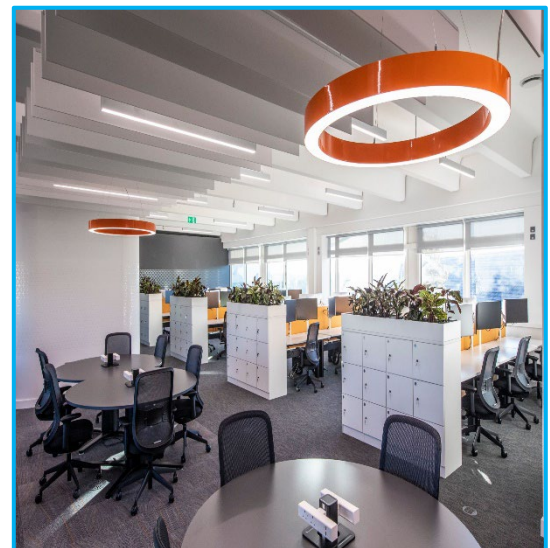
Smooth and seamless operation of your project demands a well-planned and designed electrical system. Electrical systems are an integral part of any building feature that requires power, from your lights and computers to your alarms and emergency egress.

Claitman Engineering Associates understands this, and through our expertise, we provide system designs that will have your project running at the level you need it to, while adhering to present codes and standards. Our goal is to provide adequate power to meet the needs you have today, while allowing room for future expansion and improvement.



We have extensive experience designing electrical systems such as:

- Power distribution
- Emergency power generation and distribution systems
- Harmonic and electromagnetic filtering and diagnostics
- Automatic and manual interlocks systems
- Nonstandard distribution of power
- Uninterruptible power systems
- Low-energy lighting design – data center
- Specialized lighting for architectural and decorative effects
- Power conditioning systems
- Data and phone system installations



HVAC DESIGN AND ENGINEERING

The internal environmental conditions of a building are a critical issue for owners and managers. From hospital operating and emergency rooms, to corporate office complexes and telecommunication buildings, Claitman Engineering has the expertise to design an HVAC system that will meet the needs of the building owner/tenant.

We take many factors into consideration when analyzing and selecting the appropriate HVAC system that will best meet the needs of each specific project. We take into account occupant comfort, indoor air quality, energy efficiency, equipment service ability and all current codes and standards in our design approach with every project.

In addition to temperature, other factors come into play, such as humidity, ventilation, pressurization, noise and vibration, all of which must be controlled to provide optimal conditions for people, equipment and valuable property. We take all these factors into consideration before selecting a system.



We have experience designing HVAC systems that address a multitude of design aspects, such as:

- Central chiller and boiler plants
- Building and space air handling systems
- Building and space ventilation systems
- Industrial heating and cooling systems
- Industrial ventilation systems
- Industrial process piping systems
- Fire, smoke and odor control systems
- HEPA filtration/cCEAn rooms
- Infection isolation environments
- Sound attenuation
- Restaurant and food service systems





EDUCATION

The Pennsylvania State University, BSEE Bachelor of Science, Electrical Engineering 1992

PROFESSIONAL REGISTERED ENGINEER

- Pennsylvania PE089816
- West Virginia 25190
- Delaware 27228
- Washington DC PE40000352
- New Jersey 24GE05772800
- Washington 25009378
- Virginia 065985
- Maryland 58969

PROFESSIONAL SUMMARY

- Over 30 years' experience designing Electrical power distribution systems, emergency backup systems, lighting and controls, fire alarm systems, solar power systems, EV chargers, telecommunication systems
- Engineer of Record since 2019
- President of Claitman Engineering 2025
- Firm partner since 2020
- MEP design consulting experience in data center power distribution, UPS systems, manufacturing, hospitality, higher education, K 12, retail, commercial offices, laboratories

RICK SABOL, P.E.

PRESIDENT

WORK EXPERIENCE

Strategy Robot - SCIF, 2024-2025

- Collaboration with Strategy Robot to design multiple server rooms to support Department of Defense contracts. Server rooms consist of multiple server racks to house approximately 50 servers with a total load of 75 kW per rack
- Each server room was provided with two panelboards to allow for redundant power circuits to the servers
- Provided power to the server rack cooling system which included rear door coolers and manifolded direct-to-chip cooling for larger GPUs
- Recommended by Carnegie Mellon University due to their ongoing support of the Software Engineering Institute building/A200 & A100 Server Room as well as SCIF development in 2023-2024

Carnegie Mellon University - Software Engineering Institute - SCIF/UPS, 2023-2024

- Redesign power distribution to repurpose existing 275 kVA UPS to serve a new 400-amp, 480-volt distribution panelboard
- The new distribution panelboard was utilized to feed all server racks within the IDF rooms on each floor of the building allowing for continuous power to all servers within the building
- The new distribution panelboard was utilized to feed the new panelboard for SCIF
- Provided dedicated power to all SCIF workstations and associated server rack
- Provided separate surface raceways from the server room to the workstations for power, data cabling, and fiber optic cabling
- Performed all construction administration and support throughout the construction process including onsite troubleshooting, RFI responses, assistance with development of phasing and scheduling, integration with existing building systems, etc.

Carnegie Mellon - Software Engineering Institute Projects, 2017-Current

- Data Center High Density Cooling/Cold-Aisle Containment, 2024-Current
- SCIF - Basement, 2023-2024
- Electrical Upgrades - A200 Server Rooms, 2023-2025
- Generator Day Tank Replacement/Fuel Tank Removal, 2019-2023
- Second & Fifth Floor Fan Coil Replacements, 2022-2023
- First Floor Offices, 2020-2021
- Jordan Auditorium AHU Replacement, 2020-2021
- Computer Room Air Conditioning Unit Design - A200 & A100 Server Rooms, 2017-2018
- Kitchen/Café HVAC/Electrical Upgrades, 2017-2018

Verizon and Verizon Wireless – Pennsylvania, 2012-Current

- Engineering, design, construction administration, and project development collaboration for over 40 years
- Engineer of Record for all electrical system designs since 2019
- Lead engineer and designer on over 100+ projects and over + \$100 million in total project value throughout Pennsylvania, New Jersey, and Virginia
- Projects include incoming electrical service upgrades and replacements, emergency generator upgrades and replacements, power distribution for all switchboards and panelboards, lighting design and controls, fire alarm system design, portable generator connection boxes and associated power distribution, EV charger design, solar power design, building electrical load calculations, power distribution to air handling units, chillers, cooling towers, and temporary cooling units

Verizon – Pittsburgh Central Office - Centrifugal Chiller Design/Replacement, 2023-Current

- Construction Cost: \$3,900,000
- Project consisted of installing one (1) new 800-ton centrifugal chiller serving an existing central office building for Verizon
- This is the second largest Verizon data center in the Commonwealth of Pennsylvania
- The building is twenty-two stories and operates continuously
- Project included rework of chilled water and condenser water piping, temporary cooling, controls, valving, sequencing, and layout, with regard to equipment clearances and refrigerant recovery
- New controls were applied for the chiller plant
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Harrisburg Central Office - Centrifugal Chiller Design/Installation, 2022-2023

- Construction Cost: \$4,500,000
- Project consisted of installing four (4) new 300-ton centrifugal chillers serving an existing central office building for Verizon
- This is the third largest Verizon data center in the Commonwealth of Pennsylvania
- The building is ten stories and operates continuously
- Project required design considerations for temporary cooling throughout the duration of the project and phasing of equipment installation
- New controls, valving, sequencing, and layout, with regard to equipment clearances, refrigerant recovery, and waterside economizer were applied
- New pumps were provided for primary loop(s)
- New isolation valves were installed to accommodate better maintenance and transfer of duty/standby pumps
- New controls were applied for the chiller plant
- New magnetic bearing chiller was applied to this project
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Scranton Central Office - Chillers, Air Handling Units, Building Automation, and Generators, 2020-2023

- Construction Cost: \$19,500,000
- Multi-year project consisted of installing three (3) new 250-ton screw chillers serving an existing central office building for Verizon
- Design also included a new 210-modular heat recovery chiller to provide heating for the building
- Significant electrical upgrades including (2) new 1-MW Generators and supporting fuel transfer system
- The building is five stories and operates continuously
- Project required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- New central pumping room, new piping, valving, sequencing, and layout, with regard to equipment clearances, refrigerant recovery, and economizer were applied
- New pumps were provided for primary/secondary loop(s)
- New isolation valves were installed to accommodate better maintenance and transfer of duty/standby pumps
- New controls were applied for the chiller plant
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Wilkes Barre Central Office - Chillers, Air Handling Units, Building Automation, and Generators, 2021-2024

- Construction Cost: \$11,400,000
- Multi-year project consisted of installing four (1) new 125-ton screw chillers serving an existing central office building for Verizon
- Significant electrical upgrades including (1) new 2-MW Generators and supporting fuel transfer system
- The building is six stories and operates continuously
- Project required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- New central pumping room, new piping, valving, sequencing, layout with regard to equipment clearances, refrigerant recovery, and economizer were applied
- New pumps were provided for primary/secondary loop(s)
- New isolation valves were installed to accommodate better maintenance and transfer of duty/standby pumps
- New controls were applied for the chiller plant
- New air handling units installed throughout the building
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Lancaster Central Office - Cooling Tower Replacement, 2018-2019

- Construction Cost: \$3,100,000
- Project consisted of replacement two (2) 400-ton open cooling towers serving an existing chiller plant at Lancaster Central Office building for Verizon

Verizon - Lancaster Central Office (Continued)

- Tower replacement required phasing of construction to keep systems online and operating throughout the duration of the contract
- New condenser water piping, makeup water piping, electrical systems, towers, controls, and automated change-over
- Required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Bloomsburg Central Office - Chiller Plant and AHU Replacements, 2018-2020

- Construction Cost: \$5,000,000
- Project consisted of replacement one (1) 120-ton modular chiller serving an existing chiller plant at Bloomsburg Central Office building for Verizon
- Chiller replacement required phasing of construction to keep systems online and operating throughout the duration of the contract
- New chilled water piping, pumps, electrical systems, remote condenser, controls. Project required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- Included the replacement of 600 KW generator, fuel tanks, and fuel transfer system
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Multiple Central Offices - UT 2.0 High Density In-Row Cooling with Containment Systems, 2022-Current

- Construction Cost: \$1,500,000 - \$2,500,000 per project/varying scope of work
- Locations Included: West Newton Central Office, Greensburg Central Office, Monongahela Central Office, Scranton Central Office, Wilkes Barre Central Office, Camp Hill Central Office, Reading Central Office, and Harrisburg Central Office
- Multiple projects initially at nine (9) sites with high density server racks and in-row cooling systems with cold-aisle containment
- Applied Vertiv in-row cooling systems with air cooled condensers with N+1 redundancy

Verizon - Paxtonia Central Office - Chillers, Air Handling Units, Building Automation, and Generators, 2021-Current

- Construction Cost: \$10,000,000
- Multi-year project consisted of installing three (3) new 125-ton screw chillers serving an existing central office building for Verizon
- Significant electrical upgrades including (1) new 1-MW Generator and supporting fuel transfer system
- Required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- New central pumping room, new piping, valving, sequencing, and layout, with regard to equipment clearances, refrigerant recovery, and economizer were applied
- New pumps were provided for primary/secondary loop(s)

Verizon - Paxtonia Central Office (Continued)

- New isolation valves were installed to accommodate better maintenance and transfer of duty/standby pumps
- New controls were applied for the chiller plant
- New air handling units installed throughout the building
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris

Verizon - Altoona Central Office - Chillers, Air Handling Units and Building Automation, 2022-2024

- Construction Cost: \$6,000,000
- Multi-year project consisted of installing two (2) new 200-ton modular chillers serving an existing central office building for Verizon
- Required design considerations for temporary cooling and temporary heating throughout the duration of the project and phasing of equipment installation
- New central pumping room, new piping, valving, sequencing, and layout, with regard to equipment clearances, refrigerant recovery, and economizer were applied
- New pumps were provided for primary/secondary loop(s)
- New isolation valves were installed to accommodate better maintenance and transfer of duty/standby pumps
- New controls were applied for the chiller plant
- New air handling units installed throughout the building
- Acted as engineer of record and provided all engineering & design support for the project as well as construction administration in tandem with Jim Boris



EDUCATION

The Pennsylvania State University, Bachelor of Architectural Engineering 1997

PROFESSIONAL REGISTERED ENGINEER

- Pennsylvania PE062428. West Virginia, Virginia, Ohio, Michigan, Kentucky, North Carolina, Tennessee, Maryland, Texas, Arkansas, Georgia, Rhode Island, Colorado, Indiana, California and Alabama

PROFESSIONAL SUMMARY

- Over 28 years experience as a project engineer leading designs with expertise in power distribution systems, emergency backup systems, lighting and controls, fire alarm systems, site utilities, communication systems
- Director of Electrical Engineering since 2024, overseeing electrical team assuring quality control, design accuracy, and consistency
- Firm partner since 2024
- MEP design consulting experience in commercial, industrial, healthcare, educational, and infrastructure projects ranging in size and complexities, often with aggressive time schedules

JASON DECHECK, P.E., LEED AP

PRINCIPAL, DIRECTOR OF ELECTRICAL ENGINEERING

WORK EXPERIENCE

Grove City School District - Grove City Middle School New Site Electrical Design, 2024-2025

- Electrical engineer for a new 100,000 square foot middle school on a new site
- Designed as an energy efficient building with a geothermal heat pump system, daylighting controls and energy efficient lighting and controls
- Project included extensive telecommunications systems, audio-visual systems, clock and scoreboard systems

Gateway School District - Moss Side Elementary School Renovation/New Addition, 2024-2025

- Renovation of an existing elementary school and a new addition including classrooms and a new media center/library
- Project included a new electrical service, classroom renovations and classroom technology upgrades

Pittsburgh Public Schools - Westinghouse High School Auditorium Upgrades, 2024-2025

- Replacement of the auditorium theatrical lighting system, including dimmer board, lighting and control equipment
- Replacement of the auditorium sound system

Pittsburgh Public Schools - Milliones Middle School Conversion to Pittsburgh University Prep, 2024-2025

- Renovation of Milliones Middle School into the new University Prep Building
- Design included a new auditorium, electrical service and distribution equipment replacement, classroom renovations and athletic facility upgrades

Pittsburgh Public Schools - Rooney Middle School and Fort Pitt Elementary School Security System Design (*), 2024-2025

- Security system design, based on school board standards, for schools in the Pittsburgh Public School System
- Design included head-end equipment, monitoring devices, uninterruptable power supply (UPS) system, and wireless network system

Carnegie Mellon University - School of Architecture New Exhibit Space Electrical Design (*), 2024-2025

- Design of the electrical systems for a new exhibit space in an old manufacturing facility which included lighting, electrical, and controls for the multi-function space

Carnegie Mellon University/Mellon Institute - CMU/PITT Neuroscience Institute Electrical Infrastructure Design (*), 2024-2025

- Design of the electrical infrastructure for a 3-Tesla MRI Scanner in the basement of Mellon institute which included offices and animal holding rooms

Duquesne University - Rockwell Hall Generator Replacement (*), 2024-2025

- Provided electrical engineering design of a new emergency generator system, fire pump and related infrastructure throughout the high-rise building

University of Pittsburgh – Various Projects, 2024-Current

University of Pittsburgh – Thackeray Hall Emergency Power Upgrades, 2024-2025

- Provided electrical engineering for a replacement emergency generator and transfer switches for a three-building complex
- Generator replacement included an analysis for sizing the generator to pick up all three buildings simultaneously

University of Pittsburgh – Fraternity Electrical Upgrades, 2024-2025

- Provided electrical engineering for a replacement emergency generator and transfer switches for a three-building complex
- Project included new grounding for the buildings in addition to the panelboard consolidation and replacement

University of Pittsburgh – Campus Security Upgrades, 2024-2025

- Provided electrical engineering design for security head end room installations in various buildings across the campus

University of Pittsburgh – Cathedral of Learning New English Department Conference Center Electrical Design, 2024-2025

- Provided electrical engineering design for a new conference center and offices on the 5th floor of the Cathedral of Learning

University of Pittsburgh – Cathedral of Learning Welsh Nationality Room Electrical Design, 2024-2025

- Provided electrical engineering for museum type classroom for the Nationality Rooms located in the Cathedral of Learning

BaumHaus Phase 2 – High Rise Apartment Complex Addition (*), 2024-2025

- Provided electrical engineering services for a high-rise apartment complex as an addition to an existing apartment building
- Design included multiple electrical services, emergency generator system, telecommunications infrastructure and market rate apartment designs

The Scaife Foundation – Tenant Fit Out (*), 2024-2025

- Provided electrical engineering and lighting design for a tenant fit-out project in Oxford Center consisting of lighting, power, and special systems coordination for the office renovations

PNC Bank–Various Locations-PA – Multi-Building Tenant Fit Out, 2024-2025

- Provided electrical engineering services for the fit-out of three complete floors of One PNC Plaza
- Provided electrical engineering services for various office floor moves and relocations throughout six office building locations in the city of Pittsburgh as part of a consolidation of business units in the company

Veteran's Affairs Medical Center-Erie PA – Emergency Power Study/Power Quality Study (*), 2024-2025

- Project Budget was estimated at \$4 million
- Lead Electrical Engineer for a new emergency power distribution system, which included the proposed design of a new 2000kW N+1 emergency generator plant to supply emergency power to the existing hospital building
- As part of the emergency power system design, an extensive survey of the existing emergency power system was required, to reconfigure to the branch distribution to comply with NFPA 99 requirements
- Project included an extensive power quality study to determine the source of a persistent voltage sag issue at the main utility service (results were used to determine a course of action to reduce the voltage sag implications on the facility)

FedEx Ground – Various US Locations Parking Facility Upgrades (*), 2024-2025

- Upgrades to trucking parking lots to improve lighting, add block heaters and security controls
- Project locations included Florida, Montana, Ohio and Pennsylvania, with many sites including new utility services

Confidential Online Logistics Facilities – Various US Locations**Electrical/Lighting/Special Systems Design (*), 2024-2025**

- Provided electrical engineering design services for large online logistics centers with footprints more than one million gross square feet
- Projects included multiple electrical services, emergency power systems, and provisions for material handling equipment connections
- Facilities were located across the United States

Beta Technologies – Electrical Engineering Design (*), 2024-2025

- Provided electrical engineering design services for a new electric aircraft manufacturing facility
- Project was targeting a net-zero energy usage for the building, excluding the manufacturing process
- Included multiple 15kV electrical services and main-tie-main switchgear with dry-type transformers for redundancy
- Project included EV charging distribution for employee cars and airplanes at the manufacturing plant

Form Energy-Form Factory 1 – Electrical Engineering Design/New Utility Battery Manufacturer (*), 2024-2025

- Provided electrical engineering design services for a new utility battery manufacturer, including design and construction in less than 18 months for a 400,000 gross square foot facility
- Project was targeting a net-zero energy usage for the building, excluding the manufacturing process
- The electrical distribution system included a 25kV distribution system with ten 4000A switchboards located throughout the facility for a facility where the manufacturing process was being developed in parallel with the building design
- Project included energy efficient LED high bay lighting for manufacturing, EV charging distribution for employees, and an extensive cable tray network for power and telecommunications cabling

Park Plaza Apartments – Replacement Electrical Service, 2024-2025

- Provided electrical engineering design services for a new pad mounted electrical service to replace the original electrical service located in an existing utility vault that is decaying
- Design included new exterior switchboards, and provisions to minimize the outage during the switchover

CarMax Auto Centers-Nationwide - Electrical Engineering Design (*), 2024-2025

- Engineer of record and program manager for a nationwide auto dealership client
- Project types ranged from retail buildings, auto repair facilities, auction buildings, fueling system replacement, parking lot expansions and other miscellaneous facility upgrades

Company Name	Eaton Corporation
Unique Entity ID	NP3NSFVMNUM3
Point of contact	Mario Maresca
Email address	mariohmaresca@eaton.com
Phone number	(518)951-4252

Professional Design Services for UPS System Replacement Projects

Eaton provides comprehensive professional engineering and design services to support the replacement and modernization of uninterruptible power supply (UPS) systems in mission-critical facilities. Eaton's team includes licensed professional engineers, CAD designers, application engineers, project managers, and construction managers who work collaboratively to develop complete construction documents and implementation packages for UPS replacement projects.

Eaton begins with detailed site assessments and data collection to evaluate existing electrical infrastructure, operational requirements, constructability considerations, and project constraints. Using this information, Eaton develops engineered solutions in accordance with applicable codes, industry standards, and Eaton engineering practices.

Design deliverables typically include:

- Existing and demolition electrical one-line diagrams
- New electrical one-line and three-line diagrams
- Equipment layouts and general arrangement drawings
- Equipment elevation drawings
- Cable and conduit schedules
- Conduit and cable routing plans
- AC and DC control and protection schematics
- Foundation and structural support designs, where required
- Bill of materials and technical specifications
- Issued-for-Construction (IFC) drawing packages
- As-built drawings and operation and maintenance manuals upon project completion

Eaton's design process is typically executed through progressive design milestones, including preliminary (30%), intermediate (60%), and final Issued-for-Construction (100%) design packages, allowing for stakeholder review and coordination throughout project development.

For customers requiring additional engineering support, Eaton can provide licensed Professional Engineer (PE) oversight and, when needed, serve as the Engineer of Record (EOR) to coordinate with Authorities Having Jurisdiction (AHJs), address code compliance requirements, support permitting activities, and facilitate project approvals.

Leveraging extensive experience in designing and implementing critical power infrastructure, Eaton develops construction documents that support the safe demolition of existing equipment, installation of replacement UPS systems, integration with existing electrical distribution systems, commissioning activities, and long-term facility operation. Eaton's turnkey approach helps reduce project risk, improve constructability, and minimize operational disruption within mission-critical environments.

Project Services Overview

The following pages outline Eaton's Project Services portfolio and Mission Critical Solutions, designed to support customers throughout the lifecycle of their critical power infrastructure.

Project Services

Our Project Services team combines decades of expertise with state of the art solutions to help industrial customers and utilities improve reliability, drive efficiencies, & reduce costs.

Through our comprehensive design build integrated services, we enable our customers to meet growing demands of energy, update infrastructures and modernization of their systems

One Stop Solution Provider

from design/build solutions to maintaining the Power System

Optimized Project Schedule

for cost effective system improvements

Maximum uptime
with on going services along with increased reliability & safety
09/04/2026

Key Features

- Engineering and consulting services focus on **understanding your requirements** and **setting strategies to meet your system needs with a valued return**
- Eaton's Project Operations team is a **single-source for completion of your modernization projects**, from upgrades to new facilities
- Our services team is one of the largest and most experienced in the industry, with **industry-standard software and advanced modeling and analysis capabilities**
- We have experience across all segments including applications in **industrial, utility, oil & gas, institutions and education, commercial facilities & data centers**
- Our Industry leading teams specialize in customized solutions for Hydro-electric facilities, new or existing substation upgrades including modular solutions, power distribution modernization with leading protection, control and automation expertise, and distributed energy including Microgrids

Highlights

- ★ Experienced team in all disciplines — electrical, mechanical, civil, and construction expertise with single point of accountability for all technical, financial and commercial coordination
- ★ We develop custom solutions to meet your needs, completing your project on time and within budget
- ★ We can design and supply the complete range of electrical power equipment, or we can incorporate preferred components — the choice is yours



Project Services

Offering

Engineering & Design Services

- ❑ Electrical power system design and bill-of-material development
- ❑ Civil, structural, & mechanical design in support of electrical solutions
- ❑ Equipment layout and plan view design

Protection and Control

- ❑ Substation equipment protection such as transformer, bus, breaker failure, feeder, line and line terminal utility protection
- ❑ Related communication design such as transfer trip
- ❑ Generator protection for generation sites
- ❑ Design of breaker control ranging from simple tripping schemes to automatic transfer upon loss of source

Electrical equipment sizing and specification

- ❑ Perform calculations to determine appropriate equipment ratings
- ❑ Review customer & site requirements to provide specifications
- ❑ Conduit or trench sizing and layout
- ❑ Control panel design, power factor correction or harmonic filter design
- ❑ Integrated Power Assembly (IPAs) and Modular solutions

Multi-vendor equipment supply

- ❑ Supply of the complete range of Eaton product lines
 - ❑ Equipment manufacturer agnostic approach
 - ❑ Coordination and resale of non-Eaton equipment
- 09/04/2026

Project & construction management

- ❑ Full system Design-Build capabilities
- ❑ Single-point responsibility throughout the entire project
- ❑ Site project management and installation supervision
- ❑ Primavera P6 and MS Project Scheduling Software
- ❑ Standardized documentation practices across project lifecycle

Advanced system modeling and studies

- ❑ Industry best engineers located regionally throughout the US
- ❑ FEED and system feasibility studies
- ❑ Short circuit coordination arc flash and load flow studies
- ❑ Full range of system study capabilities
- ❑ Microgrid feasibility studies with techno-economic analysis
- ❑ Cybersecurity and NERC compliance studies

Installation and commissioning services

- ❑ Nationwide subcontracting capability of all trades
- ❑ Site preparation, installation, setup and connection
- ❑ Acceptance testing and installation QA/QC
- ❑ Start-up & ground-fault certifications; interconnection confirmation & system commissioning
- ❑ Variable-term maintenance contracts with local expert support
- ❑ Warranty extension and training

Regulatory approval

- ❑ Navigate the utility and jurisdictional regulatory requirements to gain project approval for the specific project design



Mission Critical solutions

Expertise in government and non government Mission Critical Data Center customers improve reliability, drive efficiencies, & reduce costs. Through our comprehensive design build integrated services, we enable our customers to meet growing demands of energy, update infrastructures and modernization of their systems



One Stop Solution Provider

from design/build solutions to maintaining the Power System



Optimized Project Schedule

for cost effective system improvements



Maximum uptime

with on going services along with increased reliability & safety
09/04/2026

Offering

- ❑ UPS/Data Center design-build systems and turnkey services for power quality, resilience, and control
- ❑ Single point of execution for complete engineering, procurement, and construction (EPC) from conception to commissioning, with expertise for government facilities (DOD, DOS, DOE, etc.).
- ❑ Decades of experience working with and in government facilities and executing on contracts such as GSA (procurement schedule), PCCIE (USAF), FAA, EM-385 (Government Safety Program), etc.
- ❑ Project managers and sales professionals with specialized federal access and security clearances
- ❑ Conduct site surveys CONUS & OCONUS to determine the best turnkey design of critical power for customers supporting all types of critical missions
- ❑ Management of all Eaton engineering services including start-up commissioning, maintenance, modification, refurbishment, upgrades, etc.
- ❑ Centralized support team for design, application, order processing, and customer service, enabling consistent approach to manage national scale customers

Highlights

- ★ Single purchase order / contract for the entire design/build process from concept through commissioning
- ★ Manufacturer of a wide range of Eaton equipment including but not limited to – UPS and Li-ion batteries, distribution equipment, substation equipment
- ★ Able to leverage Eaton's extensive manufacturing footprint of national supply chain for strategic sourcing



Resumes

George “Doug” Nowatka, PE Senior Applications Engineer

Mr. Nowatka has 30 years of experience in project management, design, commissioning, facility condition assessment, and quality engineering for a variety of projects that cover most aspects of electrical engineering systems in datacenter and critical communication environments, as well medium voltage and excitation systems for government agencies, commercial, industrial, and utility customers.

He has experience leading teams in designing power distribution systems (medium voltage and critical power), stand-by power generation, lighting, grounding, and lightning protection. Mr. Nowatka also has extensive experience with the National Electrical Code. He has worked for Eaton for the past 25 years in various roles encompassing project & program management, design and applications engineering, and quality engineering.

Education

Bachelor of Engineering in Electrical Engineering/Georgia Institute of Technology/1985

Bachelor of Science in Physics/Centre College/1985

Licenses

PE/Registered Professional Electrical Engineer/NC

Certifications

Recent & Relevant project experience includes:

- Richard B Russell Dam MUB and Exciter Replacements- Replace existing 15 kV air blast and Oil breakers with SF6 breakers, install 6 2000A VCP-W lineups, install and startup MV Static Frequency Converter for Dam pump units.
- Electrical Engineer supporting Modular Datacenter projects- Review and analyze customer specifications and drawings, provide Eaton design responses for electrical and mechanical designs
- DISA Ogden – Design, procure, install and test 2.5 MVA UPS system including replacement of CRAC units in UPS room, convert data center to A/B bus configuration.
- DISA Mechanicsburg - Design, procure, install and test upgrade of UPS system from 1.5 MVA to 3 MVA reconfigure data center to A/B bus configuration.
- SATCOM building monitoring systems, design and install at SATOM locations US and overseas sites.
- Building 2929 Fort Bragg Design procure, install and test replacement 550 kVA UPS system with no downtime for existing users.
- National Oceanic and Atmospheric Administration (NOAA) Eaton Program Manager – Oversaw the development and implementation of power and maintenance shelter systems for 150 NEXRAD weather radar sites around the United States and four overseas locations. Maintained aggressive deployment schedule with shelter manufacturing, site preparation, SUPS manufacturing, and shelter site installation with three teams around the US operating concurrently on three-week sequenced schedules.
- Modular Data Center (confidential Customer) Provided design and technical support for both power modules and power skid designs approximately 30 power modules and 25 skids have been fielded.

Jason Crowson Sr. Project Manager

As a Senior Project Manager located in the Western Region of the United States, Jason has accumulated over 25 years of experience in the field of electrical engineering and power distribution. He has overall responsibility for managing projects, of varying complexity, of electrical distribution equipment installations from projects as small as simple 8 kVA UPS to 25MW power substations.

Jason's excellent communication skills have been recognized by clients, subcontractors, and trade personnel. This open communication keeps projects on track from start to finish. Jason's experience, accessibility, and organizational skills guarantee that projects are executed with the highest level of professionalism, which ensures that projects are finished on time and on budget.

Jason's experience includes, but is not limited to the following projects:

FAA – San Juan, Puerto Rico – Replaced Airport runway lighting distribution system.

Anadarko – Rock Springs, WY. – Installed new 25MW substation.

FAA – New Orleans, LA – Replaced Airport runway lighting distribution system.

U.S. Bureau of Reclamation – Replaced distribution substation at 3 hydro plants in Shasta region.

NASA – AMES – Replaced MV and LV electrical distribution equipment.

Anderson AFB – Guam – Replaced UPS and distribution equipment within three buildings.

US Bureau of Land Management – Boise, ID – Replaced UPS and associated electrical distribution equipment.

Beale AFB - Replaced UPS and associated electrical distribution equipment.

Keeslar AFB - Replaced UPS and associated electrical distribution equipment.

Langley AFB - Replaced UPS and associated electrical distribution equipment within three separate buildings.

Minot AFB - Replaced UPS and associated electrical distribution equipment.

Dept. of VA – Oakland, CA - Replaced UPS and associated electrical distribution equipment.

Travis AFB - Replaced UPS and associated electrical distribution equipment.

Education

B.S. Business Management,
University of Phoenix 2006

Basic Electrical theory and
application, Orlando, FL 1997

Naval Nuclear Power School,
Orlando, FL. 1998

Naval Nuclear Power Training Unit,
Idaho Falls, ID 1999

TRAINING COURSES

OSHA Construction Safety & Health

CPR & First Aid

Arc Flash Safety

Electrical Safety

QUALIFICATIONS

OSHA 30 Hour

Interim Secret security clearance

George “Doug” Nowatka, PE

Senior Applications Engineer

Mr. Nowatka has 30 years of experience in project management, design, commissioning, facility condition assessment, and quality engineering for a variety of projects that cover most aspects of electrical engineering systems in datacenter and critical communication environments, as well medium voltage and excitation systems for government agencies, commercial, industrial, and utility customers.

He has experience leading teams in designing power distribution systems (medium voltage and critical power), stand-by power generation, lighting, grounding, and lightning protection. Mr. Nowatka also has extensive experience with the National Electrical Code. He has worked for Eaton for the past 25 years in various roles encompassing project & program management, design and applications engineering, and quality engineering.

Education

Bachelor of Engineering in Electrical Engineering/Georgia Institute of Technology/1985

Bachelor of Science in Physics/Centre College/1985

Licenses

PE/Registered Professional Electrical Engineer/NC

Certifications

USACE – QCM Certified
Top Secret U.S. Clearance
Six Sigma Greenbelt

Years of Experience

37

Recent & Relevant project experience includes:

- Richard B Russell Dam MUB and Exciter Replacements- Replace existing 15 kV air blast and Oil breakers with SF6 breakers, install 6 2000A VCP-W lineups, install and startup MV Static Frequency Converter for Dam pump units.
- Electrical Engineer supporting Modular Datacenter projects- Review and analyze customer specifications and drawings, provide Eaton design responses for electrical and mechanical designs
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Powering Business Worldwide

Resumes

Jason Crowson

Sr. Project Manager

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Keeslar AFB - Replaced UPS and associated electrical distribution equipment.

Langley AFB - Replaced UPS and associated electrical distribution equipment within three separate buildings.

Minot AFB - Replaced UPS and associated electrical distribution equipment.

Dept. of VA – Oakland, CA - Replaced UPS and associated electrical distribution equipment.

Travis AFB - Replaced UPS and associated electrical distribution equipment.

Education

B.S. Business Management,
University of Phoenix 2006

Basic Electrical theory and
application, Orlando, FL 1997

Naval Nuclear Power School,
Orlando, FL. 1998

Naval Nuclear Power Training Unit,
Idaho Falls, ID 1999

TRAINING COURSES

OSHA Construction Safety & Health

CPR & First Aid

Arc Flash Safety

Electrical Safety

QUALIFICATIONS

OSHA 30 Hour

Interim Secret security clearance

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

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
Financial	Design/Build
Warehouse	Project Management

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

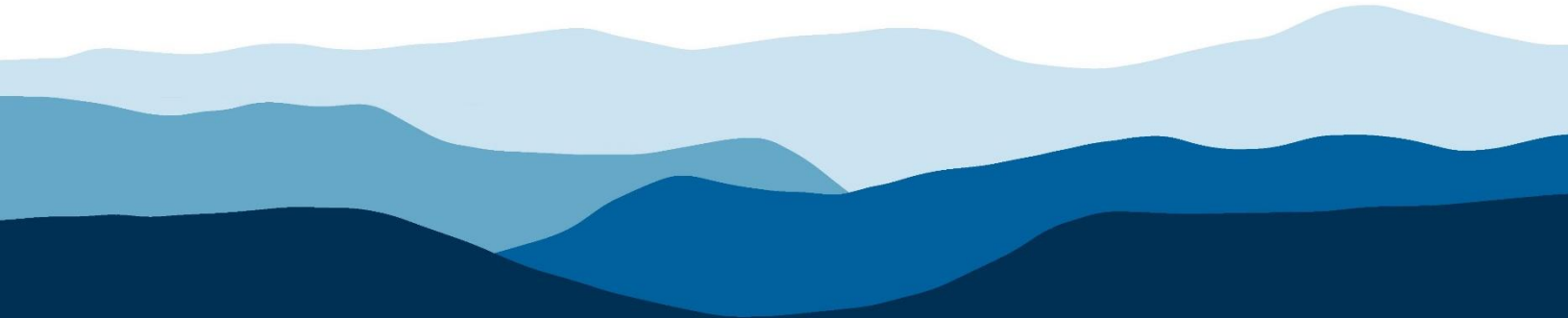
Previous work experience has shown a consistent +/-2%bid-to-budget ratio.

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
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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 – 1st 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

Montum Architecture, LLC • 55 ER Path, Keyser, WV 26726 • 304-276-7151 • montumarch.com

General Services Division: Building 10, Holly Grove Manson



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 becomea licensed Architect.

Project Role: Design Professional

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

Professional History

2020- Present	Montum Architecture	Design Professional
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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

ARROW

STRUCTURAL ENGINEERING

ARROW'S MISSION

Since 2016, Arrow Engineering has been dedicated to delivering top-tier structural engineering solutions that exceed expectations. Drawing from his extensive background as a contractor, civil engineer, and structural engineer, Michael Howell founded Arrow Structural Engineering to bring a unique blend of practical experience and innovation to every project.

At Arrow Engineering, we understand the paramount importance of a sturdy foundation and impressive design. Whether it is a commercial, industrial, governmental, historic preservation or residential venture, our team is committed to crafting solutions that exceed industry standards. With a focus on safety and durability, trust us to bring your structural visions to life with precision and expertise.



ARROW'S LEADERSHIP



MICHAEL HOWELL, P.E. S.E.
President

Mike's passion for construction began in his youth in New Brighton, Pennsylvania, where early hands-on experiences and volunteer work fueled his interest in structures. He earned a B.S. in Civil and Environmental Engineering from the University of Pittsburgh and an MBA from West Virginia University. His professional journey includes roles at firms such as American Bridge Company, McKinney and Company, Brockenbrough and Associates, and Allegheny Design Services. An active member and leader in groups like the American Society of Civil Engineers and the Richmond Joint Engineers Council, Mike also gives back to his community through board service with organizations like Pace Enterprises and the Spark Imagination and Science Center. Based in Morgantown, West Virginia, he enjoys coaching youth sports and spending time with his two children. As a speaker, he presents on topics such as engineering failures, leadership, and historical insights into modern construction.



CAROL STEVENS, P.E. F.ASCE
Chief Engineer

Carol Stevens is a leading structural engineer with decades of experience designing and rehabilitating critical infrastructure throughout West Virginia and beyond. A graduate of West Virginia University and The Pennsylvania State University, she has led CAS Structural Engineering as president since 2001, contributing to landmark projects at Twin Falls, Hawks Nest, and Pipestem State Parks, as well as historic restorations like the First Presbyterian Church and the West Virginia State Capitol Complex. Her award-winning work on the Upshur County Courthouse, Robinson Grand Performing Arts Center, and the Main Capitol Building Dome has earned recognition for design excellence. Actively involved in the American Society of Civil Engineers and the National Society of Professional Engineers, Carol also serves on the West Virginia Board of Registration for Professional Engineers and advises academic institutions, reflecting her dedication to mentoring future engineers and advancing the profession.

ARROW'S TEAM



ASHBEE SYKES, P.E. S.E.
Senior Engineer

Originally from Kitty Hawk, North Carolina, Ashbee brings a deep understanding of construction and structures to his work as a structural engineer. His background working with a family construction business provided hands-on experience ranging from framing houses to engineering multimillion-dollar projects, informing his approach to the intricacies and impact of design decisions. Inspired by his early days as a carpenter, Ashbee's journey led him to West Virginia. A graduate of West Virginia University with degrees in Mechanical and Aerospace Engineering, Ashbee is currently advancing his expertise in Structural Engineering at The Citadel. As a licensed Professional Engineer since 2019, he's committed to delivering excellence in every project.



ALEX YODER
Junior Engineer

From working in his father's wood shop to building storage sheds and remodeling houses, a passion for design and construction eventually led Alex to pursue a B.S. in civil engineering with a focus on structures from Bucknell University in Lewisburg, PA.



PHILLIP BAILEY, P.E.
Project Engineer

With a background in civil engineering and construction management, Phillip brings practical experience and academic knowledge to our projects. Phillip holds B.S. in Civil Engineering from West Virginia University, and has a background in construction management working for Yates Construction on the WVU Medicine Children's Hospital. Having worked on significant projects like WVU Medicine Children's Hospital, Phillip is well-prepared to lead complex building and design endeavors. As a licensed Engineering Intern in West Virginia, he's committed to delivering top-notch results. Phillip is a member of West Virginia University's Chi Epsilon Honorary Academic Fraternity.



ZACHARY HOWELL
CAD TECHNICIAN

As Arrow's sole CAD Technician, Zachary plays a vital role in the team. His expertise in engineering technology and design enables him to create both 2D and 3D designs, ensuring Arrow produces top-quality plans for superior structures. Beyond design, Zachary also assists with field work, measuring structures and conducting assessments. His attention to detail makes him an essential part of the team. Zachary received AutoDesk Certification from the Virtual Design Construction Institute, further validating his skills in CAD.

Michael Howell, PE SE

President



EDUCATION

University of Pittsburgh
BSCE, 2005
West Virginia University, Executive Program
MBA 2014
The Pennsylvania State University
PhD of Engineering *Expected 2027*

PROFESSIONAL REGISTRATION

P.E. Alabama
P.E. Arkansas
P.E./S.E. California
P.E. Kentucky
P.E. Maryland
P.E. Missouri
P.E. North Carolina
P.E. Ohio
P.E. Pennsylvania
P.E. Tennessee
P.E. Virginia
P.E. West Virginia

BACKGROUND SUMMARY

2019 – Present	Arrow Structural Engineering <i>President</i>
2012 – 2019	Allegheny Design Services <i>Director of Sports & Recreation</i> <i>Senior Structural Engineer</i>
2008 – 2012	Brockenbrough and Associates <i>Structural Engineer</i>
2007 – 2008	McKinney and Company <i>Civil Engineer</i>
2005 – 2007	American Bridge Company <i>Field Engineer</i>

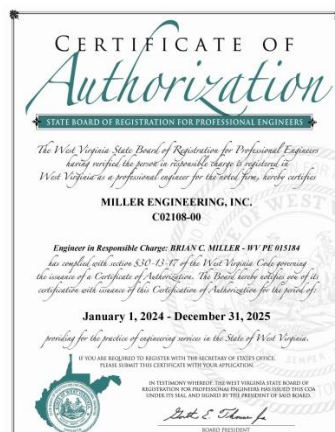
PROFESSIONAL SUMMARY

A 2005 graduate of the University of Pittsburgh with a Bachelor of Science in Civil Engineering and a 2014 graduate of West Virginia University with a master's degree in business administration. Licensed in numerous states as both a Professional Engineer and Structural Engineer. Experience in residential, commercial, heavy-highway, and industrial projects. Structural Engineering experience includes the design, specification, and evaluation of all typical construction materials including timber framing, structural steel, cold-formed steel, cast-in-place concrete, precast concrete, masonry, and aluminum. Performed forensic investigations, structural assessments, and has been a consultant for attorneys, real estate agents, insurance companies, and property owners in several legal cases. Expertise in historical and existing building assessments and renovations, risk assessment, structural failure and analysis, foundation design, subsidence evaluation, seismic and wind force detailing, and constructability assessments. Employment history includes tenures as a contractor, field engineer, civil engineer and structural engineer. Has presented numerous times on engineering management practices, design methods, and project case studies.

PROFESSIONAL ASSOCIATIONS

Pace Enterprises Board of Directors
Habitat for Humanity Construction
Barlett House Board of Directors
Spark Innovation and Science Center Board President
American Society of Civil Engineers Branch President
Richmond Joint Engineers Council Chair
Structural Engineers Institute Business Practice
ASCE 7 Timber Design Subcommittee

Staff – Licenses & Certifications





TAB 2 – PROJECT ORGANIZATON



Staff – Proposed Staffing Plan

MILLER ENGINEERING

<u>Craig Miller, PE</u>	President, Principal in Charge
<u>Travis Taylor, PE</u>	Lead MEP Engineer
<u>Tyler Trump</u>	MEP Designer
<u>Luke Summerfeldt</u>	MEP Designer

CLAITMAN ENGINEERING

<u>Rick Sabol, PE</u>	President
<u>Jason Decheck, PE</u>	Director of Electrical Engineering

EATON ENGINEERING SERVICES

<u>Doug Nowatka, PE</u>	Senior Applications Engineer
<u>Jason Crowson</u>	Senior Project Manager

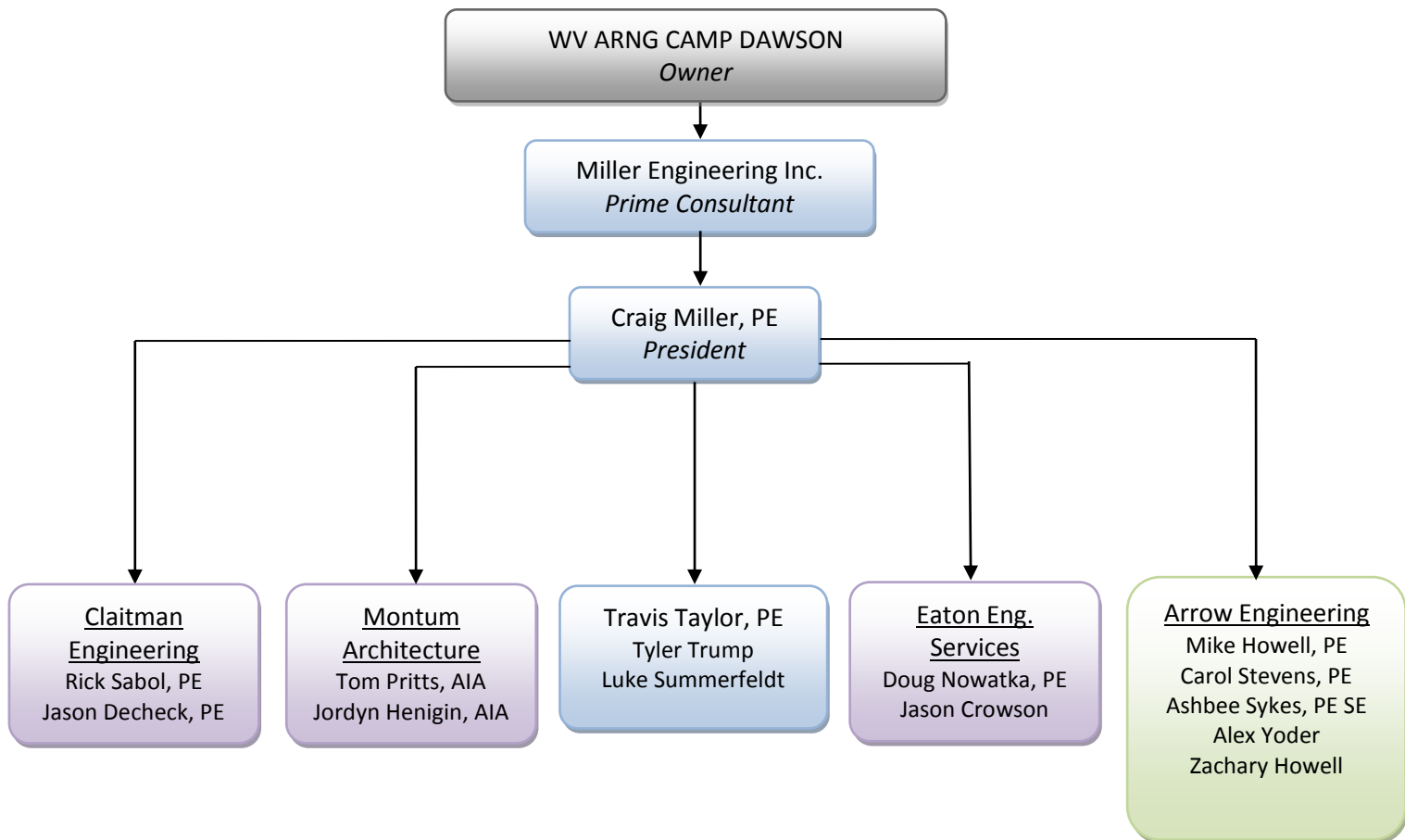
MONTUM ARCHITECTURE

<u>Tom Pritts, AIA</u>	Architect, Owner
<u>Jordyn Henigin</u>	Design Professional

ARROW ENGINEERING

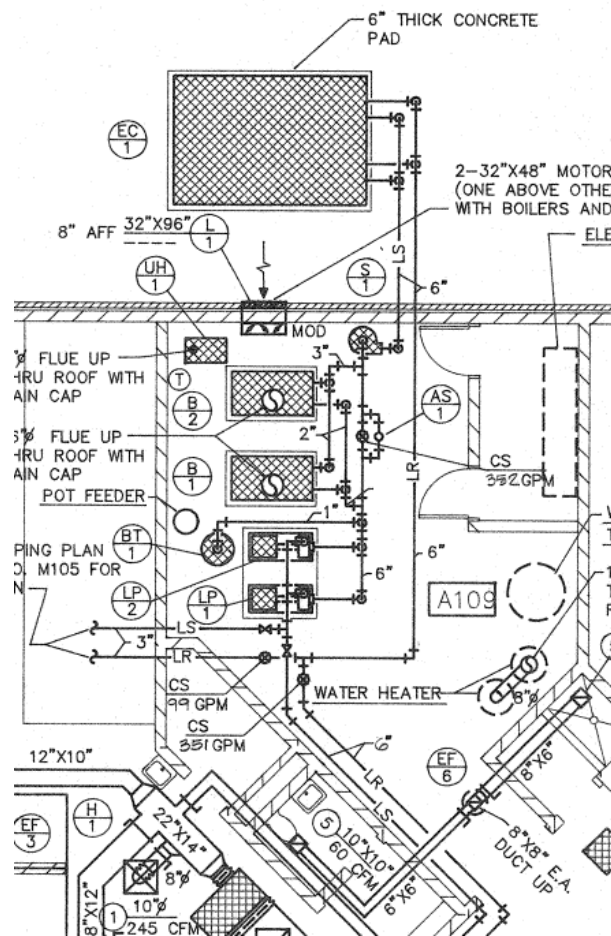
<u>Mike Howell, PE</u>	President
<u>Carol Stevens, PE</u>	Chief Engineer
<u>Ashbee Sykes, PE SE</u>	Senior Engineer
<u>Phillip Bailey, PE</u>	Project Engineer
<u>Alex Yoder</u>	Junior Engineer
<u>Zachary Howell</u>	CAD Technician

Organization Chart –Design and Construction





TAB 3 – EXPERIENCE



Experience –Electrical & Mechanical

Capitol Complex Chiller Plant Modifications

Services Provided:

- Evaluation – Study
- Electrical
- Mechanical
- Plumbing

Project Budget: \$6.75M

Project Cost: \$7.26M

No change orders

Original Duration: 14 months

Actual Duration: 24 Months (COVID)

Owner: WV GSD



WV General Services wished to reduce electrical demand, and thereby costs, to operate the Capital Chiller Plant and provide emergency cooling. MEI was commissioned to develop and evaluate options, make a recommendation, and then design and manage the construction of the solution. MEI designed a generator system, incorporating 2 – 1 megawatt natural gas engine driven, along with the associated 4,160 volt switchgear, switching controls, and significant low voltage electrical systems and controls, to automate the systems based on real-time electrical demand. We performed full construction administration on the project, including overseeing quality and minimizing down-time impact on the Owner, which was limited to 22 hours over one weekend. The \$6.75M system has been in operation for three years and is saving the taxpayers over \$275,000 per year with significantly increased operational reliability. The project also installed some 800 horsepower of new pumping capacity to utilize free cooling. The project was completed in May of 2022. COVID issues delayed the delivery of the generators by some 10 months.

Project Contact:
Dave Parsons
 Energy Manager
 WV GSD
 Bldg 1
 Charleston, WV
 304-610-1706
david.k.parsons@wv.gov

Descriptions of Past Projects Completed – New Construction

Advanced Surgical Rehabilitation Hospital

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Nurse Call
- Fire Protection/Alarm

Estimated Budget: \$17M

Facility Area: 67,000 ft²

Owner: AOR Group



Photo Courtesy of AOR



Interactive collaboration with the physician owners and contractor was the guiding principle behind the success of this project. Each and every system within the hospital was designed for and met precise health care compliance standards. Specifications for ventilation, electric, plumbing, HVAC and medical gas safety were all applied to the constructible design. Quality assurance and design aspects were satisfied by many intensive site visits as well as consistent communication with the contractor. Real time answers and coordination enabled the client to meet a fast-paced construction deadline which if missed would have had severe government regulatory repercussions and detrimental business outcomes.

Project Contact:

Rick Briggs

Lutz Myers & Associates, Inc.

(724) 758-5455

Descriptions of Past Projects Completed – New Construction

Preston County 911 Center

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Fire Protection
- Fire Alarm

Estimated Budget: \$2M

Facility Area: 7,000 ft²

Owner: Preston County



Photo Courtesy of Mills Group



Rendering Courtesy of Mills Group

The 7,000 ft² facility incorporates many features to increase the facility's reliability and functionality as a county-wide emergency operations center, in addition to being a 911-service call center. The HVAC system serving the 911 center and its supporting data center are redundant and incorporate a "shelter in place" function to seal them from outside air should the need arise. The training facility is equipped with HVAC systems and power/data cabling to permit it to function as an emergency operations center. The facility has a dual fuel emergency generator which serves the 911 center and the training room/operations center. The building water, electric and tel/data/cable utilities each required special attention and coordination with the service providers.

Project Contact:

Duane Hamilton

Preston OES

Phone: (304) 329-1855

Descriptions of Past Projects Completed – Adaptive Renovation

MedExpress National Headquarters

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Fire Protection/Alarms

Estimated Budget: \$12M

Facility Area: 31,000 ft²

Owner: MedExpress, Inc.



A full mechanical, electrical and plumbing upgrade was necessary for this former grocery store in order to meet the needs and demands of the client's use. A full computational model of the building and the new floor plan revealed that use of rooftop units of varying configurations would effectively condition the facility. Variable air volume (VAV) and constant volume systems were utilized to accomplish this goal. In addition, a dedicated air system was required for the critical corporate data center which would also accommodate both the current system load and anticipated growth of the owner. Halon systems, extensive fire and alarm systems, were installed to bring the facility to safety and state regulation codes. The critical corporate data center also required the design of a full standby power system with generator, 200KVA UPS (uninterruptible power supply) and transient voltage surge suppression. All project goals were met and the project was a

Descriptions of Past Projects Completed – Electrical

Ripley Warehouse Electrical Upgrades

Ripley, WV

Services Provided:

- Backup Power
- Electrical

Bid Amount: \$935K

Facility Area: Approx 42,000 sq ft

Owner: WV Dept. Of Agriculture



The West Virginia Department of Agriculture (WVDA) Ripley Warehouse houses the food distribution program, primarily for WV K-12 schools. The facility consists of office space, commodity warehouse, and approximately 20,000 square feet of cooler & freezer space for storing food. The WVDA is looking to expand its cooler / freezer space, thus requiring an electrical service upgrade to handle the additional cooler / freezer compressor loads.

MEI performed a thorough evaluation of the existing electrical service and distribution system. After reviewing the system, performing load calculations, and coordinating with the refrigeration vendors, determined the service should be increased from 1,200 amps to 3,000 amps allowing for future expansion. As there is no space in the warehouse or compressor buildings for equipment, MEI has proposed to house the new service equipment in a pre-fabricated building. The new service equipment will allow the building distribution to be "split" allowing the existing generator to be re-used. A second generator will be installed to handle the remaining loads. This approach will allow a phased approach to installation preventing any long duration outages. The proposed solution also allows partial building operation in the event of a generator failure. The project was completed during the summer of 2020.

Project Contact:
Alan Clemans
WV Dept. of Agriculture
(304) 558-2221

Descriptions of Past Projects Completed – High Voltage Repair

Holly River State Park

Hacker Valley, WV

Services Provided:

- High Voltage Electrical Design
- Emergency Repair
- Installation

Estimated Budget: \$2.4M

Facility Area: 8,101 acres of recreational space

Owner: West Virginia Division of Natural Resources



Emergency electrical supply was restored to select areas of the park in phase 1 due to the timing of the storm and the onset of winter. Phase 1 was a priority for the owner (WVDNR) and went from start of design to bid in less than 4 weeks. Coordination with the DOH and the DEP were facilitated during this short turnaround in order to restore electrical supply to the administrative areas.

Our team designed and developed a plan to restore power to the park and reduce future outages. MEI's design solution opted for burying 2.5 miles of electrical supply cabling in conduit, demo of the existing storm damage-prone overhead service, reclaiming PCB transformers and re-connecting all existing electrical loads. Phase 2 involved the replacement of approximately, 8,000 feet of direct buried 15kV cable with new 15kV cable in conduit. Phase 2 also involved replacing "pit" mounted transformers with proper pad mounted transformers to provide 240V power to the campground area. The campsites were equipped with new RV power pedestals to provide electrical power to each campsite. Both projects have been successfully completed.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
WVDNR State Parks Section
(304) 558-2764 ext. 51826*

Project Experience – Electrical Upgrade and HVAC Renovation

Dominion Post – Greer Building

Morgantown, WV

Services Provided:

- Field Study
- HVAC Upgrade
- Electrical Upgrade
- Construction Administration

Estimated Budget: \$1.8M

Facility Area: 18,000 ft²

Owner: Greer Industries, Inc.



Project Contact:

*Chris Halterman, Director of Operations
The Dominion Post
Greer Industries, Inc.
Phone: (304) 376-2642*

MEI was asked to evaluate the HVAC systems and report our findings. During the field study, Miller Engineering learned of HVAC system disintegration, air quality concerns, and interconnection of air systems between two levels of the building. Our study revealed the need for a complete HVAC upgrade but also for the need to upgrade the power prior to the HVAC work. MEI designed an electrical upgrade and implemented that while completing the HVAC design work. Our study included an evaluation of the existing backup generator, which we determined could be re-used. Broadcast quality UPS' and a data center UPS were design and installed. The goal of the project was to be a phased approach that integrated, updated and stabilized temperatures throughout the current floor plan, building levels and pending office reconfigurations. The main air handling systems, piping and ductwork were replaced and reconfigured as a necessity to serve the building's multiple levels and floor plan. The project was a success as a newly designed emergency system was implemented into the existing floor plan and designed as scalable for future needs of the building's owner. The Greer Building also serves as an emergency broadcast center for north central WV. MEI coordinated all aspects of construction with the owner to ensure there were no issues preventing the operation of the facility during construction.

WVU Medicine Southeast Tower Addition

DESIGN / CONSTRUCTION TIMELINE:

July 2012 – June 2017

CLIENT:

IKM Architects

REFERENCE CONTACT:

John Schrott

Phone:

412-281-1337

Email:

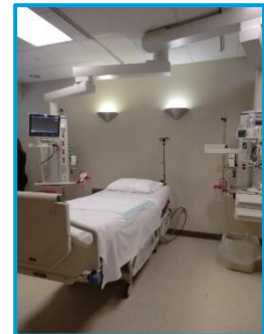
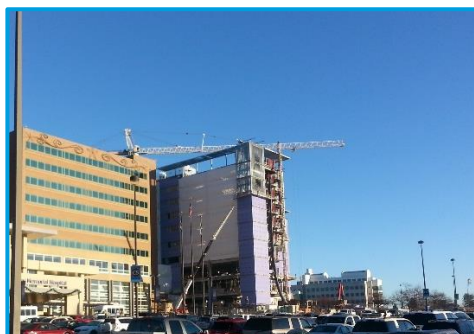
jschrott@ikm-inc.com



Claitman Engineering Associates served as the MEP/FP engineers on the 320,000 sq. ft. tower addition to the existing hospital. The new building was 10 stories in height. Two new 1000-ton chillers were added in the tower building and connected to the existing chiller plant by extending the existing primary chilled water loop to include the new chillers. This brought the total system capacity up to 5,200 tons. New 32,500 cfm air handling units were installed on each floor and supplied the air to the VAV boxes and hot water reheat. New boilers and emergency generators were installed in a new Central Utility building. Three 350 HP steam boilers and two 1,500 KW generators were installed in this building. Plumbing systems consisted of new medical gas piping systems, medical air compressors, medical vacuum pumps, connection to the existing main bulk oxygen system, nitrogen, nitrous oxide, and carbon dioxide supplied from new tank manifold assemblies. Domestic water was supplied from a new connection to the city water main. A series of water filters, water softeners, and booster pumps distribute water throughout the building.

The Normal Power distribution was upgraded and consisted of the removal of two outdoor 23kV – 480Y/277V Substations and reconnection of the 23kV feeder breakers to serve two new 2500kVA, double-ended, 23kV – 480Y/277V indoor substations to serve the new 10-story Southeast Tower and Chillers. Power distribution within the SE Tower consisted of multiple switchboards, panels and transformers throughout the facility.

The Emergency Power consisted of furnishing two new 1500kW Gen Sets and integrating them with two existing 800kW Gen Sets. New Paralleling Switchgear and multiple Automatic Transfer Switches were installed to provide an engineered design for Life Safety, Critical and Equipment Branch operations. The existing paralleling switchgear was modified to be used as an “Emergency-Only” switchboard, saving time and cost by maintaining all of the existing emergency distribution.



St. Clair Hospital New Chiller and Emergency Generator Plant

DESIGN / CONSTRUCTION TIMELINE:

December 2019 – May 2020

CLIENT:

IKM Architects

REFERENCE CONTACT:

Tami Greene

Phone:

412-281-1337

Email:

tgreene@ikminc.com



This project consisted of consolidating all of the chiller and emergency generators spread throughout the hospital campus into one central plant for chilled water and emergency power. The new plant will also serve a future patient tower and a new 290,000 sq. ft. Ambulatory Care Center (ACC).

Claitman Engineering provided the MEP design services for the ACC. The utility building included 6,500 tons of chilled water capacity that will be fed from four 1,500-ton chillers and one 500-ton winter chiller. In addition, a free cooling heat exchanger was installed with a capacity of 250 tons. New pumping systems were installed and new chilled water distribution piping were run to refeed the existing chilled water distribution systems associated with the removed chillers, as well as new supply mains to the ACC.

Electrically, three locations of emergency generators were consolidated to three 2 MW generators with one of the generators being redundant. New paralleling gear was installed along with new distribution systems, to reconnect the existing emergency systems to the new plant. These generators will also serve the new ACC and the future patient tower, as well as provide additional emergency power capabilities within the existing hospital. The existing utility service was also upgraded which involved increasing of the main hospital transformers from 3.75 MVW to 5 MVW and relocation of the existing overhead utility feeders to avoid the new utility building. These feeders were moved underground from new utility poles to the existing transformer building.



Verizon / Verizon Wireless

DESIGN / CONSTRUCTION TIMELINE:

1965 - Present

CLIENT:

Verizon

REFERENCE CONTACTS:

Tim Malavasi

GNOE – Facilities Engineering & Construction

Phone: 732-439-9107

Email: timothy.malavasi@verizon.com

Laura Sinigaglia-Marra

Project Manager PA Facilities Engineering & Construction

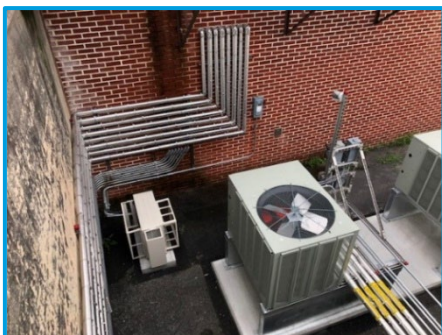
Phone: 732-379-9777

Email: laura.a.sinigaglia.marra@verizon.com



Ongoing Design task order engineering support for projects across the Commonwealth of Pennsylvania since 1965, offering full design, engineering, construction administration and commissioning support. System types include air cooled / direct cooling, underfloor systems, chilled water plants, heat recovery. Claitman Engineering strives to maintain direct ongoing communication and coordination with Verizon construction and administration personnel to develop flexible and sustainable cooling and power systems. Claitman Engineering serves as prime MEP engineering design consultant, as well as provides ancillary structural and architectural support through local design professionals throughout western Pennsylvania.

Electrical design included the replacement and/or upgrade of the incoming electrical service. We collaborated with the local utilities and meetings at the site were conducted to ensure proper requirements and installation. Additionally, design of emergency generator upgrade and/or replacement, including sizing requirements, fuel tank and storage tank layout, remote annunciation and monitoring, and all associated feeders and control wiring was performed. Portable generator connection boxes were designed to connect temporary generators to keep power to all equipment energized during the electric service and/or generator upgrade. Power distribution throughout the facility is designed to distribute power to new and additional HVAC equipment such as BARD units, air handling units, and roof-top condensing units from the commercial and essential power distribution switchboards and panelboards. Grounding plans for equipment and ductwork were designed and provided by grounding loops within the building, which are connected to the building ground bus bar. New LED lighting and controls were installed throughout the renovated spaces of the building in coordination with the ductwork and equipment. New addressable fire alarm systems were designed to replace outdated existing fire alarm / VESDA systems throughout the building.



HEALTHCARE AND SENIOR LIVING FACILITIES

Western Pennsylvania Hospital, Pittsburgh, PA

- WPH Institute
- Stress Lab
- Tri-County Cardio
- Structural Investigation at Parking Garage
- CADD Updates
- Life Safety Plans
- Ambulatory Care Center
- New Cath Lab in Service Building Addition
- Skywalk Lobby Renovations
- Seclusion Room HVAC Upgrade
- Angio Power Supply Study
- Insurance Underwriter Estimates
- Dialysis Expansion
- Natural Gas Piping Plans
- 6N Short Stay
- Water Heater Modifications – East Tower
- Mellon Pavilion - Replacement of Domestic Water Heater
- Mellon Pavilion – Fire Alarm Replacement
- Radiology Core Improvement
- Heliport
- Mobile MRI Pad
- Data Communications Prototype
- MRI Chiller Installation
- Orthopedic Inpatient Room
- Dr. Delgado's Suite
- Pharmacy/IV Prep
- MRI Replacement
- 3N Renovations
- Linear Accelerator
- Nurses' Residence & Elevator
- Fire Line Replacement
- 6th & 8th Floor Isolation Rooms
- 3rd Floor Radiology CT Equipment Replacement
- Cath Lab Replacement
- PET/CT Scanner
- Medical Staff Offices
- Wireless Network
- Copper Piping Investigation
- Emergency Power for PACS System

Putnam General Hospital, Hurricane, WV

- Operating Room Addition

Monogalia General Hospital, Morgantown, WV

- Surgery Department

Jeannette Hospital, Jeannette, PA

- ER Renovations
- ER AHU Replacement

Allegheny General Hospital, Pittsburgh, PA

- Operating Room Expansion
- Accelerator A
- Orthopedics
- EP Lab Expansion
- Interoperative Angiography
- Chest X-ray Room
- Decontamination Renovation
- Water Heater Replacement
- Animal Facility HVAC
- Patient Room Sprinkler Investigation
- TB Ventilation Study
- Emergency Power Study of Lab Medicine Area
- Cart Washer Replacement – Central Processing
- Lab Medicine Air Flow Study
- EP Lab #2
- Core Lab Project
- Federal North MRI Study
- Pediatric ICU
- Federal North MRI Installation
- 9th and 11th Floor BSL-3 Labs
- ICCC Equipment Replacement
- Cath Lab Replacement
- Cardiovascular Institute
- Digital Remote Fluoroscopy
- Cancer Center Café Electrical Design
- Pyxis Installation
- MRI 01 Level
- East Commons HVAC Study
- Decontamination Showers
- NRG Chilled Water Temperature Evaluation
- PET/CT Scanner
- ER Observation Beds
- Surgery Center AHU#2 Investigation
- OR Waiting Room
- Federal North Core Lab
- Snyder Lobby – Public Area Upgrade
- Snyder Pavilion – 1st & 2nd Floor Public Toilet Rooms
- Magovern Conference Center Lighting

Allegheny General Hospital – Suburban Campus, Pittsburgh, PA

- CT Scanner and Laser Imager
- ICU Expansion
- OR Renovation
- Washer Sterilizer Installation
- Life Care Hospitals LTACH
- OR 5 & 6

Canonsburg General Hospital, Canonsburg, PA

- Emergency Room Addition

HEALTHCARE AND SENIOR LIVING FACILITIES

Forbes Regional Campus, Monroeville, PA

- New Emergency Room Addition
- Visitor Lobby
- Acute Rehab and Psych Floor Renovations
- Heart Hospital
- Electrical Distribution System Upgrade
- Pharmacy IV Prep – USP 797
- Dialysis Suite
- CADD Updates
- Life Safety
- Residence on Fifth Avenue
- PAX System Installation
- Lab & Dining/Serving AHU Investigation
- 7th Floor Nurses Station Renovation
- Oxygen Tank Upgrade
- Power Factor Correction Investigation
- Lightning Protection
- Medical Gas Room
- Bed Storage and Offices
- Core Lab Equipment
- Exterior Light Poles
- OR Humidity Study
- Basement and 1st Floor Structural Issues
- ED Conference Room
- Anesthesiology Offices
- 6th Floor Meds

Alle-Kiski Medical Center, Natrona Heights, PA

- Cooling Tower Replacement
- Linear Accelerator
- Deaerator Replacement
- Emergency Department
- Domestic Water Service Modifications
- Boiler Replacement
- MRI at CACC
- CT Scanner Replacement
- Radiation Oncology Simulator
- Simulator Replacement
- Boiler Plant Upgrades

Charles Cole Memorial Hospital, Coudersport, PA

- New MRI
- 4th Floor Revisions
- Infectious Disease Isolation Rooms
- Lab Renovation
- Operating Room Expansion Project
- Third Floor Geriatrics
- 3rd Floor Nursing Unit

UPMC McKeesport, McKeesport, PA

- MRI Study
- Mansfield ER Modifications
- Mansfield Sprinklers
- Prescott MRI Addition
- B Level Lunchroom
- L-TACH
- Stair Replacement
- Psychiatric Smoking Room
- Parking Garage Structural Study
- PET/CT Scanner Study
- Nuclear Medicine Renovations
- Pharmacy Clean Room
- 500 Ton Chiller Replacement
- CT Scanner Replacement
- 3rd Floor Crawford HVAC & Sprinkler Study
- Heliport Evaluation
- Cardiology Suite Renovations
- Decontamination Revisions
- Radiology Reception Area
- 4th, 5th and 6th Floor Renovations – Kelly Building
- Select Specialty Hospital – Pharmacy
- Bed Tracking Suite
- Mobile PET/CT Scan
- Cancer Treatment Suite Level D – Mansfield
- Austin's Playroom

UPMC Forbes Tower, Pittsburgh, PA

- Early Study to Replace 750 KVA UPS
- Data Center Power Study
- Generator and Substation Installation
- Med Call Center

UPMC Greenville, Greenville, PA

- Generator Study and Replacement
- Humidity Control at CCU
- Kitchen/Dishwasher Renovation

UPMC Falk Library, Pittsburgh, PA

- Office Renovations
- Early Study for Rare Books Room

UPMC Southside, Pittsburgh, PA

- Boiler Replacement Study

UPMC Magee, Pittsburgh, PA

- Office Building Renovations for Dr. Gur

HEALTHCARE AND SENIOR LIVING FACILITIES

West Virginia University Hospitals – Ruby Memorial Hospital, Morgantown, WV

- OR Corridor
- PACU Renovations
- NICU Renovations
- Chiller Replacement Study
- Bone Marrow Unit HVAC Upgrade
- Cheat Lake Physician Clinic
- 8th Floor Surgical Suite Fit-out
- Help Desk
- 24KV Feeder Document Review
- Air Balancing for 19th Floor ICU
- Boiler Fuel Oil Piping
- MEP Study
- 10 Story Southeast Tower Addition
- Women's and Children's Addition

John J. Kane Hospitals, Pittsburgh, PA

- Hospital Renovations
- Fire Alarm Nurse Call
Scott
McKeesport
Ross Township
- Independent Living Unit
- Transitional Care Unit

St. Barnabas, Gibsonia, PA

- Third Floor Renovations
- First Floor Renovations
- Auditorium HVAC Investigation

HIGHER EDUCATION, EDUCATIONAL AND LEARNING FACILITIES

University Of Pittsburgh, Pittsburgh, PA

- Graduate School of Health Labs
- Ventilation System Upgrade
- Lab Renovations at 3343 Forbes Avenue
- Corrections Capacitors
- RIDC Computer Center Electrical Study
- RIDC Computer Center
- Salk Hall Computer Room HVAC
- Cathedral of Learning Room B-44 Office and
Conference Rooms
- RIDC Electrical Upgrade
- Genomics Lab
- Craig Hall Computer Room HVAC Renovations

University Of Pittsburgh, Bradford, PA

- Swarts Hall Renovation

Bloomsburg University, Bloomsburg, PA

- Emergency Power Distribution

Carnegie Library System, Pittsburgh, PA

- Woods Run Library
- Andrew Carnegie Free Library
- Andrew Carnegie Free Library Music Hall Lobby
- Brookline Library

Phipps Conservatory and Botanical Gardens, Pittsburgh, PA

- Welcome Center
- Tropical Rainforest
- Production Greenhouses

Pittsburgh Institute of Mortuary Science, Pittsburgh, PA

- Renovations

Carnegie Mellon University, Pittsburgh, PA

- Conference Room Renovations

Carnegie Science Center, Pittsburgh, PA

- Pre-Planning for Proposed New Center

BUILDING COMMISIONING

Nationwide Appraisals Building, Washington, PA Duquesne University, Pittsburgh, PA

- Multipurpose Recreation Room

Lamar Advertising Building, Pittsburgh, PA

Mountain Ridge High School. Frostburg, MD

Shadyside Academy, Pittsburgh, PA

Mt. Lebanon High School Additions and Renovations

Western Pennsylvania Hospital, Pittsburgh, PA

- Various HVAC Systems

Forbes Regional Campus, Monroeville, PA

- Various HVAC Systems

Fifth and Forbes Office Building, Pittsburgh, PA

Blackbird Lofts, Pittsburgh, PA

North Catholic High School

CORPORATE, RETAIL AND RESIDENTIAL FACILITIES

PNC, Pittsburgh, PA

- CLC Cabling
- Infrastructure A, B, C
- Switchboard A Replacement
- 31st Floor Elevator Switchboards
- 2 PNC Lighting Panel Upgrade
- Plumbing Riser Replacement PNC 2
- PNC 2 Plaza Electrical Design
- One PNC Mezzanine Power Panel Replacement
- One PNC Bus Duct Replacement
- MCC-16 Replacement
- PNC CLC Generator

Murray & Forbes Office Building, Pittsburgh, PA

- Four Story Office
- Rite Aid Pharmacy

Ice House Artist Studios, Pittsburgh, PA

- Energy Retrofit

KPM Office Building, Ford City, PA

- New Construction

Walnut Capital, Pittsburgh, PA

- 5555 Hobart Street
- Beechwood Commons

Riverview Towers, Pittsburgh, PA

- Kitchen Renovations
- Apartment Renovations

Verizon

- Over 5,500 projects on a Task Order basis since 1964

Giant Eagle Supermarkets, Various Locations

- Giant Eagle #1841 – Frederick, MD
- Giant Eagle #1842 – Frederick, MD
- Giant Eagle #8 – New Kensington, PA
- Giant Eagle #54 – Somerset, PA
- Giant Eagle #54 GetGo – Somerset, PA
- Giant Eagle #1618 – Hartsville, OH
- Giant Eagle #35 – Pittsburgh, PA
- Giant Eagle #689 – Dover, OH
- Giant Eagle #621 – Ashtubula, OH
- Giant Eagle #681 – Franklin, PA
- Giant Eagle #6384 – Churchill Commons
- Giant Eagle #604 – Poland, OH
- Giant Eagle #73 – West Mifflin, PA
- Giant Eagle #643 – Sarver, PA
- Giant Eagle #3081 GetGo – Mt. Pleasant, PA
- Giant Eagle #10 – Irwin, PA
- Giant Eagle #1609 – Moraine Pointe Plaza, PA
- Giant Eagle #6348 – Ravenna, OH
- Giant Eagle #6503 – Polaris, OH
- Giant Eagle #699 – Uniontown, PA

Clark Building, Pittsburgh, PA

- Frost & Co. Jewelry Store

North Aiken Apartments, Pittsburgh, PA

- New Construction

Gilda's House, Pittsburgh, PA

- Renovations

September 7, 2026

This statement of experience qualifications is submitted for the following lower-tier subcontractor or supplier. In the case of multiple lower-tier subcontractors or suppliers, separate forms will be submitted for previous experience of each lower-tier subcontractor or supplier.

This company has been engaged in the contracting business under its present business name for 115 years. Experience in work of a nature similar in type and magnitude to that set forth in the SOW extends over a period of 48 years.

All awarded contracts have been satisfactorily completed, except as follows (name any and all exceptions and reasons therefore, attaching additional pages if necessary):

The following contracts, covering work similar in type and magnitude to that set forth in the SOW, have been satisfactorily completed within the last 6 years preceding the due date for proposals specified in the solicitation or are now in progress for the following owners or prime contractors.

ADDRESS/CONTACT AND TELEPHONE NUMBER	WORK DESCRIPTION	VALUE	LOCATION	START/STOP
Melissa Huston 801-777-8665 Department of the Air Force 6039 Wardleigh Road Building 1206 Hill Air Force Base, UT 84056	(2) Eaton 9395 225kVA UPS Battery cabinets w/15 min. runtime 800A MBP - BMS 150kVA PDU	\$342,649.70	Lackland AFB, TX	11/21/19 – 11/20/20
Don Hultgren (719) 651-9600 Kennedy Space Center Space Commerce Way, Merritt Island, FL 32953	(1) Eaton 9395P 300kW UPS (4) Battery Cabinets - RMP	\$346,519.00	Kennedy Space Center, FL	
Col. Karen Hill (907) 552-2769 JBER Elmendorf AFB, AK 99506	(4) Bldgs (4) Eaton 93PM (60-120kVA)	\$512,356.57	JBER, AK	5/1/23 – 4/3/24
TSgt Adam Gagnon +81 098-938-1111 ext 634-3153 Kadena AB Japan	(1) Eaton 93PM 30kW MBP Battery cabinets w/28 min. runtime	\$315,000.00	Kadena AB, Japan	8/24/21 – 8/23/22

Sincerely,

Eaton Corporation



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
USPFO Buckhannon Restroom Renovations	Renovation	\$1,200,000	\$1,040,000	13% Under 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 <i>Project Engineer WV Division of Natural Resources 1000 Conference Center Drive Logan, WV 25601 (304) 885-6100 roger.c.wolfe@wv.gov</i>	Jim Skaggs <i>Technical Analyst WVARNG – Division of Engineering & Facilities 1707 Coonskin Dr. Charleston, WV 25311 304-561-6550 Robert.a.skaggsii.nfg@army.mil</i>	Cindy Fisher <i>Procurement Administrator WV Dept. Of Agriculture (304) 558-2221 cfisher@wvda.us</i>
Bob Ashcraft <i>Safety and Ancillary Projects Monongalia County Schools 533 East Brockway Street Morgantown, WV 26501 (304) 657-4079</i>	Dave Parsons <i>Energy Program Manager WV General Services 112 California Avenue Building 4, 5th Floor Charleston, WV 25305 (304) 610-1706 David.K.Parsons@wv.gov</i>	Richard J. Briggs <i>Vice President Lutz Briggs Schultz & Assoc. Inc. 239 Country Club Drive Ellwood City, PA 16117-5007 (724) 651-4406 lbsa@zoominternet.net</i>

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

Our team will begin by reviewing all existing documentation related to the existing OPS Center power, generator, and UPS systems and their supporting mechanical systems to gain an initial understanding of the original systems' design intent and operation. Claitman and Eaton will support MEI in a deep field investigation will both verify the accuracy of the existing documents and identify issues with functionality and operation of the UPS systems, with each bringing their particular specialties to bear. We will also review the history of issues related to the UPS' by speaking with shareholders to understand concerns. Both the existing documents review and field verification will allow us to create an electrical "model" of the facility to begin the design process.

Schematic

Upon completion of the facility evaluation and creation of the electrical model, our team will begin the design process. A detailed electrical load analysis will be undertaken to determine the load. The analysis may be by equipment label, field measurement, or both. We will look at power quality if that is a concern including waveform harmonic analysis. The load study will be compared to the existing equipment for size verification. Initial equipment selections will begin to determine footprint requirements and installation realities. Once the initial equipment is sized, cooling loads will also be calculated to determine the impact of the changes on the existing UPS space cooling equipment. Discussions with the Owner related to control and maintenance requirements will direct us in the best system configuration. Another important discussion item with the WVANG is the continued operation of the OPS Center. We will work with the WVANG to determine a solution to minimize downtime of both the UPS and its cooling systems. If during the design process we determines that Architectural are needed, Montum Architecture a will provide those services and assist the team. The sizing and location of the equipment will determine if structural modifications are required, which Arrow will provide. 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. The initial schematic design will be the basis of the schematic design documents. We will provide cost estimates using real material quotes and take-offs to convey projected costs to the owner.

Design Development

We will take input from the owners based upon review of the 35% design documents and proceed. In Design development, the team will work out the "buts and bolts" of the replacement, interacting with the Guard throughout. It is in the phase that we will determine how best to implement the project and minimize impact on the facility. While the requirements of the EOI give specific milestones for progress sets (35%, 65%, 95%, & 100%), we 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 we 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. We believe 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 are the final formalization of the design and will be completed using both the results of the progress set reviews and internal peer review. Of particular importance on this project is ensuring the performance requirements of both the contractor and the equipment suppliers are spelled out in clear detail. This sets expectations for all involved as this type of system is ultimately judged on its performance in real-time operation. One requirement is commissioning, and the documents must be very straightforward and clear on responsibilities in this area. We understand 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. We 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 the team. MEI will provide addendum documents as needed. We 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. We 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. We believe 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. Commissioning of the UPS' and their associated



systems is critical to success and we will ensure that this commissioning is completed by the contractor and equipment suppliers. Another company standard is for our staff to be present for testing and balancing (TAB), equipment start-up, owner training, system testing, and commissioning. While these events occur at the very end of the project, they are critical to ensure the new systems operate as designed. We 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





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

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder: 2045819

Doc Description: CEOI - Camp Dawson Operations Building UPS Replacement Desig

Reason for Modification:

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2026-08-19	2026-09-08 13:30	CEOI 0603 ADJ2700000002	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State :

Country :

Zip :

Principal Contact :

Vendor Contact Phone:

Extension:

FOR INFORMATION CONTACT THE BUYER

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

Vendor
Signature

FEIN#

-1386

DATE

8/19/26

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

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

(Printed Name and Title) Craig Miller, Pres

(Address) 429 Laurel Run Rd, Carmichaels, PA 15320

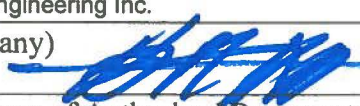
(Phone Number) / (Fax Number) 304-291-2234 / NA

(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) 

(Signature of Authorized Representative)

Craig Miller, Pres 8Sep26

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

304-291-2234/ NA

(Phone Number) (Fax Number)

304-291-2234

(Email Address)