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come, Robert M Ross icitation Response(SR) Dept: 0603 ID: ESR05132200000007136 Ver.: 1 Function: New Phase: Final Modified by batch , 05/17/2022	Procurement Budgeting Accounts Receivable Accounts Payable
Header () 1	
General Information Contact Default Values Discount Document Information Clarification Request	E List View
Procurement Folder: 1039904	SO Doc Code: CEOI
Procurement Type: Central Purchase Order	SO Dept: 0603
Vendor ID: 000000206862 💁	SO Doc ID: ADJ2200000014
Legal Name: MCKINLEY AND ASSOCIATES INC	Published Date: 5/4/22
Alias/DBA:	Close Date: 5/17/22
Total Bid: \$0.00	Close Time: 13:30
Response Date: 05/13/2022	Status: Closed
Response Time: 13:24	Solicitation Description: Huntington Tri-State Armory HVAC Renovation Design
Responded By User ID: dcarenbauer	Total of Header Attachments: 1
First Name: David	Total of All Attachments: 1
Last Name: Carenbauer	
Email: dcarenbauer@mckinleya	
Phone: 304-233-0140	



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:	1039904			
Solicitation Description:	Huntington Tri-State Armory HVAC Renovation Design			
Proc Type:	Central Purchase Order			
Solicitation Closes		Solicitation Response	Version	
2022-05-17 13:30		SR 0603 ESR05132200000007136	1	

VENDOR						
00000206862 MCKINLEY AND ASSOCIATES INC						
Solicitation Number:	CEOI 0603 ADJ2200000014					
Total Bid:	0	Response Date:	2022-05-13	Response Time:	13:24:09	
Comments:						

FOR INFORMATION CONTACT T David H Pauline 304-558-0067 david.h.pauline@wv.gov	HE BUYER		
Vendor Signature X	FEIN#	DATE	
-	FEIN#	DATE	

and conditions contained in this solicita

Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Huntington Tri-State Armory HVAC Renovation Design					0.00
Comm	Code	Manufacturer		Specifica	ation	Model #
811015	508					

#### **Commodity Line Comments:**

#### **Extended Description:**

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



## West Virginia Army National Guard



### CEOI 0603 ADJ220000014

Huntington Tri-State Armory HVAC Renovation Design





13 May 2022

David H. Pauline Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

Dear Mr. Pauline and Members of the Selection Committee;

McKinley Architecture and Engineering is pleased to provide the Acquisitions and Contract Administration Section of the Purchasing Division, on behalf of the West Virginia Army National Guard, Construction and Facilities Management Office, with our Expression of Interest for architectural and engineering design services to renovate all HVAC systems for the Huntington Tri-State Armory in Kenova, WV. As you review this submission, we emphasize the following strengths of McKinley Architecture and Engineering with respect to your project:

*McKinley Architecture and Engineering* (*McKinley & Associates*) is a full-service architectural and engineering firm that been providing design services since 1981, and are celebrating over 40 years in business. We are excited to announce that for the **2nd consecutive year**, McKinley appears on the **Inc. 5000 list** the **most prestigious ranking of the nation's fastest-growing private companies!** With offices in **Charleston** and Wheeling, WV and Pittsburgh, PA, we support a professional staff of **Engineers**, **Architects**, an **HVAC Qualified Commissioning Process Provider**, **Construction Contract Administrators**, an **AIA Safety Assessment Program (SAP) Evaluator**, and more. Our staff also includes a **LEED Accredited Professional**, **who is a Mechanical Engineer**, and 3 **LEED APs specializing in Building Design and Construction** that have the experience to add **energy efficient** features into your project.

Your **Project Manager** is **Tim E. Mizer, PE, RA, QCxP**, our **Director of Engineering Services**, whom is also a **Qualified Commissioning Process Provider** who has been formally trained to fully understand how integrated **HVAC systems** function and how systems interface with others to run your building efficiently. During the past 40 years, our firm's expertise has been called upon many times upgrading outdated and antiquated machinery, designing energy efficient systems, and even evaluating and correcting errors in existing design.

We are ready to begin immediately and will meet all your Goals and Objectives. Thank you for reviewing our submission and considering McKinley Architecture and Engineering for your project; we are very excited about the possibility of working with the WVARNG again.

Sincerely,

Érnest Dellatorre Director of Business Development McKinley Architecture and Engineering (304) 340-4267 x115 edellatorre@mckinleydelivers.com

# **Corporate Information**

### Firm History

Founded in 1981, McKinley Architecture and Engineering is a multidiscipline full service A/E firm, offering comprehensive professional services in Architecture, Engineering, HVAC Commissioning, Energy Efficient and Sustainable (LEED) Design, Safety Assessment Program (SAP) Evaluation, Construction Contract Administration, and more. We have a broad range of skill and experience for projects involving HVAC, governmental, sustainable and energy efficiency, commercial, office, and schools to name a few. Over the years, our firm won multiple State and National awards and recognitions for our designs. McKinley has made both the 2020 & 2021 Inc. 5000 lists, the most prestigious ranking of the nation's fastest-growing private companies!





Firm Information Ernest Dellatorre **Director of Business Development** 

Tim Mizer, PE, RA, QCxP Director of Engineering Services

Patrick J. Rymer, AIA, ALEP **Director of Architectural Services** 

### Date of Incorporation

July 1, 1981 Wheeling, West Virginia

### Professionals on Staff

Architects Engineers Arch./Eng. Designers LEED AP BD+Cs **Historic Preservationist Construction Admins. HVAC Commissioning Provider Interior Designer** SAP Evaluator ALEP (CEFP) REFP

### Locations

32 Twentieth Street Suite 100 Wheeling, WV 26003 P: 304-233-0140 F: 304-233-4613

129 Summers Street Suite 201 Charleston, WV 25301 P: 304-340-4267

5000 Stonewood Drive Suite 220 Wexford, PA 15090 P: 724-719-6975

### Credentials

McKinley Architecture and Engineering is a member of the following organizations:

A4LE (formerly CEFPI), ACI International, AIA, ASCE, ASHRAE, ASPE, AWI, BOCA, NCARB, NFPA, WVEDC, and more

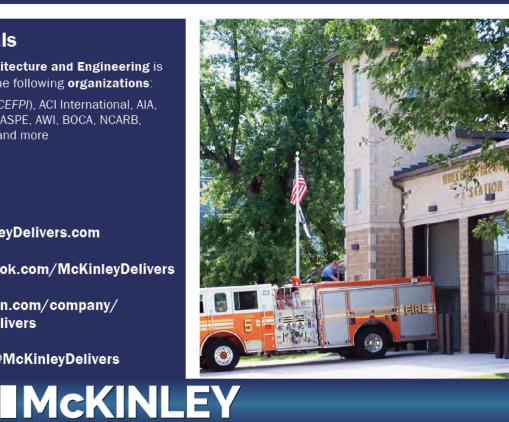
### Follow Us

www.McKinleyDelivers.com

www.Facebook.com/McKinleyDelivers

www.LinkedIn.com/company/ **McKinleyDelivers** 

Instagram: @McKinleyDelivers



# **Project Approach**

First off, one of the more exciting aspects of our job is **listening to you**, our client, in how you envision this project, and transforming your ideas into realities. **This can only be accomplished by effectively working together with you**. We use and welcome your input throughout the project. We continually achieve success in projects by maintaining time and cost management, quality control and excellent communication amongst the client and contractors. We hold weekly meetings to discuss your project, the budget, schedule and quality assurance. We provide Documented Minutes of all of our meetings and encourage the West Virginia Army National Guard, Construction and Facilities Management Office and Huntington Tri-State Armory representatives to participate in these meetings.

You will see in this submittal that we have included **several professionals** to handle your HVAC project. We have **40 employees** on staff, so if your project requires additional staffing, we have the ability to dedicate additional resources to accomplish your goals.

We have completed a multitude of **HVAC assessments, renovations, replacements, upgrades, and/or repairs projects** over the past 40 years. During this time our expertise has been called upon many times upgrading outdated machinery, scheduling for phased construction around occupied areas of the buildings, bringing the systems and load requirements up to compliance, and even evaluating and correcting errors in existing design (pipe sizing, piping material errors, control valving etc). We have completed several HVAC replacement projects where we made the systems more **energy efficient**. We currently support clients on a number of significant HVAC projects that illustrate this ability.

As mentioned, your Project Manager is Tim E. Mizer, PE, RA, QCxP; our Director of Engineering Services who is a very talented and unique professional being a Professional Engineer, a Registered Architect, as well as a Qualified Commissioning Process Provider where he has been formally trained to fully understand how integrated HVAC systems function and how systems interface with others to run your building efficiently, and has a comprehensive knowledge of the full American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Commissioning Process. Also, being both an Engineer and Architect has provided him with a total understanding of the engineering components and the process necessary for integrating architectural design and building systems.

In addition, Kurt A. Scheer, PE, LEED AP, is our Senior Mechanical Engineer, as well as a LEED Accredited Professional. He has over 20 years of experience in the industry with a focus on mechanical systems design. Additionally, as a LEED Accredited Professional, Kurt has experience with LEED Certified projects and energy modeling, and he will design an energy efficient HVAC system that will meet all of your goals and objectives.

We know the new technology and we know how and when to apply it effectively. Our Architects and Engineers have been on the cutting edge of efficient design for years; we know the newest technologies in HVAC systems. We have a LEED Accredited Professional, and 3 LEED APs specializing in Building Design & Construction who can help choose energy efficient solutions such as energy efficient HVAC systems, low maintenance materials, locally sourced materials, etc. We have designed LEED Certified and LEED Registered projects, as well as several projects listed on the U.S. Environmental Protection Agency's ENERGY STAR program.



# **Project Approach**

Our design team will also strive to achieve the **best overall indoor air quality in the building**; studies have shown that it not only has health benefits to the workers, but also enhances the environment. To achieve this our team pays careful attention to the exterior enclosure to eliminate water penetration and minimize air leakage, specifies systems and materials that limit the pollutants from entering the building, and our HVAC engineers control the quality and quantity of fresh air into the building maximizing the air quality and energy efficiency. **We offer thoughtful design options that enhance the space**, protect the environment, and meet your budget.

McKinley Architecture and Engineering takes pride in ourselves for designing projects tailored to all of our clients, and we understand every client has unique goals and objectives. This Huntington Tri-State Armory HVAC project will be successfully designed to meet your needs, and this will be accomplished by effectively working together with you. We use and welcome your input throughout the project. We will design what YOU want.

We begin each project with on-site investigations, review of the existing conditions, and study of any early planning and existing documentation/drawings. Our approach to design requires a dialog with the owners and the end users of the facility, so a **kickoff meeting** will be held with all available **WVARNG and Huntington Tri-State Armory representatives**, along with our **design professionals**. Through this on-site meeting and investigations of the Huntington Tri-State Armory building, we will better evaluate the problems or deficiencies in the current HVAC systems, and we will propose options for resolving the issues. We will then use all this information to produce a full reporting of the current conditions, with our recommendation of rework to best fit the present needs of this building. From our overall facility surveys, we will then create floor plans of your existing building from which we will then design and specify new systems and equipment to best fit the standards of today's **design** and **energy efficiency standards**.

Also from this meeting the **Owners Project Requirements** (OPR) will be defined and documented, to be used as a **guideline through the design phase**. The OPR is a living document and will be revised as changes or revisions are required throughout the project. From the OPR, McKinley will work with you to develop a priority list of the construction components. A project schedule will also be developed at this time; the schedule will cover design, bidding and construction. The OPR and the project schedule will require input from the WVARNG. During design, review meetings will be held to verify that the project is following the OPR, submission will include drawings and technical specifications, and that we are within budget. If budget issues are present we will review the priority list with you and determine how to proceed. Upon approval by the WVARNG, the bidding documents will be completed. By meeting early in the design phase, any issues that arise can be resolved without affecting the design and/or construction schedule. Upon completion of the Bidding Documents, a final design review meeting will be held to review the design, schedule and budget. The bidding documents will be sent to the Authority Having Jurisdiction for a final design submission. Through the Construction, McKinley Architecture and Engineering will complete Construction Contract Administration services, attend meetings, have site visits, answer RFI's, etc.

The timeline of any project, especially an HVAC project, is critical. Whereas almost all systems and equipment have a multi-month lead time, potential issues could be lead times for hardware and equipment, or compatibility with any existing systems. McKinley Architecture and Engineering has a great working relationship with various HVAC suppliers, which has helped



# **Project Approach**

us reduce the response time for our recent projects. A positive relationship with the installing contractors is also needed, and we have worked with the major HVAC contractors in the area.

Our HVAC redesign will include any required **Building Load Calculations** of the renovation space for **accurate sizing of new equipment**. This will be used for the evaluations of the existing spaces and also to include any additional new conditions as described by the Huntington Tri-State Armory's personnel. Additionally, we can commission the project to ensure everything is working properly, and to teach your maintenance personnel how to use the machinery and gives them all the correct manuals. McKinley can work with the Contractors and Testing Adjusting & Balancing (Rebalancing) Company to verify proper system operation. The purpose of this verification is to ensure all systems and equipment are operating as intended, and to the designed efficiency.

McKinley Architecture and Engineering has built its reputation over the past 40 years on our ability to deliver projects on time, budget, and with minimal amount of change orders. Many of our projects over the past five years have been completed **on schedule and with less than 1% change orders, which is well below the national average.** 

Our **Quality Assurance Program** starts with a peer review where a registered professional not involved in the design becomes reviewer of the project before going to bid. Additionally, at our regularly scheduled project meetings the entire design team is constantly reviewing the process. The entire team is involved in the design process **from the beginning** so that they know why the project was designed and how the building is intended to be used. This insight is especially advantageous to the on-site **Construction Contract Administrator (CA)**. Our CAs have an important role as being the **liaison between the Owner, Contractor, and Architect/Engineers.** The primary objective of the Construction Contract Administration services is to ensure completion of work the way the client wants it - **as scheduled and as budgeted.** In addition, they also initially review change orders and contractor's cost proposals, review payment requests and assembly of the project close-out documents. The background knowledge on the project helps the CA better understand the end product, helps him communicate with the contractors and it provides valuable constructability insight for our designers when questions are brought back from the field, and verify that close-out documents are submitted in a timely manner upon Substantial Completion.

The **project completion time frame expectation** for **Project Closeout** is defined in the front end of the Project Manual in the Specifications so that the contractors are aware of the requirements before submitting a bid. Our Construction Contract Administrators monitor progress during the project and verify that closeout documents are submitted in a timely manner upon Substantial Completion, and they can specify tools and goals (such as deadlines or monetary values) to encourage compliance.

Furthermore, our **11-Month Walk-Through** is a process where our professionals return to your facility eleven months after the project is completed. At that time they review all the work that was completed and check all warranties. We are making sure all of the covered work is in order and that the warranties do not expire with equipment or product not working properly. It should be noted that McKinley Architecture and Engineering has been performing our eleven month walk-through as part of our Standard of Care; long before it was adopted as an AIA 101 Standard.



# Commissioning

On staff, we have a **Qualified Commissioning Process Provider** who can provide independent commissioning services, not only on new facilities but also existing facilities.

This professional is Tim E. Mizer, PE, RA, QCxP. His QCxP accreditation was earned at



the University of Wisconsin-Madison. He has been formally trained to fully understand how integrated HVAC systems function and how systems interface with others to run your building efficiently, and has a comprehensive knowledge of the full American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Commissioning Process. From this, we commission the project to ensure everything is working properly, and to teach the maintenance personnel how to use the machinery and gives them all the correct manuals.

For existing buildings, the commissioning provider can troubleshoot the existing systems to determine the fault of

non-performing equipment or the reasons for uncomfortable spaces.

For new buildings and their systems, commissioning entails the review of the design plans, verifying the installations, and the oversight of the testing of the mechanical and electrical systems to ensure the owner is getting the type and quality of product expected.



# Sustainable "Green" Design

uildings designed today will need to meet the demands of the future; McKinley Architecture and Engineering identifies the changes necessary in the design of today and to meet these demands. This approach helps to retain the buildings' long-term profitability and value, which achieves the buildings' sustainability.

McKinley approaches ecological design from a business perspective, offering proactive solutions to complex problems such as **indoor air quality**, energy efficiency, resource depletion, and water quality. With governmental and commercial office project experience, the McKinley Team can work alongside local designers to provide sustainable design and construction guidance. We also offer full architectural design services and guided design workshops on sustainable design issues.

Our Philosophy is to provide our clients with experienced leadership as well as state-ofthe-art and **innovative** design expertise to accomplish the goals of your projects. Function, economics and versatility, in addition to the development of strong aesthetic appeal, are crucial elements in our design process. We also believe that enhancement of the physical environment in which each individual lives and works should add significantly to the enjoyment of life. Our firm has dedicated our professional skills to attain these goals.

For a few recent sustainable awards, McKinley Architecture and Engineering was



presented with the 2019 Governor's Award for Leadership in Buildings Energy Efficiency at the Innovation & Entrepreneurship Day at the Capitol! We were recognized for our commitment to sustainability and energy efficiency in the design of office buildings, schools, multi-use facilities, and a wide variety of commercial, industrial, government, and historical structures.

Our designs have also won West Virginia Department of Environmental Protection's Clean Energy Environmental Award, 2 Black Bear Awards for the Highest Achievement for the WV

Sustainable Schools program, 2 U.S. Department of Education Green Ribbon Schools, and a Gold Medal Green Building Award by Building of America, among others!

We also have a project that is **Collaborative for High Performance School (CHPS) Registered**; the United States' first green building rating program designed for schools.

Furthermore, we have designed 4 projects listed on the U.S. Environmental Protection



Agency's ENERGY STAR program: Building 55: West Virginia State Office Building in Logan, Hilltop Elementary School, Cameron Middle/High School, and Johnson Elementary School. To receive an ENERGY STAR, you need to perform in the top 25% of the most energy efficient projects in the program. Building 55: West Virginia State Office Building is one of the most energy efficient buildings in the State, and is in the Top 5% of all Energy Star rated buildings in the Country!

# Leadership in Energy and Environmental Design



**LEED®** (Leadership in Energy and Environmental Design) Green Building Rating System<sup>™</sup> developed by the U.S. Green Building Council (USGBC) is the nationally accepted standard for the design, construction, and operation of high performance green buildings (<u>www.usgbc.org</u>). In January 2001, our firm was the first organization in West Virginia to join the USGBC. No other WV firm joined until nearly 2 years later! We have LEED Accredited Professionals on staff, along

with our skilled architectural/engineering team, who will efficiently and cost effectively achieve certification under this standard or we can guide you through the process in order to develop sustainability goals specific to your project.

We have LEED<sup>®</sup> Accredited Professionals, including 3 who are specialized in Building Design & Construction:

- Kurt A. Scheer, PE, LEED AP
- Christina Schessler, AIA, LEED AP BD+C
- Jeffrey W. Wessel, AIA, LEED AP BD+C
- Thomas R. Worlledge, AIA, LEED AP BD+C, REFP



Our **LEED Certified Projects** are (LEED Rating System in parentheses):

Hilltop Elementary School in Sherrard, WV (LEED for Schools 2.0)
- The First LEED Certified School in the State of West Virginia!

**West Virginia State Office Complex** in Logan, WV (LEED NC 2.2)

All of our current LEED Registered Projects are (LEED Rating System in parentheses):

- Bellann in Oakhill, WV (LEED EB O&M)
- Cameron Middle/High School in Cameron, WV (LEED for Schools 2.0)
- SMART Office in Williamson, WV (LEED CI)

The LEED AP Specialty Logos signify advanced knowledge in green building practices and specialization in a particular field.



MCKIN

ARCHITECTURE + ENGINEERING

The LEED AP BD+C designation that Thom, Christina, and Jeff have achieved represents specialization in commercial design and construction.

Christina Schessler, AIA, LEED AP BD+C has been a

#### Thomas R. Worlledge, AIA, LEED AP BD+C, REFP has



AIA, LEED AP BD+C, REFP has been a member of the USGBC since 2001; he was the first LEED Accredited Professional in the state of West Virginia! As a professional trainer for the Sustainable Building Industries Council, he teaches other design professionals in the art of High Performance School design. He

is also a Founder & Chairman of the Board for the US Green Building Council's West Virginia Chapter.

The 'USGBC Member Logo' is a trademark owned by the U.S. Green Building Council and is used by permission.



member of the USGBC since 2009. In 2012 she received her Masters in Historic Preservation, so not only can she incorporate LEED "Green" aspects into new buildings; she can even incorporate energy efficient design into renovation/ preservation projects. Twenty

percent of a building's energy consumption is embodied in the existing physical structure itself!

# Construction Contract Administration & On-Site Representation

Construction Contract Administrator Involved from the Beginning of the Design Phase

**Observe the Construction Progress** 

Liaison between the Owner, Contractor, and Architects/Engineers

**Responsible for All Construction Progress Meetings and Minutes** 

Monitor the Construction Schedule

Ensure that the Contractor is Following the Construction Documents

Verify Pay Application and Change Orders

Typically On-Site Once Every Two Weeks (Provide Additional On-Site Representation if Requested)



Our **Construction Contract Administrators (CA)** have an extra responsibility than what most firms' Construction Administrators have; our CAs are a part of the design process from **Day 1** (they are not thrown into the project only when construction starts; they are here from the beginning), so they know the ins-and-outs of the project. Our CAs have an important role as being the **liaison between the Owner, Contractor, and Architect.** The primary objective of the Construction Contract Administration services is to ensure completion of work the way the client wants it **- as scheduled and as budgeted.** Our CAs evaluate the quality of the work to verify that it meets the level required by clients; in addition, they monitor the construction progress, are responsible for all construction meetings and minutes, and they verify pay application and change orders. The Construction Contract Administrator is typically onsite once every two weeks, but we can provide additional on-site representation if requested.



# **Design Team Flow Chart**



### Project Manager / Point of Contact

Tim E. Mizer, PE, RA, QCxP

#### **Engineering Team**

Tim E. Mizer, PE, RA, QCxP Director of Engineering Services / Architectural Engineer / Architect / HVAC Qualified Commissioning Process Provider

Kurt A. Scheer, PE, LEED AP Senior Mechanical Engineer / LEED Accredited Professional

> Alan M. Gaber, PE Electrical Engineer

Scott D. Kain Engineering Production Manager / Senior Plumbing Engineering Designer

> **Richard G. Berger** Senior Mechanical Engineering Designer

Michael J. Clark Senior Electrical Engineering Designer

David A. Ullom BIM Coordinator / Fire Protection Engineering Designer

### Architecture

Thomas R. Worlledge, AIA, LEED AP BD+C, REFP Senior Architect / LEED Accredited Professional specializing in Building Design & Construction

Construction Contract Administration

Robert E. Smith

ARCHITECTURE + ENGINEERING

\* McKinley is willing to dedicate more professionals if they are needed, including more Architects, Designers, LEED APs, CAs, etc.

# Tim E. Mizer, PE, RA, QCxP

Architectural Engineer / Architect / Commissioning Provider

### **Director of Engineering Services**

#### EDUCATION:

Kansas State University B.S. Architectural Engineering - 1983

University of Cincinnati Architecture

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Engineering in: West Virginia Ohio

Registered Architect in: Ohio

Qualified Commissioning Process Provider

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Director of Engineering Services Architect / Engineer / Commissioning Wheeling, WV (1995 to present)

M.C.C. Engineering Director of Design Columbus, Ohio (1988-1995)

Schooley Caldwell and Associates Electrical & Mechanical Design Columbus, Ohio (1986-1988)

Mizer Design Free Lance Architectural Engineering Design Columbus, Ohio (1985-1986)

Envirotek, Inc. Drafting and Electrical & Mechanical Design Raleigh, NC (1984-1985)

#### SUMMARY OF EXPERIENCE:

A very talented and unique professional who is registered **both** in **engineering** and **architecture** which has provided him with a total understanding of the engineering components and the process necessary for integrating architectural design and building systems. Furthermore, as a **Qualified Commissioning Process Provider**, he has been **formally trained to fully understand how integrated HVAC systems function and how systems interface with others to run your building efficiently. He understands that the HVAC system's performance can reduce operating and maintenance costs, improve the comfort of a building's occupants, and extend the life of equipment.** He joined McKinley Architecture and Engineering in 1995, and has over 30 years of experience. As the **Director of Engineering Services**, Mr. Mizer's presence is a key to the design procedures required to coordinate the functionality of the engineering systems into the aesthetics of a building space.

#### NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - multiple projects, including HVAC renovation

United States Postal Service - worked on a multitude of Post Offices in WV & PA, including dozens of HVAC projects (many involved Commissioning).

West Virginia State Police - dozens of renovations, additions, and new detachments, including multiple HVAC modernization projects

West Virginia Department of Transportation, Division of Highways -Buckhannon & Moundsville Headquarters HVAC

Building 55: WV State Office Complex in Logan (LEED Certified)

Building 34: WV State Office Complex in Weirton

WVDHHR's Ohio County Office fit-out / renovations, including HVAC

Steel Valley Regional Transit Authority renovations

Cabela's Eastern Distribution Center

Carenbauer's Distribution Warehouse

Mattern Tire Service Center

WVU State Fire Training Academy

Wheeling Island Fire Station

Raleigh County Emergency Services Authority

Nicholas Co. Division of Homeland Security & Emergency Management

The Towers Building renovations, including HVAC

West Virginia University - multiple renovations, additions, and new buildings, including multiple HVAC projects

West Virginia School Building Authority - Dozens of HVAC projects State-Wide, as well as new construction and renovations



## Kurt A. Scheer, PE, LEED AP Senior Mechanical Engineer / LEED Accredited Professional

#### EDUCATION:

Penn State University B.S. Architectural Engineering - 2001

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Engineering in: Pennsylvania West Virginia

Member: US Green Building Council

ASHRAE

ASPE

#### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering Senior Mechanical Engineer Wexford, PA (2020 to present)

Allen & Shariff Corporation Senior Mechanical Engineer Pittsburgh, PA (2018-2020)

BDA Engineering, Inc. Senior Mechanical Engineer Homestead, PA (2006-2018)

Allen & Shariff Corporation Mechanical Engineer Pittsburgh, PA (2004-2006)

LLI Technologies, Inc. Mechanical Engineer Pittsburgh, PA (2001-2004)

#### SUMMARY OF EXPERIENCE:

Mr. Scheer is a **Mechanical Engineer** with 20 years of experience in the Architectural Engineering industry with a focus on mechanical systems design. In addition, Kurt has overseen electrical, plumbing, and fire protection engineering for all his projects for 15 years. Market sectors such as hospitality, higher education, and commercial office are areas where he has significant experience. Additionally, Mr. Scheer has experience with **LEED Certified** projects and energy modeling, and he will design an energy efficient HVAC system that will meet all of your goals and objectives.

#### NOTABLE PROFESSIONAL EXPERIENCES:

Brooke County Judicial Courthouse renovations

City of Moundsville - Municipal/Public Safety Building

Tyler County Commission - Judicial Annex Building

Nicholas County Division of Homeland Security & Emergency Management - E911 and Emergency Operations Center

Fort Henry Building - Fourth Floor office build-out

City of Weirton - Park Drive / Three Springs Drive Development

YWCA Renovations

Light of Life Rescue Mission

Fayette County Schools - new Meadow Bridge School PK-12 School & School Based Health Clinic

Harrison County Schools - Gore Elementary School build-out renovation / addition

Harrison County Schools - new Lost Creek Elementary School

Ohio County Schools - Warwood School renovations

Ohio County Schools - Wheeling Park High School Athletic Complex

Ohio County Schools - Woodsdale Elementary School cafeteria addition & renovations

Wirt County Schools - Several ESSERF Projects County-Wide, including HVAC and Cooling Tower replacement



## Alan M. Gaber, PE

**Electrical Engineer** 

#### EDUCATION:

Ohio Northern University B.S. Electrical Engineering with a Computer Science Option - 1986

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

**Registered Engineer in:** Ohio Pennsylvania

#### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering Electrical Engineer Wexford, PA (2022 to present)

Stantec Architecture Electrical Engineer Butler, PA (2018-2022)

Penn-Ohio Electrical Contractors Electrical Engineer Masury, OH (2013-2018)

HHSDR Architects & Engineers Electrical Engineer Sharon, PA (1995-2013)

Sturgeon Engineering, Inc. Engineer-in-Training Grove City, PA (1987-1995)

United Engineers & Constructors Engineer-in-Training Philadelphia, PA (1986-1987)

#### SUMMARY OF EXPERIENCE:

Mr. Gaber is an Electrical Engineer, who for over 36 years, has a broad range of electrical and professional experiences designing building systems. He has experience working collaboratively with others to research and identify the clients' needs, and successfully meeting those needs. Alan takes pride in providing designs that are concise, efficient and within the client's budget. Each phase of his career has exposed him to different aspects of electrical design for the building construction industry, from utility company commercial service design, to commercial, industrial & institutional building design, and electrical construction management. Mr. Gaber's experiences also include K-12 & post secondary education, municipal/civic, personal care/senior living, and other sectors of business. His electrical design gualifications include lighting, power distribution, emergency/standby power, onsite generators, telephone/sound/communications, data communications, master clock/program, audio/video, fire alarms, security alarms, video surveillance, electric access, and more.

#### NOTABLE PROFESSIONAL EXPERIENCES:

#### Stantec Architecture'

Responsible for electrical engineering design for various commercial, institutional and industrial buildings. Participate in all phases of the design process from project inception through project closeout. Provide oversight of draftsman and junior engineers to produce complete, biddable documents. Review equipment submittals, answer contractor questions, observe construction. For one project example, the Industrial Plan Expansion in Florence, KY, Mr. Gaber's role included the electrical design and construction coordination of a 94,500 SF addition to an existing manufacturing plant. Project included MV switchgear, MV power distribution, and LV power distribution to feed new manufacturing equipment. Building expansion included lighting, power distribution, alarm and communications systems design. Project was completed and put into operation in third quarter 2021.

#### Penn-Ohio Electrical Contractors'

Responsible to oversee material disbursement, scheduling, project build-out, coordination with other trades, liaison with Owner and Design Team. For one project example, the 30 MVA Substation in Ellwood Crankshaft & Machine, Sharon Forge, Mr. Gaber oversaw the construction of a new electrical substation to transform 138kV Utility Power to 12,470V sub-distribution power to feed new forging manufacturing plant. Responsible for all aspects of project management including receipt of materials, scheduling work and coordinating start-up. This project was delivered on time and within budget.

\* previous work experience with a firm other than McKinley Architecture and Engineering



Scott D. Kain Engineering Production Manager / Senior Plumbing Designer

#### EDUCATION:

Technology Education College / Ohio State University Associates in Mechanical Design - 1996

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Engineering Production Manager Engineering Designer Wheeling, WV (2001 to present)

HAWA Inc. Mechanical Designer Columbus, OH (1998-2001)

Autotool Inc. Engineer Columbus, OH (1995-1998)

#### SUMMARY OF EXPERIENCE:

Mr. Kain, our Engineering Production Manager, is an accomplished engineering designer who has performed in all the engineering trades we provide; specializing in electrical, plumbing, and fire protection. He has been utilized for various McKinley projects that needed additional mechanical, structural, and architectural manpower. In addition, Mr. Kain has also provided 3D renderings, to aid in business development, during his long tenure at McKinley Architecture and Engineering.

#### NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - Multi-Purpose Building at Camp Dawson in Kingwood, WV, and AASF#1 Maintenance Building & Hangar renovations

Building 55: WV State Office Complex in Logan (LEED Certified)

Building 34: WV State Office Complex in Weirton

West Virginia Health & Human Resources Wheeling Office renovations

WVDRS Wheeling District's new office space fit-out

United States Postal Service - multiple projects / new & renovations

West Virginia State Police - multiple projects State-wide, including renovations, additions, and new construction

City of Moundsville - New Municipal Public Safety Bldg

Tyler County Commission - Judicial Annex & Sheriff's Office

West Virginia University - University Police Building fit-out

West Virginia University - new State Fire Training Academy

Wheeling Island Fire Station

Brooke Co. Commission - Judicial Center & Historic Courthouse

Belmont County Commission - Courts & Offices build-outs VAMC Beckley

WVU IOT - Maclin Hall & Conley Hall renovations

Panhandle Cleaning & Restoration warehouse/garage/office building

Cabela's Eastern Distribution Center

Carenbauer's Distribution Warehouse

Steel Valley Regional Transit Authority

Wheeling Island Hotel • Casino • Racetrack multiple projects

Orrick's Global Operations Center

Millennium Centre Technology Park

Harrison County Schools - several projects County-wide

Ohio County Schools - several projects County-wide



## **Richard G. Berger** Senior Mechanical Engineering Designer

#### EDUCATION:

CCAC of Allegheny County Concentration: HVAC

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Pennsylvania Sheet Metal Journeyman License

Volunteer Fireman (retired)

#### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering Senior Engineering Designer Wexford, PA (2020 to present)

CJL Engineering Lead HVAC Senior Mechanical Designer Moon Township, PA (2019-2020)

Lovorn Engineering Lead HVAC Senior Mechanical Designer Blawnox, PA (2013-2019)

Stantec Corporation (formerly Burt Hill) Lead HVAC Mechanical Designer Butler, PA (1997-2013)

Peter F. Loftus division of Eichleay Engineers Lead HVAC Mechanical Designer Pittsburgh, PA (1989-1997)

SSM Industries, Inc. Sheet Metal Professional Licensed Journeyman Pittsburgh, PA (1979-1989)

#### SUMMARY OF EXPERIENCE:

Mr. Berger is a mechanical engineering professional with over 35 years of experience in HVAC design. His skills include Revit, AutoCadd, Microstation CADD, HVAC duct work and piping design, HVAC calculations, project management, and HVAC and piping field experience. Rich is a Professional Sheet Metal Journeyman license Sheet Metal Workers Local 12. Have designed for healthcare, K-12 schools, universities, high rise commercial, lab renovations and hotels. He will help in the mechanical assessment for the initial facility visits to fully determine the scope of work, as well as designing, specifications, equipment selection using various manufacturer's selection software, heating/cooling loads, shop drawing submittals, and more.

#### NOTABLE PROFESSIONAL EXPERIENCES:

#### **McKinley Architecture and Engineering**

Brooke County Judicial Center Courthouse

Tyler County Commission - Judicial Annex Building

City of Moundsville - Municipal/Public Safety Building

Harrison County Schools - Gore Elementary School build-out renovation / addition

Fayette County Schools - NEW Meadow Bridge School PK-12 School & School Based Health Clinic

Wetzel County Schools - Short Line School HVAC

Steubenville City School District - Steubenville High School commons renovations

#### CJL Engineering\*

Mr. Berger was the Lead HVAC Senior Mechanical Designer for Healthcare/Commercial/Restaurants. Projects have included Hospital related area design, PNC Bank Scranton multi-story office, Parkway West Tech Center, Erie Water Works, and more.

#### Lovorn Engineering'

Mr. Berger was the Lead HVAC Senior Mechanical Designer for Healthcare/Commercial/Restaurants. Projects have included OR design, MRI design, Radiology department, Central Sterile, Higher education institutions, Restaurants, Hotels/Motels, and more.

#### Stantec Corporation (formerly Burt Hill)\*

Lead HVAC Mechanical Designer for the Healthcare Division. His projects have included but are not limited to OR design, MRI design, Radiology departmental, Central Sterile, lab design, Higher education institutions, Cornell University Sciences Building, Beachwood Ohio High School renovation, UPMC Biomedical science tower and Scaife Hall lab renovations.

\* previous work experience with a firm other than McKinley Architecture and Engineering



## Michael J. Clark Sr. Senior Electrical Engineering Designer

#### EDUCATION:

Eastern Gateway Community College A-ATS Electro-Mechanical Engineering - 2012

Jefferson Community College A-ATS Electrical Trade Technology - 2003

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Certified in SMAW Weld Process & Basic Welding and Applications 2002

West Virginia Journeyman License

Ohio Fire Alarm License

OSHA 30 Certified

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Electrical Engineering Designer Wheeling, WV (2012 to 2018, 2020 to present)

Arcelor Mittal Maintenance Technician Electrician Weirton, WV (2012)

M.J. Electric Journeyman Electrician Iron Mountain, MI (2010-2012)

Erb Electric Company Journeyman Electrician Bridgeport, OH (2009-2010)

Bechtel Group Inc. Journeyman Electrician Glendale, AZ (2009)

Cattrell Companies, Inc Journeyman Electrician Toronto, OH (1998-2009)

#### SUMMARY OF EXPERIENCE:

Mr. Clark is an Electrical Engineering Designer and a Certified Journeyman Electrician with over 20 years of industrial, commercial and residential experience. He is knowledgeable in all areas of the national electrical code and excels in analyzing and solving problems with various electrical controls and systems. Mr. Clark brings a cross-trained background to our projects, being skilled in both the design and the construction ends which gives him a unique ability to understand all aspects of a project. He is also adept in performing electrical and mechanical installations, maintenance and repairs in plant facilities. Furthermore, he is seasoned as an Electrical Foreman and Superintendent on both commercial and industrial job sites. His key skills include Electrical Systems & Controls, Installations & Maintenance, Electromechanical Repairs, Blueprints & Schematics, Generators & Transformers, Switches & Circuit Breakers, Electrical Code, Safety & QA, Wiring Diagrams, Troubleshooting, Testing Instruments, Motors & Conduit, CAD-2D/3D, Welding, & Residential construction. Mike has designed for HVAC projects, and your project might need his design for electrical system improvements, powering of all new mechanical equipment, electrical distribution, updated controls, switch gears, energy efficiency, upgrades to power feeds, and more.

#### NOTABLE PROFESSIONAL EXPERIENCES:

Building 55: WV State Office Complex in Logan (LEED Certified)

WVDRS Wheeling District's new office space fit-out

Holiday Inn Express Hotels - on-call contract / multiple projects

City of Steubenville - 5 Parks Lighting and Security project

Franciscan University OP#1 Multi-tenant Retail Building

Franciscan University OP#2 Office / Retail Building

Brooke County Schools - Several Projects County-Wide

Grant County Schools - Maysville Elementary renovations & Union Educational complex addition/renovations

Hampshire County Schools - Animal Vet Science Center

Hancock County Schools - New Manchester Elementary addition/ renovations, Oak Glen High renovations, Senator Rockefeller Career Center HVAC renovations, Weir High renovations, & new Weirton Elementary, and many more additions/renovations

Harrison County Schools - new Johnson Elementary, Gore Elementary build-out, and new Lost Creek Elementary

The Linsly School - Banes Hall addition/renovations

Wheeling Island Hotel • Casino • Racetrack - multiple projects

Carenbauer Wholesale Corporation warehouse addition/renovations

Bennett Square office build-out

Ft. Henry Building - multiple tenants fit-outs



## **David A. Ullom** BIM Coordinator / Mechanical Engineering Designer

#### EDUCATION:

Fairmont State University B.S. Mechanical Engineering Technology - 2011

Pierpont Community and Technical College Associates Degree in Applied Sciences: Drafting and Design - 2011

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Engineering Designer Wheeling, WV (2019 to present)

Kennametal Inc. Sales Engineer (2016-2019) Applications Engineer (2012-2016) Latrobe, PA

Marion County Assessors Office Map Developer Fairmont, WV (2010-2012)

#### SUMMARY OF EXPERIENCE:

Mr. Ullom is a results-driven individual who prioritizes safety, cost-effective solutions, and exceeding customer expectations. He is proficient in Autocad, Inventor, and Revit software. David also has experience as a Sales Engineer, Applications Engineer, and Map Developer, which provides an unique understanding for problem solving. Mr. Ullom will assist in the evaluation and designs of all of the mechanical systems (and possibly plumbing and fire suppression systems) in your facility.

#### NOTABLE PROFESSIONAL EXPERIENCES:

General Services Administration - Social Security Administration's Wheeling, WV Office

Belmont County Divisional Courts renovations

Jefferson County Justice Center renovations

Trinity Health System - Crisis Rehabilitation Unit

Ft. Henry Building renovation

Fayette County Schools – new Meadow Bridge K-12 project

Harrison County Schools – Gore Elementary addition and renovations

Harrison County Schools - Lost Creek Elementary

Ohio County Schools - Bethlehem Elementary renovations

Ohio County Schools - Bridge Street Middle renovations

Ohio County Schools - Elm Grove Elementary renovations

Ohio County Schools - Madison Elementary renovations

Ohio County Schools - Middle Creek Elementary renovations

Ohio County Schools - Triadelphia Middle renovations and additions

Ohio County Schools - Warwood Elementary and Middle School renovations

Ohio County Schools - West Liberty Elementary renovations

Ohio County Schools - Wheeling Middle renovations

Ohio County Schools - Wheeling Park High renovations and additions

Ohio County Schools - Woodsdale Elementary renovations

Tyler County Schools - new Bus Maintenance Facility

Mid-Ohio Valley Technical Institute (MOVTI) renovations

Jefferson County (Ohio) - Steubenville High commons and kitchen renovation



## Thomas R. Worlledge, AIA, LEED AP BD+C, REFP Architect / Specialized LEED Accredited Professional



#### EDUCATION:

Virginia Polytechnic Institute & State University Master of Architecture - 1992

Fairmont State College, School of Technology B.S. Architectural Eng. Tech. - 1983

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Registered Architect in: West Virginia Ohio Pennsylvania Tennessee Virginia

National Board Certification: NCARB #

President: West Virginia Society of Architects

#### Member:

The American Institute of Architects US Green Building Council Sustainable Building Industries Council Recognized Educational Facility Professional (REFP)

#### Former voting member:

ASHRAE 90.1 International Energy Code Committee

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Manager, Charleston Office Charleston, WV (2005 to present)

Proactive Architecture Inc. President Charleston, WV (1999-2005)

Silling Associates Inc. Vice President Charleston, WV (1992-1999)

TAG Architects Charleston, WV (1985-1990)

Alpha Associates Inc. Morgantown, WV (1983-1985)

#### SUMMARY OF EXPERIENCE:

Mr. Worlledge is a skilled Architect with over 35 years of experience, who has been the former President of the WV chapter of AIA, has received State and National design awards, and placed in National and Global design competitions. Unlike many architects who are new to green building and alternate energy, Thom started his career designing and building alternate energy systems, and was the first LEED Accredited Professional in West Virginia! He believe energy efficient design is simply good design practice. As a LEED Accredited Professional specializing in Building Design & Construction (LEED AP BD+C) and a recognized sustainable design expert, he has 2 LEED Certified projects, multiple LEED Registered projects, several other energy-efficient projects, has articles published in State and National trade publications, was a featured speaker at multiple State and National conferences, served on the committee that set the ASHRAE 90.1 Standards for the International Energy Code, professionally teaches and trains other professionals in the art of High Performance Design, is a Founder & Chairman of the Board for the US Green Building Council's West Virginia Chapter, and much more.

#### NOTABLE PROFESSIONAL ACHIEVEMENTS:

West Virginia Department of Health & Human Resources' Ohio County Office Building fit-out / renovations

Building 55: WV State Office Complex in Logan (LEED Certified / ENERGY STAR Rating of 91)

United States Postal Service - multiple projects throughout WV

West Virginia State Police - new Logan Detachment / Back-Up Data Center for the WVSP Headquarters

West Virginia State Police Academy - Renovations to Buildings A, B, and C, including exterior walls; New Buildings D and Multi-Purpose Building

West Virginia University - University Police Building renovations

Veterans Affairs Medical Centers - multiple VAMCs around WV and PA

Nicholas County Division of Homeland Security & Emergency Management - E-911 and Emergency Operations Center

Fairmont State University - College Apartments Complex (\$30M)

WVU Institute of Technology - Maclin Hall Dormitory in Montgomery

Charleston Enterprise Center renovation (WV AIA Design Award)

Williamson SMART Office (LEED Registered / Placemaker Award)

Natural Energy Design (NeD) Building (Placemaker Award)

Bellann in Oakhill, WV (LEED Registered)

Marshall County Schools - new Hilltop Elementary (LEED Certified / ENERGY STAR Rating of 86 / won multiple State and National Awards & Recognitions)

Harrison County Schools - new Johnson Elementary School (ENERGY STAR Rating of 90 / NCWV Media's Public Project of the Year / Collaborative for High Performance School registered)



## Robert E. "Bob" Smith

**Construction Administrator** 

#### EDUCATION:

University of Pittsburgh M.S. Industrial Engineering - 1989

United States Air Force Academy B.S. Behavioral Science / Human Factors Engineering - 1983

#### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

Board Member: Indian Creek School District (elected in 2009)

Instructor: Mechanical Engineering, Eastern Gateway Community College

President: Mingo Business Association (2007 to present)

Commander: American Legion Post 351 (2008 to present)

#### **PROFESSIONAL EMPLOYMENT:**

McKinley Architecture and Engineering Construction Administrator Wheeling, WV (2009 to present)

Jefferson County Regional Planning Commission Regional Planner Steubenville, OH (2008-2009)

Edison Local School District Director of Operations (1999-2008) Transportation Supervisor (1998-1999) Hammondsville, OH

#### MILITARY SERVICE:

Wright Patterson Air Force Base - Dayton, OH Chief B-2, Block 20 Field Retrofit, \$300 million B-2 Systems Program Office (1994-1996) Team Leader, Process Improvement Technology Armstrong Laboratory (1989-1994)

Randolph Air Force Base - San Antonio, TX Chief, Test Construction Section Occupational Measurement Center (1987-1988) Quality Control Psychologist Occupational Measurement Center (1985-1987)

Supervisor of Test Construction Team Occupational Measurement Center (1983-1985)

#### SUMMARY OF EXPERIENCE:

Mr. Smith has been a **Construction Administrator** at McKinley Architecture and Engineering for 10 years. Bob is a self confident, articulate and highly motivated individual with superior interpersonal and teamwork skills. He has a plethora of experience in mid to upper level personnel management, advanced information systems integration, training, acquisition, contract management, transportation and maintenance, and quality control. He has 23 years of direct supervisory experience, as well as 13 years of documented success as an **Air Force Officer.** He is currently a member of the Board of Education for the Indian Creek School District in Jefferson County, Ohio. He is also an Adjunct Professor at Eastern Gateway Community College in Steubenville, Ohio, where he is teaching Mechanical Engineering.

#### NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - AASF#1 HVAC renovations

Steel Valley Regional Transit Authority renovations

United States Postal Service - 2 Open-End IDIQ contracts / multiple projects, including Clarksburg

The Towers Building renovations, multiple phases including HVAC, windows, and doors  $% \left( {{{\rm{D}}_{{\rm{A}}}} \right)$ 

Cameron American Legion Exterior Renovations

Cabela's Eastern Distribution Center

City of Steubenville - multiple projects

Fairmont State University's new 3 building "University Terrace" Student Housing Apartment Complex (\$30M)

Brooke County Schools - District-Wide Construction Program (\$36 million), including new buildings, and renovations

Grant Co. Schools - multiple projects, including Maysville renovations, & Union Educational Complex addition/renovations

Hancock Co. Schools - District-Wide Construction Program (\$56 million), including new buildings, renovations, and additions

Marshall Co. Schools - Hilltop Elementary (LEED Certified). Cameron High (\$32 million / LEED Registered). District-Wide Construction Program (\$38 million), including new buildings, renovations, and additions.

Ohio Co. Schools - multiple projects County-Wide

Tyler Co. Schools - multiple projects County-Wide

The Linsly School - Campus-Wide addition/renovations

Harrison County Courthouse renovations

Jefferson County Courthouse renovations & Annex demo

Lincoln National Bank Building renovations



# **HVAC Replacement Projects**

Our firm has completed a variety of projects, which serve to illustrate the creative and talented nature of our professional design staff. The following examples are chosen to exhibit a **partial assortment** of **HVAC system replacement** projects:

Barnesville School District Bayer Heritage Federal Credit Union Bennett Square Boone County Schools - multiple projects Braxton County Schools - multiple projects Braxton County Senior Center Brooke County Schools - multiple projects Capitol Theatre Cardinal Health - multiple projects Carenbauer Wholesale Corporation Charleston Enterprise Center Clay County Schools Middle School Coldwater Creek Distribution Centers Community Action Southwest Senior Center Community Trust Bank - multiple projects Convenient Food Mart Cornerstone Group - Highlands Office Coronet Foods - multiple projects Diocese of Wheeling/Charleston Rectory Dr. Chapman DDS Office Building Dr. Ganzer Medical Office Building First Choice America Federal Credit Union First National Bank Williamson Franciscan Multi-Tenant Building Franciscan Office Building Fresh-Twist Glenville State College - RF Kidd Library Grant County Schools - multiple projects Grave Creek Mound Museum Hampshire County Courthouse Hancock County Schools - multiple projects Hope VI Units Jefferson County Justice Center

Linsly School - multiple projects Marshall County Court Marshall County Schools - multiple projects Martins Ferry Stadium McDowell County Schools - Mount View McKinley Carter Wealth Services renovations Mt. Calvary Chapel Oglebay - Glassworks Ohio County Schools - multiple projects Orrick's Global Operations Center Panhandle Cleaning & Restoration PRT Technical Center renovation Raleigh County Emergency Services Authority Ritchie County Schools - MS/HS Sisters of St. Josephs Convent Southern WV Community & Technical Center St. Matthews Church Parish Hall Steubenville MLK Recreation Center Summers County Schools - Summers Middle The Towers Building in Steubenville Tyler County Schools - multiple projects Union Bank Sistersville Branch USPS - multiple projects Wagner Building WV Department of Health and Human Resources WV Department of Highways West Virginia Independence Hall West Virginia Northern Community College WV State Police - multiple projects West Virginia University - multiple projects Wetzel County Schools - multiple projects Wood County Schools - multiple projects (and much more)



## 2 Open-Ended IDIQ Contracts United States Postal Service

### Appalachian Area (West Virginia & Virginia) and Erie/Pittsburgh District in Pennsylvania

Owner United States Postal Service

Construction Cost Multiple projects completed under 2 multi-year open-ended contracts

Project Architects-Engineers McKinley Architecture and Engineering



McKinley Architecture and Engineering has had <u>2</u> separate multiple year open-ended IDIQ agreements with the United States Postal Service. One is for the Appalachian Area [Indefinite Quantity Contract 360070-15-J-0095, which includes the State of West Virginia, and 49 counties and/or independent cities in Virginia], which was awarded on September 29, 2015, and is our <u>fourth consecutive</u> multiple year open-ended contract for WV. The second is for the Erie/Pittsburgh District in Pennsylvania (Indefinite Quantity Contract 362575-09-J-0232).

We have designed **dozens of facilities** for the USPS, including **new construction, additions, renovations, and rehabilitations** in numerous cities within these areas. We have completed studies, reports, general building renovations, **HVAC** and electrical systems improvements, utility infrastructure, roofs, elevators, building envelope improvements, and much more. **HVAC projects include commissioning, testing and balancing.** One recently completed example was a \$1.8 million **build-out** / **renovation project** for the Parkersburg Carrier Annex & Hub, which includes **new HVAC systems, testing and balancing**, masonry wall, concrete work, exterior wall thermal and moisture protection, site concrete paving, etc. In addition, we have designed over 100 Postal facilities for ADA compliance. We have also completed **Historic Preservation** work, such as extensive interaction with The Secretary of the Interior's (NPS) Standards for the Treatment of Historic Properties and working with the Section 106 process required by SHPO and the Federal Department of the Interior.

For the newest projects, they incorporate energy efficient design which follow the newest USPS Standards compliance to provide a more efficient systems. For example, the energy saving on a recent HVAC replacement project was achieved with the use of economizers to allow free cooling when ambient temperatures are below 60° F, and there was commissioning provided on the RTUs. We followed the USPS Standards, and we also completed Form ECC-EZ - Energy Compliance Certification for Low Energy-Impact R&A Projects.

A majority of the projects we have completed for the USPS over the past 20+ years have been various HVAC projects, including these recent examples which were all completed while the buildings remained occupied!:

- -Altoona, PA Post Office \$350,000 HVAC project involved Air Handling Units be replaced along with an addition of a DDC Control System in a historic 1931 facility.
- -Charleston Processing & Distribution Center \$375,000 HVAC renovation project involved replacing thermofusers and the ceiling fan coil units with 8 fan powered VAV boxes and 3 single duct VAV boxes with hot water reheat coils; replacing 3 failed rooftop units with new RTUs with electric heat and economizers; installing 2 new 5-ton mini split AC units in an area without cooling; and extending the existing DDC control system to control these new items. The new RTUs have economizers to allow the unit to provide free cooling whenever the outside air temperature is below 55° F, by modulating the amount of outside air delivered through the unit.
- -Clarksburg Finance Station \$460,000 HVAC project involved the replacement of the outdated 120-ton water cooled chiller and two 107-ton cooling towers, with new energy efficient systems.



## 2 Open-Ended IDIQ Contracts United States Postal Service

-Huntington Processing & Distribution Center - \$201,000 HVAC project replacing hot water boiler with like-in-kind.

- -Martinsburg Processing & Distribution Center (*seen below*) \$280,000 HVAC project replacing 4 Packaged Rooftop Units with new, like-in-kind, Packaged Rooftop Units. While the RTUs are similar, there were some design changes made to bring the units in to USPS Standards compliance and to provide a more efficient system. The new units were installed on the existing RTU curbs and tied into the existing duct systems. In order the meet the USPS Standards, the units all utilized R-410A refrigerant. The energy saving mentioned above were achieved with the use of economizers to allow free cooling when ambient temperatures are below 60° F. The existing equipment consists of Packaged Rooftop Heating and Cooling Units with DX Cooling and Gas Heating. The workroom, which makes up the majority of the building square footage houses high amounts of equipment providing high levels of internal heat gain, requiring DX Cooling when the outside air temperatures are below the economizer enable setpoint. As a result, currently to maintain space comfort the RTUs must operate DX Cooling into the heating months or the units are turned off, to save energy. The new equipment provides increased operating efficiencies with the addition of Economizers.
- -Monongahela, PA Main Office \$330,000 HVAC project replacing hot water boiler with 2 high efficiency condensing boilers in a historic 1913 facility; we recommended the most energy efficient solution that is life cycle cost effective over a 20-year period (with the upgrade from 83% to 95% efficient boilers the system operates more efficiently). While cutting the openings in the structural slab for the supply and return duct, the contractor created and/or noticed cracks; therefore we performed an emergency engineering site visit the next day on the condition of the concrete, provided a sketch for the required structural reinforcements, and the reinforcements were installed.

-Williamson Main Office - \$422,000 HVAC project replacing hot water boiler with high efficiency condensing boiler.







## Statewide On-Call Agreement WVDOT, Division of Highways

### State-wide, West Virginia

#### Owner

West Virginia Department of Transportation, Division of Highways

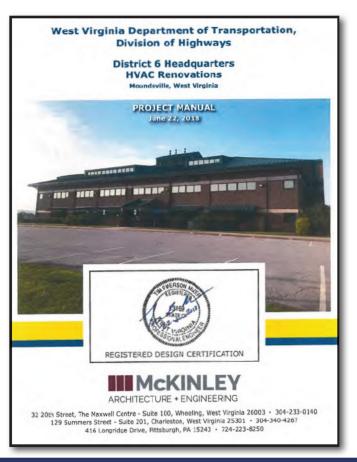
#### Construction Cost

Multiple projects completed under 2 multi-year open-ended contracts

#### Project Architects-Engineers

McKinley Architecture and Engineering

Project Engineer Tim E. Mizer, PE, RA, QCxP



McKinley Architecture and Engineering has been honored to be a partner with the West Virginia Department of Transportation, Division of Highways, and we are now on our 2nd consecutive Statewide On-Call Agreement with them. This open-ended contract is to provide both architectural/engineering consulting services (along with Construction Administration, and more) for the performance of various "tasks."

The **scope of services** generally consist of planning, studying, designing, renovating, repairing, conducting plan/specification reviews, preparing equipment specifications and related services for Department of Transportation facilities, including the site, utilities, buildings, and structures.

For one task, we designed the HVAC replacement to the existing 2-story, 8,820 square foot WVDOH Equipment Division Facility in Buckhannon (State Project N081-BLD/GR-0.00 00). We designed a new Variable Refrigerant Flow (VRF) air handling unit with remote condensing unit to condition the offices and conference room. A complete digital controls system was installed, with a desktop computer to allow authorized users access to the system.

For another task, we designed the HVAC replacement to the WVDOH District 6 Headquarters Complex in Moundsville (State Project N081-BLD/GR-0.00). The 31,000 SF building was conditioned with cooling only Air Handling Units and duct mounted heaters. That served full floors of office cubicles with no regard to proper zoning. As the conditioning units began to fail, it was determined that the complete system be replaced with a more economic system. McKinley Architecture and Engineering designed 2 Air Handling Units that provided ventilation air to VRF cassettes in the ceilings above the office areas. This solution provided individual control of all office spaces.



# Building 55 West Virginia State Office Complex



## Logan, West Virginia

Owner State of West Virginia

Size 53,200 SF approx.

Project Architects-Engineers McKinley Architecture and Engineering

Project Architect Thomas Worlledge, AIA, LEED AP BD+C, REFP

Contractor Massaro Corporation

Commissioning Agent Iams Consulting, LLC This new 5-story building underscores its major role in the development and revitalization of downtown Logan by uniting office space for 127 employees for **6 State agencies** under one roof, whom were once scattered throughout the city. The 53,200 SF building provides current technology, flexibility for future growth, and **security features** for existing and future tenants.

At the request of the Owner, the building was designed to be energy efficient and meet sustainable design goals, confirmed by LEED and energy star requirements. In March 2014, this project became LEED Certified for energy use, lighting, water, material use, as well as incorporating a variety of other sustainable strategies. To help achieve this, the HVAC System included the installation of custom air handling units with chilled and hot water coils, variable air volume boxes with hot water heating coils, 2 high efficiency condensing boilers, pumps with variable speed drive control, water cooled chiller with cooling tower, packaged rooftop energy recovery ventilator, and direct digital controls.

For a few other sustainable features, a tight building envelope was created with closed cell foam insulation and thermal efficient windows. The



windows are both energy efficient and secure. One of the unique features of the building is the daylight system. The design takes clues from older buildings that were designed to let daylight penetrate deep into the buildings by necessity. To enhance this effect we added "light louvers" which are devices that redirect daylight to the ceiling and diffuse natural light throughout the space. The open offices were placed around the exterior of the building and the enclosed offices along the

interior wall so more of the tenants receive quality light. In addition, interior windows allow the daylight to pass to the center offices.

After the project was completed, the firm *alliantgroup* completed an Energy Efficient Commercial Building Tax Deduction study regarding the energy efficient features of the building (*seen on the following pages*), and they projected the building's total energy costs and power costs to have savings of \$34,231 annually!









# Building 55 West Virginia State Office Complex



## alliantgroup

September 5, 2014

#### Sent Via CMRRR: 7013 2630 0000 2069 4021

Mr. David J. Hildreth West Virginia Department of Administration 900 Pennsylvania Ave., Ste. 500 Charleston, WV 25302

Re: Logan State Office Bldg. - Energy Efficient Commercial Building Deduction

Mr. Hildreth:

alliantgroup has completed an Energy Efficient Commercial Building Tax Deduction study for Logan State Office Bldg. for Massaro Corporation. As required by U.S. Tax Code § 179D, notification must be given to the building owner regarding the energy efficient features of the building and the building's projected annual energy costs.

Below is a list of the energy efficient features of the building which were installed on or in the building as part of a plan designed to reduce the total annual energy and power costs in comparison to a reference building which meets the minimum requirements of ASHRAE (American Society of Heating and Refrigeration, and Air-Conditioning Engineers) Standard 90.1-2001.

Heating, Ventilation, and Air Conditioning Systems:

- Boilers
- > Unit Heaters
- > Chillers
- Energy Recovery Ventilation

Interior Lighting Systems:

- Fluorescent Bulbs
- > LEDs
- Occupancy Sensors

**Building Envelope System:** 

- Pre-Cast Panels
- Rigid Polyisocyanurate
- Gypsum Board

3009 POST OAK BOULEVARD, SUITE 2000 | HOUSTON, TEXAS 77056 www.ollionfgroup.com | 800.564,4540





The projected annual energy cost for Logan State Office Bldg. was calculated to be \$34,231. Please note that the projected annual energy costs may vary from the building's actual energy costs due to the exclusion of process loads, exterior lighting, variations in occupancy, and variations in usage schedules among other variables.

Please be advised that the amount of the deduction that has been allocated to Massaro Corporation is \$98,658 for the building envelope, HVAC and hot water, and lighting systems in the building. For more information on the allocation of the section 179D deduction, please refer to the U.S. Tax Code § 179D and IRS Notice 2008-40. A copy of the notice can be found at <u>www.IRS.gov</u>

If you have any questions, please do not hesitate to contact me.

Very truly yours,

Rizwan Virani Managing Director

www.uldming.com | 800.564.4540



# The Towers Building

### Steubenville, Ohio

Owner Jefferson County Commissioners

Size 76,300 SF

Construction Cost \$6.1 million approx.

Project Architects-Engineers McKinley Architecture and Engineering

Project Architect Christina Schessler, AIA, LEED AP BD+C

Project Engineer Tim E. Mizer, PE, RA, QCxP We have worked with the Board of Commissioners of the County of Jefferson on several projects over the past few years, and currently have an engineering and architectural services open ended contract with them.

One major project example is multiple phases of renovations and upgrades to **The Towers Building**. This is a **40+ year old**, **8 story highrise** in downtown Steubenville. Unusually cold weather, age, and the culmination of years of insufficient maintenance had resulted in a series of situations resulting in frozen pipes, systems shutting down, and continuing emergency maintenance issues in the building. In February 2014, due to primarily system malfunctions and weather related damages at the building, an overall building condition assessment was determined to be necessary by the Owner.

Therefore, McKinley Architecture and Engineering was hired to perform an emergency Preliminary Analysis of the Needs and Energy Efficient Services (including site visits, and write a report outlining our findings). Existing conditions related to the architectural, mechanical and electrical portions of the building were the primary focus of the study with the goal of addressing concerns associated with occupancy comfort, continued tenant satisfaction and to determine an efficient repair and maintenance recommendations for the building.

Our recommendations addressed repair options, efficiency and energy

saving solutions. McKinley Architecture and Engineering's observations were conducted in a non-invasion fashion; essentially, this means that nothing was permanently removed or destroyed during the process. We completed a Building Condition Assessment and Energy Efficiency Analysis Report, and presented our findings.

After this, we have **designed multiple phases of renovations for the building**; a main roof replacement, mezzanine roof replacement and new lobby skylight, building envelope repairs, a **new boiler**, new ADA handicapped ramp, and an **overall HVAC replacement**. In addition, there was an adaptive reuse of a former bank on the first floor, into an office fit-out / renovations for the Jefferson County Board of Elections. **The construction was performed with the building in operation**. These projects were completed over time, with different General Contractors.

For one example, the **new boiler** project involved the replacement of existing inefficient electric boilers with a new gas fired boiler. The new boiler is **high energy efficiency**, and has a much **smaller footprint**.

The **\$3.4 million HVAC replacement** project included **renovations to the entire building.** The **demolition** included the removal existing cooling tower, exhaust fan, rooftop unit, and associated ductwork and piping from upper roof (tower); removal of existing exhaust fan and gravity ventilating intake hoods from lower roof (mezzanine); removal of basement air handling units, chilled water piping and pumps, condenser water piping and pumps, ductwork, chiller, and VAV boxes throughout the building. The new HVAC system included the installation of variable refrigerant flow system (VRF) throughout the building; installation of new dedicated outside air system (DOAS-1) on the upper roof (tower) and an air handling unit (AHU-1) in the basement with the condensing unit installed on the lower roof (mezzanine); installation of new and the reworking of existing ductwork; new shut-off and control valves installed on the existing hot water perimeter finned-tube baseboard; and installation of a new DDC Control system throughout the building. The electrical work included disconnecting existing power from demolished equipment and the installation of new circuits to the new equipment, which included adding a sub-panel on every floor. There was also partition extensions, ceiling removal and replacement, fire sealant work, and fireproofing repairs.

On the following page are pictures of the HVAC replacements.



# **The Towers Building**











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# **Jefferson County Justice Center**

### Steubenville, Ohio

Owner Jefferson County Commissioners

### Construction Cost

\$750,000 approx.

Project Architects-Engineers McKinley Architecture and Engineering

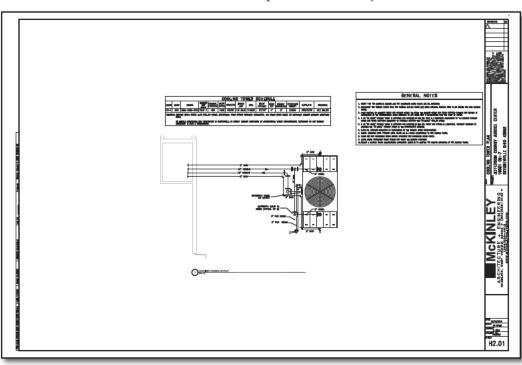
Project Manager Tim E. Mizer, PE, RA, QCxP As mentioned, we have worked with the Board of Commissioners of the County of Jefferson on several projects over the past few years, and currently have an engineering and architectural services open ended contract with them.

For another project, we recently completed a new roofing project, along with a **Cooling Tower replacement**, at the Jefferson County Justice Center facility.

Coordination between the roofing and cooling tower contractors was needed, because the roof had to be replaced before the new cooling tower and stand could be installed.

The 28,700 SF **roof replacement** project included the demolition and complete tear-off of the existing roof to the concrete roof deck, all the Polyurethane foam was scraped off so new flashing could be installed, and the roof drains and overflow scuppers were removed. Afterwards, a new 90 mil EPDM roof was installed, which includes adhering tapered polyisocyanurate to the deck. In addition, there was new metal coping, transitions, roof drains, scuppers, and flashing. The contractor for the roof replacement was N.F. Mansuetto & Sons, Inc.

The \$200,000 Cooling Tower replacement project included the demolition and removal of the existing Tower, the replacement of the structural base stand and support beams which had rusted, and the installation of a new 1,400 gpm BAC (Baltimore Aircoil Company) 3000 Series Cooling Tower, associated piping, and vibration isolation rails. The installation required a crane rental for both the existing tower removal, and the installation of the new cooling tower. There was also electrical modifications needed. The contractor for the cooling tower was Prout Boiler, Heating & Welding, Inc. The project was completed in February of 2021.



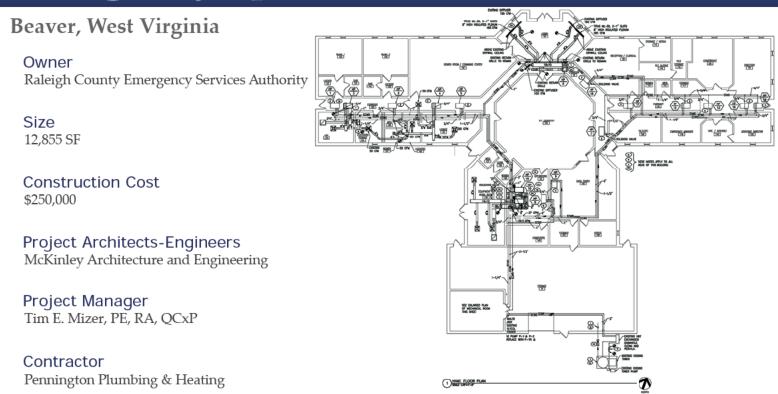
# **Jefferson County Justice Center**







# Raleigh County 911 and Emergency Operations Center HVAC



McKinley Architecture and Engineering was commissioned to investigate and provide Construction Documents to repair the ill-functioning HVAC system in the Raleigh County Emergency Services Authority's office building (911 Center and Emergency Operations Center).

Upon investigation of this 13,000 SF facility, it was determined that many of the heat pumps were undersized within the 911 Center's most critical areas (such as the Dispatch Room). More importantly, it also was determined that the building was not constructed architecturally as designed and this deficiency greatly influenced the total building's HVAC system's performance.

The project included the replacement of 2 Water Source Heat Pump Units and adding 1 new Water Source Heat Pump Unit, relocating a Water Source Heat Pump Unit from above a critical computer area, installing a new main boiler and utilizing the existing boiler as back-up boiler, replacing 2 building loop circulating pumps, installing a new HVAC Control System, replacing the cooling tower filter, replacing the cooling tower water level control and adding a water hammer arrester on the line to prevent water line rattling, installing new heat pump flow control hose kits, and adding pitched Roof Insulation at R-25 thickness. Since the facility is a 911 Center, it must remain in operation 24/7; therefore, the pumps were replaced one at a

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time so that the building could stay in operation, while the building remained occupied.

In addition to HVAC renovations, the project also includes associated electric work, miscellaneous interior renovations and insulation work.

# West Virginia University Colson Hall

### Morgantown, West Virginia

Owner West Virginia University

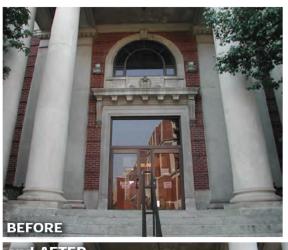
Size 35,000 SF approx.

Construction Cost \$5.6 million

Project Architects-Engineers McKinley Architecture and Engineering

Project Architect Denis Gill, AIA

Contractor TEDCO Construction

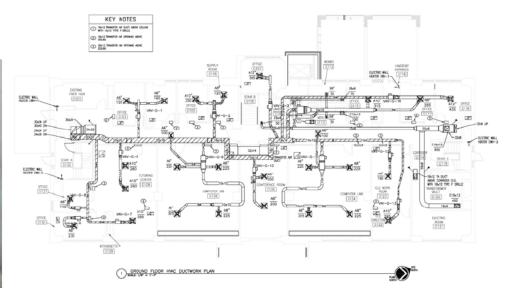




McKinley Architecture and Engineering has completed many project for West Virginia University and their affiliated campuses through multiple Open-End Architectural / Engineering Services contracts, along with additional projects outside those open-ended agreements. We have completed HVACs / boilers, doors, windows, renovations, repairs, alterations, fit-outs, historic preservations, additions, and new buildings.

For one project, McKinley Architecture and Engineering completed a \$5.6 million renovation/restoration project on Colson Hall at the downtown campus of West Virginia University. The scope of work was to take this existing 35,000 SF building and readapt it for use as a faculty office building with additional classrooms. Work included architectural elements as well as **major mechanical** and electrical **systems design.** Since this building is now the home to offices, we had to create a **quiet and comfortable HVAC system**, create adequate lighting, and design a data/communication system that met the needs of today's faculty requirements. Exterior repairs and renovations included **doors, windows**, bricks, lighting, stair and railings, and more.

The HVAC System consists of 2 Variable Volume Air Handling Units with Hot Water and Chilled Water Coils, and Enthalpy Controlled Economizer. The AHUs provide heating and cooling through a series of Variable Air Volume Boxes with Hot Water Reheat Coils. The exterior spaces also have finned tube radiation to compensate for the building envelope loss. The Chilled Water is provided from the campus Chilled Water Plant and is fed through the building with 2 Base Mounted pumps with variable speed drives, configured as duty / standby. The Hot Water is developed through a Shell-n-Tube Heat Exchanger. The steam, from the Campus System is converted to Hot Water and distributed throughout the building with 2 Base Mounted pumps with variable speed drives, configured as duty / standby. A complete Direct Digital Control System was installed to provide all programming and alarm notification.



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# Southern WV Community & Technical College Williamson Campus

### Williamson, West Virginia

Owner Southern WV Community & Technical College

Size 60,000 SF

Construction Cost \$763,635

#### Project Architects-Engineers

McKinley Architecture and Engineering

#### Contractor

Elco Mechanical Contractors, Inc.

The Owner was also experiencing water penetration in several areas of the 60,000 SF facility; due to our findings during the HVAC renovations, it was decided to replace the roof. A new, built up roof system was installed, replacing the worn and over extended ballasted system. Special consideration was given to flashing in areas of unique design. Moreover, the 8,664 SF roof replacement project was designed, specified, bid, awarded and constructed in 8 weeks. The Owner had a very tight timeline due to funding restrictions placed by the federal government. This project was successful in part due to our relationship, developed prior to the project's inception, with the roofing consultant. This relationship allowed McKinley Architecture and Engineering to develop clear and concise estimates for the Owner to determine what product best suited their situation and needs, as well as bring in a viable number on bid day.

For the HVAC portion of this \$763,635 Southern WV Community & Technical College project, we expanded the existing digital controls system to incorporate new equipment. Duct and grille modifications were made to correct insufficient airflows within the system. Reheat coils were added to provide proper separation of HVAC zones. In addition, a 13 ton rooftop unit, a 23,500 cfm supply fan, and a return fan were replaced. Due to the restrictions from the funding source, the project was designed in a shortened timespan. The building included multiple construction types and multiple HVAC systems. The budget did not allow for a complete renovation to the HVAC, so McKinley Architecture and Engineering identified the problem areas, prioritized them, and designed solutions. The end result was occupant comfort in all areas of the building for the first time in many years. In addition, corrections made to the supply and return fan corrected a building structural vibration issue.





# Southern WV Community & Technical College Wyoming/McDowell Campus

### Saulsville, West Virginia

Owner Southern WV Community & Technical College

Size 22,800 SF

Construction Cost \$293,700

Project Architects-Engineers McKinley Architecture and Engineering

#### Contractor

Elco Mechanical Contractors, Inc.

This HVAC renovation project included the replacement of a 75 ton rooftop unit, including duct modification, roof work, crane, electric, piping, and more. Also involved was the replacement of a boiler plant with a new high efficiency plant, including 2 condensing boilers, 2 pumps, breeching, concrete pads, and hydronic accessories. In addition, a new DDC controls system was installed and custom programming was written for this 22,800 SF project. Due to the restrictions form the funding source, the project was designed in a shortened timespan. We reduced the energy usage for the building by installing high efficiency equipment and controlling the entire HVAC system via custom programming that utilizes energy saving techniques.

#### and AFTER









# Brooke County Schools Brooke High School HVAC

### Wellsburg, West Virginia

Owner Brooke County Schools

Size 278,000 SF

Construction Cost \$5 million

Project Architects-Engineers McKinley Architecture and Engineering

Project Engineer Tim E. Mizer, PE, RA, QCxP

Contractor R&B Mechanical, Inc. For the **Brooke High School HVAC** project in Wellsburg, West Virginia, McKinley's role had originally included preliminary planning stages to secure a successful bond vote and state funding requests. Brooke High School HVAC is 1 of 2 projects within Brooke County Schools' \$36 million District-Wide Construction Program (funded with a \$18 million local bond vote passed in the November 2014 election, and supplemented with matching \$18 million from WV School Building Authority). We gathered data, analyzed, and performed services to help promote HVAC upgrades at Brooke High as well as a new Middle School. We worked on brochures and flyers to be distributed before the election, and provided evidence that this work is a solid investment; which helped aid in the successful Bond passage.

This 278,670 SF of HVAC replacement/renovations for Brooke High School included major HVAC/mechanical, electrical, and plumbing engineering design, and associated architectural design. The vocational shops and science labs were brought up to Code. The design meets the 2012 International Building Code, 2012 International Mechanical Code, 2012 International Plumbing Code, 2011 National Electric Code (NFPA 70), and WV State Fire Code. The \$5+ million project involved the removal of the existing hydronic heat pump system equipment and replace such with a new Variable Refrigerant Flow (VRF) System, we replaced 19 Air Handling and ERV units with electric heating and cooling to gas units serving the required ventilation in the classrooms. There were approximately 200 VRF indoor consoles to replace floor mounted water source heat pumps. There were alteration and reconfigurations to the existing ceiling ductwork for the installation of the new VRF Units. There was also demolition of other existing equipment and material.

Furthermore, the HVAC replacement/renovation package also

includes HVAC control modifications, exhaust fans, exhaust valves, louvers and gravity ventilators, grilles, register, and diffusers, new gas piping and painting, and electrical modifications. There was testing, adjusting, and balancing of the installed equipment. This project was designed with energy efficiency in mind; the VRF system to cool/heat the building has an anticipated energy cost reduction of 30% compared to existing mechanisms. The project was completed in September 2016. The entire work was less than 1% in total nonelective change orders!



# Brooke County Schools Brooke High School HVAC











# Ohio County Schools Madison Elementary School

### Wheeling, West Virginia

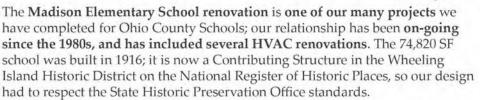
Owner Ohio County Schools

Size 74,820 SF approx.

Construction Cost \$3.7 million

Project Architects-Engineers McKinley Architecture and Engineering

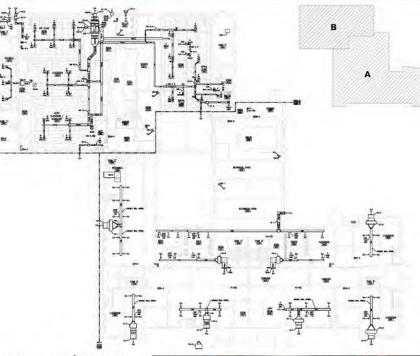
Contractor Climatech, Inc.



The **HVAC replacement** was a major goal of the **\$3.7 million** project. The existing heating system consisted of steam radiators, served from a single steam boiler located in the basement of the school. The entire lower level of the school, including the boiler room was located below the flood plain. The only air conditioning in the building was provided by individual window AC units, and ventilation air was not adequate.

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The renovations to the building included relocating the Boiler Room to the main level, to bring it out of the flood plain. This required structural reinforcement of the floor from below, installation of a concrete floor, sound dampening panels around the perimeter of the room, floor drains, and new lighting. The remainder of the HVAC renovations included the installation of Custom Air Handling Units with chilled and hot water coils, 2 high efficiency condensing boilers, pumps with variable speed drive control, Variable Air Volume boxes with hot water heating coils, packaged Rooftop Units and Direct Digital Controls. In order to hide the new ductwork and piping we also installed new acoustic tile ceilings with high efficiency, dual switch lights. The Air Cooled Chiller also needed to be elevated above the flood level, so a structural platform was installed with an integral sound wall, so the chiller will not be seen or heard. There was also HVAC testing, adjusting, and balancing, as well as performance commissioning. The renovations were partially completed while school was in session. The project involved a lot of coordination with the State Fire Marshal.







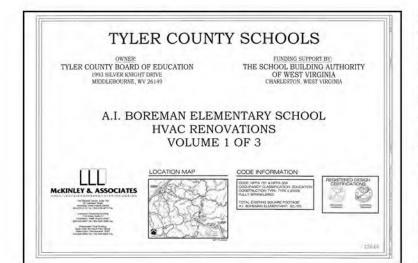
# Tyler County Schools Multiple HVAC Replacements +

### Tyler County, WV - county-wide

Owner Tyler County Schools

Project Architects-Engineers McKinley Architecture and Engineering

Coordination Architect Patrick J. Rymer, AIA, ALEP/CEFP





McKinley Architecture and Engineering has an on-going relationship with Tyler County Schools, and we have completed multiple projects for them since 2003, including their 10-year Comprehensive Education Facilities Plans (CEFP 2010-2020 and CEFP 2020-2030), various renovations, HVAC upgrades, School Access Safety project, and more. We also have a 5-year open-ended contract for implementing projects which resulted from that CEFP, as well as for other projects. Some projects were a County-wide School Access Safety project, A.I Boreman Elementary School HVAC repairs and roof, Board of Education Administrative Office renovation, new Bus Maintenance Garage, Sistersville Elementary School HVAC repairs and roof, Tyler Consolidated renovations, new Tyler Consolidated High School Athletic Complex, and Tyler County Pre-K HVAC repairs and upgrades to name a few.

For one project, the **\$2.5 million HVAC project** for Tyler County Schools involved the replacements of the existing HVAC Systems at A.I. Boreman Elementary, Sistersville Elementary, and Tyler County Pre-K Schools in Sistersville and Middlebourne, West Virginia. Boreman and Sistersville included the replacement of existing HVAC Equipment, including but not limited to RTU's and VVT Boxes, duct modifications and a new DDC Control System. Tyler County Pre-K School included New AHU with DX Cooling, new VAV Boxes with Hot Water Reheat, New Boiler Plant and DDC System. The contractor was Johnson Boiler Works.

A.I. Boreman Elementary School is a 50,700 SF facility. The HVAC project included the replacement of 17 Packaged **Rooftop Units** which includes gas heating, DX cooling, economizer with barometric relief & curb adaptor. There was also replacement of 31 VVT Dampers, duct modifications, controls, electrical work, miscellaneous construction (ceilings), as well as the demolition of existing systems being replaced.

Sistersville Elementary School is a 49,200 SF facility. The HVAC project included the replacement of 12 Packaged **Rooftop Units** which included gas heating, DX cooling, economizer with barometric relief & curb adaptor. There was also the replacement of 31 VVT Dampers, duct modifications, controls, electrical work, miscellaneous construction (ceilings), as well as the demolition of the existing systems being replaced.

Tyler County Pre-K School is an 8,700 SF facility. The HVAC project included the Installation of one 25 Ton Variable Speed AHU which includes gas heating, DX cooling, & economizer with barometric relief . There was also the installation of 10 VAV boxes with reheat, ducts, controls, electrical work, miscellaneous construction (ceilings), as well as the demolition of existing systems being replaced.



# References

We feel that the best way to demonstrate our strengths and leadership in **HVAC renovations** is by referring to our clients. We have an ever-growing list of repeat clients. We are able to respond to their needs, and we are certain that we are able to respond to all of your needs as well. So that you don't only have to take our word for it; we encourage you to call our references:

(Several Projects County-Wide, including many HVAC renovation projects) Mr. Thomas Gentile Jefferson County Commissioners 301 Market Street Steubenville, OH 43952 740 / 283-8500

(HVAC Projects) Mr. Joshua Smith, PE WVDOT Division of Highways 1900 Kanawha Boulevard, East Building 5, Room 350 Charleston, WV 25305 304 / 887-2325

(Several Projects County-Wide, including many HVAC renovation projects) Mr. Rob Robinson Brooke County Schools 1201 Pleasant Avenue Wellsburg, WV 26070 304 / 737-3481

(Several Projects County-Wide, including many HVAC renovation projects) Ms. Amanda Kimble Tyler County Schools P.O. Box 25 Middlebourne, WV 26149 304 / 758-2145 (Open-Ended IDIQ Contracts, including multiple HVAC renovation projects) Mr. Michael Douglass United States Postal Service 27497 Albert Pick Road Greensboro, NC 27498 336 / 665-2875

(Several Projects County-Wide, including many HVAC renovation projects) Dr. Kim Miller Ohio County Schools 2203 National Road Wheeling, WV 26003 304 / 243-0300

(Building 55: West Virginia State Office Complex - LEED Certified) Mr. Gregory L. Melton State of WV, General Services Division 1900 Kanawha Boulevard East Charleston, WV 25305 304 / 558-1808

(Several Projects City-Wide, including HVAC renovation projects) Mr. Christopher Petrossi City of Steubenville 115 South Third Street - Suite 108 Steubenville, OH 43952 740 / 283-6000 x1702

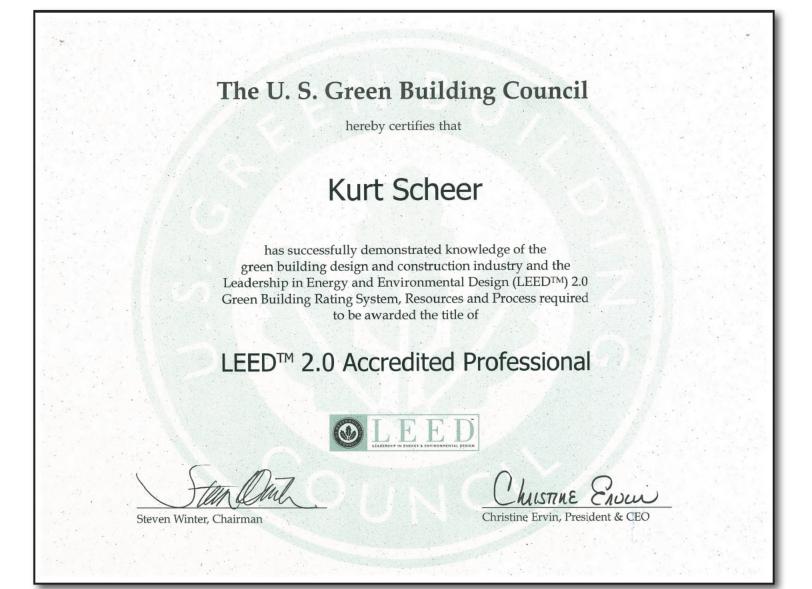


Here you will find a copy of Tim Mizer's (*your Project Manager / lead Engineer*) and Kurt Scheer's (Senior *Mechanical Engineer*) West Virginia State Board of Registration for Professional Engineers. In addition, Kurt's LEED AP Certificate is found on the next page. We can also provide more copies of certifications/ degrees/licenses of other Professionals if you wish to see them; a listing is found on each person's resume. Furthermore, copies of our firm's various licenses are found on the following pages:









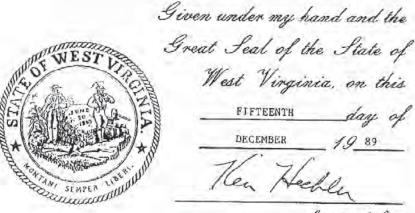




conform to law and are filed in my office. I therefore declare the organization to be a Corporation for the purposes set forth in its Articles, with the right of perpetual existence, and I issue this

#### CERTIFICATE OF INCORPORATION

to which I have attached a duplicate original of the Articles of Incorporation.



Secretary of State.





### I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

MCKINLEY & ASSOCIATES, INC.

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on December 15, 1989.

I further certify that the corporation has not been revoked by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Dissolution to the corporation.

Accordingly, I hereby issue this

### **CERTIFICATE OF EXISTENCE**

Validation ID:0WV3W\_CQTDH

Given under my hand and the Great Seal of the State of West Virginia on this day of October 27, 2015

Secretary of State

Nonce: A certificate issued electronically from the West Virginia Secretary of State's Web site is fully and immediately valid and offective. However, as an option, the issuance and validity of a certificate obtained decisionically may be edablished by visiting the Certificate Validation D displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate.



## WEST VIRGINIA STATE TAX DEPARTMENT BUSINESS REGISTRATION CERTIFICATE

ISSUED TO: MCKINLEY & ASSOCIATES INC 32 20TH ST WHEELING, WV 26003-3750

#### BUSINESS REGISTRATION ACCOUNT NUMBER:

1040-9524

This certificate is issued on: 06/28/2011

This certificate is issued by the West Virginia State Tax Commissioner in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

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CERTIFICATE OF uthorization STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS The West Virginia State Board of Registration for Professional Engineers having verified the person in responsible charge is registered in West Virginia as a professional engineer for the noted firm, hereby certifies **MCKINLEY ARCHITECTURE AND ENGINEERING, INC** C00366-00 Engineer in Responsible Charge: TIM E. MIZER - WV PE 013169 has complied with section \$30-13-17 of the West Virginia Code governing the issuance of a Certificate of Authorization. The Board hereby notifies you of its certification with issuance of this Certification of Authorization for the period o January 1, 2022 - December 31, 2023 providing for the practice of engineering services in the State of West Virginia. IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE. PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION. IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA UNDER ITS SEAL, AND SIGNED BY THE PRESIDENT OF SAID BOARD. Both E. Thomas BOARD PRESIDENT

Per your request in "General Terms and Conditions" Part 8, here you will find copies of our various Insurance Coverages:

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	certificate does not confer rights t	o the	e cert	ificate holder in lieu of s	UCh end	· ·			
oduc he Ja	ames B. Oswald Company				NAME:	Sleven Ga		FAX	
100 \$	Superior Avenue, Suite 1500				(A/C, No,	Ext): 216-30			216-839-2815
eve	land OH 44114				ADDRES		oswaldcompa		
								DING COVERAGE	NAIC #
URED	}			MCKIN-1			ntal Insurance	Company	3528
cKin	ley Architecture and Engineering	J			INSURER				
201 /hee	th Street #100 ling WV 26003				INSURER				
100	111g 111 20000				INSURER				
					INSURER				
DVE	RAGES CER	TIFI	CATE	E NUMBER: 1519257570				REVISION NUMBER:	·
	IS TO CERT FY THAT THE POLICIES CATED. NOTWITHSTANDING ANY RE FIFICATE MAY BE ISSUED OR MAY LUSIONS AND CONDITIONS OF SUCH	PERT	REME AIN, CIES.	NT, TERM OR CONDITION THE INSURANCE AFFORD LIMITS SHOWN MAY HAVE	OF ANY ED BY T	CONTRACT HE POLICIE EDUCED BY	OR OTHER I S DESCR BEI PA D CLA MS.	DOCUMENT WITH RESPE	CT TO WHICH TH
R	TYPE OF INSURANCE	INSD	SUBR WVD	POLICY NUMBER		POLICY EFF MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMI	rs
	COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE DAMAGE TO RENTED	s
	CLAIMS-MADE OCCUR							PREMISES (Ea occurrence)	\$
$\vdash$								MED EXP (Any one person)	\$
	J							PERSONAL & ADV INJURY	\$
GE								GENERAL AGGREGATE	\$
$\vdash$	POLICY JECT LOC							PRODUCTS - COMP/OP AGG	s
AU	OTHER: JTOMOBILE LIABILITY							COMBINED SINGLE LIMIT	s
-	ANY AUTO							(Ea accident) BODILY INJURY (Per person)	s
	OWNED SCHEDULED AUTOS							BODILY INJURY (Per accident)	-
	HIRED NON-OWNED AUTOS ONLY							PROPERTY DAMAGE (Per accident)	s
									\$
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$
	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$
	DED RETENTION \$								\$
AN	DRKERS COMPENSATION D EMPLOYERS' LIABILITY Y / N							PER OTH- STATUTE ER	
OF	YPROPRIETOR/PARTNER/EXECUTIVE FICER/MEMBER EXCLUDED?	N / A						E.L. EACH ACCIDENT	S
If ye	andatory in NH)							E.L. DISEASE - EA EMPLOYEE	
-	SCRIPTION OF OPERATIONS below	N	Y	AEH591893924		10/10/2021	10/10/2022	E.L. DISEASE - POLICY LIMIT Each Claim	\$ \$1,000,000
Cla	tro Date: 9/10/1981			ALI 103 1033324		10/10/2021	10/10/2022	Aggregate Deductible	\$2,000,000 \$25,000
aiver	PTION OF OPERATIONS / LOCATIONS / VEHICI r of Subrogation as designated above	LES (⊭ è is p	rovid	101, Additional Remarks Schedu ed when required of the Na	ile, may be amed Ins	attached if mor ured by writt	e space is requiri ien contract o	ed) r agreement.	1
RTI	FICATE HOLDER	_			CANC	ELLATION			
	March-Westin Company 360 Frontier Street				THE ACCC	EXPIRATION ORDANCE WI	N DATE THE TH THE POLIC	escribed policies be c Ereof, notice will Y provisions.	
	Morgantown WV 26505				At	ized REPRESE	Dolica		
						© 19	88-2015 AC	ORD CORPORATION.	All rights reser
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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

Proc Folder:	1039904		Reason for Modification:
Doc Description:	Huntington Tri-State Armory		
Proc Type:	Central Purchase Order		
Date Issued	Solicitation Closes	Solicitation No	Version
2022-05-04	2022-05-17 13:30	CEOI 0603 ADJ2200000014	1

BID RECEIVING LOCATION						
BID CLERK						
DEPARTMENT OF ADMINISTRATION						
PURCHASING DIVISION						
2019 WASHINGTON ST E						
CHARLESTON WV 25305						
US						
VENDOR						
Vendor Customer Code: *000000206862						
Vendor Name : McKinley Architecture and Engineering						
Address :						
Street : 129 Summers Street - Suite 201						
City : Charleston						
State : West Virginia	Country : USA	<b>Zip</b> : 25301				
Principal Contact : Ernest Dellatorre						
Vendor Contact Phone: (304) 340-4267	Extension: 115					

#### FOR INFORMATION CONTACT THE BUYER David H Pauline 304-558-0067 david.h.pauline@wv.gov

Vendor Signature X Suns A Delatur

FEIN# 55-0696478

DATE 13 May 2022

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.

(Name, Title)
(Printed Name and Title) Ernest Dellatorre, Director of Business Development
(Address) 32 20th Street - Suite 100, Wheeling, WV 26003
(Phone Number) / (Fax Number) (304) 233-0140 x115   (304) 233-4613
(email address) edellatorre@mckinleydelivers.com

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

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

McKinley Architecture and Engineering

(Company)

Authorized Signature) (Representative Name, Title)Ernest Dellatorre, Director of Business Development13 May 2022(Printed Name and Title of Authorized Representative) (Date)(304) 233-0140 x115 | (304) 233-4613(Phone Number) (Fax Number)edellatorre@mckinleydelivers.com

(Email Address)