

West Virginia Army National Guard



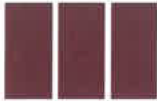
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**Huntington Tri-State Armory
HVAC Renovation Design**

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WV Purchasing Division



STATE OF WEST VIRGINIA

 **McKINLEY**
ARCHITECTURE + ENGINEERING

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,



Ernest 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 multi-discipline **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

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www.Facebook.com/McKinleyDelivers

www.Linkedin.com/company/McKinleyDelivers

Instagram: @McKinleyDelivers



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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

Buildings 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-of-the-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™ 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 (www.usgbc.org). 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® 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!
-  **Building 55: 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.



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

Thomas R. Worlledge, 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.



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



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

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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 contractor's progress to ensure that they are following the Construction Documents. They observe 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 on-site 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

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

Tim E. Mizer, PE, RA, QCCxP

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)

HHS DR 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 qualifications 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 Plant 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 # [REDACTED]

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 believes 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

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 2 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 fourth consecutive 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 to 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.



BEFORE

and

AFTER



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.

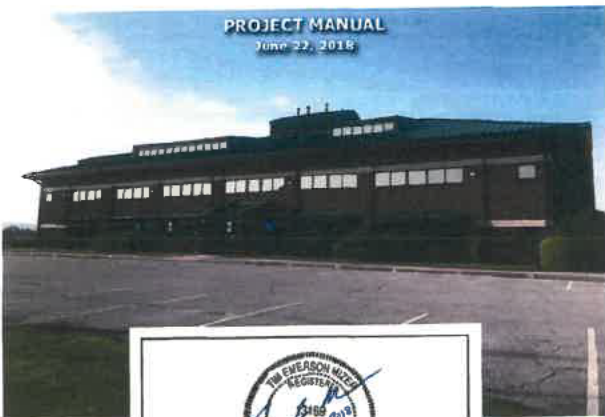
For one task, we designed the HVAC replacement to the existing 2-story, 8,820 square foot **WVDOH Equipment Division Facility in Buckhannon** (State Project N081-BLD/GR-0.00 00). We designed a new Variable Refrigerant Flow (VRF) air handling unit with remote condensing unit to condition the offices and 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.

West Virginia Department of Transportation,
Division of Highways

District 6 Headquarters
HVAC Renovations
Moundsville, West Virginia

PROJECT MANUAL
June 27, 2018



REGISTERED DESIGN CERTIFICATION

McKINLEY
ARCHITECTURE + ENGINEERING

32 20th Street, The Maxwell Centre - Suite 100, Wheeling, West Virginia 26003 • 304-233-0140
129 Summers Street - Suite 201, Charleston, West Virginia 25301 • 304-340-4267
416 Longridge Drive, Pittsburgh, PA 15243 • 724-223-8250

McKINLEY
ARCHITECTURE + ENGINEERING

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



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.alliantgroup.com | 800.564.4540

Building 55 West Virginia State Office Complex



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 www.irs.gov

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

Very truly yours,

Rizwan Virani
Managing Director



www.alliantgroup.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 high-rise** 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



BEFORE

& AFTER



04/23/2014

BEFORE & AFTER



04/23/2014



McKINLEY
ARCHITECTURE + ENGINEERING

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

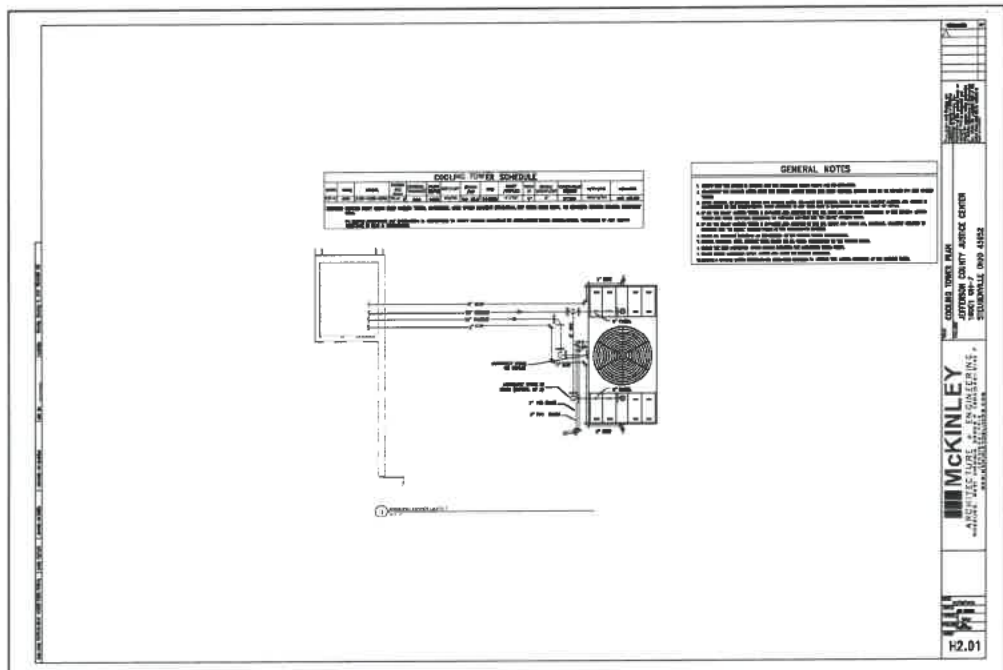
As mentioned, we have worked with the Board of Commissioners of the County of Jefferson on several projects over the past few years, and currently have an engineering and architectural services open ended contract with them.

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



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

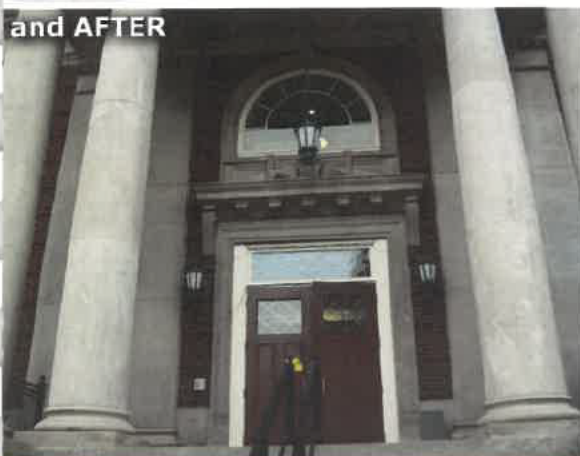
McKinley Architecture and Engineering has completed many project for West Virginia University and their affiliated campuses through **multiple Open-End Architectural / Engineering Services contracts**, along with **additional projects** outside those open-ended agreements. We have completed **HVACs / 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.**

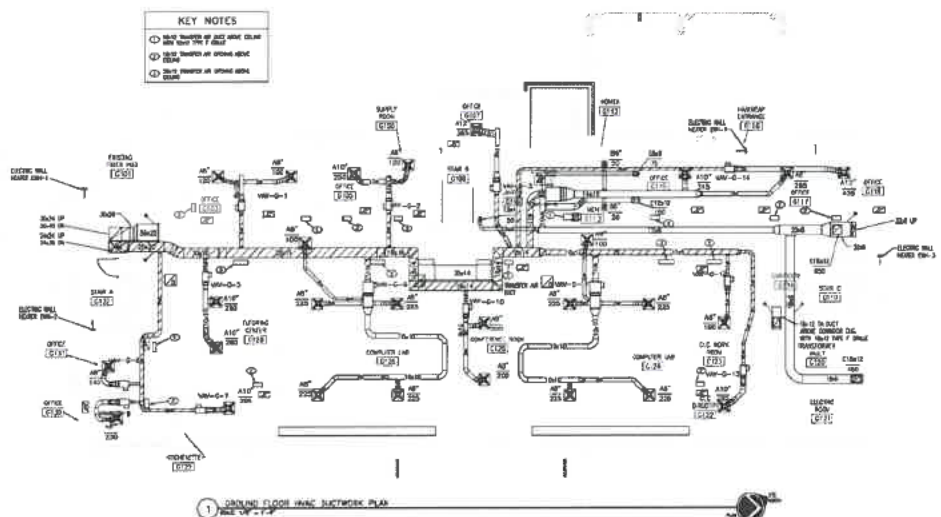
The **HVAC System** consists of 2 Variable Volume Air Handling Units with Hot Water and Chilled Water Coils, and Enthalpy Controlled Economizer. The AHUs provide heating and cooling through a series of Variable Air Volume Boxes with Hot Water Reheat Coils. The exterior spaces also have finned tube radiation 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.



BEFORE



and AFTER



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.

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.

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.



BEFORE



and AFTER

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 from 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 non-elective change orders!



McKINLEY

ARCHITECTURE + ENGINEERING

Brooke County Schools

Brooke High School HVAC



BEFORE



& AFTER



BEFORE



& AFTER



Ohio County Schools

Madison Elementary School

Wheeling, West Virginia

Owner

Ohio County Schools

Size

74,820 SF approx.

Construction Cost

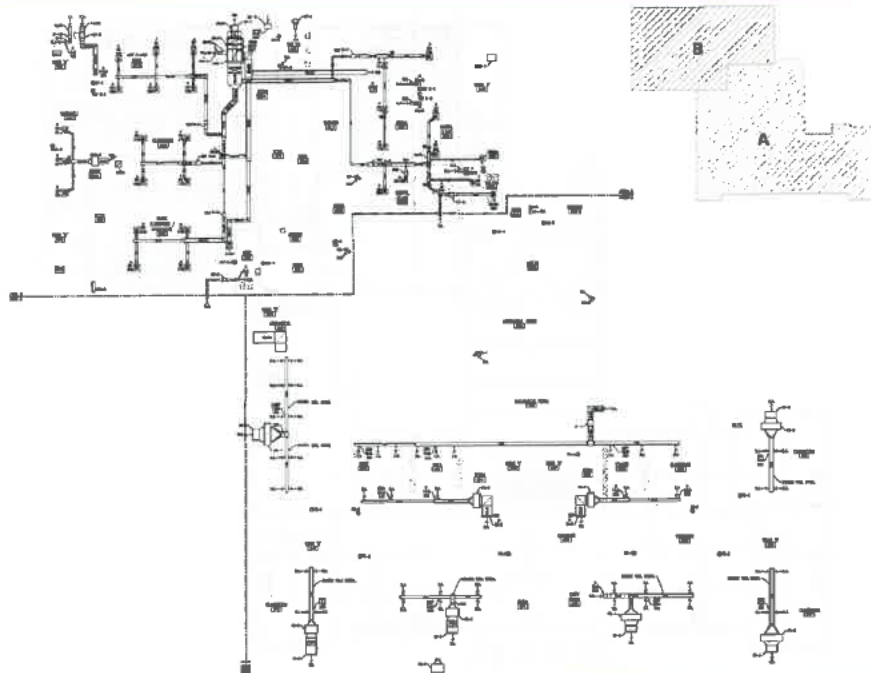
\$3.7 million

Project Architects-Engineers

McKinley Architecture and Engineering

Contractor

Climatech, Inc.



The **Madison Elementary School renovation** is one of our many projects we have completed for Ohio County Schools; our relationship has been **on-going** since the 1980s, and has included several **HVAC renovations**. The 74,820 SF school was built in 1916; it is now a Contributing Structure in the Wheeling Island Historic District on the National Register of Historic Places, so our design had to respect the State Historic Preservation Office standards.

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.

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.



**BEFORE
and AFTER**



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

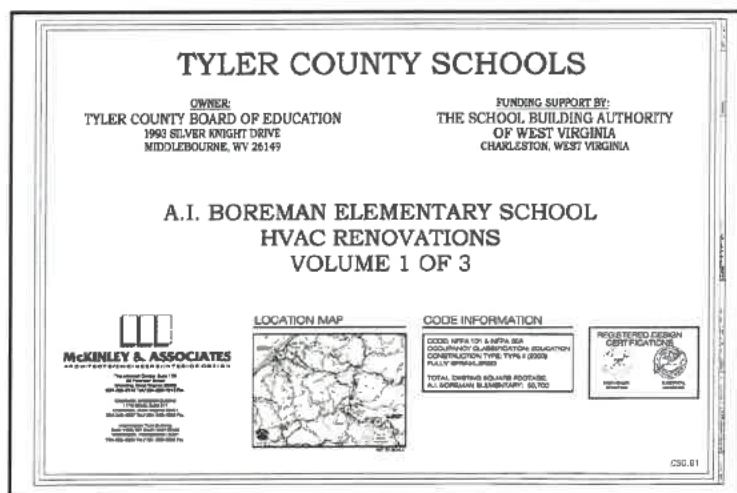
McKinley Architecture and Engineering has an **on-going relationship with Tyler County Schools**, and we have completed **multiple projects** for them since 2003, including their **10-year Comprehensive Education Facilities Plans (CEFP 2010-2020 and CEFP 2020-2030)**, various **renovations, HVAC upgrades, 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 includes 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

(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

(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)

Dr. Kim Miller
Ohio County Schools
2203 National Road
Wheeling, WV 26003
304 / 243-0300

(Several Projects County-Wide, including many HVAC renovation projects)

Mr. Rob Robinson
Brooke County Schools
1201 Pleasant Avenue
Wellsburg, WV 26070
304 / 737-3481

*(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

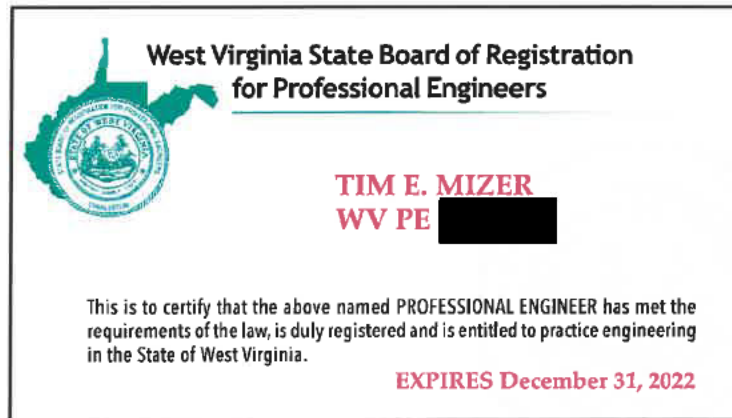
(Several Projects County-Wide, including many HVAC renovation projects)

Ms. Amanda Kimble
Tyler County Schools
P.O. Box 25
Middlebourne, WV 26149
304 / 758-2145

(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:



The U. S. Green Building Council

hereby certifies that

Kurt Scheer

has successfully demonstrated knowledge of the
green building design and construction industry and the
Leadership in Energy and Environmental Design (LEED™) 2.0
Green Building Rating System, Resources and Process required
to be awarded the title of

LEED™ 2.0 Accredited Professional



Steven Winter, Chairman

Christine Ervin, President & CEO



CERTIFICATE

*I, Ken Hechler, Secretary of State of the
State of West Virginia, hereby certify that*

by the provisions of Chapter 31, Article 1, Sections 27 and 28 of the West Virginia
Code, the Articles of Incorporation of

McKINLEY & ASSOCIATES, INC.

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.



*Given under my hand and the
Great Seal of the State of
West Virginia, on this*

FIFTEENTH

day of

DECEMBER

19 89

Ken Hechler

Secretary of State.

State of West Virginia



Certificate

*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*

Natalie E. Tennant

Secretary of State

Notice: A certificate issued electronically from the West Virginia Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Validation Page of the Secretary of State's Web site, <https://apps.wv.gov/sos/businessentitysearch/validate.aspx> entering the validation ID 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 *Authorization*

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 of:*

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.

Scott E. Thomas Jr.

BOARD PRESIDENT

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



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
08/13/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Paul Associates, Inc. 1311 Chapline Street PO Box 990 Wheeling WV 26003-0123	CONTACT NAME: Amy Stover PHONE (A/C No. Ext): (304)233-3303 E-MAIL ADDRESS: astover@paulassociates.com FAX (A/C No.): (304)233-3333
INSURED McKinley & Associates Inc See Additional Named Insured Schedule Below 32-20th Street Ste 100 Wheeling WV 26003-	INSURER(S) AFFORDING COVERAGE INSURER A: CINCINNATI INS CO NAIC # 10677 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD W/O/D	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:	X	EPP 0146335	06/15/2021	06/15/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY ☐ ANY AUTO ☒ OWNED AUTOS ONLY ☒ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY		EPP 0146335	06/15/2021	06/15/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION \$		EPP 0146335	06/15/2021	06/15/2022	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☐ N/A				☐ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 MCKINLEY ARCHITECTURE AND ENGINEERING, MCKINLEY ARCHITECTURE AND ENGINEERING LLC, MCKINLEY ARCHITECTURAL SERVICES INC, WILLOW GLEN CAPITAL, FORT HENRY LLC. CERTIFICATE ISSUED AS PROOF OF INSURANCE.

CERTIFICATE HOLDER

CANCELLATION

AI 005479

Specimen	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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ACORD 25 (2016/03)

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

10/14/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER The James B. Oswald Company 1100 Superior Avenue, Suite 1500 Cleveland OH 44114	CONTACT NAME: Steven Galica PHONE (A/C, No, Ext): 216-306-0047 E-MAIL ADDRESS: sgatica@oswaldcompanies.com FAX (A/C, No): 216-839-2815
INSURED McKinley Architecture and Engineering 32 20th Street #100 Wheeling WV 26003	INSURER(S) AFFORDING COVERAGE INSURER A: Continental Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
MCKIN-1	NAIC # 35289

COVERAGES

CERTIFICATE NUMBER: 1519257570

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD'L SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/PO/ AGG \$ \$
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB ☐ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ Y ☐ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below					PER STATUTE ☐ OTH-ER ☐ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Claims Made Retro Date: 9/10/1981	N Y	AEH591893924	10/10/2021	10/10/2022	Each Claim Aggregate Deductible \$1,000,000 \$2,000,000 \$25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Waiver of Subrogation as designated above is provided when required of the Named Insured by written contract or agreement.

CERTIFICATE HOLDER

March-Westin Company
360 Frontier Street
Morgantown WV 26505

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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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

Doc Description: Huntington Tri-State Armory HVAC Renovation Design

Reason for Modification:

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

Zip : 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 

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 wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that 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 Development 13 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)