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WV PURCHASING  
DIVISION



**CEOI 0603 ADJ2000000002**

**Eleanor Readiness Center  
HVAC Renovation Design**

 **McKINLEY**  
ARCHITECTURE + ENGINEERING

4 February 2020

Tara Lyle  
Buyer Supervisor  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305-0130

Dear Ms. Lyle and Members of the Selection Committee,

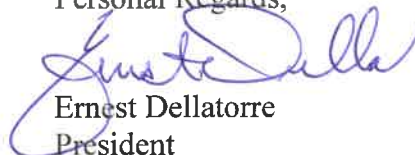
McKinley Architecture and Engineering is pleased to provide the Acquisition and Contract Administration Section of the Purchasing Division, on behalf of the West Virginia Army National Guard, Construction and Facilities Management Office, with our Expression of Interest for professional architectural and engineering design services to fully update and upgrade the HVAC systems at the Eleanor Armed Forces Readiness Center, located in Red House, WV. As you review this submission, we emphasize the following strengths of McKinley Architecture and Engineering with respect to your projects:

**McKinley Architecture and Engineering** (*McKinley & Associates*) has been providing design services since 1981. With offices in **Charleston** and Wheeling, WV and Pittsburgh, PA, we support a professional staff of **Architects, Engineers, an HVAC Qualified Commissioning Process Provider, LEED Accredited Professionals specializing in Building Design & Construction, Construction Administrators**, a Historic Preservationist, and more.

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. He understands that the systems' performance can reduce operating and maintenance costs, improve the comfort of a building's occupants, and extend the life of equipment. During the past 39 years, our expertise has been called upon many times upgrading outdated and antiquated machinery, designing energy efficient systems, and even evaluating and correcting errors in existing design.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 you!

Personal Regards,



Ernest Dellatorre  
President

McKinley Architecture and Engineering  
(304) 340-4267 x115

# Corporate Information

## Firm History

Founded in 1981, McKinley Architecture and Engineering (McKinley & Associates) is a multi-discipline **full service Architectural & Engineering firm**, offering comprehensive professional services in **Architecture, MEP Engineering, HVAC Commissioning, LEED Design, Planning, Construction Administration, and more**. We have a broad range of skill and experience for projects involving governmental, commercial, recreational, hospitality, manufacturing, industrial, educational, retail, development, and much more. Over the years, our firm won multiple **State and National awards and recognitions** for our designs.



## Firm Information

**Ernest Dellatorre**  
President

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

**Patrick J. Rymer, AIA, ALEP**  
Director of Architecture

## Date of Incorporation

**July 1, 1981**  
Wheeling, West Virginia

## Professionals on Staff

Architects  
Engineers  
Arch./Eng. Designers  
Construction Admins.  
HVAC Commissioning Provider  
LEED AP BD+C  
ALEP (CEFP)  
REFP  
Historic Preservationist

## 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

100 Bradford Road  
Suite 400  
Wexford, PA 15090  
P: 724-719-6975

## Credentials

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

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

## Follow Us

[www.McKinleyDelivers.com](http://www.McKinleyDelivers.com)

[www.Facebook.com/McKinleyDelivers](https://www.Facebook.com/McKinleyDelivers)

[www.Linkedin.com/company/McKinleyDelivers](https://www.Linkedin.com/company/McKinleyDelivers)

Instagram: @McKinleyDelivers





# Project Approach

First and foremost we can state that our large professional staff will devote whatever time is necessary to provide you with A successful projects. If our project team is chosen for this project; they are available to **start immediately** upon our being selected, and will provide the necessary hours to complete your project on time. **We will meet all of your Goals and Objectives!**

**To start your projects, kickoff meetings will be held at the Eleanor Armed Forces Readiness Center with the West Virginia Army National Guard representatives, along with all our design professionals.** From this meeting, the Owners Project Requirements will be defined and documented, to be used as a guideline through the design phases. We will **verify the existing conditions** of the facility through the review of the existing conditions, existing drawings if available, and with discussions with the Owner. From our overall facility survey, we will 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, and will create floor plans of your existing building. We will then use all this information to **design and specify new equipment and HVAC systems with added air circulation or venting as required, to maximize system efficiency, to best fit the standards of today's design and energy efficiency standards, and to meet all current building codes.**

Over the years, McKinley Architecture and Engineering has designed **hundreds of projects which involve HVAC assessments, renovations, replacements, upgrades, and/or repairs** - which gives us invaluable experience to utilize within your project, whether it is working with alternate suppliers or evaluating and recommending the best HVAC concepts. During the past **39 years**, our expertise has been called upon many times upgrading outdated and antiquated machinery, bringing the systems and load requirements up to compliance, designing energy efficient systems, scheduling for phased construction around occupied areas of the projects, and even evaluating and correcting errors in existing design (pipe sizing, piping material errors, control valving, equipment accessibility, etc). We currently support clients on a number of significant HVAC projects that illustrate this ability. 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 Eleanor Armed Forces Readiness Center personnel.

Additionally, Tim E. Mizer, PE, RA, QCxP, our Director of Engineering Services, is a **Qualified Commissioning Process Provider**. 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. McKinley Architecture and Engineering can work with the Contractors and Testing Adjusting & Balancing (Rebalancing) Company to verify proper system operation. The purpose of the verification is to verify all systems and equipment are operating as intended, and to the designed efficiency.

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 us reduce the response time for our recent projects. A **positive relationship with the installing contractors is also needed**, and we have worked with all of the major HVAC contractors in the area. Therefore, we know we can successfully complete your project on time and budget.

With our **vast HVAC renovation experience, understanding of codes**, and our **great working relationship with various state agencies**; we are confident that we have the talent and technology needed to make these projects successful. Also, as your **MEP Engineers/Architects and single point of responsibility**, you can be reassured of **smooth project delivery and sensitivity to all relevant guidelines in our state. We will meet your goals and objectives.**

# 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.

Your project manager is **Tim E. Mizer, PE, RA, QCxP**. His **QCxP accreditation** was earned at the University of Wisconsin-Madison.



**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

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

McKinley approaches ecological design from a business perspective, offering **proactive** solutions to complex problems such as indoor air quality, energy efficiency, resource depletion, and water quality. With commercial and institutional 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 2019 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](http://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 specializing in Building Design & Construction** on staff:

- Christina Schessler, 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 either under construction or in design with potential **LEED Platinum Certification** or potential **LEED Silver Certification**. Our 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 both Thom and Christina 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.

**McKINLEY**  
ARCHITECTURE + ENGINEERING



# Quality Control

**Quality control** at McKinley Architecture and Engineering is a constant process which **begins with the initial project activity and continues through document submissions, bidding, construction and owner occupancy.** The longevity and size of the firm and our history of success completing complex and innovative projects is founded upon our commitment to this process.

**During the design phases,** all personnel become fully versed in the client's program, project requirements and design standards. The design team is responsible for identifying for you any potential conflicts between program criteria and design standards and resolving those conflicts to your satisfaction.

As the schematic/concept plans are developed, Tim E. Mizer, PE, RA, QCxP, your Project Manager, will present plans for review and comments to a plan group depending on the nature of the work; e.g. engineers commenting on the engineering and architects critiquing the architecture (*a peer review is seen below*). Once a consensus is reached, the plans advance in the process.

**Prior to the completion of each phase,** a set of project documents is issued to each discipline for coordination, cross-checking and review. The following items are checked at that time:

- Drawings and specifications for program compliance.
- Drawings and specifications for internal coordination.
- Cost effectiveness of the design.
- Drawing accuracy.
- Compliance with appropriate codes and client standards.

After coordination check corrections are completed, Tim will review the documents and compare the completed documents with check prints to verify that corrections have been made in accordance with the project design criteria. A review set will be sent to you, the Fire Marshal and other governing authorities for preliminary review.

During the subsequent phases of design, all items are checked by persons other than those performing the daily design work in order to provide fresh insight. Prior to the final release of the documents, revisions are once again checked by the Project Manager and appropriately referenced on the drawings. Copies of the final documents will be distributed to you for final review and approval. A set is also sent to the Fire Marshal and other governing authorities for final review comments. Comments are incorporated into the documents prior to issuance for advertising, bidding and construction.

Bid documents are issued after a final check to verify that all bid packages have current revisions included and are appropriately identified. Bid sets are numbered and registered to bidders so that each bidder may be kept informed of clarifications and addenda. We will provide assistance in analyzing and evaluating bids for construction, and assist with awarding the construction contracts.



**During the construction,** the processing of shop drawings and submittals will be controlled and monitored by Mr. Mizer, and includes the receipt, logging, review and return of submittals. Urgent items can often be expedited to satisfy the construction schedule. In addition, Bob Smith, your Construction Administrator, will monitor the contractor's progress to ensure that they are following the Construction Documents, and verify that closeout documents are submitted in a timely manner upon Substantial Completion.



# Construction Administration & On-Site Representation

**Construction 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 Administrators** 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 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 Administrator is typically on-site once every two weeks, but we can provide additional on-site representation if requested.

# References

*(Building 55: West Virginia State Office Complex - LEED Certified)*

Mr. Gregory L. Melton  
State of West Virginia  
General Services Division  
1900 Kanawha Boulevard East  
Charleston, WV 25305  
304 / 558-1808

*(Open-Ended IDIQ Contracts, including multiple HVAC projects)*

Mr. Michael Douglass  
United States Postal Service  
27497 Albert Pick Road  
Greensboro, NC 27498  
336 / 665-2875

*(West Virginia Independence Hall)*

Mr. Randall Reid-Smith  
WV Division of Culture & History  
1900 Kanawha Boulevard, East  
Charleston, WV 25305  
304 / 558-0220

*(Multiple Projects, including 4 HVAC projects)*

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

*(WVDHHR's new Ohio County office renovation / fit-out)*

Mr. David J. Hildreth  
WV Department of Administration  
1409 Greenbrier Street  
Charleston, WV 25311  
304 / 558-1295

*(Multiple HVAC Projects)*

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

*(Orrick's Global Operations Center)*

Mr. Will Turani  
Orrick, Herrington & Sutcliffe LLP  
2121 Main Street  
Wheeling, WV 26003  
304 / 231-2629

*(Multiple Projects with Similar Scope)*

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

# 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*

**David A. Ullom**  
*Mechanical Engineering Designer*

**Bruce A. Kennedy, PE**  
*Electrical Engineer*

**Scott D. Kain**  
*Plumbing Engineering Designer*

## Architecture

**Thomas R. Worlledge, AIA, LEED AP BD+C, REFP**  
*Southern-WV Area Manager & Charleston Office Manager /  
Architect /  
LEED Accredited Professional specializing in  
Building Design & Construction*

## Construction Administration

**Robert E. Smith**

*\* McKinley Architecture and Engineering is willing to dedicate more professionals if they are needed; including more Architects and Designers, LEED Accredited Professionals, and more.*



# Tim E. Mizer, PE, RA, QCxP

Architectural Engineer / Architect / Commissioning Provider

## Director of Engineering Services

### EDUCATION:

Kansas State University  
B.S. Architectural Engineering - 1983

University of Cincinnati  
Architecture

### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

**Registered Engineering in:**  
West Virginia  
Ohio

**Registered Architect in:**  
Ohio

**Qualified Commissioning Process  
Provider**

### PROFESSIONAL EMPLOYMENT:

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

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

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

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

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

### SUMMARY OF EXPERIENCE:

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

### NOTABLE PROFESSIONAL EXPERIENCES:

**WV Army National Guard - multiple projects, including SPCC Certifications and Amendments (including Eleanor Maintenance Facility), AASF#1 Hangar HVAC, Mountaineer Challenge Academy, and Camp Dawson Multi-Purpose Building**

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

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

Building 34: WV State Office Complex in Weirton

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

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

West Virginia Independence Hall, including HVAC

Grave Creek Mound Museum renovations, including HVAC

Raleigh County Emergency Services Authority HVAC renovations

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

Orrick's Global Operations Center, including HVAC

Wagner Building, including HVAC

Belmont County Divisional Courts & Offices renovations, including HVAC

The Towers Building renovations, including HVAC

# License

For your convenience, you will see a copy of Tim Mizer's (your Project Manager's) West Virginia State Board of Registration for Professional Engineers License (WV PE #013169). We would be happy to provide you with copies of other Professionals' licenses if you wish to see them. In addition, a listing of all the professionals' certifications, degrees, and licenses are found on their resumes.



# David A. Ullom

## 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.

### NOTABLE PROFESSIONAL EXPERIENCES:

The Towers Building HVAC

Belmont County Divisional Courts

Jefferson County Justice Center

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

WVU Medicine - Reynolds Memorial Hospital

Trinity Health System - Crisis Rehabilitation Unit

Mid-Ohio Valley Technical Institute (MOVTI) HVAC

Ohio County Schools - Bridge Street Middle School

Ohio County Schools - Madison Elementary School

Ohio County Schools - RESA 6 Building

Mining sales in Illinois, Alabama, Kentucky, Ohio, and West Virginia.

Specialist in conical cutting and drilling tools for coal applications.

Reviewed test plans and procedures to ensure adequate coverage of system requirements.

Collaborated with scientific, engineering, and technical personnel to resolve testing problems and system malfunctions.

Created comprehensive test plans, test scripts, and use cases to support testing objectives.

Worked in different geologies across North America assisting sales force in finding the best product for the customer.

Developed and edited maps for the Assessor's office in Marion county, WV (Fairmont).

Gained experience in geographic information systems (GIS).



# Bruce A. Kennedy, PE

## Electrical Engineer

### EDUCATION:

The University of North Dakota  
B.S. Electrical Engineering - 1975

DeVry Institute of Technology

### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

#### Registered Engineering in:

West Virginia  
Ohio  
Pennsylvania  
Texas

### MILITARY SERVICE:

US Air Force - Honorable Discharge

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Electrical Engineer  
Wheeling, WV (2018 to present)

Advanced Electrical Simulations LLC  
Owner/Principal Engineer  
Spring, TX (2014 to present)

Cameron International  
Principal Electrical Engineer  
Houston, TX (2011-2014)

### SUMMARY OF EXPERIENCE:

Mr. Kennedy has been an **Electrical Engineer** since 1975. He is an experienced power electronics/electrical systems design engineer with extensive electrical simulation experience using ETAP, SKM, EasyPower and PSIM. He personally owns and maintains ETAP license. He has completed electrical system designs for industrial, office, medical, educational, retail construction, and more. Your doors and windows renovation project might require electrical systems tie-ins, such as access control, power, and safety & security alarm systems.

### NOTABLE PROFESSIONAL EXPERIENCES:

The Towers Building renovations

Belmont County Divisional Courts & Offices renovations

Harrison County Schools - Johnson Elementary School

WVDOT, Division of Highways - District 6 Moundsville Headquarters

Tyler County Schools - multiple projects

Wetzel County Schools - New Martinsville School renovations

Wetzel County Schools - Valley High School meat lab

Wetzel County Schools - Valley Field House

Facilities arc-flash, short-circuit fault, protective device coordination, load flow and harmonics studies.

Facilities electrical system existing conditions, code compliance and problem solving surveys.

Drilling rig short-circuit fault current, protective device coordination, load flow and harmonics studies.

Application of NEC, IEC and ABS standards to mobile offshore drilling rig electrical systems.

Computer data center electrical system design and onsite project management.

Data center short-circuit fault current, protective device coordination and arc-flash studies.

Electrical system designs for medical, industrial, office and retail construction.

Building load analyses, emergency generator sizing and fault current studies.

Electrical system designs for hospitals, medical clinics and educational buildings.

Short-circuit fault current, protective device coordination and arc-flash studies.

Industrial battery charger and UPS systems power electronics design.

Custom power conversion equipment/systems design.

# Scott D. Kain

## Plumbing & Electrical Engineering Designer

### EDUCATION:

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

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
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 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 Architecture and Engineering' 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:

WVDHHR's new Ohio County office fit-out / renovations  
Building 55: WV State Office Complex in Logan (LEED Certified)  
Building 34: WV State Office Complex in Weirton  
WVDRS Wheeling District's new office space fit-out / renovations  
United States Postal Service - statewide post offices  
West Virginia State Police - multiple projects state-wide  
West Virginia Army National Guard - multiple projects  
Orrick's Global Operations Center  
Bennett Square - multiple phases of tenant fit-outs  
Wagner Building - multiple phases of tenant fit-outs  
Ft. Henry Building - multiple phases of tenant fit-outs  
Panhandle Cleaning & Restoration warehouse and office building  
Wheeling Island Hotel•Casino•Racetrack multiple projects  
Wheeling Island Fire Station  
Jefferson County Jobs & Family Services renovations  
Harrison County Jobs & Family Services renovations  
West Virginia University - Colson Hall  
West Virginia University - State Fire Training Academy  
WVU Institute of Technology - Maclin Hall  
Cabela's Eastern Distribution Center  
WV Northern Community College - B. & O. Building  
Marshall County Schools - Hilltop Elementary School (LEED Certified)  
Marshall County Schools - Cameron High School (LEED Registered)  
Boone County Schools - multiple projects  
Brooke County Schools - multiple projects  
Hancock County Schools - multiple projects  
Ohio County Schools - multiple projects  
Wood County Schools - multiple projects

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

## Architect / Specialized LEED Accredited Professional

### Charleston Office Manager



#### 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 #48600

##### 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. Worledge is a skilled **Architect** with over 30 years of experience, who has been the former President of the WV chapter of AIA, has received State and National design awards, and placed in National and Global design competitions. Unlike many architects who are new to green building and alternate energy, Thom started his career designing and building alternate energy systems, and was the first LEED Accredited Professional in West Virginia! He believe energy efficient design is simply good design practice. As a **LEED Accredited Professional specializing in Building Design & Construction (LEED AP BD+C)** and a **recognized sustainable design expert**, he has **2 LEED Certified** projects, **multiple LEED Registered** projects, several other energy-efficient projects, has articles published in State and National trade publications, was a featured speaker at multiple State and National conferences, served on the committee that set the ASHRAE 90.1 Standards for the International Energy Code, professionally teaches and trains other professionals in the art of High Performance Design, is a Founder & Chairman of the Board for the US Green Building Council's West Virginia Chapter, and much more.

#### NOTABLE PROFESSIONAL ACHIEVEMENTS:

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

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

Veterans Affairs Medical Centers - multiple VAMCs around WV and PA

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

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

Fairmont State University - College Apartments Complex

WVU Institute of Technology - Maclin Hall Dormitory in Montgomery

West Virginia University - University Police Building

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)

Big Sandy Arena & Convention Center

Marshall County Schools - Hilltop Elementary School (**LEED Certified** - won multiple WV and National Awards & Recognitions)

Wood County Schools - Parkersburg High renovation (\$23 million) & Williamstown High renovation (\$13.5 million)



# 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:

United States Postal Service - multiple projects thru multiple open-ended IDIQ contracts, including Parkersburg Carrier Annex and Hub renovations & HVAC

The Towers Building renovations, including HVAC

Lincoln National Bank Building renovations

Cameron American Legion renovations

Jefferson County Courthouse renovations & Annex demo

West Virginia Army National Guard - AASF#1 HVAC renovations

Harrison County Courthouse renovations

Cabela's Eastern Distribution Center

City of Steubenville - multiple projects

Jefferson County Jobs & Family Services renovations

Brooke County Schools - Brooke High HVAC, new Brooke Middle, Follansbee Middle & Carlin Dodrill Fieldhouse renovations

Grant County Schools - Maysville Elementary & gymnasium renovations/HVAC & Union Educational Complex renovations

Hancock County Schools - A.T. Allison Elementary renovations, New Manchester Elementary renovations, Oak Glen High renovations/HVAC, Oak Glen High Multi-Sports Complex, Oak Glen Middle addition/renovations, Senator John D. Rockefeller IV Career Center HVAC, Weir High Multi-Sports Complex, Weir MS/HS HVAC, & new Weirton Elementary

Marshall County Schools - new Cameron High (LEED Registered) & new Hilltop Elementary (LEED Certified)

Ohio County Schools - multiple projects

The Linsly School - Banes Hall addition/renovations & Behrens Memorial Gymnasium renovations

Fairmont State University's new 3 building "University Terrace" Student Housing Apartment Complex

## Statewide On-Call Agreement

# WVDOT, Division of Highways

## State-wide, West Virginia

### Owner

West Virginia Department of Transportation,  
Division of Highways

### Construction Cost

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

### Project Architects-Engineers

McKinley Architecture and Engineering

### Project Engineer

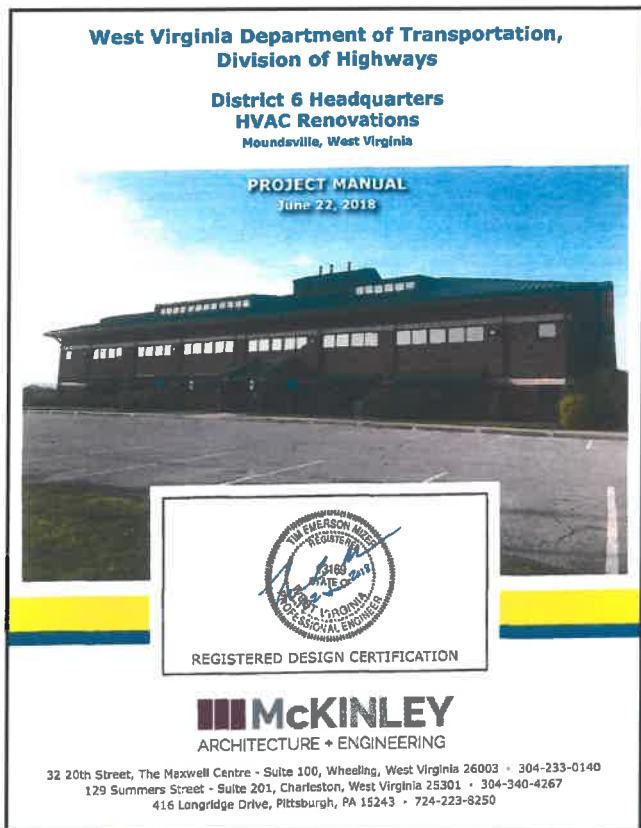
Tim E. Mizer, PE, RA, QCxP

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

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

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

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



# Building 55 West Virginia State Office Complex



## Logan, West Virginia

### Owner

State of West Virginia

### Size

53,200 SF approx.

### Project Architects-Engineers

McKinley Architecture and Engineering

### Project Architect

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

### Contractor

Massaro Corporation

### Commissioning Agent

Iams Consulting, LLC

City leaders were searching for a catalyst to stimulate community efforts to revitalize downtown Logan, West Virginia; this office building has become that inspiration. The building is designed to reflect the history and culture of the area while incorporating current technology and safety elements, thus empowering the community leaders to create a vibrant connected urban core. 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; by using less energy and water, this LEED certified building will save money for businesses and taxpayers, reduce greenhouse gas emissions, and contribute to a healthier environment for workers and the larger community. 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 features, a tight building envelope system was created with closed cell foam insulation, pre-cast panels, rigid polyisocyanurate, gypsum board, and thermal efficient windows. The interior lighting systems utilize LEDs and occupancy sensors.



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](http://www.irs.gov)

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

Very truly yours,

A handwritten signature in black ink, appearing to read "Rizwan Virani".

Rizwan Virani  
Managing Director



www.allinonegroup.com | 800.564.4540

# West Virginia Department of Health and Human Resources Office Building

Wheeling, West Virginia

## Owner

WV Department of Administration:  
Real Estate Division

## Size

56,783 SF

## Construction Cost

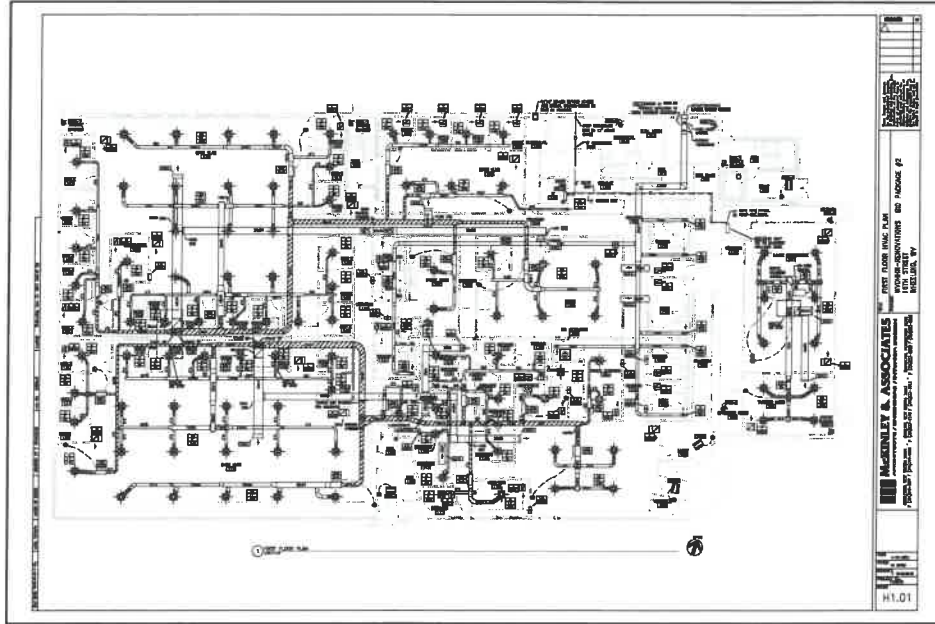
\$2 million

## Project Architects-Engineers

McKinley Architecture and Engineering

## Project Architect

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



We were asked by our client to **renovate/adaptively reuse** a car showroom and service area into an office building (now called the Mary Margaret Laipple Professional Building). The first floor **fit-out** includes space for the West Virginia Department of Health and Human Resources' (DHHR) Ohio County office. The 56,783 SF building was concrete and designed for cars; not people. The first challenge of the **renovation** was to remove a large ramp that connected two floors of the building and level the concrete floors. We worked with our client to fit the DHHR's program into the space and maximize the use of the space. We had to work around the existing structural walls and columns and provide fire escapes at the different floor levels of the floor structure. The initial \$2 million fit-out project was built in three phases: the exterior was completed first (including new security doors, windows, skin, etc.), next the interior design and renovations including major HVAC / mechanical and electrical systems to provide a state of the art facility for the DHHR's use, and then the parking lot and emergency exit fire stair tower so the project could be fast tracked to meet the Owner's 2013 move-in requirements. We worked with the local and state code officials to bring the building into compliance with the current building and fire codes and provide access to all of the occupied areas of the building. The fit-out was divided into three distinct spaces: secure office space, Client space, and training areas. There are dozens of individual offices, open office work areas, a large video conference room, smaller conference rooms, training rooms, interview rooms, and much more. The Office space is secured from the client area by an access control system.



BEFORE  
and AFTER



The training space was designed to be stand alone for use by other State staff training. We provided a separate entrance for future tenants of the upper two floors and to keep the future renovation cost to a minimum. There are multiple entryways and doors, both interior and exterior, with different levels of security access. The showroom windows were mostly in-filled because of the sensitive nature of the materials in the DHHR's office, but windows high on the wall provide **natural daylighting**.



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.
- 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 - \$280,000 HVAC project replacing 4 packaged rooftop units with new, like-in-kind, packaged rooftop units to bring the units in to USPS Standards compliance and to provide a more efficient system.
- 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.





# 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 \$800,000 **exterior envelope repair** project required masonry-clean all precast panels, including remove and replace all joint sealant, precast column repairs to realign columns as closely as possible, attached new steel anchors, patch precast concrete where required, restoration of glazing system including new gaskets and anodized caps, and more.

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.





# The Towers Building



BEFORE  
& AFTER



BEFORE & 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!**





Brooke County Schools

# Brooke High School HVAC



BEFORE

& AFTER



BEFORE



& AFTER







## Sherrard, West Virginia

### Owner

Marshall County Schools

### Size

49,700 SF

### Construction Cost

\$8.4 million

### Project Architects-Engineers

McKinley Architecture and Engineering

### Project Architect

Thomas R. Worledge,  
AIA, LEED AP BD+C, REFP

### Contractor

Grae-Con Construction

### Commissioning Agent

Iams Consulting, LLC

The 49,700 SF Hilltop Elementary School didn't start out as a green school but the design intent was to incorporate good sustainable design practice. During design coordination with the engineering team members the energy model that was developed compelled the designers to reduce the chiller capacity and system design; thus reducing energy use while saving money. It was not until after construction had commenced that the Owner decided to submit for LEED Certification. This required a great deal of coordination with the architects, engineers, subcontractors and suppliers. A lot of time was spent researching LEED-approved furnishings, finishes, etc. to make the indoor environmental quality conducive to learning, and to minimize maintenance. Since we incorporated good sustainable design practices from the beginning of design, this allowed for an easy transition, and for the project to be successfully completed. Hilltop Elementary is the first LEED Certified school in the state of West Virginia!

For the LEED Certification, we received points for the HVAC system design and commissioning, such as Thermal Comfort Controllability, Design, & Verification, as well as Mold Prevention. The HVAC System consists of 3 Single Zone Packaged Rooftop Units and a Series of Fan Coil Units, having ventilation air provided by a Dedicated Outside Air Unit. The Packaged Rooftop Units have Electric Heat, DX Cooling, Enthalpy Controlled Economizer with CO2 Override (on the Cafeteria Unit) and Hot Gas Reheat for Dehumidification Control. Upon a space RH value above 60% the DX Cooling will be energized, and Hot Gas Reheat will be utilized to prevent overcooling of the space. We are also preventing elevated humidity by limiting the ventilation air in the seldom occupied spaces, with the use of CO2 control. Upon a CO2 level of 800 ppm, the outside air damper will modulate open. However, the majority of the time the ventilation air will be kept at a minimum, since the space is seldom used at full capacity, greatly limiting the humidity. The Maximum Calculated RH value for the Classrooms served by the Fan Coil Units is 60%. The ventilation air is delivered to the spaces through a Dedicated Outside Air Unit. The Dedicated Outside Air Unit includes a Total Energy Wheel. When the outside air humidity levels are elevated, the Energy Wheel will provide the first level of dehumidification. Based on the interior sensible loading, the reduced airflow and cooling supply air temperature, the resulting RH in the space will not exceed 60%.

We also received multiple other LEED points in areas such as: low-emitting materials, acoustical performance, daylighting & views, lighting system design, light pollution reduction, optimized energy performance, recycled content, regional materials, innovation in design, and much more. The School Building Authority's 2009 Limit on New Elementary School Design is \$217/SF, but Hilltop Elementary's final price is less than \$170/SF. This amount was well below the national average for elementary school construction, sustainable or not. Also, this project had less than 1% in non-elective change orders!

HES won a 2010 Gold Medal Green Building Award by Building of America. HES also won the 2012 West Virginia Department of Environmental Protection's Clean Energy Environmental Award. HES received the 2012 Black Bear Award for the Highest Achievement for the West Virginia Department of Education's Green Ribbon Schools program. In addition, in April 2012, Hilltop was one of 78 schools nation-wide to be awarded the first-ever U.S. Department of Education Green Ribbon Schools! Moreover, on Hilltop won a 2013 Placemaker Award for Leadership of/for Place from the West Virginia GreenWorks.



Ohio County Schools

# Madison Elementary School

## Wheeling, West Virginia

### Owner

Ohio County Schools

### Size

74,820 SF approx.

### Construction Cost

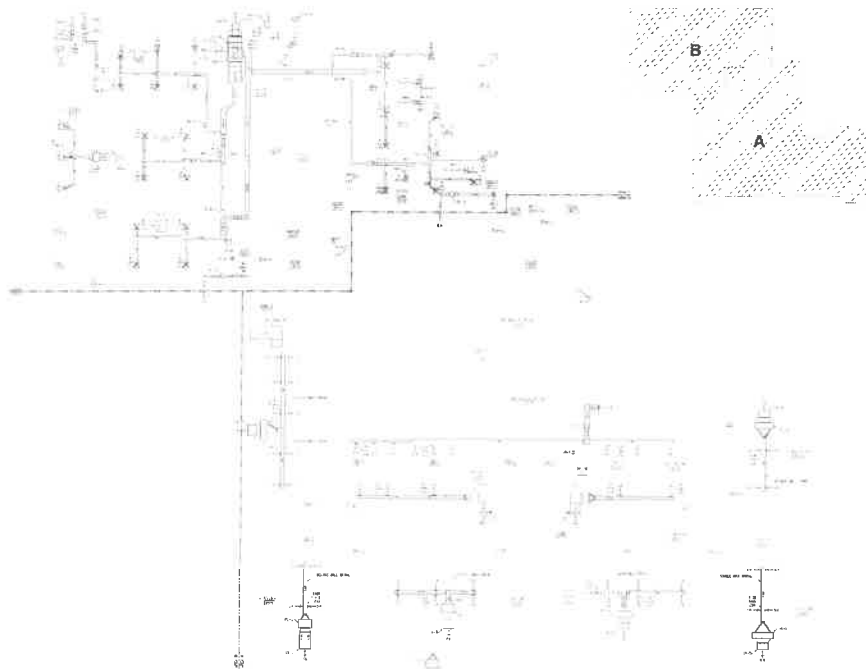
\$3.7 million

### 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**. 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**





# 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, which is an American Recovery & Reinvestment Act of 2009 (ARRA) grant 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.





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 \$293,700 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.**



BEFORE

and AFTER



# Raleigh County 911 and Emergency Operations Center HVAC

## Beaver, West Virginia

### Owner

Raleigh County Emergency Services Authority

### Size

12,855 SF

### Construction Cost

\$250,000

### Project Architects-Engineers

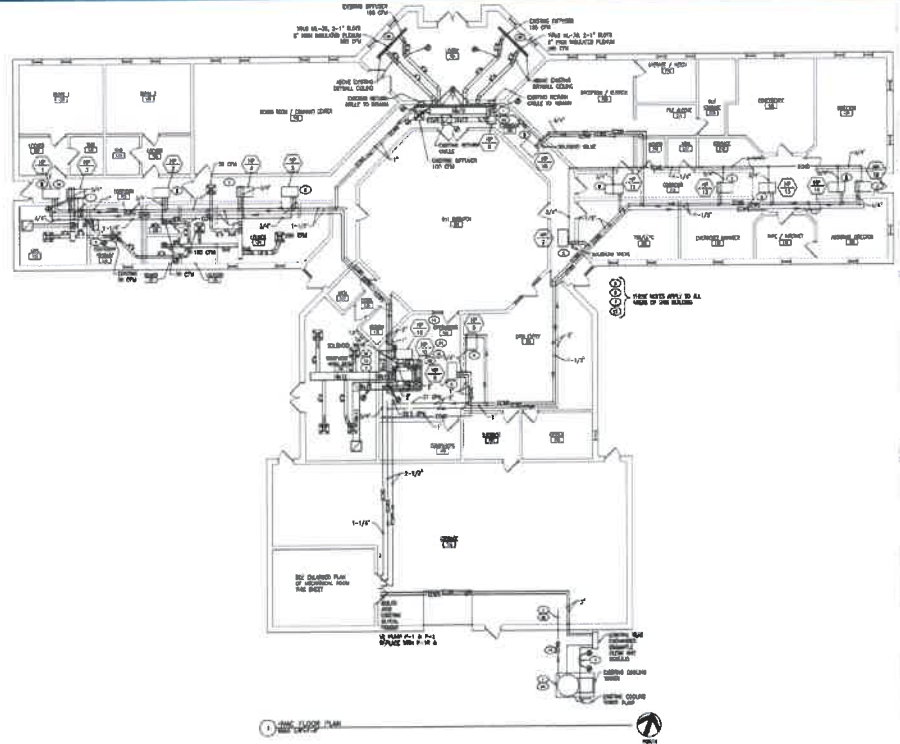
McKinley Architecture and Engineering

### Project Manager

Tim E. Mizer, PE, RA, QCxP

### Contractor

Pennington Plumbing & Heating

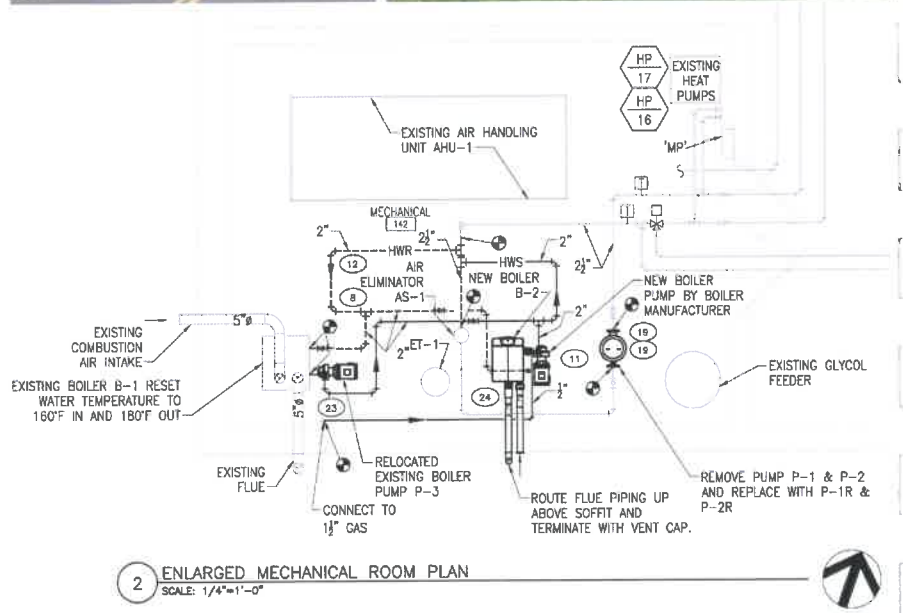


McKinley Architecture and Engineering was commissioned to investigate and provide Construction Documents to repair the ill-functioning HVAC system in the Raleigh County Emergency Services Authority's office building (911 Center and Emergency Operations Center).

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

Since the facility is a 911 Center, it must remain in operation 24/7; therefore, the pumps were replaced one at a time so that the building could stay in operation, while the building remained occupied.

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



2 ENLARGED MECHANICAL ROOM PLAN  
SCALE: 1/4"=1'-0"



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

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

Proc Folder: 679222

Doc Description: Eleanor RC HVAC Renovation Design

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2020-01-17	2020-02-06 13:30:00	CEOI 0603 ADJ2000000002	1

**BID RECEIVING LOCATION**

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

**VENDOR**

Vendor Name, Address and Telephone Number:

\*000000206862  
 McKinley Architecture and Engineering  
 129 Summers Street - Suite 201  
 Charleston, West Virginia 25301  
 (304) 340-4267

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
 (304) 558-2544  
 tara.l.yle@wv.gov

Signature X

FEIN # 55-0696478

DATE 4 February 2020

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)

Ernest Dellatorre, President

(Printed Name and Title)

129 Summers Street - Suite 201, Charleston, West Virginia 25301

(Address)

(304) 340-4267 | (304) 233-4613

(Phone Number) / (Fax Number)

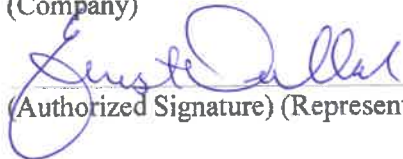
edellatorre@mckinleydelivers.com

(email address)

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

McKinley Architecture and Engineering

(Company)



(Authorized Signature) (Representative Name, Title)

Ernest Dellatorre, President

(Printed Name and Title of Authorized Representative)

4 February 2020

(Date)

(304) 340-4267 | (304) 233-4613

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

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

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

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

**DEFINITIONS:**

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

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

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

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

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: McKinley Architecture and Engineering

Authorized Signature:  Date: 4 February 2020

State of West Virginia

County of Ohio, to-wit:

Taken, subscribed, and sworn to before me this 4 day of February, 2020

My Commission expires August 16, 2020.



NOTARY PUBLIC 

*Purchasing Affidavit (Revised 01/19/2018)*

Per your request in the Solicitation, in GENERAL TERMS AND CONDITIONS, Part 8. INSURANCE, here are sample copies of our various Insurances and their Coverages:

**ACORD CERTIFICATE OF LIABILITY INSURANCE** DATE (MM/DD/YYYY) 01/02/2020

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 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, 1311 Chapline Street, P. O. Box 990, Wheeling, WV 26003-0123

INSURERS AFFORDING COVERAGE: Cincinnati Insurance Co. (10677), Brickstreet Ins (Brick)

CERTIFICATE NUMBER: 2019-2020 CERTIFICATES 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.

LINE	TYPE OF INSURANCE	INSUREE	INSURANCE	EXPIRY DATE	RENEWAL DATE	LIMITS
A	GENERAL LIABILITY		EPP/EBAD146335	08/15/2019	08/15/2020	EACH OCCURRENCE: \$ 1,000,000 AGGREGATE: \$ 1,000,000
	COMMERCIAL GENERAL LIABILITY					PRODUCTS - COMM'N AGG: \$ 2,000,000
	CONTRACTUAL LIAB					
	DEV'L AGGREGATE LIMIT APPLIES PER POLICY					
A	AUTOMOBILE LIABILITY		EPP/EBAD146335	08/15/2019	08/15/2020	COMBINED SINGLE LIMIT (CSL): \$ 1,000,000 BODILY INJURY (Per person): \$ 500,000 BODILY INJURY (Per accident): \$ 1,000,000 PROPERTY DAMAGE (Per accident): \$ 100,000
	ANY AUTO					
	SCHEDULED AUTOS					
	NON OWNED AUTOS					
A	UMBRELLA LIAB		EPP/EBAD146335	08/15/2019	08/15/2020	EACH OCCURRENCE: \$ 1,000,000 AGGREGATE: \$ 1,000,000
	EXCESS LIAB					
	RETENTION					
B	WORKERS COMPENSATION AND EMPLOYERS LIABILITY		MCB1018014	12/30/2019	12/30/2020	E.L. BODILY INJURY: \$ 1,000,000 E.L. DISEASE - CA EMPLOYEE: \$ 1,000,000 E.L. DISEASE - POLICY LIMIT: \$ 1,000,000
	PA EL INCLUDED					
	WV BROAD FORM EL					
B	BLANKET WAIVER OF SUBROGATION		MCB1018014	12/30/2019	12/30/2020	INCLUDED

CERTIFICATE HOLDER: MCKINLEY & ASSOCIATES, INC. ATTN: LISA BICARLO, 32 - 20TH STREET STE 100, WHEELING, WV 26003

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: Lisa Bicarlo

ACORD 25 (2019/01) The ACORD name and logo are registered marks of ACORD

**ACORD CERTIFICATE OF LIABILITY INSURANCE** DATE (MM/DD/YYYY) 10/3/2019

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 R Oswald Company, 1100 Superior Avenue, Suite 1500, Cleveland OH 44114

INSURERS AFFORDING COVERAGE: Continental Insurance Company

CERTIFICATE NUMBER: 1331148227 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.

LINE	TYPE OF INSURANCE	INSUREE	INSURANCE	EXPIRY DATE	RENEWAL DATE	LIMITS
	COMMERCIAL GENERAL LIABILITY					EACH OCCURRENCE: \$ 1,000,000 AGGREGATE: \$ 1,000,000
	CONTRACTUAL LIAB					
	DEV'L AGGREGATE LIMIT APPLIES PER POLICY					
	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (CSL): \$ 1,000,000 BODILY INJURY (Per person): \$ 500,000 BODILY INJURY (Per accident): \$ 1,000,000 PROPERTY DAMAGE (Per accident): \$ 100,000
	ANY AUTO					
	SCHEDULED AUTOS					
	NON OWNED AUTOS					
	UMBRELLA LIAB					EACH OCCURRENCE: \$ 1,000,000 AGGREGATE: \$ 1,000,000
	EXCESS LIAB					
	RETENTION					
A	WORKERS COMPENSATION AND EMPLOYERS LIABILITY		AEH58189394	10/19/2019	10/10/2020	E.L. BODILY INJURY: \$ 1,000,000 E.L. DISEASE - CA EMPLOYEE: \$ 1,000,000 E.L. DISEASE - POLICY LIMIT: \$ 1,000,000
	PA EL INCLUDED					
	WV BROAD FORM EL					

CERTIFICATE HOLDER: MCKINLEY ARCHITECTURE AND ENGINEERING, MCKINLEY ARCHITECTURE AND ENGINEERING LLC, MCKINLEY ARCHITECTURAL SERVICES, INC., MILLON GLEN CAPITAL

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: Lisa Bicarlo

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