

# **PICKERING ASSOCIATES**

# EXPRESSION OF INTEREST: West Virginia Army National Guard - Facilities Management Office

Wheeling AASF 2 (Army Aviation Support Facility)
Hangar Addition Design

Wheeling, West Virginia

January 25, 2019



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



#### Dear Review Committee:

Pickering Associates is pleased to have the opportunity to submit this proposal for providing Architectural/Engineering design services for the Wheeling AASF2 Rotary Wing Aircraft Hangar Addition Design project for the West Virginia Army National Guard in Wheeling, West Virginia. We feel confident that our design team is uniquely qualified to provide design services to meet the needs for your project.

Pickering Associates is capable of providing full-service architectural and engineering to complete the scope of work for your project. We have provided similar services to multiple governmental agencies throughout our 30+ year history. Through our past projects and experiences, our team has developed ways to meet the demands of even the most challenging of projects. We will take the time to review and evaluate the project with the entire team so we fully understand your project needs and our complete scope of work, prior to beginning the project. We will support you in developing the project schedule and budget as needed, and will ensure that the most appropriate and experienced design team is assigned to your project.

We understand the importance of your project, and in order to provide you with the best design team possible, we have partnered with AMT Engineering, a specialist in Transportation Engineering. As you will see in our team's project experience listed throughout this submission, we have prior experience with aircraft hangar design and development, as well as experience working with the Army National Guard. As you may know, we are currently working on three different projects with the WV Army National Guard, including two projects at Camp Dawson. From very short delivery/need based schedules for emergency work to limited project budgets, Pickering takes pride in finding unique solutions to some of the most challenging issues that our Clients face. You will find a growing list of repeat customers who come back for our services because of the Importance that we place on our projects and the Clients.

Through our initial review of your project scope, we feel that the first step would be an initial meeting to discuss project requirements including: project phasing, schedule, budget, programming, and space needs. We understand that the first phase of the project will require partial 35% design in order for the Agency to secure project funding for additional design and construction for the project. If additional funding is obtained, we will be prepared to transition into phase 2 of the project which includes completion of the remaining 65% of the design, bidding services, and construction administration services.

We look forward to personally discussing our qualifications to complete this project on time, within budget and exceeding the standards of any firm you may have worked with previously.

Should you have any questions regarding this proposal, please do not hesitate to contact us.

Respectfully submitted,

Traci L. Stotts, AIA, NCARB

V.P. Marketing & Development, Architect

Marif Dotto

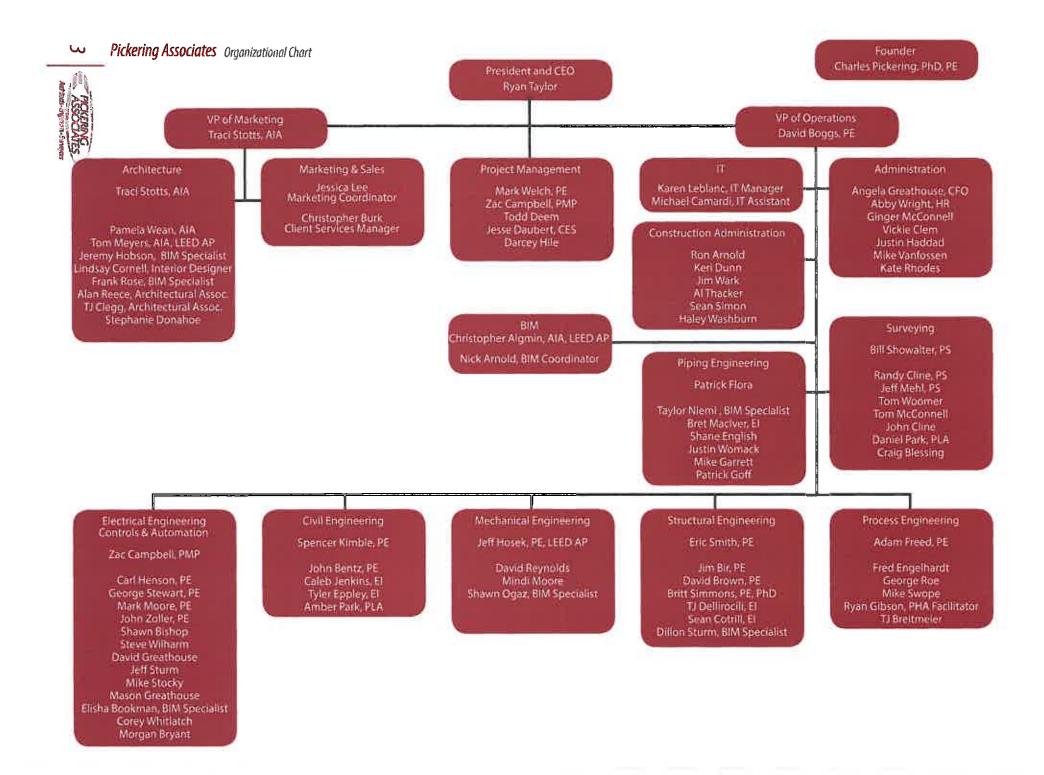
tstotts@pickeringusa.com

304.464.5305 EXT: 1101

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# Our Company & Project Team



## Charleston

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# **Parkersburg**

11283 Emerson Ave Parkersburg, WV 26104 (P) 304.464.5305 (F) 304.464.4428

## **Fairm**ont

320 Adams Street Suite 102 Fairmont, WV 26554 (P) 304.464.5305 (F) 304.464.4428

# Marietta

326 3rd Street
Marietta, OH 45750
(P) 740.374.2396

Athens

(F) 740,374.5153

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(P) 740.593.3327(F) 800.689.3755

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Founded in 1988, Pickering Associates has been providing architectural, engineering and surveying services to the West Virginia and Ohio regions for thirty years. Our company is the product of three generations and more than 75 years of construction experience. This experience plus state-of-the-art engineering practices create a full-service, multi-discipline, architectural, engineering and surveying firm serving a wide range of needs and featuring innovative, customized solutions.

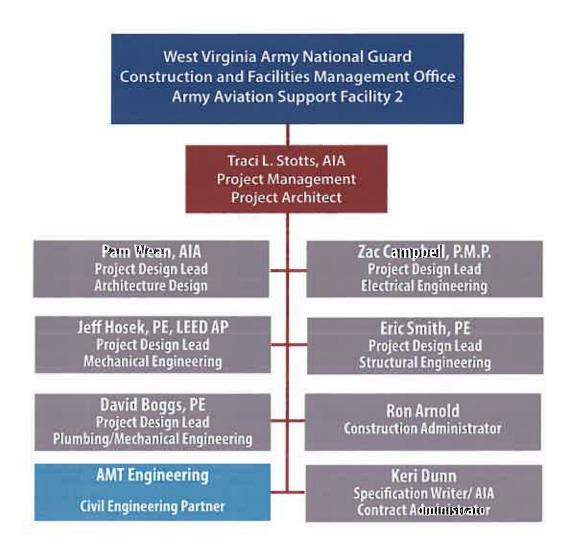
Our architectural, engineering and surveying firm consists of an exceptional balance of experience and the desire to provide our customers with a quality product at a fair price. Our highly qualified staff includes licensed professional engineers, professional surveyors, licensed architects, designers, and drafters as well as support personnel. The disciplines we cover include architecture, surveying, project management, civil engineering, structural engineering, mechanical engineering, electrical engineering, process engineering, automation and control, and construction administration. Pickering Associates specializes in the above listed disciplines with education, government, healthcare, industrial, oil & gas and private sector clients.

Successfully executing more than 10,000 projects in its history, the firm has built a tremendous wealth of experience gaining insight into what works for each of our client types. Those lessons learned add substance to our work and provide our clients with unparalleled value. Our objective is to partner with our clients improving their performance, flexibility, life-cycle cost, sustainability and ultimately well-being.

Our broad client base is representative of the area and includes education, healthcare, retail, utilities, municipal, chemicals and plastics, metals, and power generation among others. The types of projects we provide range from conceptualization and construction estimates to full turn-key design including construction management. Every project is unique and our approach to the solution is determined accordingly. Whether the project is a small electrical or mechanical modification, a larger multi-discipline new building or retrofit, or a green field installation, it receives all the attention and care required to make the project a success.

In choosing Pickering Associates, your project will be performed to your specifications with frequent meetings and status reports to keep you up-to-date on the status of the project. Our sole focus is your full satisfaction with the completed quality installation.





# Technical Expertise



Traci L. Stotts, AIA

Unless you try to do something beyond

what you have already mastered, you

will never grow.

Raiph Waldo Emerson

# Position/Title

Architect,

Vice-President of Marketing and Development

# Duties

Architect and Project Manager

# **Education**

The Ohio State University

B.S., Architecture

University of North Carolina Charlotte

Professional Bachelor of Architecture

Marshall University

Master of Science in Technology Management

# Licenses

Professional Architect WV, OH



Lead Architect for the design of new \$20M Emergency Department with private acute care rooms connected with the hospital's North and South Tower. Project consisted of 46 Emergency Department bays, 3 trauma rooms, 3 psychiatric holding rooms, a stat lab, CT scanner, a plain film x-ray unit, support services offices, waiting rooms, lounges, and emergency transport team offices.

Architect and project manager for the renovation of the existing Emergency Department at a local hospital in Parkersburg, WV. Renovations encompassed approximately 15,000 SF on the ground floor and 1,500 SF on the first floor for emergency department expansion. Scope of work included relocating central registration, offices and vending areas to the first floor, reworking the nurse triage and triage waiting spaces, adding a new chaplain office adjacent to the emergency department, creating two additional behavioral health holding rooms, addition of a padded holding room, reworking the security and guest relation spaces with the waiting area, and adding a 700 SF fast-track area with two exam rooms, a procedure room and a nurse station. Other renovations included minor finish upgrades and ensuring that the spaces met code and ADA compliance.

Lead Architect for an addition and renovation to an existing funeral home in Belpre, Ohio. Concerns with gaining additional space to enlarge the facility so as to better serve clientele drove the project. New designs features space to increase the current viewing area, new arrangement room, new entrance vestibule and new porte-cochere. Renovations to the existing facility were slated to better for functional requirements including addition of a multi-purpose room for dinners and other functions, redesign of existing toilet facilities and addition of a children's play area and new kitchen. Exterior upgrades included stone veneer, trellis area and canopies to enhance aesthetic quality.

Designed a 10,000 SF two-story office building for a drilling company in Ellenboro, WV. Pickering worked with the owner and interviewed employees to evaluate their current and future needs. The design includes space for 18 offices, private owner office/quarters, conference rooms, central reception and work areas, employee break room, filing and open two-story vestibule design. Exterior components include a stone veneer base, composite shakes and siding, three exterior porch areas designed with a heavy timber framed look that included wrapping structural members with a miratec wrap.

Lead Architect and Project Manager for design-build renovations of an abandoned lodge into physician's assistant instructional space in Marietta, Ohio. The 14,000 SF, three-story design incorporated departmental offices, conference rooms, toilets, large classroom, instruction space with exam tables, clinical instruction exam rooms, computer lab and student break rooms.

**Lead Architect for a \$725k fire station annex in Vienna, WV.** Project included a 6,300 sq. ft. annex to the existing fire station. The annex contains first floor pull-through truck bay, conference room, equipment storage and restroom facilities and second floor offices and storage space.

Lead Architect and Project Manager for a new \$1M two-story office building located on a main thoroughfare in Parkersburg, WV. Exterior appearance was extremely important. This design was based upon a magazine cutout by the owner. The exterior of the building features bay windows, columns and a balcony. The interior features seventeen private offices, a library, two conference rooms, a private conference room, reception area with abundant filing and work spaces, and an elegant lobby complete with curving stairway to second floor.

**Women's Center on the ground floor of the Medical Office Building.** Renovation included 3,100 sq. ft. area offering a comfortable place for women to receive diagnosis consultation and treatment including ultrasound, digital mammography, stereotactic biopsy, and bone density.

First East renovations included three areas of the first floor of the main hospital for their existing medical/surgical nursing unit and for relocating and expanding dialysis services. The medical/surgical nursing unit included 18 private patient rooms with 4 rooms specifically designed for infection control.





# Pamela Wean, AIA

Position/Title

Senior Project Architect Project Manager

Always be a first-rate version of yourself

instead of a second-rate version of

Lanc

somebody else.

Judy Garland

Duties

Architecture

Project Management

Education

Fairmont State College

B.S., Architectural Technology

Fairmont State College

Assoc. of Applied Science - Interior Design

Licenses

Professional Architect WV and OH



Project Architect for the design and construction of the new Franklin Elementary School in Franklin, WV. Scope included design of the first new elementary school funded by the WV School Building Authority under the Design-Build method of construction. The 46,000 SF building was designed and constructed of Cross Laminated Timber (CLT), which consists of structural wood planks that comprise the load bearing walls, floors and roof.

Project Architect for the design and construction of the new East Fairmont Middle School in Fairmont, WV. This 93,000 SF facility was designed to replace the original 1920's era building, and features the school colors of blue and gold throughout the facility. Following the opening of the new school, the existing building was demolished to make way for the new practice football field.

Project Architect for the design and construction of renovations at the Fairmont Senior High School in Fairmont, WV. Over 100,000 square feet of area was totally renovated on the school campus, featuring the main building which is listed on the National Register of Historic Places, as well as an accessory classroom building, gym and cafeterla. Exterior and interior of virtually all areas were upgraded both aesthetically and in order to meet current fire and safety codes.

**Project Architect for the design and construction of the Marion County Board of Education Office in Fairmont, WV.** Formerly the Marion County National Guard Armory, this facility was totally upgraded and renovated to house the Board of Education Offices. The new building contains over 30 new offices, a state of the art conference room, and new utilities throughout.

Project Architect for the design and construction of renovations and an addition at Jayenne Elementary School in Fairmont, WV. A three-story classroom addition was constructed which included an elevator to provide accessibility to the school. The existing building was also completely upgraded inside and outside to enhance the appearance and meet current fire and security guidelines.

Project Architect for the design and construction for renovations to Harman School in Harman, WV. An existing plaster ceiling collapsed in one classroom during the summer months, rendering the existing school unusable due to safety reasons. While students were bussed to other schools, work was phased and repairs were made to all plaster ceilings throughout the school as funding allowed. Over a period of about two and a half years, sections of the school opened up one at a time so that eventually all students could return to school.

Project Architect for the design and construction for renovations to the United Technical Center Welding Shop in Clarksburg, WV. Existing shops were gutted and renovated to create a new welding shop including multiple booths as well as open space for large projects. Office space was also created.

Project Architect for the design and construction for an addition and renovations at Simpson Elementary School in Bridgeport, WV. A two-story 10-classroom addition was constructed adjacent to the existing school, as well as a new secure entrance which also housed the main office and admin area. Renovations to the existing school also took place including new sprinklers and fire alarm, as well as cosmetic enhancements to the exterior of the building. The playground was also upgraded.

**Project Architect for the design and construction for renovations at Belmont Elementary School in Belmont, WV.** Virtually the entire interior of this school was upgraded with HVAC and lighting replacement, sprinklers, toilet room renovations and cosmetic improvements. The exterior brick walls were also repaired and cleaned, and site improvements such as parking and drainage upgrades were also performed.



Zac A. Campbell, P.M.P.

The difference between the possible and the impossible lies in a person's determination.

Tommy Lasorda

Position/Title

Electrical Engineer, Electrical and Controls System Engineering Department Manager

# **Duties**

Electrical Engineering

# **Education**

Fairmont State University
B.S., Electrical Engineering and Technology
Marshall University,
M.S., Engineering Management

# Licenses

Project Management Professional, Project Management Institute



Lead Electrical Engineer for new Emergency Department Consolidation and Patient Room Expansion project. Project scope includes providing design and engineering for the electrical connection to the existing 15kV Mon Power switch tap and the installations of the new medium voltage underground feed to the new facility electrical room, providing design and engineering for the building's electrical distribution system to meet the expectations of the new electrical loads, providing design and engineering for the installation of new receptacles, light fixtures, light—switches, electrical equipment for the new floor plan arrangements, providing design and engineering for the life safety requirements, emergency power requirements, and emergency lighting requirements for the new floor plan arrangements, etc.

**Electrical Engineer for the renovation of HVAC system in a campus building in Athens, Ohio.** Project included replacement of air handling unit motors and specifying wiring of new Variable Frequency Drives.

Electrical Engineer for a new medical office building located in Belpre, Ohio. Project included new receptacles, light fixtures, life safety, emergency power and lighting, fire alarm detection, and telecommunication. Extensive coordination was required for the specialized scanning equipment.

**Electrical Engineer for OB and Pediatric department renovations.** Project included new receptacles, light fixtures, life safety, emergency power and lighting, fire alarm detection, telecommunication, nurse call and facility paging to fit the new floor plan.

**Electrical Engineer for Fifth Floor Medical/Surgical Nursing Unit Renovations.** Project included new receptacles, light fixtures, life safety, emergency power and lighting, fire alarm detection, telecommunication, nurse call and facility paging to fit the new floor plan.

**Electrical Engineer for Third Floor Medical/Surgical Nursing Unit Renovations.** Project included new receptacles, light fixtures, life safety, emergency power and lighting, fire alarm detection, telecommunication, nurse call and facility paging to fit the new floor plan.

Electrical Engineer for an emergency room, fast-track, and central registration renovation project. Project included new receptacles, light fixtures, life safety, emergency power and lighting, fire alarm detection, telecommunication, nurse call and facility paging to fit the new floor plan.

Electrical Engineer for a the design and construction administration of a new 1200A, 480V electrical service and electrical distribution system in an existing building in Downtown Parkersburg, WV for West Virginia University at Parkersburg's new Downtown Center. The project includes a new main panel and subpanels throughout the building for future building loads.

**Electrical Engineer for the relocation of three cardiac catheterization laboratories.** Project consisted of three new cath labs, adjacent control rooms, equipment rooms, special procedure bays, echo room, stress testing room and various support spaces.

Electrical Engineer for the installation of two (2) uninterruptable power supplies for the main operating rooms and the ambulatory surgery rooms at Marietta Memorial Hospital.

**Electrical Engineer for the Fourth Floor Acute Care Unit Renovations.** Project included renovations to approximately 19,600 SF of the fourth floor at the north tower and east/west wings of the main building at the Memorial Campus. The area was renovated to accommodate 33 private acute care patient rooms, 10% of which are ADA compliant. The project also included provisions for nurse stations, clean utility, soiled utility, nourishment, medication rooms, storage rooms, central bathing facilities, offices, staff locker rooms, and various other support spaces as required by the functional program.



Jeffrey D. Hosek, P.E.

Sometimes the questions are complicated and the answers

are simple.

Position/Title

Mechanical Engineer LEED Project Engineer Mechanical Engineering Department Manager

**Duties** 

Mechanical Engineer

**Education** 

University of Akron
B.S., Mechanical Engineering

Dr. Seuss

Licenses

Professional Engineer WV, OH, KY, PA



Lead Mechanical Engineer for Emergency Department Consolidation and Patient Room Expansion project. Project scope includes providing design and engineering for the steam connection to the existing heating plant on the south tower with an underground feed to the new facility, coordinating heating tie-in, provide design and engineering for the heating piping distribution, provide design and engineering for the building's new chiller plant and piping distribution, provide design and engineering for the building's air moving equipment and distribution, provide design and engineering for the installation of miscellaneous equipment for the new floor plan arrangements.

Mechanical Engineer of record for the conversion of a multi-unit HVAC system into a more efficient single unit system at the Caperton Center on the campus of West Virginia University at Parkersburg. Added additional zones to allow for additional user control of set points.

**Mechanical Engineer for a new FBI field office in Cleveland, Ohio.** Energy efficient equipment and significant sound attenuation materials were used in this four-story building.

Lead Mechanical Engineer and Project Manager for OR Chilled Water project at Cabell-Huntington Hospital. Provided design options for reducing the levels of acceptable ranges, and implemented installing another chiller in series and replacing fan and coil components of the existing operating room air handling units.

Lead Mechanical Engineer for a new 5,400 SF medical office building located in Belpre, Ohio. This office is a satellite office for a previous client who wished to expand services. The new building is home to an Osteoporosis Clinic and DXA scanning suite which are capable of operating independently of each other.

**Lead Mechanical Engineer for OB and pediatric department renovations.** Project included re-routing existing portions of the supply, return and exhaust ductwork and modify/install new as necessary for the renovated spaces. Project also included relocated air devices and thermostats.

Lead Mechanical Engineer for Fifth Floor Medical/Surgical Nursing Unit Renovations. Project included removing two P-TAC units from each of the patient rooms on the north wing of the project area and replace with a 4-pipe heating cooling unit in the ceiling space and new chilled and steam piping routed from the mechanical penthouse. Control for the units was connected to the existing facility automation system.

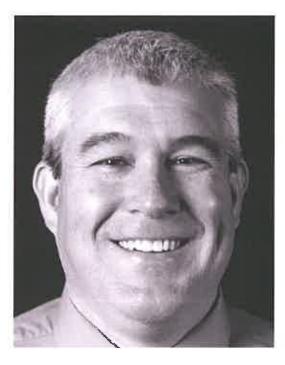
Lead Mechanical Engineer for a new Healthcare suite on the fourth floor of the main hospital. Project included re-routing existing portions of the supply, return and exhaust ductwork and modify/ install new as necessary for the renovated spaces. Project also included relocated air devices and thermostats.

**Lead Mechanical Engineer for the renovation of the first floor for Nursing and Dialysis.** Project included design of new system for isolation rooms, re-routing existing portions of the supply, return and exhaust ductwork and modify/install new as necessary for the renovated spaces. Project also included relocated air devices and thermostats.

Lead Mechanical Engineer for the renovation of First East. Project included the renovation of over 11,000 SF of existing space on the first floor of the main hospital. Design included a medical/surgical nursing unit, dialysis and isolation area. The isolation rooms each required separate HEPA filter systems among other precautionary steps.

LEED project manager for converting a downtown Columbus, Ohio fire station into a local family health center. Replaced existing mechanical and electrical systems with updated energy-efficient systems. Existing equipment was recycled to limit construction waste and utilized local and regional materials to comply with LEED requirements.

Prepared plans for new VAV indoor steam and chilled water air handler with humidification for new surgery rooms. Reworked existing piping and ductwork to work with floor plan revisions.



David A. Boggs, P.E.

Determine that the thing can and shall be done, and then we shall find the way.

Abraham Lincoln

# Position/Title

Senior Mechanical Engineer, Plumbing Engineer Vice President of Operations

# **Duties**

Mechanical and Plumbing Engineer

# **Education**

Virginia Tech, B.S., Mechanical Engineering Marshall University, M.S., Engineering Management

# Licenses

Professional Engineer WV, OH

Lead Plumbing Engineer and Mechanical Engineer for Emergency Department Consolidation and Patient Room Expansion project. Plumbing and mechanical scope included review existing conditions for medical gas tie-ins to existing systems in South Tower, reviewing and evaluating water source requirements for proposed addition with CCMC Engineering Department, reviewing existing drawings and work to determining underground sanitary tie-in location, providing design and engineering for the medical gas distribution systems for the expansion, etc.

Mechanical/Plumbing Engineer of record for new \$7MM medical office facility in Parkersburg, West Virginia. Building was designed for multiple HVAC zones to reflect tenant separation requirements of the building owner. Tenant design was based on Pharmacy, prosthetic laboratory, medical offices and a restaurant. Common restrooms, private bathrooms, and exam room sinks comprised the plumbing system design requirements.

Mechanical Engineer of record for a \$1 MM medical/dental office facility in Parkersburg, West Virginia. Design included packaged HVAC systems with multiple zones and facility exhaust systems. Plumbing design included dental vacuum and air systems as well as domestic water distribution systems for building tenants, including tenant restroom requirements to meet code requirements.

**Plumbing Engineer of record for a new 5,400 SF medical office building located in Belpre, Ohio.** Design included domestic water distribution system for exam room sinks and facility restrooms as well as sanitary and storm water drain, waste vent system design all in within the state plumbing code requirements.

Plumbing Engineer of record for the renovation of first floor patient rooms and dialysis center for a hospital facility in Parkersburg, WV. Project design included 18 private patient room bathrooms four with ante room lavatories and ADA accessibility, all equipped with a shower fixture. Design also included the relocation of the hospital's dialysis unit and plumbing systems, a 4 bed unit. Plumbing design for the 18 patient rooms included a new medical gas distribution system specification for the med-gas outlet headwalls.

Lead Plumbing Engineer for OB and pediatric department renovations. Project included new triage, waiting, private rooms with new enlarged toilet rooms including showers, and rework of existing tub rooms to relocate an existing pediatric tub and add a new shower.

**Lead Plumbing Engineer for Fifth Floor Medical/Surgical Nursing Unit Renovations.** Project included replacing/relocating fixtures for ADA compliance.

**Lead Plumbing Engineer for Third Floor Medical/Surgical Nursing Unit Renovations.** Project included replacing/relocating fixtures for ADA compliance in the twenty-seven patient rooms, staff rooms and various shower/tub rooms. Also replaced an existing shower room tub with a shower and designed a new shower room.

Lead Plumbing Engineer for a new Healthcare suite on the fourth floor of the main hospital. The project included 8 private patient toilet rooms, one semi-private room with ADA accessible toilet rooms, two new shower rooms, and one bath room with tub. Project also required the addition of medical gas and relocation of existing sprinkler heads.

Lead Mechanical and Plumbing Engineer for a new 37.5 bed Behavioral Mealth Unit which was designed to be located in existing space on the third floor of the Main Hospital. Spaces included eighteen semi-private and one private patient room, two group therapy rooms, dining area, laundry room, shower rooms, nurses station, physicians offices, consultation area, activity area, family visitation area, support area and staff locker room.



Eric Smith, P.E.

Perfection is not attainable, but

if we chase perfection we can

Duties

Civil/Str

Educat

West Vii

catch excellence.

Civil/Structural Engineer
Education

Civil/Structural Engineer

Position/Title

West Virginia University
B.S.C.E., Civil Engineering

Structural Engineering Department Manager

Licenses Professional Engineer WV, OH

Vince Lombardi

**Civil Engineer on Eureka Hunter Pipeline, L.L.C. Low Water Crossing.** Duties included designing substructure (consisting of a concrete capped pile abutment with vertical and battered piles). Coordinated with the superstructure design engineer for bridge reactions and necessary abutment details to incorporate the superstructure bearing. Also, assisted with the construction drawing package.

Civil Engineer on several projects for the City of Marietta including the Gilman Avenue Slip, Rathbone Area Drainage Study and Storm sewer assessment, Lancaster Street improvements, Sixth Street Area Mitigation flood control, and Water Treatment Plant slip repair.

Generated detailed engineering drawings, quantities, and material estimates for bridge replacements for the following counties in Ohio: Meigs County (County Roads 1, 8, 10, 14, 22, 35, 43, 52, and 82), Morgan County (County Roads 16, 53, 62, and 66 and Township Roads 48 and 106), and Washington County (County Road 354, several Township Roads, and Veto Lake)

Reviewed drawing designed for The Point Commercial Park for Lawrence Economic Development Corporation.

Responsible for foundation and column design. Modeled the structure using STAAD and performed wind load, connection, and foundation calculations.

Reviewed structural drawings for a new addition of the Holzer Clinic and evaluated adequacy of the structural members and connections.

Collected field data, created a roof model, calculated loads and generated drawings and recommendations for roof repairs at First Congregational Church.

Professional experience also includes providing accurate field notes and sketches, development of drawing layouts, details, and section drawings; providing calculations, and writing investigation and observation reports.

Extensive technical experience with civil, structural, and geospatial software packages including STAAD Pro, Presto, Enercalc, AutoCAD, AutoDesk Land Desktop, AutoDesk Civil 3D, and Topo USA.

**Senior Project Manager and Structural Engineer of Record for Catwalk at Ohio University.** Project included the reconstruction of a deteriorated portion of the elevated concrete walk in front of Crawford Hall. Involved inspection, design and construction administration.

Senior Project Manager and Structural Engineer of Record for Catwalk at Ohio University. Project included the reconstruction of a deteriorated portion of the elevated concrete walk in front of Brown Hall. Involved inspection, design and construction administration.



# Ronald D. Arnold

Real success is finding your lifework in the work that

**Position/Title**Senior Construction Administrator,
Estimator

Project Administration Construction Estimating

**Duties** 

David McCullough

you love.

Project Manager for the design and construction of a new annex for Fire Department in Vienna WV. This project included initial client meetings to establish project scope, design team coordination, multiple client reviews, bidding, and negotiation. As with any public project, there were a multitude of statutes to be adhered to.

Construction Administrator and Project Manager for a renovation project at the Marietta City Hall Building in Marietta, OH. This project included initial client meetings to establish project scope, design team coordination, multiple client reviews, interviews with all City departments, bidding, and negotiation. As with any public project, there were a multitude of statutes to be adhered to.

Project Manager for the design and construction of a new annex for Vienna Police Department. This project included initial client meetings to establish project scope, design team coordination, multiple client reviews, bidding, and negotiation. As with any public project, there were a multitude of statutes to be adhered to.

Construction Administrator and Project Manager for a new branch library in South Parkersburg. This project included initial client meetings to establish project scope, design team coordination, multiple client reviews, interviews with all key staff, reports to all stakeholders, construction progress photography, coordination with Bostwick Design Team and the Wood County Library, and contract administration.

Construction Administrator and Project Manager for the replacement of Washington County Public Library roof. Replaced clay tile roof and tin lining. Total project cost - \$260,000. Responsibilities included specification of new roof material, bid document coordination and contractor oversight.

Project Manager for the renovation of a two story 100 year old library in Marietta, Ohio. Responsibilities  $included\ building\ the\ project\ estimate, coordinating\ and\ managing\ the\ project\ scope,\ budget\ and\ schedule\ between$ field operations, architect and the owner. Challenging aspects on this project included adding a dormer and third floor into the attic space, adding a mezzanine above one third of the main floor level.

Project Manager for the 2nd floor renovations and an elevator addition to the City of Vienna Senior Center in Vienna, WV. This project included initial client meetings to establish project scope, design team coordination, multiple client reviews, bidding, and negotiation. As with any public project, there were a multitude of statutes to be adhered to.

Project Manager for the historical renovation of a four story 100 year old building on a college campus in Marietta, OH. Responsibilities included building the project estimate, coordinating and managing the project scope, budget and schedule between field operations, architect and the owner. Challenging aspects on this project included value engineering to meet the client's budget, meeting the client's 7 month construction schedule, installing an elevator in the center of the building, replacing the original wood windows with new mill-built insulated glass windows utilizing the old sash weight and chain counterbalance system, reinforcing the original wood floor and roof framing, replacing all the paneled wood doors and multi member wood trim with new to match existing the profiles, all new interior finishes, complete new plumbing, HVAC, sprinkler and electrical systems.

Construction Administrator for the roof replacement at Camden Clark Medical Center. Scope included scheduling and leading pre-construction meetings with contractor and client, bi-weekly progress meetings during construction, provide weekly site visits, submittal review, RFI's, request for payments, change orders, and certificate of substantial completion. Arnold performed a thorough inspection of the jobsites and confirmed that the entire scope of the project was complete.



Keri L. Dunn

Position/Title

Specification Writer
AIA Contract Administrator

**Duties** 

Specification Writer, Bid Administration and Contract Administration

**Education** 

Washington State Community College A.S., Industrial Technology

If you want to be creative in your company, your career, your life, all it takes is one easy step ... the extra one.

Dale Dauten

Bidding Coordinator and Construction Contract Administrator. Bid duties include preparation of front end specifications required for procurement, addressing bidding questions, preparing addenda, receiving and tabulation of bids, and issuing letter of intent. Contract Administration duties include preparing and executing contract documents, change proposal requests, change orders, change directives, receiving bonds and insurance from contractors, processing pay applications and closeout documentation. Familiar with WV School Building Authority Requirements and various grant requirements including the American Recovery and Reinvestment Act. Projects have included:

#### Recent projects include:

- Roof Replacement at Parkersburg High School Field House.
- Roof Replacement at Camden Clark Medical Center.
- Roof Replacement for the Washington County Public Library.
- Facade Renovations at West Virginia University at Parkersburg's Downtown Center.
- New Elevator Installation at West Virginia University at Parkersburg's Downtown Center.
- Electrical Service and Distribution at West Virginia University at Parkersburg's Downtown Center.
- Roof Replacement at West Virginia University at Parkersburg's Downtown Center.
- Asbestos Abatement at West Virginia University at Parkersburg's Downtown Center.
- Chiller Replacement at West Virginia University at Parkersburg's main campus.
- Salt and Motorcycle Storage Building at West Virginia University at Parkersburg's main campus.
- HVAC Upgrade project at West Virginia University at Parkersburg's Caperton Center.
- Fire Alarm Upgrades at West Virginia University at Parkersburg's main campus.
- Elevator Control Modernization at West Virginia University at Parkersburg's main campus.
- New Spec Process Building in Davisville, WV multiple prime contracts.
- New Industrial Plant in Millwood, WV multiple prime contracts.
- Energy Saving Implementation for Wood County Commission multiple prime contracts.
- Access Safety at all Wood County School locations.
- Structural Repairs at Wood County Board of Education.
- Brick Repairs at an elementary school for Wood Co. Schools
- Boiler Replacement at an Elementary School in Wood County, WV.
- Welding Shop Ventilation replacement at the Wood County Technical Center.
- Access Safety renovations at all Wirt County School locations.
- Access Safety renovations at several addition entrances for Wood County Schools.
- Access Safety and Main Entrance Renovations for Wood County Schools four phases of implementation.
- Electrical Upgrades at two elementary schools for Wood County Schools.
- HVAC Renovations at the Wood County Courthouse for the Wood County Commission.
- Fifth Floor Renovations at Camden Clark Medical Center Memorial Campus.
- Third Floor Renovations at Camden Clark Medical Center Memorial Campus.
- Roof Replacement at the Polymer Alliance Zone in Davisville, WV.



Civil Engineering Support

#### Education

BS, 1993, Civil Engineering, West Virginia Institute of Technology

#### Registrations

Professional Engineer: W۷

Years of Experience

Total: 24 With AMT: 3

# Bart Schumacher, PE Senior Project Engineer

Mr. Schumacher offers 24 years of experience providing civil engineering services for projects throughout West Virginia. He has provided design reviews, assessments and planning, design and construction administration for both site and roadway design projects, with key project elements such as site layout, grading and drainage design, utility relocations, access roads and parking, pedestrian facilities, and environmental permitting. Recently serving as Project Manager for a project at WVANG's Huntington Tri-State Armed Forces Reserve Center, he is familiar with the requisite standards and requirements.

#### Representative Projects

Military Motor Pool at Huntington Tri-State Armed Forces Reserve Center (WV ANG), Kenova, WV: Project Manager for AMT's design of a new military motor pool, including reconstruction of the access road to the parking area, along with grading and creation of a parking area to accommodate heavy military equipment. The project included lighting, drainage, and environmental permitting. PCASE was used for the design of the new pavement as well as the stone thickness for the motor pool area.

Wheeling ADA Sidewalks, Ohio County, WV: Roadway project manager for a design-build project to upgrade sidewalk ramps in Wheeling WV. The sidewalk ramps were upgraded to current ADA standards.

New Wirt County Headquarters, Wirt County, WV: Design Leader for a project to demolish and construct new Wirt County Headquarters. The project included site layout for new building, access road, parking, utility relocations, erosion and sediment control, and environmental permitting.

New Ellenboro Substation, Ritchie County, WV: Design Leader for a project to construct new office building, salt shed, spreader shed, construct new access road, and fence around the entire property. The project including site layout for new building, access road, parking, utility relocations, erosion and sediment control, and environmental permitting.

I-77 Weigh Stations, Mineral Wells, WV: Design leader for project to demolish and construct new weigh station facilities. Old buildings were demolished and replaced with new larger facilities. Roadway plans were developed to improve the bypass lanes as well as repair the existing concrete pavement on the project. Floor plans complete with mechanical, electrical, and plumbing details were completed as well as site plans for the site. Drainage was improved at the site. Coordination with a future pre-pass system was required and conduit and junction boxes were added to accommodate the system without causing future damage to the roadway. The scales were replaced and project lighting was modified to improve nighttime visibility at the scales. Concrete pads were added to place future outbuildings. The project required utility coordination as well as coordination with the Fire Marshall.

Camden Avenue Park and Ride Expansion, Wood County, WV: Design Leader for a project to expand the existing park and ride facility. The project included site layout, modification of drainage, revised layout of parking spaces, design of erosion and sediment control features, and environmental permitting.

Sistersville Tank Industrial Access Road, Pleasants County, WV: Roadway project manager for a project to construct a new access road into a new industrial park. Approaches were designed to accommodate the turning movement of large trucks.





Role Civil Engineer

#### Education

BS, 1997, Civil Engineering Technology, University of Pittsburgh

#### Registrations

Professional Engineer: DC, DE, MD, PA, VA

LEED Accredited Professional

Years of Experience

Total: 21 With AMT: 21

# Matthew Ernest, PE, LEED AP Associate

Mr. Ernest has 21 years of experience in civil engineering assessment, planning, design, and construction phase services for federal and military projects including hangars. His expertise includes sustainable site design and preparation of construction documents for renovation, expansion and rehabilitation projects encompassing stormwater management, drainage, utilities, pedestrian facilities, site access and roadways, parking, fencing, and more. He also serves as a liaison between clients and various federal, state and local agencies relative to the preparation and acquisition of permits. He is experienced in obtaining local permits. He is well versed with FAA, FAR Part 77 regulations as well as the Unified Facility Codes (UFC). Mr. Ernest is the process of obtaining his professional engineering reciprocity for West Virginia.

#### REPRESENTATIVE PROJECTS

Military Motor Pool at Huntington Tri-State Armed Forces Reserve Center (WV ANG), Kenova, WV: Lead Civil Engineer for the design of a new military motor pool, including reconstruction of the access road to the parking area, along with grading and creation of a parking area to accommodate heavy military equipment. The project is located adjacent to the Huntington, WV, Tri-State Airport. Services included concept planning and layout, surveying, geotechnical exploration, site demolition, grading, storm drainage, perimeter fencing, site lighting, permit coordination. Prepared concept options to avoid an adjacent slip failure. Coordinated storm drainage piping profiles with existing rock outcroppings. Prepared cost estimates and project bid manual.

P-561 Prototype Hangar Facility (NAVFAC), NAS Patuxent River, MD: Project Manager and Lead Civil Engineer responsible for providing comprehensive civil engineering design services for this new \$42M, 88,000-SF hangar facility, associated parking lot and extensive utility infrastructure. The design services included an early rough grading and drainage package to expedite construction schedule, on-site water and sewer, water system extension, dedicated fire protection line, AFFF tank, storm drainage, site grading and layout, SWM LID swale design, regional SWM pond design, and erosion control. Obtained related civil/site permits. Complied with AT/FP and Unified Facilities Criteria (UFC) for design. Determined building setback to avoid the both FAR Part 77 and UFC Airfield/Runway Imaginary Surfaces. Prepared required documentation for the FAA required Aeronautical Studies including FAR Part 77 documents, Form 7460-1 and the FAA 1A Certification exhibits for the permanent building as well as temporary cranes used for construction. Coordinated electrical and communication layout and profile. Coordinated work adjacent to wetlands and waterways. Provided construction phase services including submittal and RFI review.

Unmanned Aircraft Support Facility (NAVFAC), NAS Patuxent River, MD: Project Manager leading civil engineering and surveying services for the design-build of the new 10,000 SF unmanned aircraft facility including new access roads and parking located adjacent to existing airfield runways. The design services included topographic and utility surveys, on-site water and sewer, water system extension, storm drainage, site grading and layout, SWM, and erosion control. Coordinated electrical and communication layout and profile. Obtained related civil/site permits. Complied with AT/FP and Unified Facilities Criteria (UFC) for design. LEED Silver certification. Provided construction phase services.

I-77 Weigh Stations, Mineral Wells, WV: Civil Engineer responsible for site layout, grading and drainage for the renovation to two weighs station facilities. Services included topographic surveys, site demolition, grading, drainage site layout, profiles and details. Coordinated site improvements and utility services with the new buildings.





# Our Services & Your Project

We understand that the goal of your project is to create additional aircraft hangar space at your Wheeling, WV facility. We like to start all projects with an initial meeting to discuss project requirements and scope of work with all stakeholders. The topics discussed in this meeting will include: project phasing, overall project schedule, design and construction budget, programming & space requirements, project goals, and project challenges. During this meeting we will listen to your needs and ideas to ensure that we fully understand your project and our full scope of work.

We understand that the first phase of the project will require partial 35% design in order for the Agency to secure funding for additional design and construction for the project. If additional funding is obtained, we will be prepared to transition into phase 2 of the project which includes completion of the remaining 65% of the design, bidding services, and construction administration services. It is very important early in the project that we all fully understand and agree upon the deliverables that are expected and needed to complete phase 1 – these will be discussed and described in our design proposal.

Once the scope of work has been fully defined and vetted, our team will assist with site selection, as needed. Our highly qualified engineers and designers can provide valuable input in this area to ensure that the addition will be placed in a location that takes into consideration all aspects of the project such as existing structures, utilities, and site constraints. This phase of the project is very important to ensure that the location for the new addition allows for the most functional design, while taking anticipated construction costs into consideration.

In parallel with the site selection, our architects and engineers will also be working with your staff to fully understand the programming requirements for the projects. During this design, we will work to develop a written program that can then be translated to schematic design documents. We will utilize your input and comments, as provided in our design meetings, as well as information provided by all of our engineers, to develop schematic floor plans and exterior elevations for your review and approval prior to moving into design development.

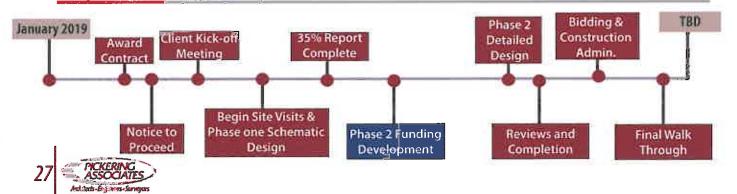
In order to reach 35% design for phase 1, and so we can provide you with a preliminary estimate of anticipated construction costs for the project, we will need to further develop the schematic design. This will move the project into design development which will include preliminary design of the following: site layout, structural system, mechanical & plumbing systems, and electrical design. During this phase we will also get a better understanding of the finishes and materials that will be used so we can incorporate them into the cost estimate. We anticipate regular meetings with you, the Client, during all phases of design for continuous input and comments to ensure that all design work meets your overall vision for the project. Client approval for 35% design will be required to complete our work for phase 1 design.

After the 35% design is complete, we can assist the Agency as needed to help secure project funding for the additional design and construction for the project. If additional funding is obtained, we will be prepared to discuss the schedule for the remaining work associated with phase 2 of the project.

During phase 2, our team will create and develop detailed construction drawings for bidding, and work closely with your staff to ensure that the design and specifications are to your standards and satisfaction. With regular meetings, communication, and design reviews, we will complete the bidding and construction documents to meet the goals and needs of the project. We will also assist in project bidding, and perform construction administration services for the project - to ensure that the construction meets the design intent and follows the construction drawings that were developed.

Pickering Associates has a team dedicated to construction administration that have years of experience working with both owners and contractors to oversee the project through construction. The construction administrator assigned to your project will be intimately involved with the design and review of the project for a seamless transition from design into construction. Our contract bid specialist and construction administration staff will oversee the bid and construction process from start to finish. Once construction is complete, we will handle the final punch-list and details needed to get your hangar addition ready for use.

#### Project Overview Proposed Project Development



### Comprehensive Design

At Pickering Associates, we understand the importance of keeping the Client informed and engaged throughout the entire design and construction process. It is crucial to the project to get the Client involved early in the process along with other key stakeholders, in order to understand the needs of the facility. Our plan would be to engage the key stakeholders in regular design meetings to ensure expectations and schedules constraints are met.

Our design process will begin with schematic design. We feel that time spent with your staff to better understand the project, will allow us to be more efficient in completing the schematic design phase for this project and progress us to the next phase quicker than our competitors, therefore allowing us to meet your anticipated design schedule.

We always involve the authorities-having-jurisdiction during the schematic design to make certain that we address any and all concerns that they may have, thus reducing costly changes during design and/or construction. We have a close working relationship with agencies such as the West Virginia State Fire Marshal's Office and are familiar with the local and state requirements that need addressed for a wide range of projects. At the end of the schematic design phase Pickering will present rough sketches to the owner for approval. These sketches will provide the owner with the opportunity to verify that we have correctly interpreted your desired functional relationships between various activities and spaces. The sketches will also provide the client with a general indication of the exterior design and overall look of the addition. Once schematic design is complete, we will move into the design development phase for the project.

The design development phase is a transitional phase where the design team moves into developing the contract documents. In this phase, the architects and engineers prepare drawings and other presentation documents to crystallize the design concept and describe it in terms of architectural, electrical, mechanical, and structural systems. In addition, we will also prepare an estimate of probable construction costs so you will have a better indication of anticipated project costs. By preparing this estimate early in the design process, it will allow us to identify potential cost savings that may be required to keep the project within your anticipated budget. At the end of the design development phase, the architect will provide the client with drafted to-scale drawings that will illustrate the project as it would look when it's constructed. These drawings will specifically define the site plan, floor plans and exterior elevations. It is important that the client provide input to the architect at this time as the design development drawings are used as the basis for the construction drawings and used to further develop and refine the estimate of probable construction costs for the project.

Once the Owner has approved the design development phase, the Architect prepares detailed working drawings, thus progressing into the construction document phase of the project. During this time, final drawings and specifications are produced for the project. These documents will be used for bidding the project to contractors. These drawings and specifications become part of the construction contract. The construction documents will include all necessary information to ensure that the project will be constructed as conceived by the Owner and design team. Renderings and/ or a physical 3D model can also be prepared (if desired by the client) to accurately portray the final design and to use as a marketing tool.

Pickering Associates can handle the bidding & negotiation phase of the project with our experienced in-house construction administration team. We have systems in place, and are equipped to electronically distribute the bidding documents to contractors and equipment suppliers interested in bidding the project, as well as produce hard copies as required. We will assist in contacting contractors to get interest in bidding the project, answer requests for information during the bidding process, assemble addendums, schedule, coordinate and lead a pre-bid meeting, and assist the owner with bid opening and contractor evaluation.

During construction administration Pickering Associates can be an agent of the owner, overseeing construction to ensure conformity to construction drawings, specifications, and standards. Pickering will assist the owner in awarding the contract, lead and coordinate weekly construction meetings, produce meeting agendas and meeting minutes, answer RFI's from contractors, review submittals, process change orders and pay applications, perform regular site visits, complete a punch list at the end of the project, and keep the owner informed throughout the entire process. This closely monitored process helps to ensure that the final project represents the intended design as indicated in the construction documents.

#### Consensus Building

Consensus building is essentially mediation of a conflict which involves many parties and is usually carried out by a facilitator that moves through a series of steps.

In the beginning, our facilitator or project manager identifies all of the parties who should be involved, and recruits them into the process. We propose a process and an agenda for the meeting, but allow the participants to negotiate the details of the process and agenda - giving the participants a sense of control of the process. This process builds trust between the participants and the facilitator, between the participants themselves, and with the overall process.

Defining and often re-defining the conflict is usually the next step. The project manager will get the participants to define the issues in terms of interests, which are usually negotiable, rather than positions, values, or needs, which usually are not. The project manager will then get the participants to brainstorm alternative approaches to the problem. This is typically done as a group effort, in order to develop new, mutually advantageous approaches. After the participants generate a list of alternate solutions, these alternatives are carefully examined to determine the costs and benefits of each (from each party's point of view), and any barriers to implementation are documented. Eventually, the choice is narrowed down to one approach which is modified, until all the parties at the table agree to the solution. The project manager then takes the agreement back to the owner for discussion and approval.

#### **Cost Control**

Through the development of the project scope, number of units to be designed and site evaluations, we take into consideration the budget available or targeted to assure funds are accounted for early in project development. Once a preliminary site and building footprint is defined, we take the time to develop an estimate of probable project costs and alert our clients of any differences between project budget and the anticipated project costs.

#### Quality of Work

While a project budget may limit the use of traditionally expensive materials, Pickering still sees the importance of using proven materials which will provide a quality project while being cost effective. Importance is always placed on areas where small amounts of up charge can create the largest impact to the future tenants and provide an inviting environment. As professionals, we are also tasked with finding cost effective solutions which still provide the building owners with years of excellent service. While every individual project we have designed is unique, there are common design elements and materials which have proven over the years to be best suited for similar projects.

#### Performance Schedule

With the selection of Pickering Associates, your organization gains the full depth of our organization. All projects are scheduled out through all phases of delivery by our resource manager and the project manager, assigning the necessary resources to perform to the schedule necessary for that project and highlight major milestones long before they could become an issue. With more than 70 professionals on staff, you can be confident that Pickering Associates has the resources to meet your project schedule.

#### Sustainable Design

Pickering Associates is a LEED affiliated firm. We have architects and engineers that are current with LEED registration and the firm has completed multiple projects ranging from the certified level to platinum. We use software and best engineering practices to provide the end user the most energy efficient building systems. When you combine this with providing architectural design that works with these systems for insulation and avoidance of solar heating, you end up with an energy efficient building.

#### Multi-discipline Team

We also believe that because we are a full-service firm, (having the majority of the designers, architects, engineers, landscape designers, surveyors, project managers, and construction administration professionals on staff and under one roof), we are able to provide a better coordinated project than firms who are required to use many outside consultants. We organize regular in-house project team coordination meetings throughout the design phases of a project to discuss and work-out any issues or concerns that may arise. We feel that this face-to-face coordination with our design team is more effective and efficient than coordinating via email or over the phone. Our close coordination efforts have proved valuable in many cases where the design schedule is accelerated and/or where there is equipment in the project that requires the effort and coordination of several disciplines. Typically, there are more change orders in firms that are not full service due to the difficulty and time required for drawing coordination.

#### Cost Estimation

In order to provide estimates for probable construction costs with accuracy, Pickering subscribes to and utilizes RS Means Cost Works On-Line. This tool provides comprehensive, localized, and up-to-date construction costs to help us create reliable estimates for our projects.

We know the importance of not only understanding our client's budget, but ensuring that the project is designed to fit into (and stay within) that budget. When an exterior addition is involved, we do our best to give our client a project that will not only look nice, but provide a design that will fit into the context of the existing facility by making it look like it belongs. We do not feel that it is appropriate to over-design a project to make a statement – thus increasing construction costs and making it difficult to stay within the client's project budget. We believe that it is more important to design features into the project that will allow for a better functioning project.

We utilize cost control methods to make sure that the overall project budget does not increase without the client's knowledge or prior approval. We typically provide an updated estimate of probable construction costs for each phase of design, thus monitoring and providing control for the project budget. If scope items are added to the project during the design phase we make certain that the client understands the implications and costs associated with each change or addition - prior to officially adding it to the project.

### **Building Information Modeling**

Pickering Associates approaches Building Information Modeling as a very useful tool that can accomplish goals that extend beyond the typical design and construction phases of the project. Defining the specific project expectations is critical for the owner and designers. We work with the owner and start with their anticipated use of the BIM model once construction is complete. From there, we work through the design schedule incorporating all aspects of BIM that will enhance the owners understanding of the project. We will assign model management responsibilities, quality assurance responsibilities, and level of development criteria – all linked to specific schedule milestones. We incorporate clash detection, collaboration tools, visualization capabilities, and analytical studies throughout to benefit the project development process. We utilize these aspects of BIM and elevate them with in-house 3D printing services to provide exceptional professional services. Many or our architectural and engineering leads, designers, and drafters are trained, proficient, and up to date on BIM software. We even have an in-house BIM coordinator that routinely provides training and updates to our staff to ensure that everyone has the proper training to perform the work we do.

### **Cutting Edge Technology**

Pickering Associates approaches Building Information Modeling (BIM) as a tool for quick design concept generation that will continually add detail throughout the project and even beyond the construction phase. The ability to visualize a design early on via the 3D model allows high level decisions to be clearly identified and addressed during the beginning phases of the project – typically where potential impacts to project cost/schedule is greatest. Defining specific expectations is critical for key stakeholders and BIM allows our design teams to address those expectations much earlier in a project than a traditional 2D workflow.

Efficient visual communication and an in-depth design understanding are the greatest assets that BIM brings to the table at Pickering Associates. The composite model allows our team to accelerate project development and simplify conversations during design reviews. Having the capability to visualize all of the design models together in a single review session aides both inter- and intra-department collaboration like never before. Capturing all client and designer comments and feedback within a 3D model live during a review session saves countless hours of paging through "redlines" generated from traditional 2D physical paper reviews. The added capacity to search and export reports of these virtual comments allows our team to capture and track design communications more efficiently than ever before.

#### 3D Scanner

Pickering Associates has invested in state-of-the-art 3D Scanning technologies to more quickly and accurately document existing site conditions. This helps our design teams capture existing site data in more detail and in a format the blends well with our 3D modeling and BIM workflows. This tool allows us to send a small scanning team into an existing building/space and virtually document the conditions of the area in three dimensions, including detailed color photographs throughout the scanned area for design teams to reference throughout the project. This data capture implementation is safer and more efficient for our designers. It reduces the time and equipment needed for traditional hand-measuring that our industry has been accustomed to throughout the years. Granting our designers the ability to virtually measure items directly on a 360 degree image to an accuracy within 1/8" right from their desk, where they have the greatest access to design tools is unprecedented in our region!

## **Aerial Mapping**

Pickering Associates has recently obtained certification through the FAA's Part 107 Remote Pilot process to operate Unmanned Aircraft Systems (UAS) commercially. As cutting edge technology continues to evolve, Pickering Associates is able to fulfill client needs further by providing high-quality aerial imagery and three-dimensional aerial mapping.

Currently, Pickering Associates is capable of employing the use of two UAS: the Yuneec Typhoon 4K and/or the DJI Mavic Pro to fulfill client needs of high quality imagery and 4K video. In addition to imagery and video, the DJI Mavic Pro allows for the capturing of 3D point cloud data to be incorporated into CAD design files. In addition, the data obtained by the DJI Mavic Pro has the capability of being integrated with the Faro 3D scanning system, and ultimately be intertwined with our firm's ability to 3D print models. The functions of these images and videos can range from Pre-Construction documentation of large scale projects to construction progress documentation to As-Built documentation. They can also be used as marketing and inspection tools.



# Related Prior Experience

Type Government

## Services

Architecture Civil

Structural

Mechanical Electrical

Surveying

Piping

Project Management

Construction Administration







Pickering Associates was recently hired by the West Virginia Army National Guard to conduct two design projects for their Camp Dawson Location in Kingwood, West Virginia.

The first project was the Window and Door renovations to Building 215 on the campus. This project scope included the design of new windows and doors that are better suited to protect against transference of heat and cold. The new windows included window shades that have the option of light filter and black out. This project also included the design for the replacement of all exterior and interior door hardware. The new door hardware was developed to ensure it was high security type per the West Virginia National Guard specifications. In this project we provided design development, schematic design, and construction documents. The project went out for bid in January of 2019.

The second project was the restoration of the Rappel Tower Support Facility on the campus. The Rappei Tower Support Facilities consists of two (2) prefabricated concrete buildings; one of which is a classroom building, and the other a restroom facilities. Each building had structural and sustainment issues that were addressed both structurally and mechanically. The design elements for the project included, abating mildew and molded wall board and material from classroom area, addressing roof issues, storm drainage, design for new HVAC systems, new instantaneous domestic hot water system, restroom renovations, and new interior and exterior LED lighting for both buildings. This project design was completed and issued for bid in January 2019.

Contact: Todd Reynolds, Project Manager P: 304-561-6558 | E: matthew.t.reynolds18.nfg@mail.mil National Guard



Type Government

## Services

Architectural

Construction Administration

Project Management



Prior to merging with Pickering Associates in 2016, Associated Architects was hired by the Air National Guard to design a Fire. Crash and Rescue Station for Yeager Airport. The 20,000 SQ FT facility was completed in the summer of 2006, and includes 12 apparatus bays, which were designed to be able to serve both the flight deck as well as the building on and off campus, living areas, a full kitchen and dorms. This unit also houses the main communications for the Guard's responsive units, with high security requirements for both the protection of the building and also the flight deck. The design included unique elements such as the gravity fed foam fill stations, individual overhead waterfill stations for each bay, hazardous decontamination wash down rooms, air fill rooms and 15 second open garage doors.

The project team worked with the Air National Guard, Yeager Airport and key stakeholders to make sure all programmatic needs were accommodated. The completed project cost was more than \$4.5 million.

Contact: Capt. Fredrick Thomas. P.E., Air National Guard | 304.341.6649

Type Government

Architecture
Project
Management
Construction
Administration



Pickering Associates was contracted by Mondo Building and Excavating on behalf of Washington Electric Cooperative to provide design-build services for a new 30,000 SF office and warehouse building. The Client had outgrown their existing facility and was utilizing more than one location to house their operations. This new building allowed the client to maintain all of their operations under one roof while factoring in future growth for the company. Pickering was the Architect of Record as a consultant to the contractor on this project, and provided architectural, civil, mechanical, electrical, mechanical and plumbing design for the project.

The design-build team for this project provided the owner with a new LEED certified building that met all of their needs. Our services also included LEED design, LEED management, and limited construction administration services.

Scope of work included: Grading for roadway relocation, site grading, sediment and erosion control, storm water management design, foundation design, interior and exterior retaining wall design, anchor bolt embedments, plumbing plans, storm water design, natural gas piping design, HVAC design assistance, building code review, architectural drawing assistance and review, and a fire protection plan with building code information.

Pickering attended project coordination meetings with the client and contractor, completed all required AIA documents for the project, submitted drawings for permitting, reviewed contractor shop drawings, reviewed pay applications, performed the final walk-through with the client, and managed the LEED design services for the project.

The project team was successful in obtaining LEED certification for the project.



Type Government

#### Services

Architectural
Civil
Structural
Mechanical
Electrical
Construction
Administration

Pickering Associates was hired by the City of Vienna in West Virginia design a new two-story annax to expand a local volunteer fire department's existing fire station facility. The new building contains first-floor pull thru truck bay, conference room, equipment storage and restroom facilities and second-floor offices and storage spaces.

With the schematic design completed, a 3D color rendering was provided to the client for establishing funding. They were able to use our schematic plans and renderings for grant and loan applications.

This brick and block facility is an approximate 6,300 sq. ft. slab on grade with the second-floor construction of light gauge metal framing and shingled roof. The building features a vehicle exhaust system for servicing the fire trucks, new signage and louvers on the front facade and a complete sprinkler system.

The bid process included seven responsive bidders with four being within 10% of the construction estimate.

All aspects of the project were coordinated with the Mayor of Vienna and all associated parties.

Design was completed 12/11/2009. Construction was completed by 04/30/2010 for a budget of \$724,800.00.

Contact: Robert Rush | 304.295.4511 | robrush@vienna-wv.com

## Our Work Mid-Ohio Valley Technical Institute, Diesel technology Addition and Renovation



Type Education

#### Services

Architectural
Electrical
Structural
Mechanical
Civil
Construction
Administration
Project
Management



MOVTI was awarded a 3% grant from the WV School Building Authority to construct an addition to their automotive education facility. The 3,000 SF addition is home to the relocated machine shop, providing a better organized space, and make way for a new Diesel Technology Program. Since the project is funded with WV School Building Authority Funds, careful planning was needed to stay within the funding budget.

The new addition is approximately 41'-4" wide by 72'-0" deep (2,976 SF) and houses the relocated Machine Shop and classroom spaces. The existing Machine Shop bay will be utilized for their new Diesel Technology work area.

The addition includes spaces for the Machine Shop, one classroom, storage, and a mezzanine with a stair for additional storage. The new addition matches the adjacent existing building construction of concrete block walls, metal bar joists, acoustical metal decking, rigid roof insulation, and EPDM roofing. All visible materials match the existing as closely as possible. One new 10'x10' overhead coiling door and one man-door were added to the west end of the building, one man-door was added to the front/north wall into the classroom area, and set of double (6'-0" wide) man-doors were added to the back/south wall of the new addition. Two new openings were added to the existing wall between the existing building and new addition. One opening is approximately 10'-0" wide (with no doors), and the second opening is a man-door from the existing bay into the new classroom area. Pickering Associates performed a code review during the schematic design process that verified the proposed layout of the spades.

The project team consisted of Christopher Algmin, AIA, Elisha Bookman, Eric Smith, PE. Zac Campbell, PMP, Mark Welch, PE, and Amber Park.

Type Government

Electrical Engineering Mechanical Engineering Project Management Construction Administration







The City of Vienna, West Virginia contracted with Pickering Associates to review the emergency generator installations and configurations at both the Vienna Volunteer Fire Department and the Vienna Police Department. The generator was reconfigured to be connected to the existing fire department and the new facility.

The connection from the police department to the generator was removed and a new generator was installed and utilized for the police department only. All the existing installations were corrected to meet all applicable local codes and standards.

Our engineers reviewed all the existing emergency generator configurations and installations at the venues. They provided the design and engineering to correct all the existing electrical installations associated with the emergency generator and provided the design and engineering to reconfigure the existing emergency generator to the police station. The team provided the design and engineering to install a new natural gas emergency generator and all associates equipment to connect to the existing police station.

All aspects of the project were coordinated with the Mayor of Vienna and all associated parties.

Contact: Robert Rush | 304.295.4511 | robrush@vienna-wv.com

Type Government

Architectural
Civil
Survey
Structural
Mechanical
Electrical
Construction
Administrator



Pickering Associates completed a major renovation project at the Marietta City Hall and Fire Department Building on Putnam Street in Downtown Marietta, Ohio. The new building design provided upgrades for the City that would gain the most impact with the least amount of construction dollars. Upgrades were made to City offices, police department and the fire department. The renovation was essential to alleviate space deficiencies and included many upgrades that were necessary for building code and ADA compliance.

Scope of work for the project included upgrades to the Mayor's office suite, relocation of the Auditor's office and Treasurer's Office, relocation of the Police department to provide a more functional space out of the flood plain, and upgrades for the fire department. Some of the major goals that were accomplished for this project include: Addition of a new three-stop elevator that provided ADA access to all levels of the building, new ADA compliant toilet facilities, consolidation of Police department operations for a more functional program, upgrades to all mechanical, electrical, and plumbing systems, a new EPDM roof and exterior upgrades, as well as a new training and meeting room for the current fire department.

Pickering Associates provided conceptual design services and overall master planning for the project, and worked with the various City departments to fully understand the needs of each group. Our architects and engineers also assisted the City with many presentations to City Council and various City committees, in order to provide an understanding of the project scope and anticipated construction budget. These presentations were important for the project to gain City and Community acceptance and approval before progressing into construction. Once approved, construction drawings were prepared, and Pickering provided full Bidding and Construction Administration services for the project - including constructability reviews and project inspections for the City throughout the duration of the project.

Design was completed December 20, 2013. Construction was complete by October 2014.

Contact: Eric Lambert, City Engineer 740.373.5495 ericlambert@mariettaoh.net

*Type*Government

Architecture
Project
Management
Construction
Administration





Prior to merging with Pickering Associates in 2016, Associated Architects was asked by the City of Charleston to design the new Orchard Manor Fire Station in Charleston, WV. This design-bid-build project was completed in August of 2004 and was designed with the firefighters in mind. The new facility provides its occupants a day room, a kitchen with dining facilities, a weight room, dorms, showering facilities, and conditioned apparatus bays.

A total of 7,712 SQ FT, the construction cost for this project was approximately \$1.3 million.

Type Government

## Services Architectural

Construction Administration

Project Management





Prior to merging with Pickering Associates in 2016, Associated Architects was hired by Putnam County to design a new 911 Command Center. The new 11,000 SQ FT facility provides a large scale EOC room, training rooms, office spaces and an EMC bunk/living facility. The adjacent building provides a service garage for emergency response vehicle repairs and storage.

The project team, worked with the County Administrator and project stakeholders to make this project a success for Putnam County. The completed project cost was approximately \$4.5 million.

Type Government

Architectural

Construction Administration

Project Management







Prior to merging with Pickering Associates in 2016, Associated Architects was hired by Mason County to design a 911 Command Center and EMS Garage. This one-story, 8.200 SQ FT facility was designed to replace an aging building, which had previously housed Mason County's 911 Command Center. The new building provides full system redundancies and building separation requirements, high security and protection for the call center and on site living quarters for both the EMS and call center employees.

The project team, worked with County representatives and key stakeholders to make sure all programmatic needs were accommodated. The completed project cost was approximately \$2.1 million.

Contact: Chuck Blake, Director | 304,675,9911

# P-561 Prototype Hangar Facility (NAVFAC)

#### NAS Patuxent River, MD

AMT provided civil engineering, surveying, and landscape architecture services for a \$42M design-build project to develop the second phase of a secure modified type II hangar space for a single large aircraft, or up to four smaller aircraft at Naval Air Station (NAS) Patuxent River. The 89,000-SF project includes one new hangar facility, with related site improvements that include aprons, tow-away, emergency vehicle access road, expanded privately-operated vehicle parking, utility infrastructure, and AT/FP measures.

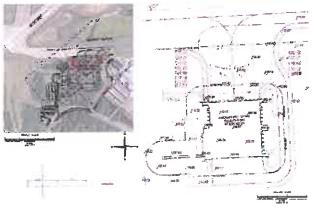
Civil engineering services provided by AMT included site visits and meetings; planning, development of construction documents; SWM/ES design, permitting, and approval; development of an early bid/construction package; LEED certification support; and construction support. Civil construction documents include site clearing/demolition plans; erosion control, layout, and grading plans; drainage plans; AT/FP measures; utility plans and profiles; paving and layout plans; temporary Maintenance of Traffic plans for construction; and related specifications and supporting calculations.

Determined building setback to avoid the both FAR Part 77 and UFC Airfield/Runway Imaginary Surfaces. Prepared required documentation for the FAA required Aeronautical Studies including FAR Part 77 documents, Form 7460-1 and the FAA 1A Certification exhibits for the permanent building as well as temporary cranes used for construction.

AMT led the SWM/ES control effort. This included development and submittal of SWM/ES plans, applications, reports, and calculations. The SWM design balanced UFC 3-210-10 Low Impact Development, EISA Section 438, LEED, and MDE SWM requirements.

Landscape architecture (LA) services led by AMT included preparation of hardscape layout, details, and specifications; and planting plans for SWM facilities. AMT





supported Construction phase services included review of shop drawings and submittals, requests for information, on-site construction observation and reporting, site-related punch list preparation, and development of as-built record documents based on the contractor's redline markups.

Surveying services provided by AMT included topographic survey, field survey elevation spot checks, utility designation, and a SWM as-built survey. The topographic survey encompassed approximately four acres, and depicts buildings, walks, pavement, fences, trees, spot elevation, first floor elevations, 1-foot contours, and other major visible site improvements. Spot shot elevations were obtained along two baselines through the center of the proposed hangar to field verify the RFP survey information, and an exhibit was prepared overlaying these elevations on the RFP survey. Quality Level B utility designation was performed, marking known and unknown utilities per APWA standards using geophysical prospecting techniques and record information. The SWM as-built survey was performed to comply with MDE requirements, and involved topographic survey of the built SWM facilities, including contours, spot elevations, storm drain structures, and inverts.

AMT

Professional Reference:

Anthony Olekson, P.E., Project Manager, Patuxent River Naval Air Station, Department of Public Works

Telephone Number: (301) 757-4794

Email address: anthony.olekson@navy.mil



# WVANG Military Motor Pool at Huntington Tri-State Armed Forces Reserve Center, Kenova, WV

AMT designed a new military motor pool for the Huntington Tri-State Armed Forces Reserve Center in Kenova, West Virginia. Design services include the preparation of all preliminary and final working drawings, specifications, detailed cost estimates, bidding and construction schedules, assistance in surveying, and analyzing and evaluating bids for construction. The motor pool addition area consists of approximately 1.5 acres. The primary goals of the project include reconstruction of the access road to the parking area to better accommodate heavy vehicles and improving the alignment at the intersection of the adjoining roadway; grading, draining, and stabilizing the site for the creation of a parking area to accommodate heavy military equipment; and lighting of the



project area. PCASE was used for the design of the new pavement as well as the stone thickness for the motor pool area.

# Unmanned Aircraft Support Facility (NAVFAC) NAS Patuxent River, MD

AMT provided civil engineering and surveying services for the design-build of the new 10,000 SF unmanned aircraft facility including new access roads and parking located adjacent to existing airfield runways. Determined that the building did not encroach into the airfield imaginary surfaces defined by the FAR Part 77 and the UFC. The design services included topographic and utility surveys, on-site water and sewer, water system extension, storm drainage, site grading and layout, SWM, and erosion control. AMT also coordinated electrical and communication layout and profile and obtained related civil/site permits. The project complied with AT/FP and Unified Facilities Criteria (UFC) for design and was designed for LEED Silver certification. AMT provided construction phase services.



# I-77 Weigh Station Renovations Mineral Wells, WV

AMT provided surveying and engineering design for this project to demolish and construct new weigh station facilities. Old buildings were demolished and replaced with new larger facilities. Roadway plans were developed to improve the bypass lanes as well as repair the existing concrete pavement on the project. Floor plans complete with mechanical, electrical, and plumbing details were completed as well as site plans for the site. Drainage was improved at the site. Coordination with a future pre-pass system was required and conduit and junction boxes were added to accommodate the system without causing future damage to the roadway. The scales were replaced and



project lighting was modified to improve nighttime visibility at the scales. Concrete pads were added to place future outbuildings. The project required utility coordination as well as coordination with the Fire Marshall.



# References



June 1, 2018

To Whom It May Concern:

I am writing to recommend the professional services we receive from Pickering Associates.

Mark Mondo Building and Excavating has worked with Pickering Associates for many years.

We have always received prompt, professional, collaboration, and insight when working with

them. From simple phone call Q & A, to full service project management, and the myriad of

negotiations and regulations of a project, Pickering Associates delivers the services that keep us

building projects, year after year. As complicated as a project can be, it is good to know that so

many disciplines are so well represented in one firm.

As a regular user of their output, I find that their construction documents to be second to none.

Their attention to detail and clarity of presentation is so important when trying to convey the

design of a project. Better drawings mean better projects. Simple as that.

John H. Anderson

Project Manger | Business Development

Mark Mondo Building and Excavating

740-376-9396

740-236-6006 Mobile

john@mondobuilding.com



ENGINEERING DEPARTMENT 304 Putnam Street - Mariatta, Ohio 45750 Phone (740) 373-5495 - Fax (740) 376-2006 www.mariettaoh.net

November 15, 2018

To Whom It May Concern:

Pickering Associates has worked with the City of Marietta on our City Hall Building Renovations, Armory Elevator Renovations, various Waste Water Treatment Plant Projects, as well as multiple other projects over the past several years, providing Architectural, Engineering and Surveying services for the City.

From initial project planning, design development and bidding, through contracting, construction administration and closeout, Pickering Associates has been beside the City of Marietta to provide any necessary support needed to make the project successful. Zac Campbell, Traci Stotts, Ron Arnold, and other Architects, Designers and Engineers have worked closely with our staff to run projects as efficiently as possible. Also Jim Wark with Pickering Associates has worked with the Engineering Department and City Staff for the past 3-years to provide Comprehensive Construction Administration Services from constructability review prior to bidding to final closeout of the project.

Their team has provided us with quality bidding/construction drawings and specifications, allowing us to receive accurate bids, which in turn, allows us to move ahead expeditiously from bidding to contracting. They have shown a clear understanding of the bidding and contract administration process, which truly helps make our job easier.

It has been a pleasure working with the staff at Pickering Associates, and I would not hesitate to recommend them for similar projects.

Tuchu

Sincerely,

Joseph R. Tucker, P.E.

City of Marietta



# Come grow with us!

May 19, 2016

To Whom It May Concern:

Pickering Associates worked with Polymer Alliance Zone, Inc. on our 80,000 square foot preengineered warehouse building at Polymer Technology Park in Davisville, WV. The project was funded through WV Economic Development Administration (WVEDA) and the Infrastructure Joint Development Council (IJDC).

From initial project planning, design development and bidding, through contracting, construction administration and closeout, Pickering Associates was beside PAZ to provide any necessary support needed to make this project successful. Their professional team of Architects, Designers and Engineers, worked closely with our staff to make sure the design accommodated all of our needs.

It has been a pleasure working with the staff at Pickering Associates, and I would not hesitate to recommend them for projects of any type and magnitude. I continue to look forward to our future working relationship with their team.

Sincerely,

Karen Facemyer

President/CEO

Polymer Alliance Zone, Inc.

888-711-1143



# Physical Plant Department Wood County Schools Maintenance 4701 Camden Avenue Parkersburg, WV 26101

Phone: 304-420-9568 Fax: 304-420-9570

January 10, 2019

To: Whom It May Concern

Subject: Customer Reference – Pickering Associates

Wood County Schools continues to contract with Pickering Associates in 2019 as they have for the past several years. Pickering Associates continues to deliver a quality product with excellent results.

In 2018 Pickering Associates continued to support the Williamstown Elementary construction project which is currently on schedule to be completed in 2020.

In 2018, the firm designed and oversaw the completion of 300,000 square feet of Wood County Board of Education roofing projects.

In 2019 Pickering Associates designed and will oversee the completion of 200,000 square feet of Wood County Board of Education roofing projects.

In 2018 Pickering Associates also completed the design of handicapped accessible bathrooms for Jackson Middle School and will assist with the oversight of the addition in 2019.

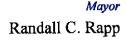
in 2018 Pickering Associates also completed the design and will assist in the oversight of the addition to Erickson Field Sports Facility bathrooms and concessions in 2019.

It has been a pleasure to work with Pickering Associates. I would not hesitate to recommend the Pickering Associates team to provide excellent design and oversight to any level of construction project.

Sincerely

**Martin Best** 

**Physical Plant Director** 





Recorder
Cathy Smith

City Council
Roger Bibbee
Jim Miracle
Bruce Rogers
Steve Stephens
Tom Azinger

April 18th, 2016

To whom it may concern,

Pickering Associates has worked with the City of Vienna on our Police Department Annex, Volunteer Fire Department, and Senior Center, as well as multiple other projects over the past several years, providing Architectural, Engineering and Surveying services for the city.

From initial project planning, design development and bidding, through contracting, construction administration and closeout, Pickering Associates has been beside the City of Vienna to provide any necessary support needed to make the project successful. Traci Stotts, Ron Arnold, and other Architects, Designers and Engineers, worked closely with our staff to make sure the design accommodated all of our needs.

Pickering Associates has consistently completed projects for us satisfactorily. Their team clearly exhibits a thorough understanding of the bidding and construction administration process, which makes for smooth-running projects.

We have enjoyed working with the staff at Pickering Associates and appreciate their work for the City of

Sincerely,

Vienna

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.
LIDER J. States ARCHITECT
(Name, Title)  ICOC) LStotts, ATA
(Printed Name and Title) 11283 Energy Ave. Porkerborg, WV 26104
1304) 464-530.5 1(304) 464 - 4428
(Phone Number) / (Fax Number)  TStotts (3) Picken alwa (000) (email address)
(entail address)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wyOASIS. Legrify that I have previously this Solicited in the second state of the s
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.
Pickering & Modates
(Company)
(Authorized Signature) (Representative Name, Title)
Traci L. Stotts, AIA
Printed Name and Title of Authorized Representative)
1/24/19 Date)
(304) 464-5305/(304)464-4428
Phone Number) (Fax Number)

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI- 0603- AD)190000013

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Adde	ndu	m 1	Numbers Received:			
(Chec	k th	e bo	ox next to each addendum	receive	I)	
	[,	<u></u>	Addendum No. 1	[	].	Addendum No. 6
	[	]	Addendum No. 2	[	]	Addendum No. 7
	[	]	Addendum No. 3	]	]	Addendum No. 8
	[	]	Addendum No. 4	ſ	]	Addendum No. 9
	[	]	Addendum No. 5	ſ	1	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Pickering Associates

Company

Liace L. Statt

Authorized Signature

1/24/19

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012