

GRW | engineering | architecture | geospatial

801 Corporate Drive | Lexington, KY 40503 859.223.3999 | www.grwinc.com

December 11, 2019

Mr. Guy Nisbet
Purchasing Division
West Virginia Department of Administration
2019 Washington Street, East
Charleston, WV 25305

REGENTED

2019 DEC 12 AM II: 07

WY PURCHASING DIVISION

RE: Expression of Interest for Mountaineer Challenge Academy South - Renovation Design | Solicitation No.: CEOI 0603 ADJ2000000001

Dear Mr. Nisbet and Selection Committee Members:

Achieving the goals established for the West Virginia Army National Guard (WVARNG)'s Mountaineer Challenge Academy South are greatly dependent upon selecting the right A/E design partner. GRW would like to work with you on your project. Our team offers you the right experience and expertise to successfully complete your project, and we are committed to meeting your needs.

Experience and Familiarity. GRW is a full-service A/E design consulting firm that has been working with clients like you on similar projects throughout the region for more than 50 years. Our experience includes WVARNG renovation projects, as well as educational facilities, commercial kitchens, and dormitories. A few of the projects included in our proposal include:

- Murray State University Winslow Cafeteria and Deli Renovation: Bid documents for renovation of 28,287 SF building were delivered 45 calendar days after the initial kick-off meeting. Completed on schedule and project bid at 0.5% below the A/E estimate.
- Marshall University Weisberg Family Engineering Laboratory: 16,000 SF teaching facility houses laboratory space, as well as classroom space, public space for students and faculty offices.
- Southeast Kentucky Community and Technical College, Harlan Campus Building One Renovation: Exterior and interior renovations of 31,000 SF building included new classroom and offices. Project was completed one month ahead of schedule, and low bid was 3% below our estimate.
- Federal Bureau of Prisons Satellite Minimum Security Camps: Open concept dormitory housing for 256 persons (in two wings, separated by a commons area); dining area seating 112 persons with associated commercial kitchen, refrigerator/freezers, dry storage, and dock/receiving areas; and classrooms.
- Smithville Elementary School Renovation/Addition: Included new classroom wing and kitchen addition.
- WVARNG Martinsburg Secure Facility:
 Renovations to 2-story area (6,200 SF per level) to provide new secure office space, as well as HVAC replacement, new interior finishes, building security and cameras, and site security fencing.

West Virginia Department of Administration December 11, 2019 Page 2



GRW and its subsidiary Chapman Technical Group (offices in St. Albans and Buckhannon, WV) also have extensive experience in developing projects through the WV Purchasing Division. We have designed, bid, and constructed numerous, major Division of Natural Resources projects throughout the state. The West Virginia Division of Highways (DOH) recently began working with the State's Purchasing Division for building projects, and our \$10 million equipment shop building for District One was the first project that the DOH bid through the WV Purchasing Division. Our knowledge and experience of the State's purchasing procedures made this an easy transition for all stakeholders. Although every agency has its own particulars with regard to bidding projects, our experience with the WVARNG and the State's Purchasing Division will help ensure effective and efficient project delivery.

We Are Committed to Your Success. Taking care to meet your goals for your budget and schedule is a priority, as it is on every GRW project. From our extensive federal, state and local government experience, GRW is skilled at delivering designs that maximize the potential of the site, and integrate the architectural and engineered features of the building in relation to its environment, eliminating the need for redesigns and re-bids to bring the cost within budget.

The ultimate measure of success is how well the completed projects meet your needs and aspirations. To this end, our project team is committed to establishing an inclusive, methodical and logical approach to the design process.

Thank you for your consideration and for the opportunity to work with the West Virginia Department of Administration, and Army National Guard Construction and Facilities Management office. We look forward to the next step in your selection process where we can present our additional ideas toward the successful completion of your project.

Respectfully submitted,

Shane Lyle, AIA, LEED AP BD+C

GRW Vice President



Expression of Interest

Mountaineer Challenge Academy South - Renovation Design CEOI 0603 ADJ200000001

WV Department of Administration WV Army National Guard

Table of Contents

Section 1.0 Introduction

Section 2.0 Relevant Past Projects

Section 3.0 Staff Qualifications

Section 4.0 Project Management and Quality/Cost Control

Section 5.0 References

Section 6.0 West Virginia EOI Forms and Addendum Acknowledgement

1.0 GRW Introduction

About GRW

Founded more than 50 years ago, GRW is an employee-owned architectural, engineering and geospatial services firm with more than 200 employees.

At GRW, we have the ability to address your projects from nearly every angle. Because of our in-house capabilities, we can more easily tailor our approach allowing our teams to deliver more quickly, with

greater potential for more accurate cost estimates, and fewer change orders.

Among our achievements, GRW is listed in Building Design and Construction's Giants 300 report as one of the



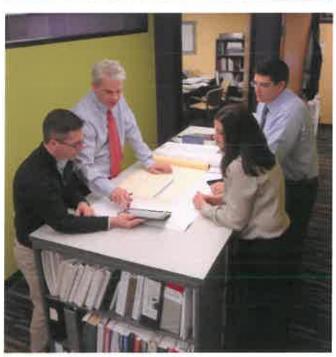
nation's top Architecture-Engineering firms. Also, since 1972, GRW also has been recognized nationally as a top producing firm by *Engineering News-Record*.

Our Corporate Culture

Our corporate culture is one of close collaboration with an approach that gives our project managers and their project teams a hands-on approach, as needed, from planning through construction phases.

At GRW, we know that business relationships are built on trust – the ability to trust your business partner to deliver on their promises. By choosing GRW for your professional services, you are choosing a company that delivers on our promises. You can expect our full attention starting on day one, and extending to the day of project completion and beyond. Listening diligently to your needs, and those of your stakeholders, is the hallmark of our approach. Delivering projects that meet our clients' goals – honestly, reliably, and efficiently, time after time – is the reason why GRW has achieved a 90% rate of repeat business.





Department of Defense Experience

GRW brings to the table a wide ranging body of military experience that includes work for the National Guard, U.S. Army, U.S. Air Force, the U.S. Army Corps of Engineers, and the Naval Facilities Engineering Command (NAVFAC). These projects include renovation and new construction work, as well as military master plans, and a broad range of geospatial services.

The map below provides a general geographic overview of where we have provided services to the military.





* U.S Army Corps of Engineers work encompasses multiple IDIQs and task orders in 18 Districts
OCONUS Locations: Kadena Air Base, Okinawa, Japan and Camp Lemonnier, Djibouti

2.0 Relevant Past Projects

Winslow Cafeteria and Deli Renovation

Murray State University | Murray, KY

This cafeteria renovation involved the demolition and retrofit of the dining room and food service area of Winslow Cafeteria, the main food venue on the Murray State University campus. The 28,287 SF building was updated to create a modern appearance for the 1960s era facility.

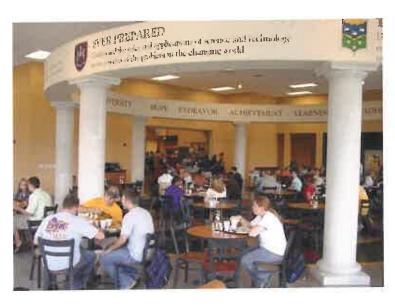
The dining rooms include decorative pre-cast concrete columns made to look like stone with a circular entablature displaying the crests of residential colleges of Murray State University.

Lounge areas were created for students and faculty to relax and include wall-mounted televisions. Wireless access points were added in the dining rooms to allow faculty and students to connect to the University Ethernet LAN with their laptop computers.

Lighting inside the building was designed to be inviting, and dimmers and creative switching were used to create wide variations in illumination. The building egress lighting was reviewed and redesigned to extend beyond legal exits by 30 feet on the outside of the building.

The serving line equipment was replaced with all new equipment including a wok with commercial exhaust hood and makeup air unit on the roof. The hood included automatic fire extinguishing equipment tied into the building fire alarm system.

This project is an excellent example of our ability to meet an abbreviated design schedule. The bid documents were delivered to the Owner 45 calendar days after the initial kick-off meeting. Completed on schedule, the project also bid at 0.5% below the A/E estimate. The project was a complete success, and featured in the magazine, "On-Campus Hospitality."



Subsequently, the Winslow Cafeteria received a second, GRW-designed renovation including new dining area floor coverings and additional booths around the perimeter of the 28,287 SF building. An existing beverage storage room space was converted into a delicatessen capable of serving sandwiches, similar to popular chain sandwich restaurants. Counter area and electrical modifications were made to support new food service equipment. Circuits were conveniently run from an existing panelboard in the deli space. The existing beverage dispensing equipment was reworked, allowing another beverage storage room to feed the dispensers previously supported by supplies housed in the renovated space.

Client Contact: Jason Youngblood, Ast. Director of Facilities Design & Construction, Murray State University, (270) 809-6859, jyoungblood@murraystate.edu



Nursing Building Renovation

University of Kentucky | Lexington, KY

The University of Kentucky selected GRW to provide architectural and engineering services for the Phase II renovation of approximately 8,117 SF on the sixth-floor of the University's Nursing Building. The main objective was to accommodate the construction of a 144-seat computer classroom. The computer classroom, which is used for computerized exams and lectures, includes several support functions: proctor/check-in room for access control and surveillance, a student belongings room with lockers, a processor room for the computer processors and CCTV surveillance equipment, as well as a corridor system to secure the floor after hours. The project also includes an IT office and a reading room with seating for 42.

Existing HVAC, plumbing, and fire protection systems were all reconfigured to accommodate the renovated areas. The project further involved the evaluation and design for upgrading the supply fan within the 35,000 cfm built-up air-handling system within the roof penthouse that serves the entire building. Preliminary testing, adjusting and balancing was performed and designs were prepared for evaluating the options of replacing the fan in-kind, modifying the unit for fan-wall technology, and repairing and upgrading the existing fan. Ultimately, the existing fan was repaired and upgraded to meet safety and performance requirements.

Client Contact: Sandy Redmon, Project Manager, University of Kentucky, (859) 218-3115, sredmon@email.uky.edu



Weisberg Family Engineering Laboratory

Marshall University | Huntington, WV

GRW was hired by Marshall University to masterplan and design the first phase for a new engineering complex on their main campus in Huntington, WV. This 16,000 SF teaching facility houses materials, soils, hydraulics, structural, and environmental laboratory space, as well as classroom space, public space for students and faculty offices. A building-wide access control system was provided to monitor usage and control entry.

The curved façade of the building was designed to create a park-like plaza along the north edge of 3rd Avenue, giving a softened edge to what previously had been parking lots and pavement. Brick and other exterior building materials were selected to complement the adjacent campus buildings, thus giving a more unified appearance to the campus.

Client Contact: Betsy Dulin, JD, MS, Former Dean, Marshall University College of Eng., (304) 561-7508, betsydulin@38thed.com



Southeast Kentucky Community and Technical College, Harlan Campus Building One Renovation

Commonwealth of Kentucky Division of Engineering & Contract Administration

The \$3.1 million renovation of this building located in Harlan, KY included updated exterior appearance, and modernized teaching spaces. Work included roof replacement, window replacement, complete interior reconstruction, interior excavation for new auditorium, and total replacement of building mechanical and electrical systems.

The 31,000 SF building includes:

- Classrooms
- Distance learning / ITV classroom
- Computer lab
- Conference room
- Science laboratory
- Library
- 200-seat auditorium/theater

- Offices
- Welding shop
- Machine shop
- Carpentry shop

The building is now 100% sprinkled, with new fire alarm system and new 480/277V, 3,000A electrical service. Modifications were made to existing central plant mechanical systems to accommodate additional heating and cooling loads.

The project was completed 1 month ahead of schedule, and the low bid was 3% below the Architect's estimate. Because this project was so successful, the Owner made a videotape of the facility to train staff on the level of quality and finish that can be attained for their normal per unit budget amounts.

Satellite Minimum Security Camps

Federal Bureau of Prisons | McCreary County, KY and Aliceville, AL

GRW led the design team for the design-build of a two minimum-security prison camps, one a men's facility in McCreary County, Kentucky, and the other a women's facility located near Aliceville, Alabama. These minimum security facilities generally include two buildings – an open concept dormitory building, and a support building that includes food service, classrooms, medical clinic, counseling, and other support spaces. The camp houses 256 persons, and includes a total of approximately 57,000 square feet for both buildings. The simple and durable finishes minimize potential vandalism and promote ease of maintenance. Features of both buildings include:

- Open dormitory housing for 256 persons (in two wings, separated by a commons area)
- Dining area seating 112 persons, with associated commercial kitchen (shown at right), refrigerator/freezers, dry storage, and dock/receiving areas
- Medical clinic area, along with counseling areas
- Classrooms and indoor recreation areas
- Offices and other support areas
- Outdoor recreation fields





"GRW remained committed to a cooperative and team-oriented approach throughout the life of the project. GRW staff - from design team leaders to support staff - were always extremely responsive, demonstrated excellent communication, and were genuinely fun to work with. The Bureau would be fortunate to repeat the positive experience of the FCI Aliceville project on future work and would benefit from the inclusion of GRW on any project team." - Judah Organic, Design Compliance Programs Manager, Federal Bureau of Prisons

Client Contact: Judah Organic, Design Compliance Programs Manager, Federal Bureau of Prisons, (202) 514-9566, jorganic@bop.gov



Smithville Elementary Renovation/Addition

Ritchie County Board of Education | Harrisville, WV

The Smithville Elementary School project included the demolition of two buildings in the existing four building complex and the design of a **new classroom wing and a new kitchen addition** adjacent to the remaining buildings.

The new additions were designed to join with the existing classroom wing and multipurpose building to create a single facility under one roof.

The new school will provide access control and better security, new HVAC systems and better indoor air quality, compliance with ADA/ABA requirements throughout, including renovated toilets rooms.





Jane Lew Elementary Addition

Lewis County Board of Education | Jane Lew, WV

The project includes **five new classrooms, an updated officer suite**, and a new building entrance and bus loop. Toilet rooms will also be renovated and new floor finishes will be installed throughout the building. A new HVAC system will serve the addition, and a new sprinkler system and fire alarm will be installed for the entire school. New ceilings and lighting will also be provided throughout. The renovations will allow the students to be housed in a single building that provides the safety, security and educational spaces that are required in a modern school.

Man K-8 School Addition

Logan County Board of Education | Logan, WV

The Man K-8 Addition included the design and space planning for a 9,360 square-foot addition to the existing school. The addition included **four new classrooms**, a **2,400 square-foot gymnasium/multipurpose room**, ADA compliant restroom facilities, and a small landscaped courtyard. The project included all structural, mechanical, and electrical engineering. The design and construction was accomplished in 10 months and nearly 15% below budget.



Joint Armed Forces Reserve Center and Field Maintenance Shop Complex

Ohio Army National Guard | Springfield, OH

GRW provided full-discipline A/E services for planning, design and construction of a new LEED Silver Certified 85,865 SF Joint Armed Forces Readiness Center (AFRC) and Field Maintenance Shop (FMS) for the OH Army National Guard (ARNG) and the US Army Reserves in Springfield, Ohio. These facilities are designed to match the architecture of the facilities on an adjacent site occupied by the Ohio ANG.

The administrative/training complex includes the following functional spaces and features:

- Private offices and administrative common spaces
- Classrooms and library
- Gymnasium-type multipurpose assembly hall with commercial kitchen for 400+
- Physical fitness area
- Heated and unheated storage areas
- Full cutoff luminaires for site lighting to eliminate light trespass
- Occupancy sensor controlled interior lights throughout
- T5 low mercury, high-efficiency fluorescent lamps and electronic ballasts
- Energy submetering connected to building management system (DDC)
- Geothermal system for heating and cooling of the facilities
- Site anti-terrorism/force protection measures, security lighting, utilities and landscaping

Using innovative design methods and alternative construction materials, GRW was able to optimize this project so that it was bid at \$13,938,000, approximately \$9.5 million less than the original budget determined by the government.

Client Contact: George McCann, Project Manager, OH ARNG, (614) 336-7413, george.c.mccann@us.army.mil



team how much the Ohio ARNG appreciated the design GRW produced for the Springfield AFRC and FMS. Of particular note was your Project Manager, Jimmy Piper, who did an outstanding job coordinating all design disciplines, incorporating the Ohio ARNG design comments, and following all required design guidance from the NGB to ensure all design submissions were timely and complete."--COL Robert C. Clouse, CFMO, Ohio ARNG

Petersburg Federal Correction Institution Food Service Building

Federal Bureau of Prisons | Petersburg, VA

This project is a new 23,500 SF medium-security dining and food service building to replace the existing aged and deteriorated building. The design and construction is being completed in two phases to accommodate the Owner's funding allocation. All construction is in compliance with the FBOP's stringent security requirements, including wall construction, interior materials/finishes, doors/frames/hardware, and security electronics. Specific features of the project include:

- Complete demolition of the existing 22,000 SF building, including abatement of existing hazardous materials
- New security fencing and gates
- Reconfiguration of existing site utilities
- New food preparation area, including kitchen, coolers/freezers, dry storage, food prep areas, and dishwash
- Main dining hall with serving line for approximately 400 persons
- Separate staff dining area accommodating approximately 40 persons
- Dock and receiving area
- Miscellaneous office and support spaces
- Complete integration of new security electronics system with the existing campuswide system.

Client Contact: Cheryl Brownell, Regional Architect, FBOP Mid-Atlantic Region, (301) 317-3251, cbrownell@bop.gov

Martinsburg Secure Facility

West Virginia Army National Guard | | Martinsburg, WV

GRW is designing renovations for a secure facility located adjacent to the Eastern WV Regional Airport in Martinsburg, WV. The purpose of the renovation is to provide new secure office space, and related support spaces, for a specific using agency. The main renovated area is on two upper levels, containing approximately 6,200 SF per level. The scope includes:

- Demolition of existing interior finishes and other improvements within the renovation area
- Complete replacement of the existing nonoperational HVAC system with a new energyefficient system
- New interior finishes throughout the areas, including raised access flooring throughout the renovated areas
- New structural roof deck and roofing system
- New elevator and fire stairs
- New site security fencing, sliding vehicular security gates, exterior parking, walkways, site utility improvements, and storm drainage improvements
- New building security and cameras

Client Contact: Matthew Reynolds, Deputy Branch Chief - Design & Construction, West Virginia Army National Guard, (304) 561-6568, matthew.t.reynolds18nfg@mail.mil

WV Department of Administration/ WV Army National Guard | Mountaineer Challenge Academy South Renovation





Knight Hall Renovation

Georgetown College | Georgetown, KY

Knight Hall is a four-level, 60,000 SF women's residence hall built in 1959; a north wing was added in the 1960s. Currently, the hall has 127 dorm rooms and approximately 265 beds. The hall is located on the campus of Georgetown College in Georgetown, KY.

The College hired GRW to complete preliminary design, cost estimates, and a life cycle cost analysis to renovate the building. The current general scope has included interior finishes, restroom and shower renovation, accessibility, window replacement, as well as HVAC and electrical systems. The anticipated renovation is expected to take place in two phases: Phase I ground and first floors, and Phase II second and third floors.

Client Contact: Bart Horne, Director of Facilities, Georgetown College, (502) 863-8182, Bart_Horne@georgetowncollege.edu

130th Airlift Wing Building 107 Renovation

West Virginia Air National Guard || Charleston, WV

This project included two separately funded (MILCON/SRM) sub-projects. These two companion projects were designed to **re-purpose an existing unoccupied hangar into administrative, simulation training, and storage spaces** for the Aeromedical Evacuation Squadron (AES). Both projects were designed to meet LEED Silver design criteria.

The project scope included:

- Upgrade of mechanical and electrical systems to meet current building codes and standards
- Replacement of inadequate restrooms and locker rooms
- Replacement of fire alarm and fire protection systems
- Hardening of the front façade, replacement of windows, and elimination of on-street parking to achieve ATFP compliance
- Construction of new interior spaces and renovation of existing shop areas to create necessary office, training, and support spaces

The completed building includes the following programmed spaces:

- Command and administration
- Flight crew support spaces
- Medical simulation areas for flight crew training
- Mobile storage and staging
- Medical equipment maintenance
- Conference rooms, classrooms, and breakrooms
- Restrooms and locker rooms
- HVAC, electrical, and communications support

Client Contact: Capt. Harry Netzer, Deputy BCE, WV ANG, (304) 341-6649, harry.g.netzer.mil@mail.mil

Contractor Performance Assessment Report (CPAR) from Contracting Officer Robert Barker:

- QUALITY: Contractor meet requirements for design on this project. Firm worked a difficult task order with 2 project task order numbers, utilizing 2 designs for one project. Quality of work for project benefited the government by providing a thorough final design for the project.
- SCHEDULE: Contractor kept to scheduled deadlines for project requirement. Worked well with Base Contracting and Civil Engineering to discuss any issues that would delay deadlines.
- COST CONTROL: Contractor kept costs controlled during project and worked very well with Base Contracting and Civil Engineering, keeping pace in utilization of 2 sources of funding, both MILCON and SRM.
- MANAGEMENT: Contractor met contractual requirements and worked well with the 130th Airlift Wing Base Contracting Office and Civil Engineering office. No major management issues were noted during the performance of the contract and GRW engineers and team continued to communicate regularly to ensure all aspects of the project were on track.
- REGULATORY COMPLIANCE: Performed all necessary environmental testing and occupational health requirements for project; kept base personnel informed of any findings or issues that would significantly delay project completion.
- ADDITIONAL/OTHER: Good team to work with; continues to maintain very professional standards and conduct.



130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion

West Virginia Air National Guard | Charleston, WV

GRW was retained to provide complete architectural and engineering Type A, B and C services for renovating the existing 5,395 SF Security Forces Squadron facility and adding 2,500 SF of administrative and training space to the facility. This project uses MILCON/SRM split funding to deliver a renovated and expanded SFS facility, which provides increased space for command and administrative functions.

A few relevant spaces and features include:

- Expanded command/administrative space
- Arms vault
- Training rooms
- SIPRNet
- ATFP building/site security
- ADA compliance

- Geothermal
- Split MILCON/SRM funding
- Extensive communications infrastructure

This project meets LEED Silver measures for sustainable design.

Contractor Performance Assessment Report (CPAR) from Contracting Officer Matthew Corcoran:

- Quality: Exceptional/Outstanding Overall Job
- Schedule: Exceptional/Outstanding Overall Job
- Cost Control: Exceptional/Outstanding Overall Job
- Management: Exceptional/Outstanding Overall Job
- Regulatory Compliance: Exceptional/Outstanding Overall Job

Client Contact: Capt. Harry Netzer, Deputy BCE, WV ANG, (304) 341-6649, harry.g.netzer.mil@mail.mil

Additional West Virginia Army and Air National Guard Experience

Relocation of Camp Dawson Electrical Power and Communications Lines, Kingwood, WV - Study and design for 4-phase construction program to relocate overhead electrical power lines and communications lines (telephone, data, etc.) to underground duct banks in order to eliminate historic problems associated with overhead services. Phase 1: 3000 LF of power line relocation to new underground duct banks, with the associated replacement of pole-mounted transformers with pad-mounted transformers (1000 KVA to 50 KVA). Phase 2: Relocation of communications service to new underground duct banks along Phase 1 route. Phases 3 & 4: Relocation of approximately 2000 LF of overhead power lines and overhead communications lines to new duct banks, respectively.

Camp Dawson Volkstone Training Area Utility Upgrade, Kingwood, WV – Expansion of sewer (1,996 LF), water (1,996 LF) and electric (1,797 LF) to all existing and future buildings, unit training equipment site (UTES) and wash rack locations. Also includes design of Forward Operating Base (FOB) including 20 14' x 16' wooden buildings, new bath house for approximately 200 people and pavilion.

Camp Dawson Ranges at Briery Mountain, Kingwood, WV – Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area.

Camp Dawson Live Fire Exercise Shoot House, Kingwood, WV – Design for innovative re-use of a recently-acquired former industrial complex adjacent to Camp Dawson to provide a \$2 million Live Fire Exercise Shoot House, including shoot house to be housed in a metal warehouse, operations / storage, after action review (AAR) facility, ammunition breakdown facility, warehouse restroom renovation, access road and parking area, and utility services. Completed conceptual design for LFSH facility with final design and construction of LFSH completed by selected vendor (design / build); balance of facilities delivered with traditional design / bid / build approach.

Readiness Center Commissioning Projects, WV – LEED Fundamental Commissioning for four building construction projects: Buckhannon AFRC - Phase 1, 38,000 SF and \$13,150,000 construction cost; Morgantown Readiness Center, 58,520 SF and \$20,500,888 construction cost; Moorefield Readiness Center, 57,256 SF and \$17,725,351 construction cost; and Logan Readiness Center, 58,520 SF and \$14,296,326 estimated construction cost. Scope included all commissioning, coordination and documentation required for LEED certification on the HVAC systems and networked controls, the lighting control systems and the domestic hot water distribution systems.

167th Airlift Wing Munitions Storage, Martinsburg, WV – New munitions inspection building, five magazines (all pre-manufactured modular units), new concrete pads (2,865 SF), all-weather pavement (5,566 SF) for vehicular access, gate/fencing, utilities, exterior lot lighting, communications, and security for the munitions area.

167th Airlift Wing C-5 Apron Repair,
Martinsburg, WV — Evaluation and design services
to repair fractured/heaved C-5 apron caused by
poorly draining base and sub base. Pavement repair
of approximately 1,755 SY included demolition and
removal of fractured and heaved pavement down to
below original base and sub base, compaction of
new material, placing of sub base and base and
concrete pavement parking apron, asphalt shoulder
stabilization, all constructed to support C-5 aircraft.
Utility and site improvements were also included.

167th Airlift Wing C-17 Maintenance Hangar Modifications, Martinsburg, WV – Fast-track design of maintenance hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

167th Airlift Wing C-17 Fuel Cell Hangar Modifications, Martinsburg, WV – Fast-track design of fuel cell hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

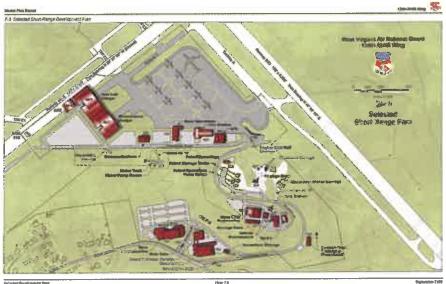
167th Airlift Wing C-17 Corrosion Control Hangar Modifications, Martinsburg, WV – Fast-track design of corrosion control hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

167th Airlift Wing C-17 Composite

Material Shop, Martinsburg, WV — Fast-track
design of composite material shop to the existing
corrosion control hangar required to meet 167AW's
change in mission from C-5 to C-17 aircraft.

167th Airlift Wing Basewide Sewer Line Repair, Martinsburg, WV – Planning, design and construction administration services for replacement of sanitary sewer system, circa 1954. Pipe included combination of various construction materials including vitrified clay pipe (VCP) with dilapidated sections allowing high rates of inflow and infiltration during storm events.

130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV – Design services for \$3 million renovation and energy-efficient improvements to 25,765 SF facility with history of remodeling activities resulting in a building that inadequately serves its users (Administration and Operations, Base Operations, Command Post, and Life Support and Fitness Center). Work included Charrette to develop alternative floor plans. Selected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs. Designed to achieve USGBC LEED Certified rating, meet all ANG Sustainable Design criteria and utilize MILCON/SRM split funding.



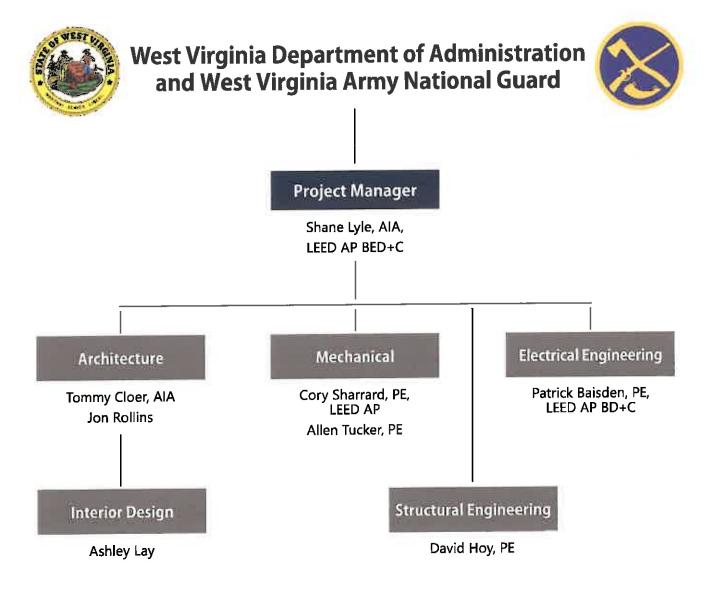
130th Airlift Wing Master Plan Update and CIP, Charleston, WV - Engineering consulting for preparation of a Web-Enabled Master Plan Update and GeoBase Common Installation Picture (CIP) for the 130th Airlift Wing in Charleston to evaluate benefits and impacts associated with acquiring additional airfield property for aircraft parking, operations, and maintenance facilities to meet current and future proposed missions. Identified constraints and opportunities that apply to the 130th AW aircraft parking, operations and maintenance areas, including Anti-Terrorism/Force Protection (AT/FP) measures; quantified existing and required airfield facilities; developed new alternatives for long- and short-range plans; and created plan tabs that depict constraints and opportunities, long- and short-range development plans, land use and circulation plan, real estate plan, and facility utilization plan.

West Virginia ANG 130th Airlift Wing LOX
Storage Relocation, Charleston, WV – Type A and
B design and construction administration services to
relocate LOX function to south end of flight line to
meet operational and installation development plan
requirements. Facility includes covered storage
facility with adjacent tank storage canopy; elevated
pads and spill containment structure for storage
tanks; paved entry road; protective fencing; and
utilities (electric and communications).

3.0 Staff Qualifications

When you work with a GRW team, you have access to some of the most reputable consultants in the industry. For the Mountaineer Challenge Academy South project, each of the GRW team members has relevant experience. From the design of educational facilities to commercial kitchens to dormitories, our team members are experts in their fields. Furthermore, our team's local knowledge and capacity has been strengthened by GRW's acquisition of West Virginia-based Chapman Technical Group.

Our clients also directly benefit from GRW's onestop business model and multidiscipline staff who specialize in architecture, engineering (mechanical, electrical, structural, transportation, civil/site), interior design, and landscape architecture. These capabilities allow our teams to collaborate more efficiently with you, which makes a significant positive impact on your project experience.



Shane Lyle, AIA, LEED AP BD+C | GRW Architect



YEARS OF EXPERIENCE: With GRW: 30 Total: 36

EDUCATION

Bachelor of Architecture (with honors), 1983, University of Kentucky

REGISTRATION

Registered Architect: KY, WV, TN, AL, GA, IN, TX, MS, SC, FL, MO, AZ, NM, CA, WA

National Council of Architectural Registration Boards (NCARB) Certification

LEED Accredited Professional, Building Design + Construction Certified Interior Designer: Kentucky

PROFESSIONAL AFFILIATIONS AND TRAINING

American Institute of Architects

Past President - AIA East Kentucky Chapter Board of Directors

American Correctional Association (ACA)

Member / Past Officer - UK College of Architecture Alumni Association

Life Member - UK Alumni Association Shane's architectural design and project management experience is extensive. He regularly takes primary responsibility for a wide range of projects for a diverse group of clients including universities, medical facilities, local and state governments, the U.S. Armed Forces, the Federal Bureau of Prisons, and private developers. His areas of responsibility typically include programming/planning, budget analysis, design, construction documents, client meetings, bidding/negotiation services, construction phase services, and code compliance.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV — Project Manager. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

Marshall University Weisberg Family Engineering Laboratory, Huntington, WV — Project Manager. New, 16,000 SF Engineering Laboratory Building on the main campus providing laboratories for materials, soils, hydraulics, structural, and environmental studies, classrooms and faculty offices. Building security systems included access control and CCTV. HVAC systems feature rooftop VAV systems with variable electric reheat.

Southeast Kentucky Community and Technical College, Harlan Campus Building One Renovation, Harlan, KY – Project Manager. Renovation design for 31,000 SF building including updated exterior appearance, and modernized teaching spaces. Work included roof replacement, window replacement, complete interior finish replacement, interior excavation for a new 200-seat auditorium, and total replacement of building mechanical and electrical systems. The project was completed 1 month ahead of schedule, and the low bid was 3% below the Architect's estimate.

UK Nursing Building Renovation, Lexington, KY – Principal. Design services for Phase II renovation of approximately 8,117 SF on sixth-floor of University's Nursing Building. Fit-up project includes 144-seat computer classroom used for computerized exams and lectures, IT office and reading room with seating for 42. Also included processor room for computer and CCTV surveillance equipment, as well as corridor system to secure floor after hours.

Murray State University Winslow Cafeteria Renovation, Murray, KY — Project Manager. Design for demolition and \$1.2 million renovation of college's main dining room and food serving area. The 28,287 SF building includes dining rooms with decorative columns of pre-cast concrete; lounge areas with wall-mounted televisions; and wireless internet access. The bid documents were delivered to the Owner 45 calendar days after the initial kick-off meeting. Completed on schedule, the project also bid at 0.5% below the A/E estimate. The project was a complete success, and featured in the magazine, "On-Campus Hospitality."

Murray State University Winslow Cafeteria Deli Renovation, Murray, KY – Project Manager. Design services for cafeteria renovation including new dining area floor coverings; additional booths around the perimeter of the 28,287 SF building; and conversion of beverage storage room space into a delicatessen.

Petersburg Federal Correction Institution Food Service Building,
Hopewell, VA – Project Manager. Demolition and replacement of existing
aged 22,000 SF dining and food service building with new 23,500 SF
medium-security facility completed in two phases to accommodate Owner's
funding allocation. Includes new food preparation area (including kitchen,
coolers/freezers, dry storage, food prep areas, and dishwash); main dining
hall with serving line for approximately 400 persons; separate staff dining
area for approximately 40 persons; dock and receiving area; new security
fencing and gates; reconfiguration of existing site utilities; and complete
integration of new security electronics system with existing campus-wide
system.

Federal Bureau of Prisons Satellite Minimum Security Camp, Aliceville, AL – Project Manager. Design-build of women's minimum-security prison camps with two buildings (57,000 SF) including open concept dormitory building and support building (food service, classrooms, medical clinic, counseling, and support spaces). Includes open dormitory housing for 256 persons (in two wings, separated by a commons area); dining area seating 112 persons with associated commercial kitchen, refrigerator/freezers, dry storage, and dock/receiving areas; medical clinic area; classrooms and indoor recreation areas; offices; and outdoor recreation fields.

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar, Fuel Cell Hangar, and Maintenance Hangar Modifications, and Addition of Composite Material Shop Martinsburg, WV – Project Manager. Fast-track design of projects required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV – Principal. Repurpose of unoccupied hangar into space for Aeromedical Evacuation Squadron (AES). Repairs and building repurposing includes: new interior spaces within existing facility to accommodate new functions; building exterior repairs, new interior finishes; mechanical and electrical systems upgrade; fire alarm and fire protection systems repair; and site/building revisions to meet ATFP standards.

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV — Principal. Renovation of 5,395 SF SFS facility including addition of 2,500 SF administrative and training space to better serve unit.

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV – Principal. Renovation and energy-efficient improvements to 25,765 SF facility. Selected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs. Designed to achieve USGBC LEED Certified rating, meet all ANG Sustainable Design criteria and utilize MILCON/SRM split funding.

GRW 19

Tom Cloer, AIA | GRW Architect



YEARS OF EXPERIENCE: With GRW: 13 Total: 18

EDUCATION

Bachelor of Architecture, 2001, University of Tennessee

REGISTRATION

Registered Architect: WV, VA, KY

National Council of Architectural Boards of Certification

PROFESSIONAL AFFILIATIONS AND TRAINING

WV Chapter, American Institute of Architects

St. Albans Property and Maintenance Board

St. Albans Historic District Committee Member Tommy has extensive architectural experience, having worked with clients on programming/planning, budget analysis, design, construction documents, meeting coordination, bidding/negotiation services, construction phase services, and code compliance. He regularly provides leadership in architectural design and project management for new building design and renovation projects such as K-12, parks and recreation, and government and municipal facilities.

RELEVANT PROJECT EXPERIENCE

Jane Lew Elementary School Addition, Jane Lew, WV – Project Architect for the design of an addition and renovation project that included five new classrooms, an updated office suite, and a new building entrance and bus loop. Toilet rooms were also renovated and new floor finishes were installed throughout the building. A new HVAC system serves the addition, and a new sprinkler system and fire alarm were installed for the entire school. New ceilings and lighting were also provided throughout.

Smithville Elementary School Addition, Smithville, WV – Project Architect for the addition and renovation of the Smithville Elementary School project which included the demolition of two buildings in the existing complex and the design of a new classroom wing and a new kitchen addition adjacent to the remaining buildings. The new additions were designed to join with the existing classroom wing and multipurpose building to create a single facility under one roof.

Man K-8 Addition, Man, WV – Project Architect for the Man K-8 Addition which included the design and space planning for a 9,360 square-foot addition to the existing school. The addition included four new classrooms, a 2,400 square-foot gymnasium/multipurpose room, ADA compliant restroom facilities, and a small landscaped courtyard. The design and construction was accomplished in 10 months and nearly 15% below budget.

Lewis County High School Man Trap, Weston, WV – Project Architect for the design of a new secure entrance to Lewis County High School which included the planning and design of a man trap entrance.

Other School Experience

Tommy has served as an architect and designer on numerous school projects throughout West Virginia ranging from small renovation projects to new middle schools. He is well versed in the requirements and procedures of the West Virginia School Building Authority and the West Virginia Department of Education Policy 6200.

Jon Rollins | GRW Architectural Intern



YEARS OF EXPERIENCE: With GRW: 12 Total: 20

EDUCATION

Bachelor of Architecture, 1999, University of Kentucky

PROFESSIONAL AFFILIATIONS AND TRAINING

LEED (Leadership in Energy and Environmental Design) qualified pre- and post-construction credit documentation for building certification

Adaptive reuse for Universal Design in residential projects

Jon's experience with architectural design services is diverse. He has been involved with projects involving Air National Guard and Army National Guard facilities, as well as educational, historical building restoration/renovation, residential, commercial, and healthcare projects.

RELEVANT PROJECT EXPERIENCE

Federal Bureau of Prisons Satellite Minimum Security Camp, Aliceville,

AL – Architectural Designer. Design-build of women's minimum-security prison camps with two buildings (57,000 SF) including open concept dormitory building and support building (food service, classrooms, medical clinic, counseling, and support spaces). Includes open dormitory housing for 256 persons (in two wings, separated by a commons area); dining area seating 112 persons with associated commercial kitchen, refrigerator/freezers, dry storage, and dock/receiving areas; medical clinic area; classrooms and indoor recreation areas; offices; and outdoor recreation fields.

Petersburg Federal Correction Institution Food Service Building,

Hopewell, VA – Architectural Designer. Demolition and replacement of existing aged 22,000 SF dining and food service building with new 23,500 SF medium-security facility completed in two phases to accommodate Owner's funding allocation. Includes new food preparation area (including kitchen, coolers/freezers, dry storage, food prep areas, and dishwash); main dining hall with serving line for approximately 400 persons; separate staff dining area for approximately 40 persons; dock and receiving area; new security fencing and gates; reconfiguration of existing site utilities; and complete integration of new security electronics system with existing campus-wide system.

Ohio ARNG Joint Armed Forces Reserve Center and Field Maintenance Shop Complex, Springfield, OH – Architectural Designer. New LEED Silver Certified 85,865 SF complex serving both Ohio Army National Guard and U.S. Army Reserves. Joint Armed Forces Reserve Center (60,902 SF) includes administrative, educational (classrooms, weapons simulator, distance learning, training-specific libraries, COMSEC), and assembly hall and kitchen.

Pulaski County Schools Maintenance Projects, Somerset, KY -

Architectural Designer. Projects included: Northern Middle School masonry removal and repairs, metal roof flashing replacement, hot water heater replacement, and asphalt paving resurface; Oak Hill Elementary School roof replacement; Memorial Education Center roof replacement; and Day Treatment Center (alternative school) masonry replacement, roof replacement, door and window replacement, and replacement of two rooftop mechanical units.

Pulaski County Schools Area Technology Center Renovation, Somerset, KY – Architectural Designer. Design for 6,000 SF renovation of approximately 38,000 SF facility. Spaces include industrial technology classroom, robotics tech lab, hydraulics tech lab, weld tech lab, electronics tech lab, and support spaces.

West Virginia ANG 130th Airlift Wing Building 107 Renovation,

Charleston, WV – Architectural Designer. Repurpose of unoccupied hangar into space for Aeromedical Evacuation Squadron (AES). Repairs and building repurposing includes: new interior spaces within existing facility to accommodate new functions; building exterior repairs, new interior finishes; mechanical and electrical systems upgrade; fire alarm and fire protection systems repair; and site/building revisions to meet ATFP standards.

Berea College Edwards Building Renovation, Berea, KY – Architectural Designer. Renovation of three-story administrative and residential services building to house offices for fund raising activities, as well as to provide space for offices related to media production. Vertical circulation consists of one open stairway and two exterior fire escapes. Preliminary design proposes new interior stairs, elevator, public restrooms on each floor, open floor plan suites, and lobby gallery space.

Berea College Forestry Outreach Center, Berea, KY – Architectural Designer. New building located in Berea College's forest area adjacent to trailhead of Indian Fort Mountain Trails. Approximate 5,000 SF facility includes classroom, forest history display area, three forester offices, conference room, public restrooms, and care taker apartment.

Berea College Fee Glade Building Elevation Studies, Berea, KY -

Architectural Designer. Elevation design studies for Bruce-Trades Building, Edwards Building, and Science Hall Building with back elevations facing Fee Glade, a green space with walkways, sculptures and curved stone walls. Goal of project is to assist Berea College with design ideas to revise elevations of these buildings to help unify architecture facing Fee Glade.

Berea College Quad Walkway Studies, Berea, KY – Architectural Designer. Three dimensional design study documents to provide walkway pavement additions and modifications to allow carts and pedestrians to pass without moving off paths. Study provided paving material and layout alternatives, as well as stormwater management solutions.

Frankfort Plant Board Administration Building, Frankfort, KY -

Architectural Designer. New three-level, 46,000 SF administration building on 30-acre site providing consolidated facility for administrative offices (accounting, human resources, management, IT, dispatch, customer service), as well as exterior drive through tellers, board/community room and designated shelter area. Building construction includes primarily architectural precast concrete panels with design elements such as structural silicone glazing systems and aluminum panels.

Georgetown College Cooke Memorial Building and Anna Ashcraft Ensor Learning Resource Center Renovation Study, Georgetown, KY –

Architectural Designer. Code review services and schematic floor plans for the possible renovation of 19,982 SF Cooke Memorial building and 55,000 SF Anna Ashcraft Ensor Learning Resource Center (LRC). Study involves adding partition walls to form approximately 3,854 SF of office space at Cooke Memorial and 7,488 SF of classroom space at LRC.

Ashley Lay | GRW Interior Designer



YEARS OF EXPERIENCE: With GRW: 2 Total: 2 EDUCATION B.A., Interior Design, 2017, University of Kentucky

Ashley is a recent graduate who completed several noteworthy and/or award-winning projects. Her experience is benefiting GRW with her current involvement in educational, medical, and municipal government projects. Ashley's design skills include the use of Autocad, Revit, SketchUp, and Adobe Creative Suite programs, among others.

RELEVANT PROJECT EXPERIENCE

Adair Youth Development Center Ceiling Replacement, Columbia, KY – Interior Designer. Ceiling replacement for 80-bed maximum security juvenile detention facility.

Georgetown College Knight Hall Renovation - Assessment and Preliminary Design, Georgetown, KY – Interior Designer. Preliminary design, cost estimates, and a life cycle cost analysis to renovate four-level, 60,000 SF women's residence hall. Included are interior finishes, restroom and shower renovation, accessibility, window replacement, as well as HVAC and electrical systems. Anticipated renovation is expected to take place in two phases.

Berea College Edwards Building Renovation, Berea, KY – Interior Designer. Renovation of three-story administrative and residential services building to house offices for fund raising activities, as well as to provide space for offices related to media production. Vertical circulation consists of one open stairway and two exterior fire escapes. Preliminary design proposes new interior stairs, elevator, public restrooms on each floor, open floor plan suites, and lobby gallery space.

Berea College Seabury Center Renovation, Berea, KY – Interior Designer. Design services to renovate two existing racquetball courts into office suites for coaches and create separate entry for Athletics Department. Proposed design involves addition of flooring/ceiling system to create two-story office suite, as well as enclosure of portion of lobby with aluminum/glass wall at lower level to create reception space.

Berea College Facilities Maintenance and Auxiliary Maintenance Buildings, Berea, KY – Interior Designer. New 37,445 SF pre-engineered metal Facilities Maintenance (FM) and 15,504 SF pre-engineered metal Auxiliary Maintenance (AM) buildings to unify and improve efficiency for Facilities Maintenance Departments. FM building includes office space; office support spaces; maintenance work areas for each department; multipurpose lunchroom/classroom for 60+ staff; toilet/shower/locker area; general work/storage area; additional mezzanine storage area with freight service elevator access; unit heaters and exhaust/air circulation systems in shop areas; HVAC in office areas via one central roof top unit; and building wide fire suppression. AM building includes: vehicle repair area with two, slabsupported lifts; vehicle wash bay; bus storage; campus recycling center with industrial cardboard bailer and paper shredder; offices; bathrooms; additional overflow storage area; and 30 electric cart maintenance vehicle charging/parking spaces. Both buildings have card reader access, motorized overhead doors, man doors, concrete floors with trench drains where applicable, and oil/water separator systems.

Comprehend Medical Office Building, Maysville, KY – Interior Designer. Design and construction phase services for a new 26,000 SF addition to provide space for clinical and administrative functions. Key design factors incorporated: welcoming, secure environment; brand and identity promotion; large open atrium; public circulation space; easy wayfinding; connection to existing clinic; clearly defined public, clinical, and administrative zones. Building responds to a complex, steeply sloped site by incorporating expanded parking into the lower level adjacent to primary public and staff entrances.

Escambia County Correctional Facility, Pensacola, FL – Interior Designer. New \$130 million, three-story, 300,000 SF, correctional facility via two-phase design-build delivery method. Phase 1 includes housing for 720 inmates, as well as central core of administration, program, and support spaces for anticipated full build out of approximately 1,500 beds (adult and juvenile). Phase 2 is addition of remaining beds. Other key components include secure sallyport; inmate intake and receiving area; and commissary, laundry, and food service areas that will serve both old and new facilities. Facility will be designed to comply with LEED, achieving a rating of LEED Silver.

FibroTex Manufacturing Facility Renovation and Expansion, McCreary County, KY – Interior Designer. Design-build project including addition/renovation of approximately 80,000 SF to textile manufacturing facility.

Nicholasville Fire Station #4, Nicholasville, KY - Interior Designer. Facility programming, facility needs assessments, architectural and engineering design, and construction phase services for new 6,825 SF fire station with two pull-through apparatus bays, and vehicle storage for up to six vehicles. Facility includes station captain's office, training room, sleeping guarters for two companies (total of 10 staff), dayroom/break area, and dedicated Personnel Protection Gear (PPE) gear and laundry spaces. Also includes controlled security lock systems for visitors; backup generator power for entire building, communications, electrical, and mechanical/HVAC; zoned sloped concrete floors with trench drain and oil/water separator system; high pressure washing system in apparatus bays; four zones of dedicated vehicle exhaust and makeup air units in vehicle maintenance area; highspeed, motorized overhead section doors; staff and visitor parking; concrete apparatus vehicle parking and driveways; staff assembly areas with sustainable stormwater including rain garden and vegetated filtration plantings.

Cory Sharrard, PE, LEED AP | GRW Mechanical Engineer



YEARS OF EXPERIENCE: With GRW: 0 Total: 20

EDUCATION

B.S., Industrial Technology, 1996, Murray State University

B.S., Mechanical Engineering, 1998, University of Kentucky

REGISTRATION

Professional Engineer: KY, IN, OH, WV, NY, FL

NCEES Member allows reciprocity with other states LEED AP

PROFESSIONAL AFFILIATIONS AND TRAINING

Kentucky Local Correctional Facilities Construction Authority Board (through 2023)

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) - Board of Governors, Bluegrass Chapter

Kentucky Society of Professional Engineers (KSPE) - Professional Development Committee (Vice Chair), Bylaws & Operational Procedures Committee, Ethical Practices Committee

Society of American Military Engineers (SAME)

Society of Marketing
Professional Services (SMPS) =
Past President

Cory possess more than 20 years' experience with mechanical engineering including design of traditional water source heat pump (WSHP), geothermal WSHP, hybrid geothermal WSHP, variable refrigerant flow (VRV), split system, rooftop units, unit ventilators, variable air volume (VAV), and ice storage systems. Her experience includes numerous K-12, higher education, vocation school, detention center, church, and library projects.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV — Mechanical Engineer. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

Petersburg Federal Correction Institution Food Service Building, Hopewell, VA – Mechanical Engineer. Demolition and replacement of existing aged 22,000 SF dining and food service building with new 23,500 SF medium-security facility completed in two phases to accommodate Owner's funding allocation. Includes new food preparation area (including kitchen, coolers/freezers, dry storage, food prep areas, and dishwash); main dining hall with serving line for approximately 400 persons; separate staff dining area for approximately 40 persons; dock and receiving area; new security fencing and gates; reconfiguration of existing site utilities; and complete integration of new security electronics system with existing campus-wide system.

Clay County BOE Clay County High School Renovations, Clay, WV – Mechanical Engineer. Design and construction administration phase services for gymnasium and locker rooms, commons area, and HVAC system renovations; door/window replacement; and security/communications system improvements. Portion of construction will occur during summer months, but much will be completed while school is occupied.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Mechanical Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator. Structure features cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists.

Berea College Edwards Building Renovation, Berea, KY – Mechanical Engineer. Renovation of three-story administrative and residential services building to house offices for fund raising activities, as well as to provide space for offices related to media production. Vertical circulation consists of one open stairway and two exterior fire escapes. Preliminary design proposes new interior stairs, elevator, public restrooms on each floor, open floor plan suites, and lobby gallery space.

Berea College Seabury Center Renovation, Berea, KY – Mechanical Engineer. Design services to renovate two existing racquetball courts into office suites for coaches and create separate entry for Athletics Department. Proposed design involves addition of flooring/ceiling system to create two-story office suite, as well as enclosure of portion of lobby with aluminum/glass wall at lower level to create reception space.

Additional K-12 School Experience

- Scott County Schools New Great Crossing High School, Georgetown, KY
- Scott County Schools High School Cafeteria Improvements, Georgetown,
 KY
- Scott County Schools High School Career Technology Center, Georgetown, KY
- Washington County Schools Elementary and High School Renovations, Springfield, KY
- Wayne County Schools Area Technology Center, Monticello, KY
- Berea Independent Schools HVAC Renovation, Berea, KY
- Burgin Independent School District Elementary School Renovation, Burgin, KY
- Clark County Schools High School Gym Addition and Athletic Fields,
 Winchester, KY
- Corbin Independent Schools Middle School HVAC Renovation, Corbin,
 KY
- Danville Independent Schools Hogsett Elementary School Renovation,
 Danville, KY
- Estill County Schools High School Renovation, Irvine, KY
- Fayette County Public Schools Johnson Elementary HVAC, Lexington, KY
- Fayette County Public Schools Deep Springs Elementary School, Lexington, KY
- Fayette County Public Schools Breckinridge Elementary School Renovation, Lexington, KY
- Fayette County Public Schools Facility Surveys, Lexington, KY
- Fayette County Public Schools ADA Upgrades, Lexington, KY
- Garrard County Schools Camp Dick Elementary School Classroom Additions, Lancaster, KY
- Harlan Independent Schools Elementary School Renovation, Harlan, KY
- Jessamine County Schools West Jessamine High School Auditorium Addition, Nicholasville, KY
- Laurel County Schools Hunter Hills Elementary School, London, KY
- Laurel County Schools Alternative School, London, KY
- Lewis County Schools Tollesboro Elementary School, Phases II & III, Tollesboro, KY
- Lewis County Schools Central Elementary School Heaters, Tollesboro, KY
- Madison County Schools New Elementary School, Richmond, KY
- Madison County Schools Silver Creek Elementary School, Richmond, KY

Allen Tucker, PE | GRW Mechanical Engineer



YEARS OF EXPERIENCE: With GRW: 10 Total: 35

EDUCATION

B.S., Mechanical Engineering, 1984, Clemson University

REGISTRATION

Professional Engineer: KY, SC, FL Construction Documents Technologist (CDT) NCEES Member allows reciprocity with other states Allen's experience as a mechanical engineer has encompassed water resources projects, as well as educational, commercial, and governmental facilities. His broad expertise includes mechanical system design, plumbing, and fire protection as well as various field inspection services. Allen has been involved with overall mechanical design, client interface, multidiscipline coordination, plan preparation, specifications, calculations, and scope of work development. His experience also includes shop drawing and material submittal review, preparation of request-for-proposals, project design review and development of design documentation in accordance with the owners project requirements and basis of design.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Mechanical Engineer. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

Georgetown College Knight Hall Renovation - Assessment and Preliminary Design, Georgetown, KY – Mechanical Engineer. Preliminary design, cost estimates, and a life cycle cost analysis to renovate four-level, 60,000 SF women's residence hall. Included are interior finishes, restroom and shower renovation, accessibility, window replacement, as well as HVAC and electrical systems.

Federal Bureau of Prisons Satellite Minimum Security Camp, Aliceville,

AL – Mechanical Engineer. Design-build of women's minimum-security prison camps with two buildings (57,000 SF) including open concept dormitory building and support building (food service, classrooms, medical clinic, counseling, and support spaces). Includes open dormitory housing for 256 persons (in two wings, separated by a commons area); dining area seating 112 persons with associated commercial kitchen, refrigerator /freezers, dry storage, and dock/receiving areas; medical clinic area; classrooms and indoor recreation areas; offices; and outdoor recreation fields.

Ohio ARNG Joint Armed Forces Reserve Center and Field Maintenance Shop Complex, Springfield, OH – Mechanical Engineer. New LEED Silver Certified 85,865 SF complex serving both Ohio Army National Guard and U.S. Army Reserves. Joint Armed Forces Reserve Center (60,902 SF) includes administrative, educational (classrooms, weapons simulator, distance learning, training-specific libraries, COMSEC), and assembly hall and kitchen.

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV – Mechanical Engineer. Renovation of 5,395 SF SFS facility (B142) including addition of 2,500 SF administrative and training space to better serve unit.

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV – Mechanical Engineer. Repurpose of unoccupied hangar into space for Aeromedical Evacuation Squadron (AES). Repairs and building repurposing includes: new interior spaces within existing facility to accommodate new functions; building exterior repairs, new interior finishes; mechanical and electrical systems upgrade; fire alarm and fire protection systems repair; and site/building revisions to meet ATFP standards.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Mechanical Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator. Structure features cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists.

Frankfort Plant Board Administration Building, Frankfort, KY — Mechanical Engineer. New three-level, 46,000 SF administration building on 30-acre site providing consolidated facility for administrative offices (accounting, human resources, management, IT, dispatch, customer service), as well as exterior drive through tellers, board/community room and designated shelter area. Building construction includes primarily architectural precast concrete panels with design elements such as structural silicone glazing systems and aluminum panels.

Pulaski County Northern Elementary School, Somerset, KY – Mechanical Engineer. Engineering design services for new 62,974 SF, 450-student elementary school. Systems include central geothermal heating and cooling plant generating hot and chilled water serving variable volume air-handling systems with hot water reheat; high efficiency lighting; data and voice telecommunications; low-flow plumbing fixtures; and complete wet-pipe sprinkler and fire alarm systems. Also included bus fueling station and 9,000 gpd packaged wastewater treatment plant.

West Virginia ARNG Camp Dawson Live Fire Exercise Shoot House, Kingwood, WV – Mechanical Engineer. Design for innovative re-use of recently-acquired former industrial complex adjacent to Camp Dawson to provide Live Fire Exercise Shoot House, including shoot house to be housed in a metal warehouse, operations / storage, after action review (AAR) facility, ammunition breakdown facility, warehouse restroom renovation, access road and parking area, and utility services. Responsible for performing HVAC, plumbing and fire suppression calculations, equipment lay out, specifications, and controls, as well as sizing, selecting and locating exhaust system for live fire shoot house proper.

Patrick Baisden, PE, LEED AP BD+C | GRW Electrical Engineer



YEARS OF EXPERIENCE: With GRW: 10 Total: 22

EDUCATION

B.S., Electrical Engineering, 1997, University of Kentucky

REGISTRATION

Professional Engineer, Electrical: KY, IN, WV, OR, NM, WV LEED Accredited Professional, Building Design + Construction NCEES Member allows reciprocity with other states Patrick's experience with electrical systems design has encompassed industrial, educational, and commercial projects, as well as numerous projects for GRW's water resources, and local, state, federal clients. His areas of expertise include electrical power distribution, communication systems, interior/site lighting, lighting control systems (network, dimming, and theatrical), and code compliance.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Electrical Engineer. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

UK Nursing Building Renovation, Lexington, KY – Electrical Engineer. Design services for Phase II renovation of approximately 8,117 SF on sixth-floor of University's Nursing Building. Fit-up project includes 144-seat computer classroom used for computerized exams and lectures, IT office and reading room with seating for 42. Also included processor room for computer and CCTV surveillance equipment, as well as corridor system to secure floor after hours.

Georgetown College Knight Hall Renovation - Assessment and Preliminary Design, Georgetown, KY – Electrical Engineer. Preliminary design, cost estimates, and a life cycle cost analysis to renovate four-level, 60,000 SF women's residence hall. Included are interior finishes, restroom and shower renovation, accessibility, window replacement, as well as HVAC and electrical systems. Anticipated renovation is expected to take place in two phases.

Federal Bureau of Prisons Satellite Minimum Security Camp, Aliceville,

AL – Electrical Engineer. Design-build of women's minimum-security prison camps with two buildings (57,000 SF) including open concept dormitory building and support building (food service, classrooms, medical clinic, counseling, and support spaces). Includes open dormitory housing for 256 persons (in two wings, separated by a commons area); dining area seating 112 persons with associated commercial kitchen, refrigerator/freezers, dry storage, and dock/receiving areas; medical clinic area; classrooms and indoor recreation areas; offices; and outdoor recreation fields.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Electrical Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator. Structure features cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists.

West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV – Electrical Engineer. Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area.

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV – Electrical Engineer. Renovation of 5,395 SF SFS facility including addition of 2,500 SF administrative and training space to better serve unit.

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV – Electrical Engineer. Renovation and energy-efficient improvements to 25,765 SF facilitySelected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs.

Pulaski County Schools Eubank Elementary Renovation and Addition, Pulaski County, KY – Electrical Engineer. Mechanical and electrical engineering design, and construction administration services for renovation and addition of a 46,820-SF school. Scope includes a new kitchen and addition to the cafeteria, as well as a renovation of entire building. Mechanical work included HVAC systems involving rooftop VAV boxes with electrical reheat and energy recovery ventilation, as well as geothermal units. Electrical work included replacement of lighting, fire alarms, and communications, and new service for the addition.

Pikeville High School HVAC Replacement, Pikeville, KY - Electrical Engineer for a HVAC replacement project for which the existing heater banks located in two (2) air handler units were replaced with individual heaters located in the supply duct serving each individual space to allow individual temperature control for each office/classroom space. Electrical work was limited to providing branch power to individual heaters and providing power to the new air handler units.

Lee County Vocational School Renovation, Beattyville, KY- Electrical Engineer for a complete renovation of an existing vocational school. Existing classrooms were provided with additional power, data/voice, and video outlets as required to accommodate new student computer workstations/teacher workstations, and projector/interactive whiteboards. The lighting in the building was completely replaced with fixtures containing T5 lamps and energy efficient ballasts. Lighting controls consists of a network lighting control system for all interior spaces including the exterior lighting. This project meets the requirements set forth by the International Energy Conservation Code with regard to Electrical Power and Lighting Systems. A new microprocessor controlled, intelligent fire alarm system was provided along with all new notification and initiating devices throughout to meet current codes along with to meeting ADA requirements. A new microprocessor controlled voice and communication/intercom system was provided with all new speakers throughout.

David Hoy, PE | GRW Structural Engineer



YEARS OF EXPERIENCE: With GRW: 12 Total: 12

EDUCATION

B.S., Civil Engineering, 2006, West Virginia University

REGISTRATION

Professional Engineer: WV, KY, IN, TN, NC, OH, VA

PROFESSIONAL AFFILIATIONS AND TRAINING

American Society of Civil Engineers Dave is experienced in the design of various building structural systems including timber, concrete, steel, and masonry construction, as well as foundation design, including deep foundation systems. He has provided structural engineering on a variety of structures including schools, office buildings, and recreation facilities. In addition to building structures, David also has experience with water/wastewater projects involving the design of below grade concrete structures and elevated structural slabs.

RELEVANT PROJECT EXPERIENCE

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar, Fuel Cell Hangar, and Maintenance Hangar Modifications, and Addition of Composite Material Shop Martinsburg, WV – Structural Engineer. Fast-track design of projects required to meet 167AW's change in mission from C-5 to C-17 aircraft.

Clay County High School, Clay, WV – Project Structural Engineer. New bus garage, locker room renovations, new restroom facility, and press-box renovations.

Jane Lew Elementary School Addition, Jane Lew, WV – Project Structural Engineer. Addition and renovation project that included five new classrooms, an updated office suite, and a new building entrance and bus loop.

Smithville Elementary School Addition, Smithville, WV – Project Structural Engineer. Addition and renovation of the Smithville Elementary School project which included the demolition of two buildings in the existing complex and the design of a new classroom wing and a new kitchen addition adjacent to the remaining buildings.

Pocahontas Wellness Center, Marlinton, WV – Project Structural Engineer. 13,000 square-foot community wellness center, constructed adjacent to but separate from the existing Marlinton Elementary School.

Coal Heritage Discover Center, Mt. Hope, WV – Project Structural Engineer. Rehabilitation of the historic Patterson Building into Coal Heritage Discovery Center consisting of offices, meeting rooms, an historic information center, a small theater space, a public lobby area, a gift shop, and a small café area.

State Road Commission Building, Charleston, WV – Project Structural Engineer. Renovation of the historic State Road Commission Building for the West Virginia Division of Highways. The 40,000 square-foot building houses offices and support facilities for the local highway district.

WV DOH District One Equipment Shop, Charleston, WV – Project Structural Engineer. New 34,000 square-foot, 14-bay vehicle maintenance building. The design included pre-cast concrete wall panels and deep foundations and grade beams.

4.0 Project Management and Quality/Cost Control

Project Management

Our approach to managing your project is straightforward: assemble the best and brightest design talent with knowledge of the national guard/military projects; bring an open mind and fresh perspectives; and remain accountable to you throughout the process for cost control/budget. The relationship between you and your chosen design consultant is critically important. The cornerstone of the GRW design approach is collaboration. Communicating in an open dialog, where ideas can be freely expressed and considered, helps to vest everyone in the project's success, and is a vital prerequisite to ensuring buy-in from all project stakeholders. The following provides a general overview of our process.

Kickoff/Charrette

We will have an initial meeting with you and the primary project stakeholders to discuss in detail your project goals, options for accomplishing those goals, and budget and schedule requirements for the work. Following this meeting, we issue a written record of our discussions.



Existing Conditions

We will take stock of the existing building(s), through an examination of existing documentation and field observations. We will identify existing conditions that are not in compliance with current codes and standards, including, but not limited to, ADA compliance, life-safety compliance, and state/federal facility requirements.

At the conclusions of this step we will create a report that outlines the condition of the existing building components and systems that will be affected by the work of this project. This information will include the identification of existing hazardous materials.

A1 & A2 Design Submittals

Using the information from the Kickoff/Charrette and analysis of existing conditions, we will proceed with developing a schematic design.

We will present this concept to you through the use of drawings, product information sheets, written narratives and an initial cost estimate. After your review of the material, we will meet together to go over the design review comments, review the budget, and document any desired revisions. We will repeat this process as needed to reach an acceptable solution that meets your goals and budget.

We will also discuss with you potential construction phasing opportunities, if/as needed. We will document each step of the process with thorough meeting minutes.

B1, B2 & B3 Construction Documents

Using the approved Schematic Design documents, the design team will proceed with Design Development docs which likewise, are issued for Owner/User review and approval before proceeding to completion of Construction Documents for bidding.

The Estimate of Probable Cost is updated at each design review submittal to check the estimate against the drawings and specs, to make sure the work remains within budget. We will also reconfirm final decisions on materials, equipment, and finishes.

If needed, we will incorporate a phasing plan into the final documents to minimize the impact of construction on the facility's day-to-day operations.

The final construction documents will consist of drawings, specifications, and instructions to bidders. The completed documents are then ready for bidding.

Construction Phase

The same Project Manager you worked with throughout design continues as your point of contact through the entire construction process. Also, the original designers are the team we use to review shop drawings, attend meetings and observe the work in progress. This provides a continuity that benefits the project, and is an integral part of our quality control process.



GRW manages and tracks our construction administration and resident inspection responsibilities using **Newforma**® Project

Center (project information management software); this ensures that the process is transparent to all parties. Newforma has built-in modules specifically developed for the A/E industry. Using this system, Owners, Design Team, and Contractor/GC all have access to real-time logs showing the current status of all construction-related activities.

During project construction, GRW provides consultation and advice on construction matters including visits to the site to check work progress and quality and to evaluate general conformance with the contract documents.

In addition, we review laboratory, shop and on-site tests of equipment and materials related to the submittals. Once reviewed, copies of submittals, with comments, are distributed to the team members (Owner, Contractor, etc.) for appropriate action. A comprehensive submittal file is maintained in the Newforma software.

Our team members review and recommend progress payments to the construction contractor based on observation of the work in-place. Project costs automatically update for tracking of project budgets.

Our team performs semifinal inspections of the project and creates a list of work yet to complete prior to the final technical inspection. Upon completion, we will provide a set of record drawings based on mark-ups from the contractor, to show field changes made during construction. These drawings are reviewed by the Project Manager and serve as the record drawings for the project and are suitable for facility management.

Changes

The GRW project team will not approve any change that affects project cost, time or quality without your approval, and then only after a thorough discussion and vetting of the reasons for the change. Contractor cost proposals are carefully reviewed to ensure the proposed costs are fair and reasonable. When needed, GRW will negotiate on your behalf to reach an equitable solution.

Flexibility

These procedures are not cast in concrete, as GRW prides itself on being an organization which seeks to simplify and expedite procedures that can impede the work and stifle creative people. Sometimes these procedures are streamlined for smaller projects, and sometimes they are more formalized for larger projects but at all times they remain flexible to accommodate the needs of our client's organizations. We want you to be satisfied with the quality of your facility: the bottom line is that GRW cares a great deal about securing repeat business with our clients.

GRW and its subsidiary Chapman Technical Group (offices in St. Albans and Buckhannon, WV) have extensive experience in developing projects through the WV Purchasing Division. For many years, we have designed, bid, and constructed numerous, major Division of Natural Resources projects throughout the state. The West Virginia Division of Highways (DOH) recently began working with the State's Purchasing Division for building projects, and our \$10 million equipment shop building for District One was the first project that the DOH bid through the WV Purchasing Division. Our knowledge and experience of the State's purchasing procedures made this an easy transition for all stakeholders. Although every agency has its own particulars with regard to bidding projects, our experience with the West Virginia Purchasing Division will help ensure effective and efficient project delivery.

Quality & Cost Control

At GRW, cost control, scheduling and value engineering are daily components of design rigor. Project planning decisions are assessed in weekly project meetings with all A/E disciplines to confirm budgets and schedules will be met. During these sessions, project status is discussed to direct adequate resources to meet the project schedule. The issues tracking list we create is reviewed to ensure problems are resolved before they impact the schedule or budget. Our vision as your full-service architectural and engineering design firm is to partner with you to simplify the design and construction process for the results you intend.

Quality Control

Shane Lyle, our Project Manager, has primary responsibility for the daily management and coordination of the project team. With over 35 years of experience, he has a clear understanding of the most effective methods for maintaining the programming, planning, and design schedule.

COMMUNICATION: At GRW, our highest project-management priority is focused on maintaining clear and effective communication throughout the entire project. This focus includes our communication with you and your stakeholders, with the Contractor, and with our internal design team members. Key to this effort is our use of Newforma project information management software, which allows the storage, sharing, and retrieval of project information both internally and externally.

PROJECT MANAGER: Our process begins initially with the assignment of an experienced Project Manager who is responsible for organizing the design effort and who manages the Quality Control process. While a project design team may involve many different departments or groups, the Project Manager has the ultimate authority over the project at all times.

A key element in effective Quality Assurance/Quality Control (QA/QC) is the use of regularly scheduled progress meetings. A kickoff meeting between key members of GRW's proposed project team and your management and staff will be held to ensure a common understanding of the goals and objectives among all project partners. These issues will be

reviewed and the work plan will be discussed in detail. Lines of communication and coordination will be established. Regular meetings will then be scheduled throughout the project to report on project progress and to review technical issues. These meetings provide a forum for discussing concerns and ideas. The assigned Project Manager is the primary conduit for communication between you and the design team.

TEAM MANAGEMENT: QA/QC is enhanced at GRW since most design disciplines are in-house. Because of this, scheduling internal team meetings or overthe-shoulder reviews is greatly simplified. On this project, the Project Manager will conduct weekly team meetings with the design team members to facilitate coordination of design issues. Any design problems are identified along with a path for their correct resolution. A checklist managed by the Project Manager is used to track the resolution of issues from meeting-to-meeting.

SCHEDULE MANAGEMENT: No QA/QC process can succeed without allocating sufficient time for internal review. The Project Manager will develop a proposed internal design schedule at the beginning of the project for appropriate time for internal review. These internal reviews typically occur prior to normal design submittal dates for the project.

QUALITY CONTROL REVIEWS: QC reviews at GRW includes desk-to-desk, task-to-task, and person-to-person crosschecking of work that takes place on a regular basis within the company. Impromptu meetings to discuss specific issues take place as often as needed. The peer review personnel are determined by the Project Manager at the beginning of the project, and remain consistent throughout the course of the project.

QUALITY ASSURANCE: A major advantage of providing all design disciplines within the same firm is the opportunity to streamline communication and work flow resulting in a well-coordinated set of construction documents. By close collaboration throughout the design stage, ideas can be quickly discussed and evaluated to understand impacts on cost, schedule and effectiveness.

PROGRAMMATIC OVERSIGHT: The Project Manager is tasked with maintaining oversight of the project as the design develops, to insure that the design decisions are in keeping with the programmatic criteria developed with you at the project's initiation. At each interim submittal, the Project Manager takes a step back, and looks at the project in broad terms to insure that the design is progressing in accordance with the original criteria.

Cost Control

project BUDGET ACCOUNTABILITY: Government officials are accountable to the public for the expenditure of public monies. The GRW team understands this obligation and develops a project design that is cost-effective and delivers an efficient and appropriate use of funds assigned to the military. Rarely do projects have sufficient budget to accommodate everything on the programmatic wish list. Reconciling the program against the project budget is done early and often in order to guide the project to a successful conclusion. GRW approaches

this process in a pragmatic and open manner. This subject will be on the agenda of every project meeting we have with you for open and frank discussion so that everyone is kept abreast of any potential concerns. Prioritizing the program relative to the budget can be a difficult task, with different stakeholders sometimes at odds over how to resolve differences of opinion. GRW excels at guiding this process and helping you to resolve these differences.

GRW has a strong history of successful estimating of projects, and our design experts will draw upon this knowledge during the development of our construction cost estimates.

We can also develop a list of possible valueengineering for consideration to help manage construction costs and give you the most construction value for your dollar.



GRW provided design and construction phase services for the WV ANG's 130th Airlift Wing Building 107 Renovation. With a construction budget of \$5M, the awarded bid was \$4,941,290, and the final construction cost was \$4,991,876 (within 1% of awarded bid).

5.0 References

GRW understands that professional consulting begins as a relationship built on trust. We fully understand the importance of gaining your respect, proving our worth, and being there long after your successful project is completed. With repeat clients providing more than 90 percent of GRW's current workload, we believe this is a testament to our business philosophy of providing close, personal, high quality service. We invite you to contact our references to verify GRW's performance.

West Virginia Army National Guard

MAJ Robert Kincaid, Jr. (304) 791-4459 robert.j.kincaid.mil@mail.mil

Matthew T. Reynolds (304) 561-6568 matthew.t.reynolds18nfg@mail.mil

West Virginia Air National Guard

Capt. Harry Netzer, Deputy BCE (304) 341-6649 harry.g.netzer.mil@mail.mil

Maj. Emerson C. Slack, Deputy BCE (304) 616-5233 emerson.c.slack,mil@mail.mil

Federal Bureau of Prisons

Judah Organic, Design Compliance Programs Manager (202) 514-9566 jorganic@bop.gov

Frankfort Plant Board, Frankfort, KY

Sharmista Dutta, PE, Project Manager (502) 352-4407 sdutta@fewpb.com (New Administration Building Shown Below)





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

State of West Virginia **Centralized Expression of Interest**

02 - Architect/Engr

Proc Folder: 658630

Doc Description: Addendum No.01 Mountaineer Challenge Academy South

Proc Type: Central Purchase Order

ite Issued	Solicitation Closes	Solicitati	on No	Version
019-12-09	2019-12-17 13:30:00	CEOI	0603 ADJ2000000001	2

D RECEIVING LOCATION

D CLERK

EPARTMENT OF ADMINISTRATION

JRCHASING DIVISION

19 WASHINGTON ST E

HARLESTON

WV

25305

NDOR

idor Name, Address and Telephone Number:

RW

31 Corporate Drive

∋xington, KY 40503

59) 223-3999

INFORMATION CONTACT THE BUYER

Nisbet

) 558-2596

l.nisbet@wv.gov

iture X < 61-0665036 fers subject to all terms and conditions contained in this solicitation

12/11/2019 DATE

Page: 1

FORM ID: WV-PRC-CEOI-001

DDITIONAL INFORMATION:
ddendum
ddendum No.01 issued to publish and distribute the attached information to the vendor community.
·····································
entralized Expression of Interest Professional Architect & Engineering Services for Mountaineer Challenge Academy "South" Improvement/Renovation Project)
accordance with West Virginia Code: 5G-1-3, The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The Vest Virginia Army National Guard's Office of the Adjutant General, from qualified firms to provide architectural/engineering services and other lountain Challenge Academy "South" located in: Montgomery, in Fayette County, West Virginia. per the bid requirements, specifications and rms and conditions as attached hereto.
Online submissions of Expressions of Interest are Bushill to 16

Online submissions of Expressions of Interest are Proh	ibited*
--	---------

VOICE TO	SHIP TO				
IVISION ENGINEERING & FACILITIES DJUTANT GENERALS OFFICE 707 COONSKIN DR	DIVISION ENGINEERING & FACILITIES ADJUTANT GENERALS OFFICE 1707 COONSKIN DR				
HARLESTON WV25311	CHARLESTON WV 25311				

10	Comm Ln Desc	Qty	Unit Issue	
	MCA South Renovation Design			
nm Code	Manufacturer	IP		

im code	Manufacturer	Specification	Model #	7
101508				1
-				
anded December				1

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

	Document Phase	Document Description	Page 3
ADJ200000001	Final	Addendum No.01 Mountaineer Challenge	of 3
		Academy South	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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.

Addendum Numl	bers Received:
---------------	----------------

(Check the box next to each addendum received)

[X]	Addendum No. 1]	J	Addendum No. 6
[]	Addendum No. 2	I]	Addendum No. 7
]]	Addendum No. 3	[]	Addendum No. 8
[]	Addendum No. 4	[1	Addendum No. 9
[]	Addendum No. 5	[]	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.

Company

Authorized Signature

12/11/2019

Date

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

Revised 6/8/2012