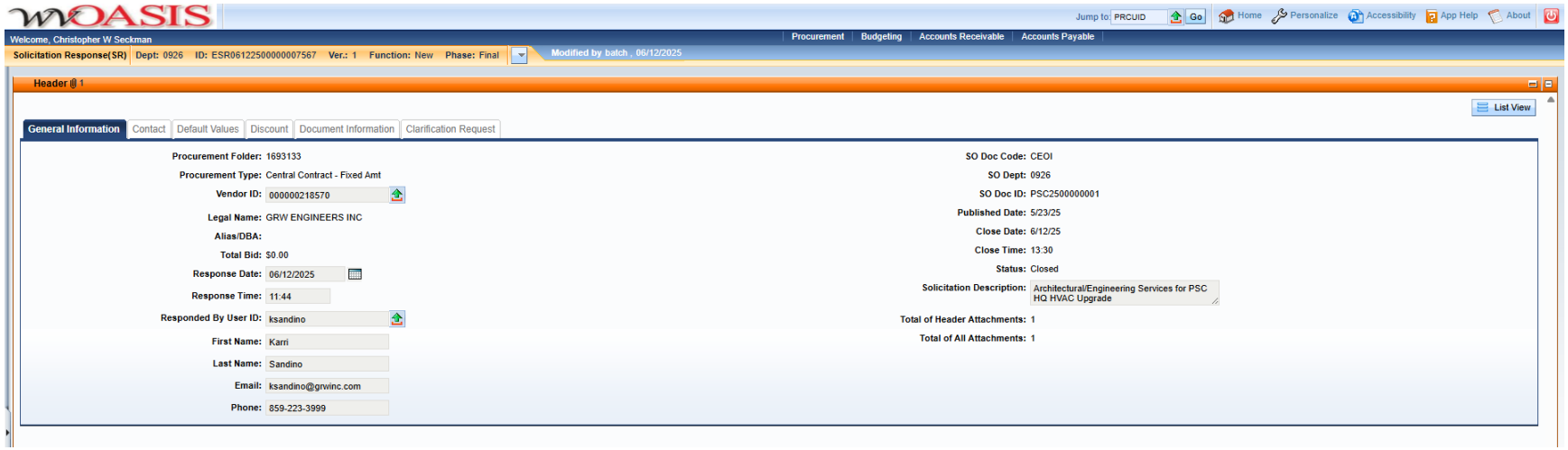
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


wvOASIS
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About
Welcome, Christopher W Seckman
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 0926 ID: ESR06122500000007567 Ver.: 1 Function: New Phase: Final
Modified by batch , 06/12/2025
Header @ 1
List View
General Information
Contact
Default Values
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Document Information
Clarification Request
Procurement Folder: 1693133
Procurement Type: Central Contract - Fixed Amt
Vendor ID: 000000218570
Legal Name: GRW ENGINEERS INC
Alias/DBA:
Total Bid: $0.00
Response Date: 06/12/2025
Response Time: 11:44
Responded By User ID: ksandino
First Name: Karri
Last Name: Sandino
Email: ksandino@grwinc.com
Phone: 859-223-3999
SO Doc Code: CEOI
SO Dept: 0926
SO Doc ID: PSC2500000001
Published Date: 5/23/25
Close Date: 6/12/25
Close Time: 13:30
Status: Closed
Solicitation Description: Architectural/Engineering Services for PSC HQ HVAC Upgrade
Total of Header Attachments: 1
Total of All Attachments: 1

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

State of West Virginia
Solicitation Response

Proc Folder:	1693133
Solicitation Description:	Architectural/Engineering Services for PSC HQ HVAC Upgrade
Proc Type:	Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2025-06-12 13:30	SR 0926 ESR06122500000007567	1

VENDOR

000000218570
GRW ENGINEERS INC

Solicitation Number: CEOI 0926 PSC2500000001

Total Bid: 0 **Response Date:** 2025-06-12 **Response Time:** 11:44:41

Comments:

FOR INFORMATION CONTACT THE BUYER
Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

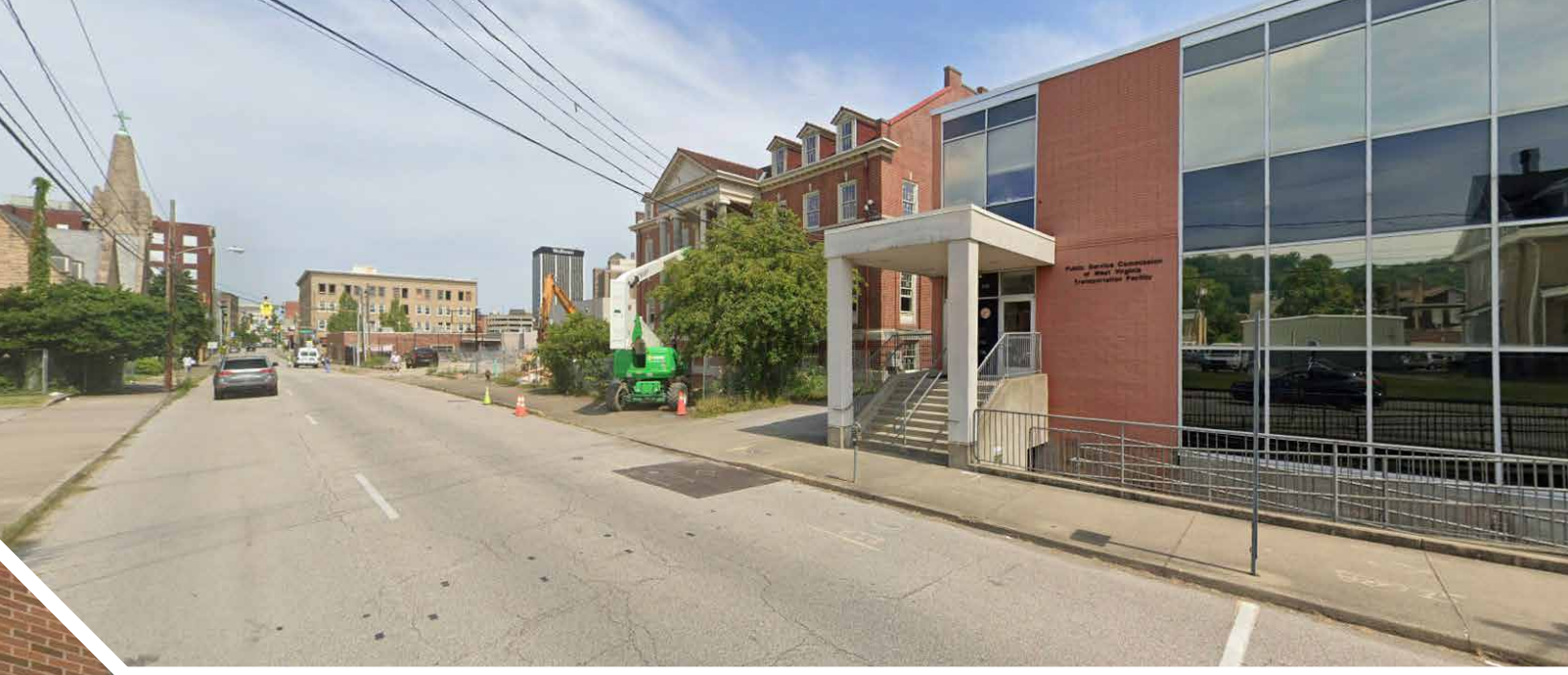
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Architectural/Engineering Services for PSC HQ HVAC Upgrade				0.00

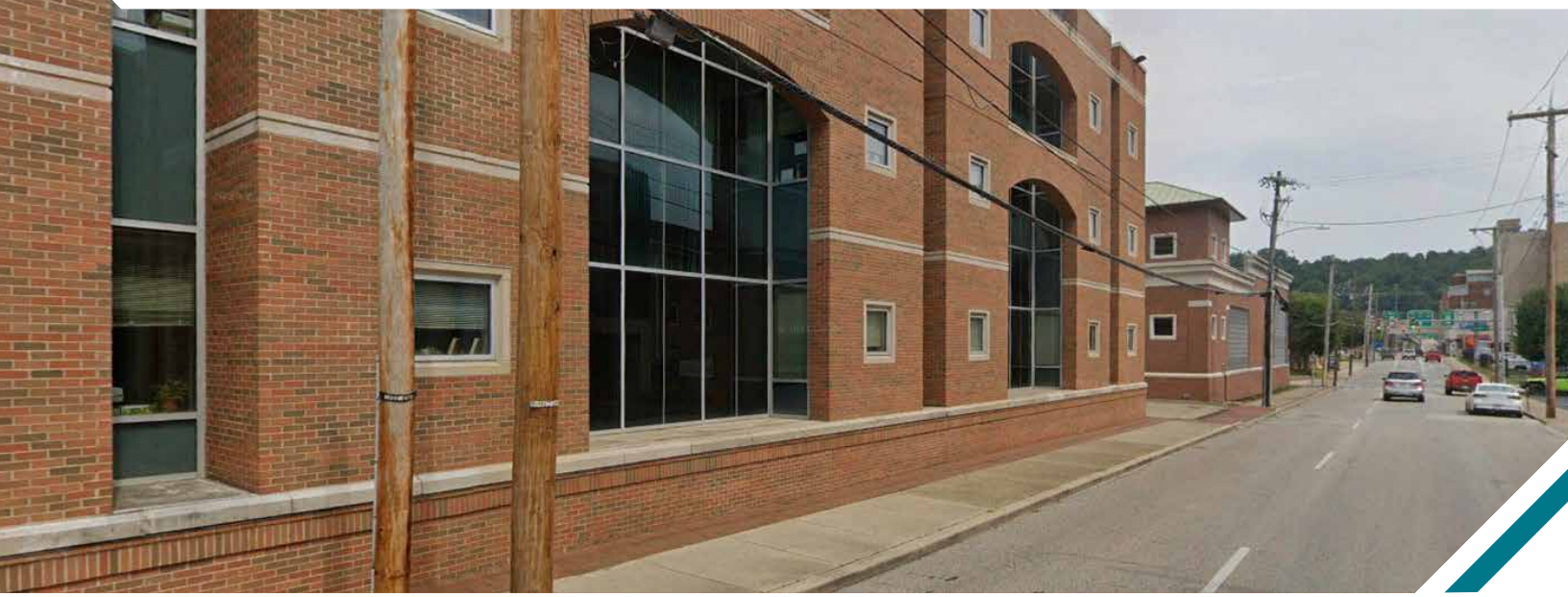
Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: This is an EOI; no price included. Thank you.

Extended Description:

See attached specifications for further details.





EXPRESSION OF INTEREST

Architectural/Engineering Services for PSC HQ HVAC Upgrade | Charleston, WV CEOI 0926 PSC2500000001

WV Department of Administration

Public Service Commission of West Virginia

June 12, 2025

engineering | architecture | geospatial

GRW | 801 Corporate Drive Lexington, KY 40503 | 859.223.3999

GRW | engineering | architecture | geospatial
801 Corporate Drive | Lexington, KY 40503
859.223.3999 | www.grwinc.com

June 12, 2025

Mr. Larry D. McDonnell, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street, East
Charleston, WV 25305

RE: Expression of Interest: CEOI 0926 PSC2500000001
Architectural/Engineering Services for PSC HQ HVAC Upgrade

Dear Mr. McDonnell and Selection Committee Members:

Achieving the goals established for the HVAC renovation project at the WV Public Service Commission's two headquarters buildings is greatly dependent upon selecting the right A/E design partner. We understand you're looking for a team to assist you with redesigning the HVAC equipment at the facilities in order to replace aging and inadequate equipment with energy efficient, economical and maintenance friendly equipment. GRW would like to work with you on your project – and we believe we offer you the right experience and expertise to successfully delivery the results you require.

Experience & 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 61 years. Our project team's experience in West Virginia is substantial and encompasses projects at locations including Charleston, Kingwood, Ripley, and Martinsburg, WV. **See Sections 2.0 and 3.0.**

GRW and its subsidiary Chapman Technical Group (offices in St. Albans and Buckhannon, WV) also have experience developing projects through the WV Purchasing Division. We have designed, bid, and constructed numerous, major Division of Natural Resources projects throughout the state, as well as projects for the Department of Highways, the Division of Corrections and Rehabilitation, as well as the National Guard. Although every agency has its own particulars regarding bidding projects, our experience with the State's Purchasing Division will help ensure effective and efficient project delivery.

Our Team Offers HVAC Engineering Expertise

By selecting GRW, you will be working with knowledgeable mechanical and electrical engineers who regularly work on the design of heating and cooling system renovations for existing buildings, as well as new facilities. These professionals offer specialized experience with HVAC system renovations for state and educational facilities as well as municipal entities and government clients. **Section 2.0** includes more information about our HVAC project experience. You can read more about our team qualifications in the resumes provided in **Section 3.0.**

Our Project Manager Understands HVAC Replacements/Repairs

Our proposed Project Manager/Mechanical Engineer **Cory Sharrard** possesses more than 25 years' experience with mechanical engineering including design of traditional water source heat pump (WSHP), geothermal WSHP, hybrid geothermal WSHP, variable refrigerant flow systems, and traditional RTU/VAV systems.

For example, Cory served as Project Manager for these mechanical engineering/ HVAC system projects:

- Clay County High School Renovation and Addition, Clay, WV
- West Virginia ARNG Martinsburg Secure Facility Renovation, Martinsburg, WV
- West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV
- Fayette County Public Schools Multiple HVAC System Evaluations & Renovations, Lexington, KY
- Wayne County Schools Gymnasium Building HVAC Renovation, Monticello, KY
- West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV
- Kentucky School for the Deaf and Kentucky School for the Blind HVAC Upgrade, Danville & Louisville, KY

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. 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. **See Sections 4.0 and 5.0.**

Thank you for your consideration and for the opportunity to work with you. 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.

If you have questions about our qualifications or any other items, please feel free to call or email.

Respectfully submitted,

Cory Sharrard, PE, LEED AP
GRW Vice President / Project Manager

859-880-2346
csharrard@grwinc.com

engineering | architecture | geospatial

Expression of Interest

Architectural/Engineering Services for PSC HQ HVAC Upgrade | Charleston, WV

CEOI 0926 PSC2500000001

WV Department of Administration Public Service Commission of West Virginia

Table of Contents

SECTION 1.0

GRW Introduction

1.0 GRW Introduction

About GRW

Founded in 1964, GRW is a Kentucky-owned, Kentucky-based multidiscipline architectural, engineering, and planning firm with more than 170 employees. You can count on our experienced, customer-focused team to deliver award-winning, highly functional projects.

Recognized nationally as a top A/E design firm, Building Design and Construction's Giants 400 report ranks GRW among the nation's top firms. GRW has also been ranked in Engineering News Record's Top 500 Design Firms in the U.S. for 50 years.

We Know West Virginia

GRW understands how to navigate the ins-and-outs of working with the State of West Virginia regulatory entities. We've had a relationship with West Virginia agencies since the early 1990s and we've completed dozens of assignments for the

- **Division of Natural Resources**
- **Division of Corrections and Rehabilitation**
- **Division of Highways**
- **General Services Division**
- **West Virginia Air and/or Army National Guard**
- **Clay County Public Schools**

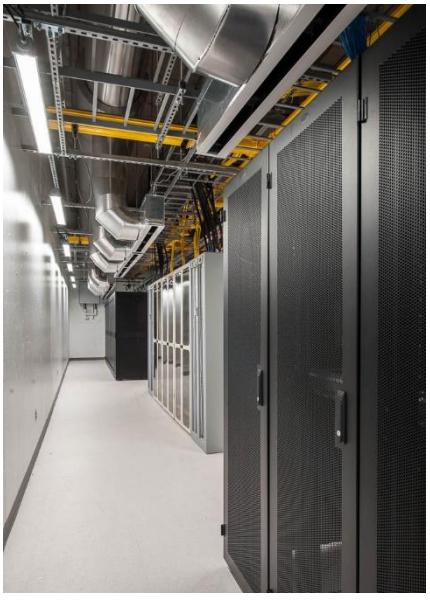
Our team members are well versed in the applicable codes and regulatory requirements for the projects we design with the State.

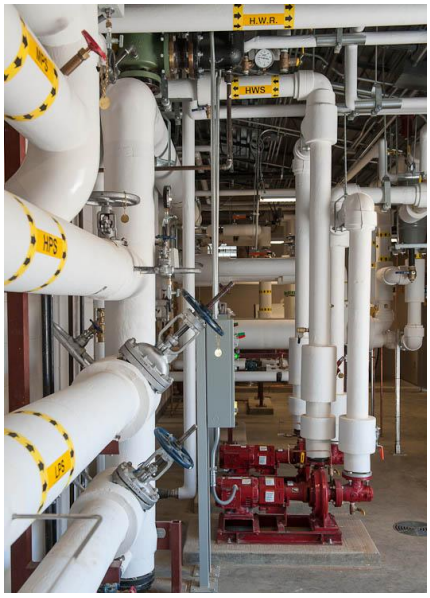
Our Firm's Philosophy: Building a Trust Relationship

Business relationships are built on trust. 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 community 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.**

We're Eager to Engage With You

Listening diligently to your needs, and those of your stakeholders, is the hallmark of our approach. The planning and design process will be orderly and transparent, ultimately delivering a design that meets your goals and budget.





Specialized Experience: Building Design & Renovation

Your GRW team has access to a full-service building design studio, with architectural professionals supported by an in-house team of civil/site, electrical, mechanical, and structural engineers, and technicians – as well as surveyors and geospatial professionals offering LiDAR, GIS, and aerial mapping/imagery. Our teams have led numerous facility renovations and expansions, as well as new facility construction for a variety of clients.

We can complete all project phases, from concept design through construction administration.

Our In-House Services

Here's quick glance at a ***few*** of our relevant services:

Mechanical

- Fire Protection Systems
- Plumbing Systems
- HVAC Systems
- Building Energy Simulations
- Geoexchange Design
- Energy Auditing

Architecture

- Space Utilization Studies
- Master Plans
- Interior Design
- Life Safety
- ADA Compliance Studies
- Green Building Design
- Resident Project Representation
- Cost Estimating

Electrical

- Communications & CATV
- Fire Alarm Systems
- Low & Medium Voltage Power Distribution
- Access Control Systems
- Lightning Protection Systems
- Lighting (Exterior, Interior)
- Lighting Control Systems
- Solar Photovoltaics

Civil

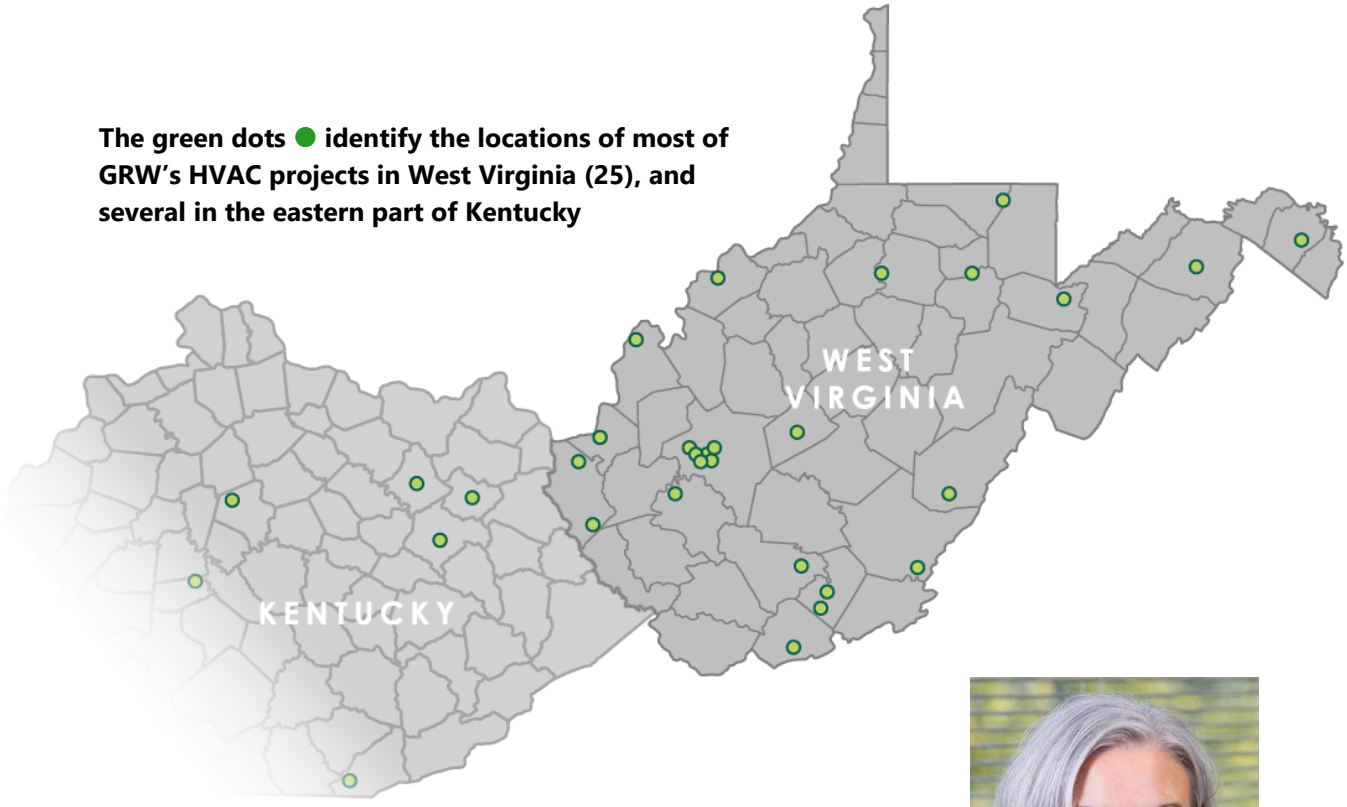
- Site Development
- Parking
- Landscape Architecture
- Storm Drainage
- Water/Wastewater Systems

Structural

- Building Structures
- Foundations
- Equipment Isolation Pads
- Special Inspections

GRW HVAC Projects in West Virginia & Eastern Kentucky

GRW and our assigned project manager, Cory Sharrard, have experience with the design of numerous projects involving new or renovated/replacement HVAC systems. The map below shows the locations of GRW's HVAC projects in West Virginia, as well as a few locations in the eastern part of Kentucky.



Our Project Manager Understands HVAC Replacements/Repairs: Our proposed Project Manager/Mechanical Engineer **Cory Sharrard,** PE, LEED AP, possesses more than 26 years of experience with mechanical engineering including design of traditional water source heat pump (WSHP), geothermal WSHP, hybrid geothermal WSHP, variable refrigerant flow (VRF) systems, and traditional RTU/VAV systems. Cory has served as Project Manager for numerous mechanical engineering/HVAC system projects in West Virginia and throughout her career. A few of these are listed below. Those in bold are included in Section 2.0:

- **West Virginia ARNG JFHQ TAG Wing Renovation, Charleston**
- **West Virginia Division of Natural Resources Building 74 Renovation, South Charleston**
- **Clay County High School Renovation and Addition, Clay**
- **West Virginia Division of Corrections HVAC Multiple Facilities, Multiple Locations**
- **West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston,**
- **West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston**
- **West Virginia ARNG Martinsburg Secure Facility,**
- **West Virginia Division of Natural Resources Bath House Renovations, South Charleston**
- **Morehead State University HVAC Upgrades - Breckinridge, Baird & Enrollment Services Buildings, Morehead, KY**
- **Fayette County Public Schools Henry Clay High School HVAC System Evaluation and Renovation, plus 15 more assignments**
- Berea Independent Schools HVAC Renovation, Berea, KY
- Kentucky Department of Corrections Mechanical & Electrical Services Five Locations
- Kentucky School for the Deaf HVAC Assessments & Upgrades

- Wayne County Schools Vocational School Boiler Replacement, Monticello, KY
- Wayne County, KY, Schools Bell Elementary New HVAC System
- Administrative Office of the Courts Madison County, KY, Judicial Center Courtroom Renovation
- Wayne County Schools Turner Elementary School Boiler Replacement, Monticello, KY
- Wayne County, KY, Schools Gymnasium Building HVAC Renovation
- Western Kentucky University Boiler Replacement, Bowling Green, KY

GRW West Virginia Experience

The following shows a portion of GRW's long history of experience with the State of West Virginia.

- West Virginia ARNG Buckhannon Readiness Center Phase II Commissioning, Buckhannon, WV
- West Virginia Department of Highways District 1 State Road Commission Building, Charleston, WV
- West Virginia ARNG JFHQ TAG Wing Renovation, Charleston, WV
- West Virginia Division of Corrections Lakin Correctional Center Lightning Protection Improvements, West Columbia, WV
- West Virginia Department of Highways District 1 Smith Street Streetscape, Charleston, WV
- West Virginia Department of Highways District 1 Campus Master Plan, Charleston, WV
- West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV
- West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston, WV
- West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV
- West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV
- West Virginia ANG 167th Airlift Wing Munitions Storage, Martinsburg, WV
- West Virginia ARNG Camp Dawson Volkstone Training Area Utility Upgrade, Kingwood, WV
- West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar Modifications, Martinsburg, WV
- West Virginia ANG 167th Airlift Wing C-17 Composite Material Shop, Martinsburg, WV
- West Virginia ANG 167th Airlift Wing C-17 Maintenance Hangar Modifications, Martinsburg, WV
- West Virginia ANG 167th Airlift Wing C-17 Fuel Cell Hangar Modifications, Martinsburg, WV
- West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV
- West Virginia ANG 167th Airlift Wing C-5 Apron Repair, Martinsburg, WV
- West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV
- West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV
- West Virginia ARNG Relocation of Camp Dawson Electrical Power and Communications Lines, Kingwood, WV
- West Virginia ANG 130th Airlift Wing Building 107 Consolidation Study, Charleston, WV
- West Virginia ANG 130th Airlift Wing Communications Facility Code / Criteria Review, Charleston, WV
- West Virginia ANG 167th Airlift Wing Maintenance Mall (Building 307) Repair, Martinsburg, WV
- West Virginia ANG 167th Airlift Wing Basewide Sewer Line Repair, Martinsburg, WV
- West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV
- West Virginia ANG 130th Airlift Wing LOX Storage Relocation, Charleston, WV
- West Virginia ANG 130th Airlift Wing Communications Duct, Charleston, WV
- West Virginia ARNG Readiness Center Commissioning Projects
- West Virginia ARNG Joint Armed Forces Reserve Center and Area Maintenance Support Activity, Ripley, WV
- West Virginia ARNG Camp Dawson Live Fire Exercise Shoot House, Kingwood, WV
- West Virginia ANG 130th Airlift Wing Master Plan Update and CIP, Charleston, WV
- West Virginia ANG 130th Airlift Wing Communications Facility, Charleston, WV
- West Virginia ANG Yeager Airport Pavement Design, Charleston, WV
- West Virginia Division of Highways - I-64 Aerial LiDAR, Hal Greer Boulevard, WV
- West Virginia Division of Highways - I-70 LiDAR and Photogrammetric Mapping, Wheeling, WV
- West Virginia Division of Highways - I-64 Mobile LiDAR, West of Charleston, WV


WEST VIRGINIA
GUARD

SECTION 2.0

Project Experience

2.0 Project Experience

Within this section, we have included examples of our recent relevant project experience for your review. We encourage you to contact any of our references to verify our performance. See also Section 6.0.

West Virginia Army National Guard

The Adjutant General (TAG) Wing Renovation, Charleston, WV

GRW provided architecture and engineering services to renovate The Adjutant General (TAG) Wing of the Joint Forces Headquarters (JFHQ) in Charleston, WV. Work for the 7,200 SF facility includes renovations of office areas, complete HVAC renovations, complete restroom renovations, and new interior LED lighting for these areas. **Cory Sharrard, PE, LEED AP, led the HVAC design for this project.**

CLIENT CONTACT: Jim Skaggs, West Virginia Army National Guard, (304) 561-6550, robert.a.skaggsii.nfg@army.mil

West Virginia Department of Administration

West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV

GRW, working with its subsidiary Chapman Technical Group, was selected to complete a multiphase project for the renovations of Building 74 for the General Services Division (GSD). Phase 1 provided a thorough evaluation of the interior and exterior of the existing 37,000 square-foot building, including functional analysis, code review, and evaluations of the building enclosure, roof, electrical, and mechanical systems.

The three-story, masonry-construction facility was built sometime in the late 1970s. Following the purchase of the building by the State in 2009, extensive renovations were completed to create spaces suitable for the user. No upgrades were made to the primary mechanical and electrical systems at that time – and it is believed the rooftop mechanical units are at least 15 years old.

The building is occupied by several sections of Department of Natural Resources (DNR) including DNR Administration, State Parks, Wildlife Resources, Land and Streams, and Law Enforcement. There are approximately 100 employees in the building.

Based on GRW's evaluation of the building systems, the following recommendations have been selected by the State and are being designed by GRW:

- Replacement of existing heating and cooling systems, including all ductwork and all rooftop equipment, with new energy efficient rooftop units with electric heating VAV boxes
- New DDC controls throughout building
- Replacement of existing single-pane windows with energy-efficient double-pane windows
- Replacement of existing T5 light fixtures with energy-efficient LED fixtures
- Updated security system and fire alarm modifications as needed for the updated building layout
- Minor reconfiguration of office space on the second floor to address code egress issue
- Replacement of existing ceilings and floor finishes

CLIENT CONTACT: Mark Crites, Building Project Management Specialist, West Virginia Department of Administration, (304) 957-7142, Mark.A.Crites@wv.gov

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
GENERAL SERVICES DIVISION
State Capitol
Charleston, West Virginia 25305

Allan L. McVey
Cabinet Secretary

Gregory L. Melton
Director

April 9th, 2021

Mr. Phillip A. Warnock, AIA, NCARB
Project Architect
Chapman Technical Group
200 Sixth Avenue
St. Albans, WV 25177

Dear Mr. Warnock,

It is my pleasure to recommend Chapman Technical Group (CTG) for upcoming roles as Project Architects, Engineers and Construction Managers for any small, medium, or large-scale projects you seek. I have worked with the CTG design team for the past (4) years serving as a Building Project Management Specialist for the State of West Virginia and CTG has exhibited excellent professional skills and delivered spectacular results on all projects.

CTG has also demonstrated extensive knowledge of project management and superb communication skills. The team's ability to facilitate clear communication has ensured project change orders and overruns were few and far between. Their in-depth knowledge of the A/E profession has led to the increase of projects completed on-time and within budget.

The team's work on the Lincoln Plaza Restoration, located at the main entry to the West Virginia State Capitol Building, as well as restorations to the East and West Main entries have brought much of the old grandeur back to the building and grounds. Their design for the extensive campus-wide Spot Repair Project, now in construction, is demonstrating remarkable results by eliminating existing trip hazards, correcting multiple ADA deficiencies, as well as improving current water runoff conditions.

CTG has my highest recommendation for professional design services.

Sincerely,

Mark A. Crites

Mark A. Crites
Building Project Management Specialist
General Services Division – Engineering Section
Building 4, Fifth Floor
112 California Avenue
Charleston, WV 25305

Telephone: (304) 957-7142

E.E.O./AFFIRMATIVE ACTION EMPLOYER

Fax: (304) 558-1928

West Virginia Division of Corrections & Rehabilitation

West Virginia DCR HVAC Multiple Facilities, Multiple Locations, WV

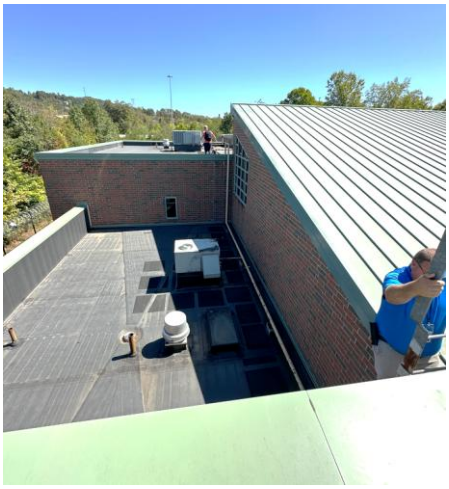
GRW has been retained by West Virginia - Division of Corrections to provide schematic design, design, development, construction documents, cost estimates, construction bid services, and construction administration **services to replace the central air systems and building automation controls systems at ten (10) West Virginia Division of Corrections and Rehabilitation (DCR) facilities**.

1. Lakin Correctional Center and Jail
2. Eastern Regional Jail and Correctional Facility -- Building No. 2
3. Salem Correctional Center and Jail
4. Donald R. Kuhn Juvenile Center
5. James H. "Tiger" Morton Juvenile Center
6. J.M. "Chick" Buckbee Juvenile Center
7. Kenneth Honey Rubenstein Juvenile Center
8. Lorrie Yaeger Juvenile Center
9. Robert L. Shell Juvenile Center
10. Sam Perdue Juvenile Center

GRW also worked with DCR to complete a lightning protection system ground study and improvements at the Lakin Correctional Center, Columbia, WV. Lack of adequate lightning protection and an inadequate grounding system at Lakin has resulted in low operational efficiency and more than $400,000 in damages from lightning strikes. GRW designed the installation of facility-wide surge protection devices, an improved grounding system, and an active lightning protection device to shut off mission critical equipment on an impending storm event.

CLIENT CONTACT: Philip Farley, II, Director of Engineering and Construction, West Virginia Division of Corrections, (304) 558-2036 x53463, Philip.K.Farley@wv.gov

Preconstruction/ evaluation phase images from several of the 10 DCR sites are shown.



STATE OF WEST VIRGINIA
DEPARTMENT OF HOMELAND SECURITY
DIVISION OF CORRECTIONS AND REHABILITATION

LANCE YARDLEY
ACTING COMMISSIONER

DOUGLAS P. BUFFINGTON, II
ACTING CABINET SECRETARY

Engineering, Construction, and Maintenance
1409 Greenbrier Street
Charleston, WV 25311
304-558-2036 Telephone
304-957-7622 Fax

June 5, 2025

To Whom It May Concern,

On behalf of the West Virgina Division of Rehabilitation and Corrections (DCR), I'm writing to express appreciation for the design and consulting services provided by GRW. Their professionals have been collaborating with the DCR team on several projects over the past several years.

GRW's services have included completion of a lightning protection system ground study and electrical design for improvements to the grounding system at the Lakin Correctional Center and Jail, a 166,000 SF, medium-security correctional facility in West Columbia, WV. The project is currently under construction and GRW has been extremely good to work with on both the design and contract administration. As soon as the submittals and RFIs are submitted to them, they have always had a quick turnaround.

GRW has also been providing mechanical and electrical engineering services for the replacement of the central air systems and building automation controls systems at ten (10) DCR facilities around the state. At the beginning of the contract, they immediately did site visits to each of the ten (10) DCR facility and to familiar themselves with the facilities to get all the additional information required to start the design process.

DCR has been pleased with GRW's ability to incorporate our design comments, and to follow all the required design guidance for these vital projects.

We value our relationship with GRW, commend them and their organization, and look forward to future opportunities to work together.

Sincerely,

Philip Farley
Director of Engineering, Construction, and Maintenance

Fayette County Public Schools

CLIENT CONTACTS: Myron Thompson, (859) 381-4165, Myron.thompson@fayette.kyschools.us OR Melinda Joseph-Dezarn, AIA, Director of Facility Design & Construction, (859) 381-3826, melinda.josephdezarn@fayette.kyschools.us

Henry Clay High School HVAC System Evaluation and Renovation, Lexington, KY

Fayette County Public Schools (FCPS) hired GRW to provide mechanical engineering services to replace all major HVAC equipment located on the roof at Henry Clay High School in Lexington, KY. Prior to being hired for the renovation, GRW completed an evaluation of the HVAC system. The school is **approximately 250,000 SF and the existing HVAC system consisted of 26 multi-zone rooftop units** and several additional split-system air handling units with air cooled DX coils for cooling and hot water heating coils for heating.

GRW provided design and construction administration services to replace all 26 HVAC units, provide new DDC controls, and provide testing and balancing for both the air and water sides of the system. The new multi-zone rooftop units were replaced in existing roof locations using existing roof curbs and connecting back to existing ductwork. GRW also coordinated the cleaning of all existing ductwork throughout the building. **Cory Sharrard, PE, LEED AP, has served has project manager for each assignment.**

FCPS has since hired GRW to design multiple additional HVAC renovations:

- **Lansdowne Elementary School** HVAC Replacement: 9 multi-zone rooftop units, single-zone rooftop unit, and split system air handling unit, new DDC
- **Northern Elementary School** HVAC Replacement: 10 rooftop multi-zone units and 3 rooftop single zone units
- **Lexington Traditional Magnet School** HVAC Replacement: 24 corner units, new cooling tower, new DDC
- **Booker T. Washington Elementary School** HVAC Replacement: 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system air handling units, new DDC
- **Arlington Elementary/Pre-K** HVAC & Interior Renovation
- **Winburn Middle School** HVAC Replacement: 10 rooftop units, building controls

Fayette County Public Schools

To: Whom It May Concern

From: Melinda Joseph-Dezarn, AIA
Fayette County Public Schools
Director, Facility Design & Construction

Date: June 2, 2025

Re: GRW Recommendation

As the Director of Facility Design & Construction for Fayette County Public Schools, I have had the opportunity to work closely with GRW on multiple HVAC renovation projects over the past few years. These HVAC replacement projects included work at Lansdowne, Northern, LTMS, and Booker T. Washington Schools. Those projects are finishing up, but we currently have another HVAC project started at Winburn Middle School.

We are also working on a small renovation project at Arlington Elementary School, which involves their architectural design services as well as their mechanical and electrical engineering team. FCPS has been pleased with GRW's ability to incorporate our design comments, and to follow all required design guidance for these necessary projects.

We value our relationship with GRW, commend them and their organization, and look forward to future opportunities to work together. They are very professional and have overcome challenges during construction and have adapted well to changes in the field.

MJD
Melinda Joseph-Dezarn

Clay County Schools | Clay, WV

Clay County High School Renovation and Addition

GRW, working with its subsidiary Chapman Technical Group, was contracted by the Clay County School District to provide design and construction administration phase services to upgrade the existing high school building. The scope of work includes replacing all existing windows with new energy efficient windows, building a new addition to the front of the school to provide a new commons/lobby area, and reconfiguring the existing gymnasium and existing restrooms throughout the building. A portion of the construction will occur during summer months, but much of the work will be completed while school is in session.

The entire existing HVAC system is being replaced. The new HVAC system includes stand-alone heat pump units for each classroom, new Rooftop Units for common areas such as the lobby, gymnasium, cafeteria, etc., and Variable Refrigerant Volume (VRF) systems for the two office areas. Outside air is being brought into the building thru each of the pieces of equipment as well as new energy recovery ventilators. ew direct digital controls (DDC) will be installed throughout the building to control all new equipment.

Back up heating for the stand-alone units and various unit heaters will be connected back to the existing hot water hydronic heating system in the building that is being fed by two existing gas fired boilers.

New plumbing fixtures and piping will be installed in the newly configured restroom areas. The plumbing piping will connect back to the existing main piping and existing hot water heating system for the building. The existing fire protection system will remain in place and be reconfigured as needed to accommodate floor plan changes.

New power will be provided for all of the new HVAC equipment being installed. New LED lighting will be installed in the new commons/lobby addition as well as the gymnasium. New clocks and intercoms will be installed throughout the building as well as new security cameras. The fire alarm system will be upgraded as needed for the new systems and layouts. **Cory Sharrard, PE, LEED AP, led the HVAC design for this project.**

CLIENT CONTACT: Jared Fitzwater, Clay County Schools, (304) 587-4266, jfitzwat@k12.wv.us

West Virginia Department of Administration

WV State Capitol East Campus Warehouse/Grounds Building, Charleston, WV

This new construction project involves planning and design services for a warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility serving the West Virginia Department of Administration, General Services Division on the Capitol East Campus. This project also includes Open Storage and Bulk Storage Building on site as well as a separate building for Capitol Mail Room Building.

Key components of the Warehouse/Grounds Building 26,771 SF facility include a heavy vehicle repair bay, air compressor and air compressor reels throughout shops, wash bay, woodworking shop, offices, support facilities, and emergency generator.

The building is a pre-engineered metal building that utilizes a wall system with girts with batt insulation, vapor barrier, and metal liner panels on the inside face. The roof is a standing seam metal roof system on purlins w/batt insulation, vapor barrier, and metal liner panels on the inside face.

The building HVAC includes gas radiant heaters, rooftop units mounted on the ground, exhaust fans, and dual fuel split system heat pumps to feed the different areas of the building. A wet sprinkler system has been designed to protect the multiple hazardous classifications for each area of the building. Coordination of new equipment and existing equipment relocated from a previous facility enables the facility to flow and function properly.

As a safety concern, special attention was paid to separate pedestrian and vehicle paths. The facility is secured with perimeter fencing and keycard entry systems. A generator was provided for the facility to keep operations functional, which is critical for heavy snow emergency situations. All new underground utilities were provided to the site, further enhancing the dependability of the facility. The project includes CAT 6 structured cabling, fiber optic network communications, electronic access control. and surveillance camera systems.

CLIENT CONTACT: Robert Kilpatrick, Acting Business Manager, West Virginia Department of Administration, (304) 352-5491, robert.p.kilpatrick@wv.gov

Morehead State University

Morehead State University HVAC Upgrades - Breckinridge, Baird, Button & Enrollment Services Buildings, Morehead, KY

GRW was awarded a project by Morehead State University, in Morehead, Kentucky, to design HVAC upgrades in four campus buildings and produce separate bid documents for each, based on a given budget.

Baird Music Hall is a heavily used, classroom, office, auditorium building. After preliminary studies, it was decided that the available funds would best be spent in bringing the existing hot/chilled water fan/coil unit system up to current Code requirements for outdoor air. The project included addition of a rooftop-mounted, packaged, direct outside air (DOAS) unit and distribution ductwork. Supply air temperature is maintained by an on-board heat pump and auxiliary steam heating coil. Offsetting exhaust air energy is largely recovered by a unit-mounted enthalpy wheel and reinjected into the incoming outside air stream. The project construction has been completed.

Button Hall Auditorium, beyond providing a seating for large audiences, is also used for athletics and drills. It is served by large rooftop multizone HVAC units. Originally it was planned to replace the units with similar new ones, but the costs were excessive, and this work was removed from the overall scope.

The **Enrollment Services Building** was originally constructed as a vocational school shop and classroom building for the Rowan County Public Schools, and later converted to an office building for the MSU student services department and a storage area for vehicles and equipment. After some study of the existing installations, it was concluded that the existing chilled water and hot water plants and their distribution systems were useable, for the present, and the funds could best be spent by replacing the existing hot/chilled water fan/coil units, some of which appear to be over 50 years old, with new similar equipment. Project has been awarded and is now under construction.

Breckinridge Hall is a large campus building cooled by chilled water from two air-cooled chillers, mounted in a yard adjacent to the building. After review of the alternatives and costs, it was decided to use the available budget to replace the larger of the two aging chillers with a new nominal 200 Ton, variable-speed, air-cooled chiller. The existing pad had to be modified, since the new chiller was longer than the existing unit, and modifications of piping and electrical service, above and below ground were needed. The project construction has been completed.

CLIENT CONTACT: Kim Oatman, PE, PLS, Assistant Vice President Facilities Operations, Morehead State University, (606) 783-2066, k.oatman@moreheadstate.edu

U.S. General Services Administration

U.S. Federal Courthouse Renovation, Lexington, KY

GRW was part of the design-build team selected by the U.S. General Services Administration (GSA) to design and construct improvements for the federal courthouse located on Barr Street in Lexington, KY. The project team's design enhanced security at the building through the renovation of existing space, as well as new construction. Improvements included upgraded security electronics, site blast protection, and circulation / control enhancements.

GRW's specific role on the design-build team was to provide civil/site engineering, and **mechanical, plumbing, communications, and electrical engineering**. The project involved a phased construction schedule; work was completed while the building was occupied. This project included the following new, major components:

- Emergency generator for entire building (350 KW)
- Additions and modifications to IDS, CCTV system and access control systems
- Site work, storm water/drainage, HVAC, plumbing, and electrical rewiring for all affected spaces
- USMS vehicular sallyport
- Secure parking garage for judges with restricted circulation through secure corridors
- Ballastic protection of courts security booth
- Prisoner elevator (travel to 3rd and 4th floor)
- Judge's elevator
- Freight elevator and loading dock
- Overhaul of two public elevators
- Addition of a new fire exit stairwell
- Prisoner holding cell on the fourth floor
- Jury deliberation room on the 4th floor

Sustainability was a key factor as the addition achieved a 33% energy efficiency improvement over code, exceeding EPAct requirements for federal buildings. HVAC systems included the addition of variable refrigerant volume systems, as well as modifications to an existing variable volume air-handling system. Also included were state-of-the-art ventilation systems for the parking garage, loading dock, and sallyport controlled by occupancy, temperature, and hazardous gas (CO & NOx) levels. LED lighting was added in all new spaces.

"GRW staff were technically proficient and conducted themselves professionally. It was clear that they understood the requirements of the contract, and the design options proposed were likely limited by the design-build nature of the contract. The design documents they produced appeared clear and complete, and they maintained a teaming approach to responding to government comments and requests. Their communications were timely and helped to keep the project moving forward. I would be pleased to work with GRW again." Kevin Dunham, Regional Chief Architect. U.S. GSA

CLIENT CONTACT: Kevin Dunham, Regional Chief Architect, U.S. GSA, (404) 331-2998, kevin.dunham@gsa.gov

West Virginia Department of Transportation

Vehicle Maintenance and Equipment Shops Building, Charleston, WV

GRW, working with its subsidiary Chapman Technical Group provide planning and engineering design services for a vehicle maintenance and equipment storage facility serving the WVDOT Division of Highways' District One vehicle fleet and equipment.

Key components of the 35,000 SF facility include eight heavy vehicle repair bays, six light vehicle repair bays, two welding bays, wash bay, small engine shop, storage, offices, support facilities, concrete floor with trench drains.

Two cranes serve the repair bays, and a third crane serves the entire weld shop area. The two-story structure includes a freight elevator to allow storage of parts and tires on the second floor. The rest of the building is protected from the tire storage area by fire barriers and a sprinkler system with hazardous material design for the area. Coordination of new equipment and equipment relocated from the previous facility enables the facility to flow and function properly.

The structure utilizes cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists. This allows the entire building to be insulated without risking damage to the insulating envelope. **With brick facades, pilasters, and careful detailing, the building design draws on elements from the surrounding historic structures to make the building fit into the center of Charleston's Historic Warehouse District.**

As a safety concern, special attention was paid to separate pedestrian and vehicle paths. The facility is secured with perimeter fencing and keycard entry systems. A generator was provided for the facility to keep operations functional, which is critical for heavy snow emergency situations. A separate streetscape project is providing underground utilities to the site, which will further enhance the dependability of the facility.

CLIENT CONTACT: Travis Knighton, PE, District Engineer, West Virginia Department of Transportation, (304) 356-3771, Travis.W.Knighton@wv.gov

West Virginia Department of Administration

West Virginia Division of Natural Resources Bathhouse & Restroom Renovations Multiple locations

GRW, working with its subsidiary Chapman Technical Group, was selected to design renovations to bathhouses and restrooms at 26 locations throughout the West Virginia parks systems. The renovations include new fixtures, finishes, and minor electrical and mechanical upgrades. The project also includes new modular bathhouses and restrooms, as well as ADA access improvements.

CLIENT CONTACT: Matt Yeager, Deputy Chief, Planning, Engineering, and Maintenance, (304) 558-2764

West Virginia Army National Guard

Martinsburg Secure Facility Renovation, Martinsburg, WV

GRW designed renovations for a secure facility located adjacent to the Eastern WV Regional Airport in Martinsburg, WV. The purpose of the renovation was 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:

- **Complete replacement of the existing non-operational HVAC system with a new energy-efficient system. New system consists of water source heat pumps (WSHP) connected to a new boiler and closed loop fluid cooler. A new water-cooled dedicated outside air unit with heat recovery was designed for required outside air to the building.**
- **Redundant HVAC systems for secure IT room and non-secure IT room. Each room is served by the WSHP system as well as ductless split systems.**
- Demolition of existing interior finishes and other improvements within the renovation area
- New DDC control system for all new equipment
- New interior finishes throughout the areas, including raised access flooring throughout the renovated areas
- New building security and cameras
- 515KW/644KVA standby diesel generator

CLIENT CONTACT: Todd Reynolds, Deputy Branch Chief - Design & Construction, WV ARNG, (304) 561-6568, matthew.t.reynolds18nfg@mail.mil

SECTION 3.0

Staff Qualifications

3.0 Staff Qualifications

To assist you with the design of improvements for your two (2) PSC headquarters buildings, we've selected GRW team members with the relevant experience and availability. Our clients also directly benefit from **GRW's one-stop 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 can make a significant positive impact on your project experience. **Resumes** are on the following pages. Read more about our **approach** and **methodology**, including an overview of key team member responsibilities in **Section 4.0**.

West Virginia Department of Administration
Public Service Commission of West Virginia

Principal

Monty Maynard, PE,
LEED AP BD+C

Project Manager

Cory Sharrard, PE, LEED AP

Mechanical Engineering

Cory Sharrard, PE, LEED AP
Chris Boggs, PE
Jon Sheppard, PE
Tyler Evans, EIT

Electrical Engineering

Monty Maynard, PE, LEED AP BD+C
Todd Cantrell, PE

Structural

Jon Marcum, PE, SE

Architecture

Phill Warnock, AIA
Tom Cloer, AIA

Cory Sharrard, PE, LEED AP

GRW Project Manager

YEARS OF EXPERIENCE:
With GRW: 6
Total: 26

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, TN

NCEES Member allows reciprocity with other states

LEED Accredited Professional

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

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG JFHQ TAG Wing Renovation, Charleston, WV – Mechanical Engineer. Work for 7,200 SF facility includes renovations of office areas, complete restroom renovations, and new interior LED lighting.

Clay County High School Renovation and Addition, 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 Division of Natural Resources Building 74 Renovation, South Charleston, WV – Project Manager. Evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility that houses approximately 100 employees. Among improvements selected for design are replacement of heating and cooling systems, windows, T5 lighting with LED fixtures, and replacement of ceilings and floor finishes, as well as new DDC controls throughout building.

West Virginia Division of Corrections HVAC Multiple Facilities, Multiple Locations, WV – Project Manager. Schematic design, design, development, construction documents, cost estimates, construction bid services, and construction administration services to replace the central air systems and building automation controls systems at ten (10) facilities across West Virginia including Lakin, Eastern Regional, Salem, Kuhn, Tiger-Morton, Chick-Buckbee, Rubenstein, Yeager, Shell, and Perdue.

West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston, WV – Mechanical Engineer. Planning, design, and bidding services for a 26,771-SF warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility serving the WV Department of Administration, General Services Division on the Capitol East Campus. Included are an open storage and bulk storage building on site as well as a separate building for Capitol mail room building.

West Virginia Division of Natural Resources Bath House Renovations, South Charleston, WV – Project Manager. Engineering and architectural services for the design of renovations to bathhouses and restrooms at 26 locations throughout the parks systems. Renovations include new fixtures, finishes, and electrical and mechanical upgrades. Includes new modular bathhouses and restrooms, as well as ADA access improvements.

Clay County Schools Bus Garage, Clay, WV – Mechanical Engineer. FEMA-funded project for new bus garage constructed above 100-year flood elevation. Project included 5,000 SF masonry garage (constructed on deep foundations) with two service bays, wash bay, parts storage, and drivers lounge. Separate building houses spare tires.

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.

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 (including redundant HVAC systems for secure IT room and non-secure IT room); new DDC control system for all new equipment, 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.

Morehead State University HVAC Upgrades - Breckinridge, Baird, Button & Enrollment Services Buildings, Morehead, KY – Principal. Design services for HVAC upgrades in four buildings: Breckinridge Hall, Baird Music Hall, Button Auditorium and university's enrollment services building.

Fayette County Public Schools Henry Clay High School HVAC System Evaluation and Renovation, Lexington, KY – Project Manager. Mechanical engineering design and construction administration services to replace all major HVAC equipment on the roof of approximately 250,000-SF high school. Current HVAC system, evaluated by GRW prior to this assignment, consists of 26 multi-zone units and several additional split-system air handling units with air-cooled DX coils for cooling and hot water heating coils for heating. Project to include replacement of units, new DDC controls, and testing and balancing for both the air and water sides of the system.

Kentucky Department of Corrections Mechanical & Electrical Services - Five Locations, Various Locations, KY – Mechanical Engineer. Electrical and mechanical evaluation (cost estimates, priority lists) and design services for miscellaneous projects to be determined at five various corrections facilities in eastern part of State.

Fayette County Public Schools Booker T. Washington Elementary School HVAC Replacement, Lexington, KY – Project Manager. Engineering services for HVAC improvements including the replacement of 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system air handling units. A new DDC control system be installed with new controllers as well as all existing equipment in the building. Existing ductwork throughout the building shall be cleaned, and electrical work shall be included to disconnect and reconnect new units.

Wayne County Schools Gymnasium Building HVAC Renovation, Monticello, KY – Project Manager. Mechanical, electrical, and architectural design services for an HVAC renovation that includes new rooftop equipment for the gymnasium as well as VRF systems for the remaining portions of the building including a kitchen/cafeteria and locker rooms.

Monty Maynard, PE, LEED AP BD+C

GRW Principal

YEARS OF EXPERIENCE:
With GRW: 29
Total: 48

EDUCATION
B.S., Electrical Engineering, 1978, University of Kentucky

REGISTRATION
Professional Engineer (Electrical): KY, WV, IN, GA, TN, TX, NV, NC, MS, MI, AL, CA, DC, FL

NCEES Member allows reciprocity with other states

LEED Accredited Professional, Building Design + Construction

PROFESSIONAL AFFILIATIONS AND TRAINING
Design-Build Institute of America

National Fire Protection Association

International Society of Automation

American Institute of Architects

American Council of Engineering Companies

National Council of Examiners for Engineering and Surveying

Air National Guard Civil Engineering Association Life Member (Associate)

Society of American Military Engineers

American Water Works Association

Kentucky Society of Healthcare Engineers

RELEVANT PROJECT EXPERIENCE

West Virginia Division of Corrections Lakin Correctional Center Lightning Protection Improvements, West Columbia, WV – Project Manager. Lightning protection system ground study and improvements at 166,000 SF, medium-security, women's correctional facility in West Columbia, WV. Services included study of power distribution deficiencies, grounding study, as well as design and construction administration services for recommended new system.

West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV – Principal. Evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility that houses approximately 100 employees. Among improvements selected for design are replacement of heating and cooling systems, windows, T5 lighting with LED fixtures, and replacement of ceilings and floor finishes, as well as new DDC controls throughout building.

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV – Electrical Engineer. Design services for $3 million renovation and energy-efficient improvements to 25,765 SF facility with history of remodeling activities resulting in building that inadequately served 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 allowed 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.

Kentucky Department of Corrections Mechanical & Electrical Services - Five Locations, Various Locations, KY – Project Manager. Electrical and mechanical evaluation (cost estimates, priority lists) and design services for miscellaneous projects to be determined at five various corrections facilities in eastern part of State: Blackburn Correctional Complex, Bell County Forestry Camp, Northpoint Training Center, Eastern Kentucky Correctional Complex (EKCC) and Little Sandy Correctional Complex.

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV – QA/QC. Scope of work included design services (LEED Silver design criteria) for two separately funded (MILCON/SRM) sub-projects to repurpose existing unoccupied hangar into space for Aeromedical Evacuation Squadron (AES). Repairs and building repurposing included: 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. New functional areas include spaces for medical simulation training, maintenance, operations, administration, storage, and other mission-related activities.

Northpoint Training Center Replacement, Burgin, KY – Electrical Engineer. Design and construction oversight services for fast-track project with multiple bid packages to rebuild prison facilities (41,646 SF total) following riot. Meeting LEED Certified Design Criteria, two new buildings include: Program Building (kitchen/dining, medical, canteen, multipurpose classrooms, library, and sanitation) and Visitation Building. Additional work involved security system renovation at six existing two-story dormitories, addition/renovation of the central control building, and new campus emergency power generator.

Kentucky Department of Juvenile Justice Jefferson County Youth Detention Center Renovation, Louisville, KY – Electrical Engineer. Renovation of facility to house functions for high security youth population that is intended to provide adequate space for functions of 64-bed high-security youth detention facility. Approximately 50,000 square feet of facility is affected by project scope involving basement and first two floors.

Gilmer Federal Correctional Institution and Satellite Camp, Glenville, WV – Engineering Manager. Design / build delivery, for a new $106 million federal correctional complex of 13 buildings totaling 603,132 SF, built on a 125-acre reclaimed mine site. Facilities include three 4-story dormitory buildings (768 inmates in medium security), 2-story segregation unit (96 inmates in medium security), satellite camp (128 inmates in minimum security), separate buildings for administration, medical services, recreation, industrial and vocational, academic instruction, food service, canteen/barber/laundry, warehouse, central utilities plant, vehicle maintenance, security, and site utilities.

Escambia County Correctional Facility, Pensacola, FL – Electrical Engineer. 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). Other key components include secure sallyport; inmate intake and receiving area; and medical, commissary, laundry, and food service areas that serve both old and new facilities. Facility was designed to comply with LEED Silver design criteria.

CoreCivic Marion Adjustment Center Renovation, St. Mary, KY – Electrical Engineer. Site, security, electrical, and architectural improvements including: roadway, parking, perimeter fencing, exterior lighting at fence line, sallyport and gate control system, security electronics control room, integrated alarm reporting system, IP video system, intercom systems, generator and interior finishes replacement within St. Mary's building (21,500 SF, 3-story structure).

Aliceville Federal Correctional Institution and Satellite Camp, Aliceville, AL – Lead Electrical Engineer. Design-build delivery of $196 million, LEED Silver women's medium-security Federal Correctional Institution (70-acre site) and minimum-security Federal Prison Camp. Complex includes following buildings: food service (kitchen/dining), medical services, warehouses/sanitation, administrative, recreational, academic educational, industrial/vocational, personal services, vehicle maintenance, and central utilities plant.

YEARS OF EXPERIENCE:
With GRW: 2
Total: 16

EDUCATION
B.S., Mechanical Engineering, 2006, University of Louisville

M.Eng., Mechanical Engineering, 2007, University of Louisville

REGISTRATION
Professional Engineer: KY

PROFESSIONAL AFFILIATIONS AND TRAINING
American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

Chris Boggs, PE

GRW Mechanical Engineer

Chris has 15 years of mechanical engineering experience with an emphasis on HVAC design including geothermal, boiler/tower, and hybrid water source heat pump systems, variable refrigerant flow, split system, rooftop units, unit ventilators, and variable air volume (VAV). He has been responsible for projects from initial planning with Owner, through design phase and construction administration. He has completed the HVAC design on a wide variety of projects including K-12 schools, higher education, courthouses, hotels, museums, medical office buildings, hospitals, behavior health facilities, and pharmacies.

RELEVANT PROJECT EXPERIENCE

West Virginia Division of Corrections HVAC Multiple Facilities, Multiple Locations, WV – Mechanical Engineer. Schematic design, design, development, construction documents, cost estimates, construction bid services, and construction administration services to replace the central air systems and building automation controls systems at ten (10) facilities across West Virginia including Lakin, Eastern Regional, Salem, Kuhn, Tiger-Morton, Chick-Buckbee, Rubenstein, Yeager, Shell, and Perdue.

Kentucky Department of Corrections Mechanical & Electrical Services - Five Locations, Various Locations, KY – Mechanical Engineer. Electrical and mechanical evaluation (cost estimates, priority lists) and design services for miscellaneous projects to be determined at five various corrections facilities in eastern part of State: Blackburn Correctional Complex, Bell County Forestry Camp, Northpoint Training Center, Eastern Kentucky Correctional Complex (EKCC) and Little Sandy Correctional Complex.

Wayne County Schools New Early Learning Center, Monticello, KY – Mechanical Engineer. Design of a new HVAC system as part of the renovation and addition of an existing elementary school for use as Wayne County's Early Learning Center. Scope includes replacements of rooftop equipment, a new VRF system serving an addition, electrical service for new HVAC equipment, new lay-in ceiling with new LED lighting, upgraded fire alarm system, as well as roof patching, window replace/repair.

Wayne County Schools Bell Elementary New HVAC System, Monticello, KY – Mechanical Engineer. Mechanical and electrical as well as architectural design for an elementary school HVAC renovation. Project includes new VRF systems for the original construction portion, new roof, new exterior doors and windows, new electrical service for new HVAC equipment, roof penetration/deck repair and roof flashing, lay-in ceiling with new LED lighting, and upgraded fire alarm system.

Fayette County Public Schools Winburn Middle School HVAC Replacement, Lexington, KY – Mechanical Engineer. Mechanical and electrical design services to replace HVAC equipment including (10) HVAC rooftop units, and building controls.

Kentucky Department of Juvenile Justice Jefferson County Youth Detention Center Renovation, Louisville, KY – Mechanical Engineer. Renovation of facility to house functions for high security youth population that is intended to provide adequate space for functions of 64-bed high-security youth detention facility. Approximately 50,000 square feet of facility is affected by project scope involving basement and first two floors.

Kenton County School District Transportation & District Support Facility, Fort Wright, KY – Mechanical Engineer. New approximately 80,578 SF transportation and support facility to support staff and operations for these critical district functions: transportation, maintenance, technology, and support operations. Spaces anticipated range from offices and conference rooms to a garage, a network operations center (NOC), etc.

Loretto Living Center Design-Build Third Floor Renovation, Loretto, KY – Mechanical Engineer. Design-build renovation of the third floor into an independent living facility with a series of suites and studio apartments. New layouts, mechanical and plumbing systems, LED lighting, and finishes will be provided.

Berea College Hutchins Library IT Suite Renovation, Berea, KY – Mechanical Engineer. Architectural and engineering design to renovate the 9,135 SF Hutchins Library IT Suite for use by several other groups including 2,842 SF for Student Success Transitions; 878 SF for Disability and Accessibility Services; 1,457 SF for Center for Transformative Learning; and 5,177 SF for existing occupants.

Jeffersontown Fire & EMS Station #54, Jeffersontown, KY – Mechanical Engineer. Complete A/E design services for new 17,500 SF city Fire and EMS station. Facility consists of two-story fire house, accessory 3-bay garage building, storage building, and full site development. Fire house has dorms, office, decontamination areas as well as a 3-bay pull through apparatus bay (storage of 7 vehicles), ICC-500 compliant tornado shelter, and building -wide natural gas generator.

Kenton County School District Transportation & District Support Facility, Fort Wright, KY – Mechanical Engineer. New approximately 80,578 SF transportation and support facility to support staff and operations for these critical district functions: transportation, maintenance, technology, and support operations. Spaces anticipated range from offices and conference rooms to a garage with eight drive-through bays, a food service area, a network operations center (NOC), specialized spaces (image room, bug rooms), and numerous other items.

Jeffersontown Fire & EMS Station #4, Jeffersontown, KY – Mechanical Engineer. Complete A/E design services for new 17,500 SF city Fire and EMS station. Fire house has dorms, office, decontamination areas as well as a 3-bay pull through apparatus bay (storage of 7 vehicles), ICC-500 compliant tornado shelter, and building -wide natural gas generator.

Jon Sheppard, PE

GRW Mechanical Engineer

YEARS OF EXPERIENCE:
With GRW: 7
Total: 14

EDUCATION

B.S., Mechanical Engineering, 2010, Georgia Southern University

M.Eng., Mechanical Engineering, 2021, University of Cincinnati

REGISTRATION

Professional Engineer: KY

Engineer-in-Training: GA

RELEVANT PROJECT EXPERIENCE

West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV – Mechanical Engineer. Evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility that houses approximately 100 employees. Among improvements selected for design are replacement of heating and cooling systems, windows, T5 lighting with LED fixtures, as well as new DDC controls throughout building.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Mechanical Designer. Approximate 35,000 SF facility includes: light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; freight elevator; perimeter fencing; keycard entry system; and generator.

West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston, WV – Mechanical Engineer. Planning, design, and bidding services for a 26,771-SF warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility.

West Virginia Division of Natural Resources Bath House Renovations, South Charleston, WV – Mechanical Designer. Engineering and architectural services for the design of renovations to bathhouses and restrooms at 26 locations throughout the West Virginia parks systems. Renovations include new fixtures, finishes, and minor electrical and mechanical upgrades. The project also includes new modular bathhouses and restrooms, as well as ADA access improvements.

Clay County High School Renovation and Addition, 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 other improvements.

Clay County Schools Bus Garage, Clay, WV – Mechanical Engineer. FEMA-funded project for new bus garage constructed above 100-year flood elevation. Project included 5,000 SF masonry garage (constructed on deep foundations), parts storage, and drivers lounge.

Morehead State University HVAC Upgrades - Breckinridge, Baird, Button & Enrollment Services Buildings, Morehead, KY – Mechanical Engineer. Design services for HVAC upgrades in four buildings: Breckinridge Hall, Baird Music Hall, Button Auditorium and enrollment services building.

Bert T. Combs Forestry Building HVAC Upgrade, Pineville, KY – Mechanical Designer. Design documents for heat pump replacements and piping changes required to install new heat pumps.

Franklin County Public Health Center Renovation, Frankfort, KY – Mechanical Engineer. Renovation of 10,462 SF building used primarily as office space. Includes a conference room for classes and community meetings. Secondary usage of building is an Emergency Operations Center.

YEARS OF EXPERIENCE:
With GRW: 2
Total: 3

EDUCATION
B.S., Mechanical Engineering, 2023, University of Kentucky

Tyler Evans, EIT

GRW Mechanical Designer

RELEVANT PROJECT EXPERIENCE

West Virginia Division of Corrections HVAC Multiple Facilities, Multiple Locations, WV – Mechanical Designer. Schematic design, design, development, construction documents, cost estimates, construction bid services, and construction administration services to replace the central air systems and building automation controls systems at ten (10) facilities across West Virginia including Lakin, Eastern Regional, Salem, Kuhn, Tiger-Morton, Chick-Buckbee, Rubenstein, Yeager, Shell, and Perdue.

West Virginia Division of Natural Resources Bath House Renovations, South Charleston, WV – Mechanical Designer. Engineering and architectural services for the design of renovations to bathhouses and restrooms at 26 locations throughout the West Virginia parks systems.

West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston, WV – Mechanical Designer. Planning, design, and bidding services for a 26,771-SF warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility.

Morehead State University Academic Athletic Center Life Safety & Fire Protection Study & Improvements, Morehead, KY – CADD Designer. Completion of a life safety and fire protection study, as well as subsequent design services for improvements.

Fayette County Public Schools Winburn Middle School HVAC Replacement, Lexington, KY – Mechanical Designer, Project Engineer. Mechanical and electrical design services to replace HVAC equipment including (10) HVAC rooftop units, and building controls.

Fayette County Public Schools Lexington Traditional Magnet School HVAC Replacement, Lexington, KY – Project Engineer. HVAC improvements including the replacement of 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system air handling units.

Fayette County Public Schools Lansdowne Elementary School HVAC Replacement, Lexington, KY – Project Engineer. Mechanical and electrical design services to replace HVAC equipment.

Fayette County Public Schools Booker T. Washington Elementary School HVAC Replacement, Lexington, KY – Project Engineer. Engineering services for HVAC improvements including the replacement of 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system AHUs.

Berea College Hutchins Library IT Suite Renovation, Berea, KY – Mechanical Designer. Architectural and engineering design to renovate the 9,135 SF Hutchins Library IT Suite for use by several other groups.

Franklin County Public Health Center Renovation, Frankfort, KY – Mechanical Designer. Renovation of 10,462 SF building used primarily as office space for health inspectors, health educators, and home visitation staff. Includes a conference room for health education classes and community meetings. Secondary usage of building is an EOC.

Todd Cantrell, PE

GRW Electrical Engineer

YEARS OF EXPERIENCE:
With GRW: 19
Total: 21

EDUCATION
B.S., Electrical Engineering, 2004, University of Kentucky

B.S., Physics, 2004, Morehead State University

REGISTRATION
Professional Engineer, Electrical: KY, TN, OH, MO, NY, VA

PROFESSIONAL AFFILIATIONS AND TRAINING
American Council of Engineering Companies

AGi32 Lighting Software Roadway Emphasis Class - Presented by Lighting Analysts, Inc.

RELEVANT PROJECT EXPERIENCE

West Virginia ANG 130th Airlift Wing Communications Facility, Charleston, WV – Electrical Engineer. Design (Type A and B, 65%) for a new $3.6 million, 13,100 SF Communications Facility at Yeager Airport in Charleston for West Virginia Air National Guard, designed for LEED Silver rating, to provide centrally located common user communications system for both intra-base and off-base communications, with ground control of all ground point-to-point contact and air to ground point-to-point contact (such as radio, telephone, DISNET, etc.). Design paused at 65% to enable base's master plan and re-prioritize new capital improvements.

West Virginia ANG 130th Airlift Wing Communications Facility Code / Criteria Review, Charleston, WV – Electrical Engineer. Code/criteria review and LEED update report for facility designed to 65% three years prior under separate GRW/NGB contract then put on hold pending funding. Twofold project goal included: 1) identify and delineate known codes/criteria that are either new or updated since 65% design submittal; and 2) describe revised LEED 3.0 criteria now in effect for project and outline points for LEED Silver certification, compared to LEED Silver 2.2 criteria in effect at 65% design stage.

West Virginia ANG 167th Airlift Wing Maintenance Mall (Building 307) Repair, Martinsburg, WV – Electrical Engineer. Concept development report for C-5 aircraft complex which required electrical modifications to meet needs of current occupants' activities, and investigation/resolution of temperature control in numerous locations. Report included detailed discussion of current electrical, architectural and HVAC system problems; recommendations to resolve large-system problems, as well as particular solutions for small areas; conceptual level drawings; conceptual level outline specification; and construction cost estimate.

West Virginia Division of Corrections HVAC Multiple Facilities, Multiple Locations, WV – Electrical Engineer. Schematic design, design, development, construction documents, cost estimates, construction bid services, and construction administration services to replace the central air systems and building automation controls systems at ten (10) facilities across West Virginia including Lakin, Eastern Regional, Salem, Kuhn, Tiger-Morton, Chick-Buckbee, Rubenstein, Yeager, Shell, and Perdue.

Fayette County Public Schools Booker T. Washington Elementary School HVAC Replacement, Lexington, KY – Electrical Engineer. Engineering services for HVAC improvements including the replacement of 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system air handling units. A new DDC control system be installed with new controllers as well as all existing equipment in the building. Existing ductwork throughout the building shall be cleaned, and electrical work shall be included to disconnect and reconnect new units.

Fayette County Public Schools Henry Clay High School HVAC System Evaluation & Replacement, Lexington, KY – Electrical Engineer. Mechanical engineering design and construction administration services to replace all major HVAC equipment on the roof of approximately 250,000-SF high school. Current HVAC system, evaluated by GRW prior to this assignment, consists of 26 multi-zone units and several additional split-system air handling units with air-cooled DX coils for cooling and hot water heating coils for heating. Project to include replacement of units, new DDC controls, and testing and balancing for both the air and water sides of the system.

Fayette County Public Schools Lexington Traditional Magnet School HVAC Replacement, Lexington, KY – Electrical Engineer. Engineering services for HVAC improvements including the replacement of 5 rooftop/CAV units, 3 rooftop single zone units, and 2 split system air handling units. A new DDC control system be installed with new controllers as well as all existing equipment in the building. Existing ductwork throughout the building shall be cleaned, and electrical work shall be included to disconnect and reconnect new units.

Fayette County Public Schools Winburn Middle School HVAC Replacement, Lexington, KY – Electrical Engineer. Mechanical and electrical design services to replace HVAC equipment including (10) HVAC rooftop units, and building controls.

Fayette County Public Schools Northern Elementary School HVAC Replacement, Lexington, KY – Electrical Engineer. Engineering services for HVAC improvements including the replacement of 10 rooftop multi-zone units and 3 rooftop single zone units. A new DDC control system shall be installed with new controllers for the new rooftop units. Existing ductwork throughout the building shall be cleaned, and electrical work shall be included to disconnect and reconnect the new units.

Fayette County Public Schools Lansdowne Elementary School HVAC Replacement, Lexington, KY – Electrical Engineer. Mechanical and electrical design services to replace HVAC equipment in the building at Lansdowne Elementary School. The project includes the replacement of multi-zone rooftop units, single-zone rooftop unit, and split system air handling units.

Citizens National Bank HVAC Replacement, Somerset, KY – Electrical Engineer. Replacement of building HVAC system including replacement of two multi-zone air-handling systems along with reconfiguration of ductwork and hydronic systems, and addition of fin-tube radiation along entire western exposure to address historic comfort issues.

Commonwealth of Kentucky Central Lab Cooling Tower Replacement, Frankfort, KY – Electrical Engineer. Design documents prepared to replace existing cooling tower at Centralized Laboratory Facility.

Kentucky Department of Veterans Affairs Thomas-Hood Veterans Center Heat Pump Replacement, Wilmore, KY – Electrical Engineer. Provided design documents for heat pump replacements and piping changes required to install new heat pumps.

Phill Warnock, AIA

GRW Architect

Phill is especially skilled in working with historical architecture and building renovations. His work with county courthouses has been recognized with awards from the West Virginia AIA chapter, as has his work with the West Virginia Division of Highways. Phill's ability to build strong client relationships and successfully manage projects has resulted in repeat work from several of our clients.

YEARS OF EXPERIENCE:

With GRW: 21
Total: 33

EDUCATION

Bachelor of Architecture, 1995, University of Tennessee

REGISTRATION

Registered Architect: WV, KY, IN, TN

National Council of Architectural Boards Certification (NCARB)

PROFESSIONAL AFFILIATIONS AND TRAINING

American Institute of Architects (AIA)

AWARDS

Honor Award, WV AIA Upshur County Courthouse

Merit Award, WV AIA

I-79 Burnsville Rest Area

Merit Award, WV AIA State Road Commission Building

RELEVANT PROJECT EXPERIENCE

West Virginia Department of Highways District 1 State Road Commission Building, Charleston, WV – Project Manager. Renovation of historic 40,000 SF State Road Commission Building to house offices and support facilities for local highway district.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Project Manager. 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 weld shop area; freight elevator; fencing; keycard entry system; and generator.

West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV – Architect. Evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility. Among improvements selected for design are replacement of heating and cooling systems, windows, T5 lighting with LED fixtures, and replacement of ceilings and floor finishes, as well as new DDC controls throughout building.

West Virginia State Capitol East Campus Warehouse/Grounds Building, Charleston, WV – Project Manager. Planning, design, and bidding services for a 26,771-SF warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility serving the WV Department of Administration, General Services Division on the Capitol East Campus. Included are a 4,300 SF open storage and bulk storage building on site as well as a separate 6,000 SF building for Capitol mail room building.

Lewis County Courthouse Conditions Report and Roof Area Restoration, Weston, WV – Project Manager. Preparation of report to identify and evaluate existing conditions, prioritize recommendations for restorations of building envelope and structure, and provide construction cost estimates.

Mercer County Airport Authority Terminal Building Renovations, Bluefield, WV – Architect. 11,000 square-foot project incorporated phased renovation and addition process for 1950's era building. Included HVAC and electrical improvements, building façade improvements, window replacement, accessible restroom facilities, insulation enhancements, passenger flow, security, and accessibility.

Upshur County Courthouse Renovations, Buckhannon, WV – Project Manager. Award-winning design and construction of several improvement and restoration projects

Tom Cloer, AIA

GRW Architect

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.

YEARS OF EXPERIENCE:

With GRW: 18
Total: 23

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, Past VP & Secretary

St. Albans Historic District Committee Member

RELEVANT PROJECT EXPERIENCE

Clay County High School Addition and Renovation; Clay, WV -- Architect Worked closely with Clay County Schools to obtain a WV School Building Authority Needs Grant to fund the design and construction of a multi-million-dollar addition and renovation to the 106,000 sf Clay County High School. The project included design and construction of a new multipurpose Commons Area that can serve as additional cafeteria space, a lobby for the gymnasium during sporting events and graduation, and as an area for students to congregate before and after school. Major renovations to the gymnasium and locker rooms include a new gym floor, bleachers, basketball and volleyball equipment, lockers, and shower rooms. In addition to renovating all toilet rooms, the school received new doors, windows, light, paint and a new HVAC system was also Installed throughout the school.

Lewis County Schools Jane Lew Elementary School Addition, Jane Lew, WV – Architect. Addition includes five new classrooms, updated officer suite, and new building entrance and bus loop, along with new HVAC system for addition. Also includes new sprinkler and fire alarm system, ceilings, floor finishes, and lighting for entire school, as well as renovated toilet rooms.

Logan County Schools Man K-8 Addition, Mallory, WV – Architect. Space planning and design for 9,360 SF addition including four new classrooms; 2,400 SF gymnasium/multipurpose room; ADA compliant restroom facilities; and small landscaped courtyard. Design and construction was accomplished in 10 months and nearly 15% below budget.

Ritchie County School District Smithville Elementary School Renovation/Addition, Smithville, WV – Architect. Demolition of two buildings in existing four-building complex and design of new classroom wing and kitchen addition adjacent to remaining buildings to create single facility under one roof. Also included access control and improved security, new HVAC systems, compliance with ADA/ABA requirements throughout, and renovated restrooms.

Canaan Valley Resort State Park Improvements, Canaan Valley, WV – Architect. Upgrades included new tubing park featuring 12-lane tube run in excess of 800 feet long with vertical drop of 90 feet; tubing lodge with wood-burning fireplace, restrooms, concession stand, and outdoor patio; storage building; new beginners slope and ski school area; renovations at main ski lodge (Bear Paw Lodge); and wobble clay shooting range.

Jon Marcum, PE, SE

GRW Structural Engineer

YEARS OF EXPERIENCE:
With GRW: 8
Total: 27

EDUCATION

M.S., Civil Engineering, 1996, University of Kentucky

B.S., Civil Engineering, 1995, University of Kentucky

REGISTRATION

Professional Engineer/Structural Engineer: KY

Professional Engineer: KY, WV, IN, TN, GA, NY, NC, WA, OH, AZ, TX, NM, KS

NCEES Member allows reciprocity with other states

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Structural 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 (including redundant HVAC systems for secure IT room and non-secure IT room); new DDC control system for all new equipment, 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.

Kentucky Department of Juvenile Justice Jefferson County Youth Detention Center Renovation, Louisville, KY – Structural Engineer. Renovation of facility to house functions for high security youth population that is intended to provide adequate space for functions of 64-bed high-security youth detention facility. Approximately 50,000 square feet of facility is affected by project scope involving basement and first two floors.

Kenton County School District Transportation & District Support Facility, Fort Wright, KY – Structural Engineer. New approximately 80,578 SF transportation and support facility to support staff and operations for critical district functions. Spaces include offices and conference rooms, garage with eight drive-through bays, a food service area, a network operations center (NOC), specialized spaces (image room, bug rooms) etc.

Ashland Federal Correctional Institute Standby Power Improvements, Ashland, KY – Structural Engineer. Design-build of 750 kW standby power generator at minimum-security satellite camp & addition of four, paralleled 500 kW standby power generators at medium-security main campus.

Jeffersontown Fire & EMS Station #4, Jeffersontown, KY – Structural Engineer. Complete A/E design services for new 17,500 SF city Fire and EMS station. Facility consists of two-story fire house, accessory 3-bay garage building, storage building, and full site development. Fire house has dorms, office, decontamination areas as well as a 3-bay pull through apparatus bay (storage of 7 vehicles), ICC-500 compliant tornado shelter, and building - wide natural gas generator.

Administrative Office of the Courts Trimble County Courthouse Structural Assessment, Bedford, KY – Structural Engineer. Inspect and assess courthouse structure to identify potential structural deficiencies. Includes cost estimates for any found deficiencies.

U.S. Customs and Border Protection North Laredo Border Wall, Laredo, TX – Structural Engineer. Design-build of approximately 14 miles of border wall including roads, bridges, drainage, foundations, electrical, electronic security and telecommunications.

Northpoint Training Center Boiler Building Plumbing Replacement, Burgin, KY – Structural Engineer. Provided design documents to correct existing plumbing issues from previous project that was designed and installed by design-builder.

Commonwealth of Kentucky Central Lab Cooling Tower Replacement, Frankfort, KY – Structural Engineer. Design documents prepared to replace existing cooling tower at Centralized Laboratory Facility.

Berea College Facilities Maintenance and Auxiliary Maintenance Buildings, Berea, KY – Structural Engineer. 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. Both buildings have card reader access, motorized overhead doors, man doors, concrete floors with trench drains where applicable, and oil/water separator systems.

Nicholasville Fire Station No. 4, Nicholasville, KY – Structural Engineer. Facility programming, facility needs assessments, architectural and engineering design, and construction phase services for new 6,825 SF fire station. Includes controlled security lock systems for visitors; backup generator power for entire building, communications, electrical, and mechanical/HVAC; staff and visitor parking etc.

Commonwealth of Kentucky Central Lab Facility Boiler Plant Upgrade, Frankfort, KY – Structural Engineer. Replacement of three existing high pressure steam boilers with new high pressure steam boilers along with associated piping, controls, etc.

Frankfort Plant Board Administration Building, Frankfort, KY – QA/QC. 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.

Kentucky Department of Veterans Affairs Thomas-Hood Veterans Center Heat Pump Replacement, Wilmore, KY – Structural Engineer. Provided design documents for heat pump replacements and piping changes required to install new heat pumps.

Pulaski County Schools Bus Maintenance Garage, Somerset, KY – Structural Engineer. New 11,036 SF, pre-engineered metal building with three drive-through maintenance bays equipped with motorized, vertical lift sectional doors with space for six buses; tire room; work room; parts room; toilets; break room; waiting area; office; and mezzanine storage/mechanical area. Also included 3 in-ground, adjustable bus lifts; concrete floor with trench drains and oil/water separator; fire suppression system; centralized vehicle fluids system piped to 4 central dispensing locations; compressed air system; vehicle exhaust systems; overhead radiant system and ventilation in bus bays; and complete HVAC in office areas.

SECTION 4.0

Anticipated Concepts & Methods of Approach

4.0 Anticipated Concepts & Methods of Approach

GRW is ready to partner with the West Virginia Public Service Commission along with the Department of Administration to assist with improvements needed at the Commission's two headquarters buildings in Charlestown, WV.

This important assignment will help ensure current/ outdated HVAC systems are properly updated and replaced – and that they meet all mechanical system building codes. GRW will use its experience with the State of West Virginia and its many similar HVAC projects. **We are ready to meet your project goals and objectives:**

- Complete all engineering design services: mechanical, electrical, plumbing, and architectural.
- Research and investigate existing HVAC equipment and provide drawings/specifications for replacement of the equipment, while meeting required codes and coordination, as directed by owner/agency/authority.
- Ensure key design elements focus on using energy-efficient, economically sustainable, and maintenance-friendly equipment.
- Research & investigate location of existing utilities.
- Provide drawings and specifications of all aspects of the project as needed and directed by the you, the utility company, and any other approval authority.
- Provide other services as desired.

An Approach Based on Respect & Clarity

Our approach to accomplishing these goals and objectives for your project is straightforward:

1. Assemble the best design talent with knowledge of government facilities
2. Bring an open mind and fresh perspective
3. Remain accountable to you throughout the process for cost control/budget.

The cornerstone of the GRW design approach is collaboration. Communicating in an open dialog helps to vest everyone in the project's success and is a prerequisite to ensuring buy-in from all.

Our assigned project manager is key to our approach. Leading you and our team as our project manager will be the director of GRW's mechanical engineering division, **Cory Sharrard**. She brings more than 26 years of experience with 30+ similar projects – including . We believe you will find her a knowledgeable engineer, skilled leader, and a valuable partner throughout your upcoming project.

Cory's logical and methodical approach will provide a steady hand guiding the team, the Commission, and all stakeholders through the design process to a successful conclusion.

Closely supporting Cory to ensure efficiency, effectiveness, and code compliance of the HVAC systems will be **Chris Boggs** and **Jon Sheppard**. Our electrical engineer **Todd Cantrell** will evaluate the electrical systems in the building to ensure code compliance and ensure we provide power required for any HVAC upgrades. All are experienced engineers accustomed to working on complex, systems-oriented, code-oriented projects for the military including WVARNG projects. **Monty Maynard**, a GRW vice president and our firm's most senior electrical engineer, brings to the team a high familiarity with West Virginia and hundreds of similar projects. He will support Cory offering additional quality assurance/quality control, as well as technical advice. Our architects, **Tommy Cloer** and **Phill Warnock** – who work in our West Virginia office and on have worked on multiple West Virginia projects – and our in-house structural engineer, **Jon Marcum**, are prepared to offer the support needed for their disciplines for these projects.

Kickoff Meeting

As part of the first phase of the project, we'll hold 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

After we gain a full understanding of your desires and goals through the kickoff, we also will complete an examination of the existing conditions. We will take stock of the existing equipment, reviewing existing documentation and making field observations.

For your HVAC projects we will also:

- Consider & identify equipment lifespan, functions.
- Identify noncompliant conditions.
- Look at the performance of the systems and utility costs for an established time period.
- Ensure new equipment meets current force protection standards, and current building code.
- Formulate how they relate to all required, current codes and efficiencies

At the conclusion 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.

Again, we will meet with you to determine likes, dislikes, what's working, and what's not. This will give us a foundation as we move forward.

We'll use all information we collect to begin an outline for recommendations – including initial cost estimates – divided into sustainment, restoration, and modernization categories – for your new systems.

EXAMPLE: A design example of one of our most recent HVAC replacement projects is shown on the following page for your reference. This project included the replacement of 26 multi-zone rooftop units at Henry Clay High School in Lexington, KY (**See also Section 2.0**). A new Direct Digital Control (DDC) system was installed for the new equipment as well as for remaining existing equipment throughout the building. New split system air handlers and several single zone rooftop units were also replaced.

Design Submittals / Schematic Design

Using the information from the two previous phases, we continue through the 10% phase – and move into the 35% design phase. We will present the **schematic design** concept to you using drawings, product information sheets, written narratives and an initial cost estimate. After your review of the material, we will meet 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 potential construction phasing opportunities, if/as needed. We will document each step of the process with thorough meeting minutes.

Design Development , Pre-final & Final 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 **pre-final construction documents** and completion of final construction documents for bidding.

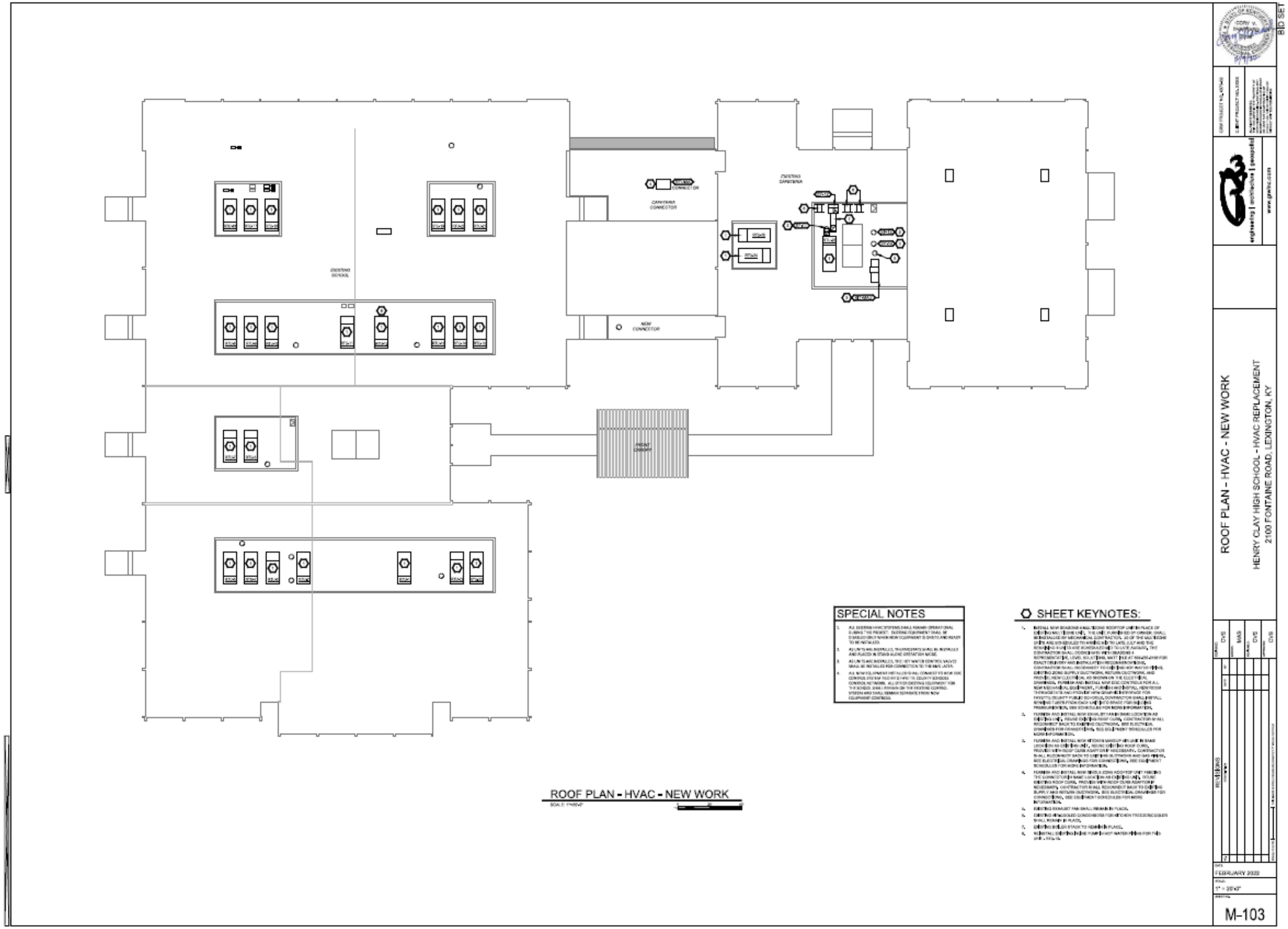
The **estimate of probable cost** is updated at each design review submittal to check the estimate against the drawings and specs, to make sure the work remains within budget. We will also reconfirm final decisions on materials, equipment, and finishes.

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.

GRW Design Example:

Replacement Of 26 Multi-Zone Rooftop Units at Henry Clay High School



SECTION 5.0

Construction Management & Contract Administration

5.0 Construction Management & Contract Administration

Our straightforward approach continues throughout the management of the entire project. The key elements to our approach to construction management and contract administration services are highlighted below.

CONTINUITY: 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.

LOCAL TEAM MEMBERS: Further assisting the design team on the ground will be our local construction observers that are based in West Virginia. They expand our project team's capacity and capabilities to complete site visits and gather necessary information during the construction administration process.

Our West Virginia-based architects, Phill Warnock and Tom Cloer, will assist in getting our documents reviewed with the State Fire Marshalls office as well as helping with writing contracts for each project.

COMMUNICATION & COMMUNICATION TOOLS: 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 project information management software, which allows the storage, sharing, and retrieval of project information both internally and externally.

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 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.

PROGRESS MEETINGS: A key element in effective Construction Administration is the use of regularly scheduled progress meetings. A pre-construction meeting between key members of GRW's project team, your management and staff, and contractors 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.

MOVING TOWARD COMPLETION: Our team performs substantial completion 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.

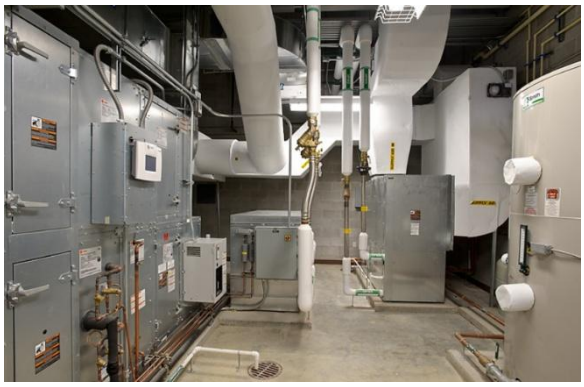
Flexibility

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.

SECTION 6.0
References

6.0 References

GRW understands that professional consulting begins as a relationship built on trust. We 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 85 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 Department of Administration

Mark Crites, Building Project Management Specialist
(304) 957-7142
Mark.A.Crites@wv.gov

WV Division of Corrections & Rehabilitation

Philip Farley, II, Director of Engineering and Construction,
(304) 558-2036 x53463
Philip.K.Farley@wv.gov

West Virginia Division of Natural Resources

Matt Yeager, Deputy Chief,
Planning, Engineering, and Maintenance
(304) 558-2764

West Virginia Army National Guard

Todd Reynolds, Deputy Branch Chief - Design & Construction
(304) 561-6568
matthew.t.reynolds18nfg@mail.mil
Jim Skaggs
(304) 561-6550
robert.a.skaggsii.nfg@army.mil

Fayette County Public Schools, Lexington, KY

Melinda Joseph-Dezarn, AIA
Director of Facility Design & Construction
(859) 381-3826
melinda.josephdezarn@fayette.kyschools.us

Myron Thompson
Chief Operating Officer
(859) 381-4165
Myron.thompson@fayette.kyschools.us

SECTION 7.0

West Virginia EOI Forms

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

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder:	1693133		**Reason for Modification:**
Doc Description:	Architectural/Engineering Services for PSC HQ HVAC Upgrade		
Proc Type:	Central Contract - Fixed Amt		
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2025-05-23	2025-06-12 13:30	CEOI 0926 PSC2500000001	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code: 000000218570
Vendor Name : GRW Engineers, Inc. (GRW)
Address : 801 Corporate Drive
Street :
City : Lexington
State : KY **Country :** United States **Zip :** 40503
Principal Contact : GRW - Cory Sharrard, PE, LEED AP – GRW Director, Mechanical Engineering
Vendor Contact Phone: 859-880-2346 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor Signature X William L Maynard **FEIN#** 61-0665036 **DATE** 6/11/2025

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

Expression of Interest

The Acquisitions and Contract Administration Section of the Purchasing Division ("Purchasing Division") is soliciting Expression(s) of Interest ("EOI" or "Bids") for WV Department of Agriculture ("Agency"), from qualified firms to provide architectural/engineering services ("Vendors") to provide architect and engineering design services for the upgrade and replacement of outdated HVAC system located at the Public Service Commission buildings located at 201 Brooks St. Charleston, WV 25301 and 1116 Quarrier St. Charleston, WV 25301 to better support the needs of the facility, per the bid requirements, specifications and terms and conditions as attached herein.

INVOICE TO	SHIP TO
PUBLIC SERVICE COMMISSION 201 BROOKS ST CHARLESTON WV 25301 US	PUBLIC SERVICE COMMISSION 201 BROOKS ST CHARLESTON WV 25301 US

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering Services for PSC HQ HVAC Upgrade		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:
See attached specifications for further details.

SCHEDULE OF EVENTS

Line	Event	Event Date

ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Cory Sharrard, PE, LEED AP, GRW Director, Mechanical Engineering

(Address) 801 Corporate Drive, Lexington, KY 40503

(Phone Number) / (Fax Number) 859-880-2346 / No fax #

(email address) csharrard@grwinc.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

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

GRW Engineers, Inc. (GRW)
(Company)

William L Maynard
(Signature of Authorized Representative)

Monty Maynard, PE, LEED AP BD+C, Sr. Vice President, 6/11/2025
(Printed Name and Title of Authorized Representative) (Date)

859-880-1713 / No fax #
(Phone Number) (Fax Number)

mmaynard@grwinc.com
(Email Address)