

Expression of Interest to Provide Professional  
Architectural/Engineering Design Services

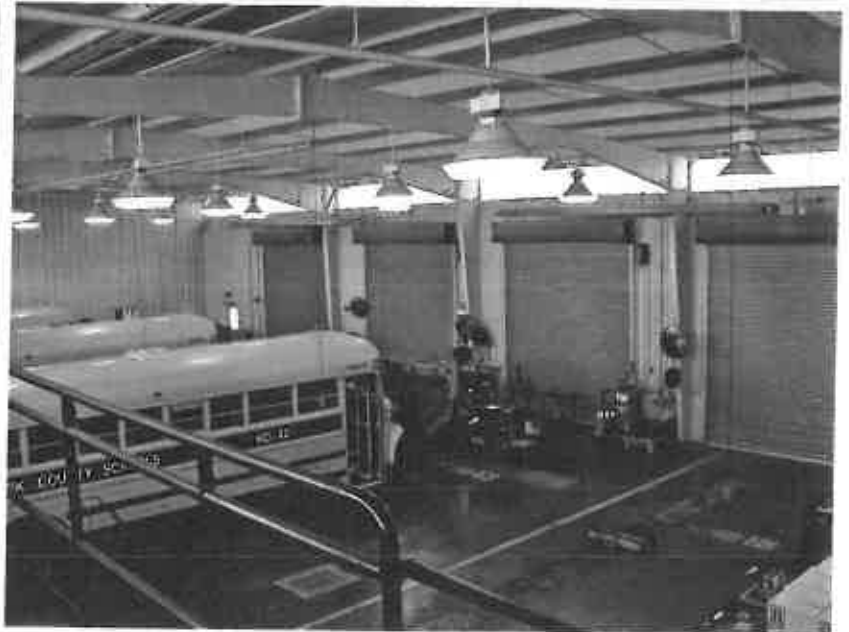
# West Virginia State Police Various Projects

May 5, 2016



**Chapman  
Technical  
Group**

a division of  
GRW



# ARCHITECTURE

Chapman Technical Group  
200 Sixth Avenue  
St. Albans, WV 25177  
304.727.5501

05/02/16 13:21:33  
WV Purchasing Division



**Chapman  
Technical  
Group**  
a division of  
GRW

May 5, 2016

Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, West Virginia 25305-0130

**Re: Various Architectural Projects**

Dear Selection Committee:

Chapman Technical Group is most interested in providing architectural and engineering services for various projects in West Virginia. We have worked all over West Virginia on many similar projects.

Construction was recently completed on the \$6 million renovation of the original State Road Commission building on Smith Street in Charleston for the West Virginia Division of Highways. The 40,000 square-foot renovation project included new office space, a storage area accessible by vehicles, an emergency generator, and a complete new roof. The project was completed on time and within budget.

We also recently completed the renovation of a three-story building in downtown Pt. Pleasant for the Mason County Sheriff's Office. The project used bullet-resistant construction and included offices, a break-room, an interrogation room, evidence storage, and a separately secure storage area for confiscated firearms. The project also include a back-up emergency generator.

In addition, Chapman Technical Group has designed many vehicle storage and maintenance facilities and are currently designing a \$7 million facility for the West Virginia Division of Highways.

Our submittal includes highlights of these and similar projects, as well as our project team qualifications. We offer all of the required services in-house, which means we are efficient and cost-effective. We would very much appreciate the opportunity to present our project team and discuss your project in more details. Meanwhile, if you have any questions or need additional information, please contact me.

Sincerely,

**CHAPMAN TECHNICAL GROUP**

  
Joseph E. Bird, ASLA  
Vice President

200 Sixth Avenue  
Martinsburg, WV 25177

304.727.5501  
304.727.5580 Fax


Buckhannon, WV  
Martinsburg, WV  
Lexington, KY

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

**CERTIFICATION AND SIGNATURE PAGE**

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

Chapman Technical Group  
(Company)

 Joseph E. Bird, VP  
(Authorized Signature) (Representative Name, Title)

304-727-5501, 304-5580, 5-2-2016  
(Phone Number) (Fax Number) (Date)

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

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

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

**DEFINITIONS:**

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

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

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

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Chapman Technical Group

Authorized Signature: [Signature] Date: 5-2-2016

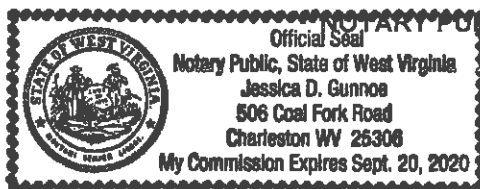
State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 2<sup>nd</sup> day of May, 2016

My Commission expires September, 2020.

AFFIX SEAL HERE



[Signature]

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CEOI DPS160000001**

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

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

**Addendum Numbers Received:**


(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

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

Chapman Technical Group

\_\_\_\_\_  
Company

\_\_\_\_\_  
Authorized Signature

5-2-2016  
\_\_\_\_\_  
Date

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

## **SECTION 1.0 | Company Overview**

# COMPANY OVERVIEW & AWARDS



Established in 1984, Chapman Technical Group has steadily grown to a diverse firm of professionals, many of whom were educated in West Virginia colleges and universities. We have achieved an outstanding reputation for developing high-quality projects, while meeting schedules and budgets.

In 2013, Chapman Technical Group was acquired by the Lexington Kentucky based A/E firm of GRW, allowing us to provide a wider range of services while expanding our resources. Now, in addition to our offices in St. Albans, Buckhannon, and Martinsburg, West Virginia, as part of the GRW family, we also work in Kentucky, Ohio, Tennessee, and Indiana.

Our architectural group not only designs new buildings from the ground up, but also specializes in renovations and historic restoration projects. Our

award-winning landscape architects provide master planning, as well as detailed site design for parks and public spaces projects.

In addition to our building studio, our engineering support staff gives us the ability to meet almost any challenge a project may present. All of our mechanical, electrical, plumbing engineering is provided in-house and our civil engineers work with our landscape architects to provide site designs that are functional and achieve a high level of aesthetics.

Water and sewer system design is accomplished by our environmental engineers, and when on-site wastewater treatment is required, we can do it.

Working with our airport group, we can provide full airport design services, from runway and lighting design, to hangars and terminal buildings.

# COMPANY OVERVIEW & AWARDS



SRC Building Renovation  
WV AIA Merit Award, 2016  
Historic Preservation



I-79 Rest Area  
AIA Merit Award, 2010  
Historic Preservation

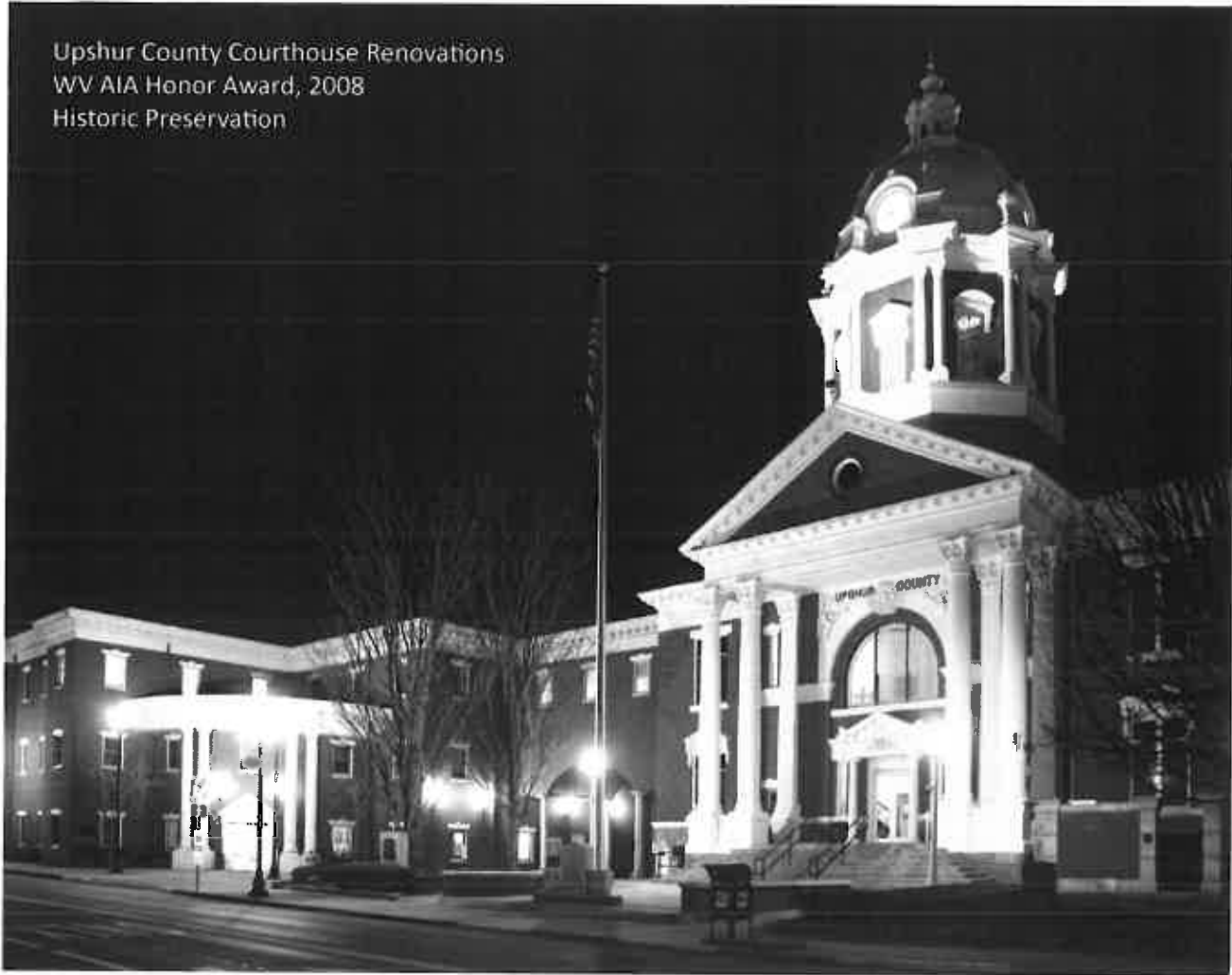




# COMPANY OVERVIEW & AWARDS



Upshur County Courthouse Renovations  
WV AIA Honor Award, 2008  
Historic Preservation



# COMPANY OVERVIEW & AWARDS



Upper Big Branch Miners Memorial  
WV ASLA Honor Award, 2012



Nuttallburg Historic Mining Complex  
WV ASLA Merit Award, 2012

## **SECTION 2.0 | Project Experience**

# ARCHITECTURE



## WV Division of Highways State Road Commission Building Renovation Charleston, WV

As part of the West Virginia Division of Highways District One Campus Renovation, the former State Road Commission Building was renovated to serve as an office building for various DOH personnel. The historical 40,000 square-foot facility retained many historical features, including many original doors and transoms, while providing energy-efficient and cost-effective systems throughout. In addition to a complete interior makeover that included a historic information center and radio studio, the building also received new exterior doors, windows, roofing and a new elevator. A skywalk connects the building to a new Headquarters Building being constructed beside the SRC Building, and a courtyard between the two will be provided for employee use.



# ARCHITECTURE



*American Institute of Architects, Merit Award, 2009*

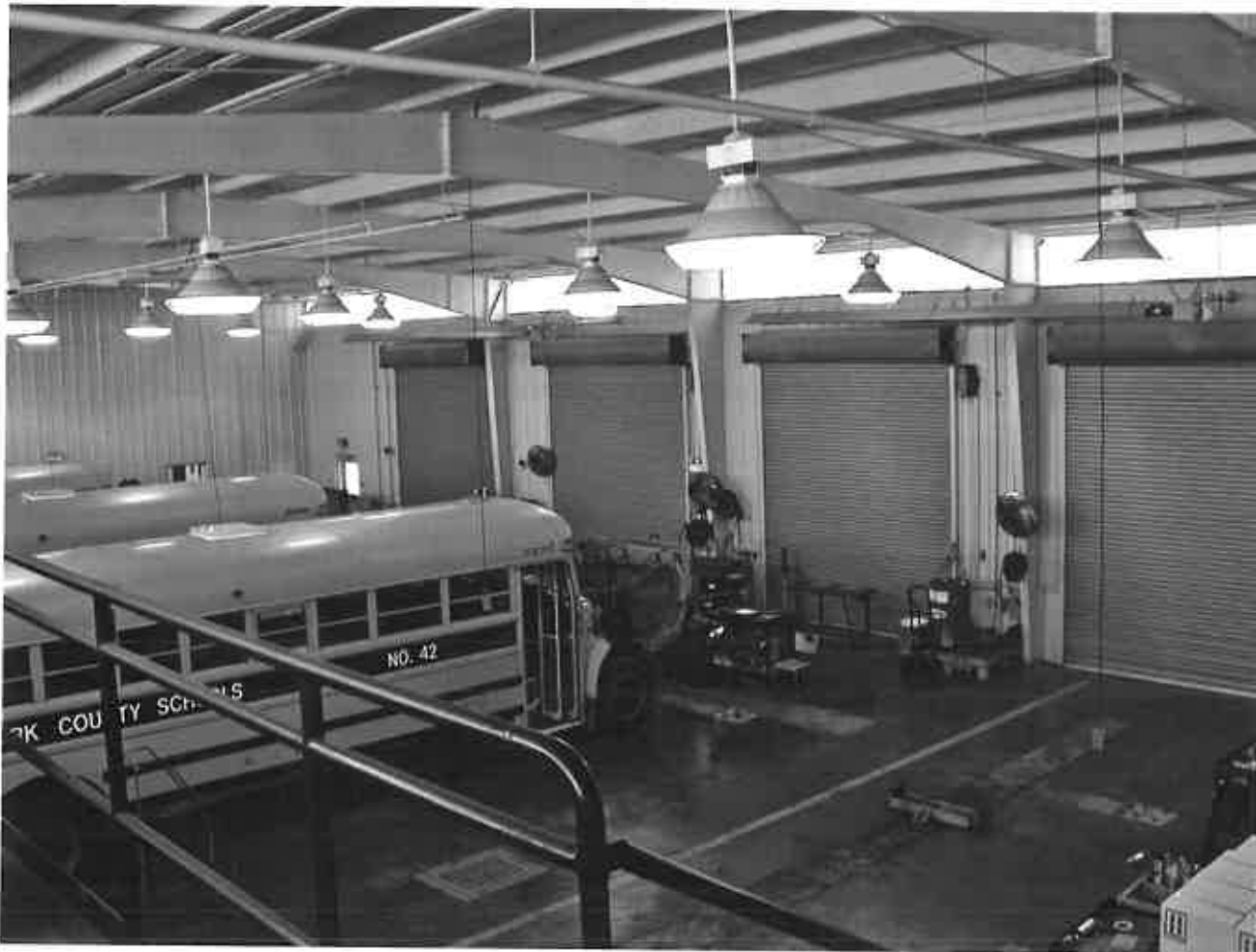


## **WV DOT Division of Highways**

**Burnsville Rest Area  
Burnsville, West Virginia**

The Burnsville Rest Areas are the first of the new standard rest areas to be built around the state for the West Virginia Department of Transportation. A dual-facility layout ensures that demand will be met for many years. Native materials, including smooth cut and rough stone, were used inside and out. Low maintenance but highly durable materials including

the tern-coated stainless steel roof, glass, aluminum, wood, polished groundfaced CMU, and epoxy terrazzo were used throughout. The design plays off of West Virginia imagery and creates safe, warm, and welcoming spaces. Separate maintenance and vending buildings complement the main structures.

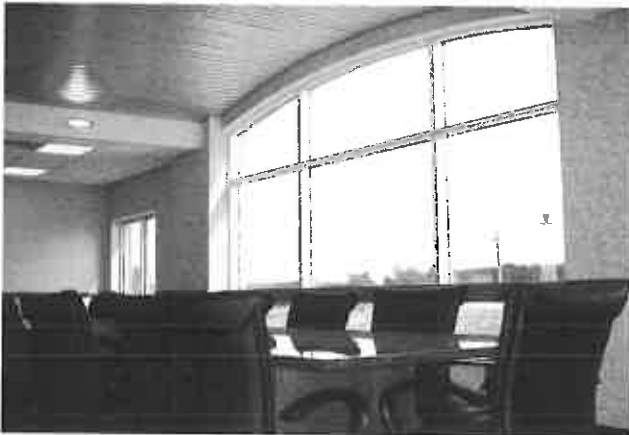


## **Clark County (KY) Transportation Offices and Bus Maintenance Facility** Winchester, Kentucky

This project involved the architectural design of a 2,250 SF of office space, 8,700 SF of maintenance space, and 2,450 SF of mezzanine space. The overall project program included four drive-thru maintenance bays - three equipped with lifts; drive-through "touch-free" wash bay; mezzanine level space; four individual staff offices; two staff breakrooms, and; ADA compliant men's and women's restroom facilities.

The exterior of the pre-engineered metal building consists of 8" split-face CMU and ribbed metal panels. Ribbed translucent "daylight" panels are located along the eave to allow additional light into the workspace.

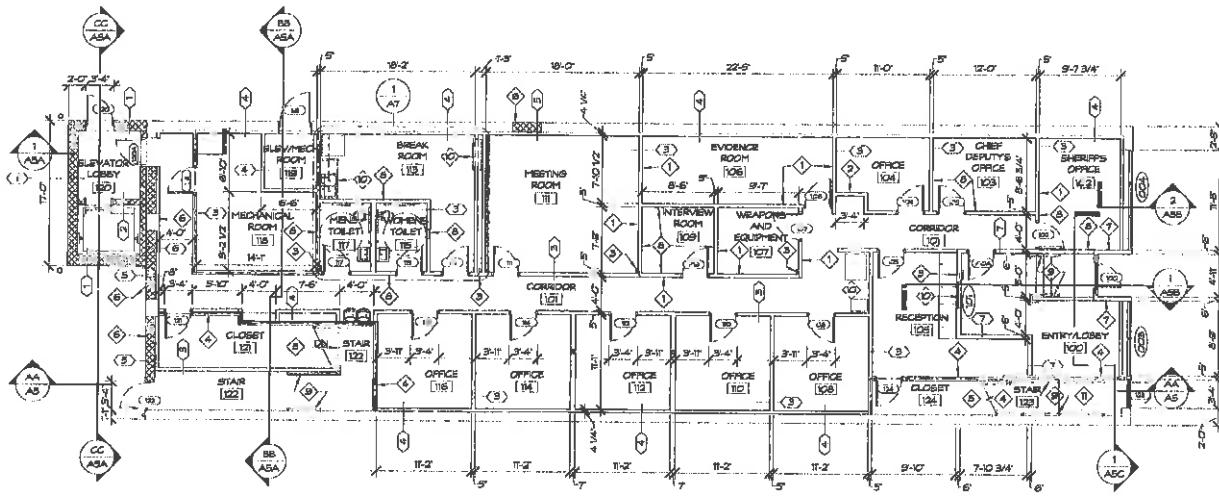
The interior faces of the exterior walls are lined with ribbed metal panels to conceal the building structure and batt insulation while also upgrading the final appearance. The remaining interior office walls were constructed with 8" CMU.



**Eastern WV Regional Airport Authority**  
New Airport Terminal  
170 Aviation Way, Room 105  
Martinsburg, West Virginia 25405

In 2001, the EWVRAA• initiated the design and development of its terminal facilities, preparing to accommodate the airport's role as a "reliever" for Dulles International Airport. The first phase included the relocation of electrical equipment to a new underground vault, which was designed to be part of a small basement for the new terminal building. The second phase included the construction of a \$1.9 million, 12,000 square-foot, terminal/administration building adjacent to the existing terminal building.

The core function of the building is to function as a general aviation airport, while accommodating future passengers once commercial air service is provided. In addition to housing the EWVRAA main offices, a museum/lobby, interim lobby (sterile hold), restaurant, and tenant office spaces have also been provided. The project also included the reconstruction of part of the facade of the original terminal building in the lobby of the new terminal building.



FIRST FLOOR PLAN  
SCALE: 1/8" = 1'-0"

## Mason County Sheriff's Office Point Pleasant, WV

The Mason County Commission selected this existing building adjacent to the County Courthouse to be headquarters for the Mason County Sheriff's Department. The three story 11,500 square-foot facility remained basically unchanged on the exterior with the exception of minor facade repairs, new doors and windows. The first floor interior of the building was completely demolished and rebuilt to house the new Sheriff's Office while the second and third floor were renovated for Sheriff's office storage, voting machine storage and programming, and other County needs. Other additions and renovations included a new elevator at the rear of the building, a new sprinkler system throughout the building,







## Ohio Army National Guard Readiness Center and Maintenance Shops Springfield, Ohio

GRW provided planning, design and construction of a new 85,865 SF Joint Armed Forces Readiness Center (AFRC) and Field Maintenance Shop (FMS) for the Ohio Army National Guard (ARNG) and the US Army Reserves (USAR).

The 24,963 SF Field Maintenance Shops included 10 drive-through bays; tools and parts storage; battery room; bulk POL storage and lubrication

system storage; flammable material storage and controlled waste facilities; private shop offices; and classrooms and a library.

Additional site work involved parking, wash platform, loading dock, access roads, force protection measures, security lighting, utilities and landscaping.



**Buckhannon-Upshur County Airport**  
**Snow Removal Equipment Building**  
38 West Main Street  
Buckhannon, West Virginia

As part of the continuing expansion of the Upshur County Airport, Chapman Technical Group provided design and construction administration services for the three-bay Removal Equipment building. The building and the site were designed to easily accommodate future expansions. The 3,200 square-foot facility was completed in 2002 at an approximate cost of \$300,000.





## **Aliceville Correctional Institute Vehicle Maintenance Facility** Aliceville, Alabama

GRW led the design team for the design-build of this women's medium-security Federal Correctional Institution (FCI) and minimum-security Federal Prison Camp. This \$196 million project has a gross building area of approximately 665,889 SF.

Among the 26 buildings, the complex includes several pre-engineered metal buildings such as the Vehicle Maintenance Facility for central fueling and maintenance of all fleet vehicles including buses. The service bays are equipped with vehicle exhaust ventilation systems and electro-hydraulic lift for both cars and buses. A bus wash facility is also

associated with this structure, which utilizes a sand trap, and exits through an oil/water separator. Fuel dispensing of both unleaded and diesel is controlled by a computer located in this facility. Authorized users scan a card reader at the dispensers, located outside the building. Waste oil and anti-freeze tanks are also provided. Fuel and waste oil tanks are above ground, secondary containment type tanks; diesel is 2000-gallon capacity and unleaded is 6000-gallon capacity. Waste oil and anti-freeze tanks are 250 gallons each.



## **Barbour County Economic Development Authority**

**Belington Multi-Tenant Business Incubator**

**Belington Industrial Park**

**Belington, West Virginia**

Chapman Technical Group assisted the Barbour County Economic Development Authority by providing design services and construction administration for the Belington Multi-Tenant Building located in the Belington Industrial Park. The Multi-Tenant Building is a 25,100 s.f. metal building which consists of three 8,300 s.f. tenant spaces, each with their own office core and bay spaces.



# ARCHITECTURE



**Buckhannon Upshur Airport Authority**  
**New Airport Hangars**  
40 West Main Street  
Buckhannon, West Virginia 26201

The Buckhannon Upshur Airport Authority called upon Chapman Technical Group to design two 10,000 sq. ft. hangars - one with an 18-ft. door height for a growing local fixed based operator and one with a 28-ft. door height for an avionics and interior refurbishing business. A specially designed reinforced floor slab accommodates the various aircraft anticipated. Innovative construction details were developed to meet the specific fire safety and building codes and stay within budget.



## **SECTION 3.0 | Project Team**

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# Joseph E. Bird, ASLA

Vice President

Project Officer



**Years of Experience:** 37  
**Years with Chapman:** 30

## Education

B.S., Landscape Architecture,  
1981, West Virginia University

## Registration

Landscape Architect: WV, KY

## Affiliations

WV Chapter, American Society of  
Landscape Architects

## Awards

Honor Award, WV ASLA  
Shrewsbury Street Development Plan

## Projects Include

St. Albans Streetscape Improvements  
(St. Albans, WV)

Robert C. Byrd Federal Courthouse  
Site Design (Beckley, WV)

VA Medical Center Healing Garden  
and Site Design (Huntington, WV)

Canaan Valley State Park Ski Facility  
Improvements (Canaan Valley, WV)

Lewisburg L & R Recreation Trail  
(Greenbrier County, WV)

Smith Street Streetscape Improvements  
(Charleston, WV)

Sixth Street Streetscape Improvements  
(Covington, KY)

## Qualifications

### Site Development

Site planning and project management for numerous projects throughout West Virginia ranging from small campus sites to large sites for commercial, government, industrial, and institutional development. Projects include military complexes, campuses, public housing developments and other public facilities.

### Parks and Recreation

Projects include swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems. Also involved in the design of facilities such as softball fields, fishing access facilities, recreation facilities for prisons, as well as passive recreation areas for public and private clients.

### Miscellaneous

Other project experience includes the urban planning and development, streetscape design, roadway and storm drainage projects, as well as the project management of numerous major architectural projects throughout West Virginia. His recent relevant project experience includes the design and/or management of major recreation projects including the Beech Fork State Park Campground Improvements; the Beech Fork State Park Cabin Project; the Beech Fork State Park Swimming Pool and Bathhouse; the Blackwater Falls Cabin Projects; the Canaan Valley Golf Course Drainage Improvements Project, and the Canaan Valley Ski Area Improvements Project.

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# Phillip A. Warnock, NCARB, AIA

## Project Architect



**Years of Experience:** 23  
**Years with Chapman:** 12

### Education

B.S., Architecture, 1995,  
University of Tennessee

### Registration

Architect: WV, KY

### Affiliations

National Council of Architectural  
Registration Boards  
American Institute of Architects

### Awards

Honor Award, WV AIA  
Upshur County Courthouse

Merit Award, WV AIA  
I-79 Burnsville Rest Area

### Publications

Structure Magazine, February 2010  
"A Gem in the Mountains"  
Upshur County Courthouse Restoration

## Qualifications

### Architectural Design

Experience ranges from design, detailing and drafting through project management and construction administration of building projects in various states, including West Virginia, Tennessee, Kentucky and South Carolina.

### Experience Includes

- Public School Facilities
- Historic Preservation/Restoration/Adaptive Reuse
- Community/Recreation Centers
- Aviation Facilities
- Governmental Facilities
- Health Care/Pharmaceutical Facilities
- Military Support Facilities/Armories
- Multi-Family Housing
- ADA Assessments
- Research and Development Labs
- HUD 811, 202 and ECHO Facilities
- Office Buildings
- Rest Areas and Welcome Centers
- Public Safety Facilities

### Projects Include

Upshur County Courthouse Projects  
(Buckhannon, WV)

State Road Commission Building Renovation  
(Charleston, WV)

New WV DOH Rest Areas and Welcome Centers  
(21 Locations throughout WV)

New Roark-Sullivan Lifeway Center Men's Shelter  
(Charleston, WV)

Mercer County Airport Terminal Building Renovation  
(Bluefield, WV)

New Pocahontas County Community Center  
(Marlinton, WV)

New Whitestown Maintenance Garage  
(Whitestown, IN)



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# W. Thomas Cloer, III, NCARB, AIA

## Project Architect



**Years of Experience:** 14  
**Years with Chapman:** 9

### Education

B.S., Architecture, 2001  
University of Tennessee

### Registration

Architect: WV, VA

### Affiliations

National Council of Architectural  
Registration Boards  
WV Chapter,  
American Institute of Architects  
St. Albans Property and Maintenance  
Board Member  
St. Albans Historic District  
Committee Member

## Qualifications

### Architectural Design

Experience ranges from drafting, detailing, and leading design through writing and specifications, project management and construction administration of building projects throughout West Virginia and Virginia.

### Project Types

- Public School Facilities
- Government Facilities
- Office Buildings
- Medical Office Facilities
- Single Family Housing
- Multi-Family Housing
- Recreational Facilities
- ADA Assessments
- Site Planning

### Projects Include

Man K-8 School Addition  
(Logan County, WV)

Teays Medical Office Building  
(Putnam County, WV)

Pleasant Hill Elementary School Renovations  
(Calhoun County, WV)

Jane Lew Elementary School Additions/Renovations  
(Lewis County, WV)

New Blackwater Falls State Park Cabins  
(Davis, WV)

Smithville Elementary School Additions/Renovations  
(Ritchie County, WV)

New Canaan Valley State Park Ski Lodge  
(Canaan Valley, WV)

Philippi-Barbour County Airport Industrial Building  
Barbour County, WV)

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# Sharon L. Chapman

## Interior Designer



**Years of Experience:** 24  
**Years with Chapman:** 24

### Education

B.A., Art and Interior Design, 1993,  
University of Charleston

### Registration

Allied Member, American Society of  
Interior Designers

### Affiliations

Allied Member, ASID  
St. Albans Rotary  
Thomas Memorial Hospital Foundation  
Gabriel Project of WV

### Awards

Academic Achievement Award,  
Art and Design, University of Charleston  
Finalist, Entrepreneur of the Year, 1999  
Finalist, Entrepreneur of the Year, 2000  
St. Albans Renaissance Group,  
Business Person of the Year, 2002  
Junior Achievement,  
Chairman's Award, 2002-2003  
St. Albans Renaissance Group, Appreciation  
Award, 2005  
George Warren Fuller Award, 2005  
Thomas Memorial Foundation,  
Quiet Hero Award, 2009  
Alumni Achievement,  
University of Charleston, 2012

## Qualifications

### Space Planning and Interior Design

Space planning, interior design, material selections and furniture layouts for new and renovation projects including a courthouse annex, city hall renovations and other public buildings, private offices, commercial facilities, recreation facilities, industrial buildings, and residential properties. Also involved in building renovation feasibility studies and use analyses, and building facade renovation projects.

### Projects Include

Upshur County Courthouse  
(Buckhannon, WV)

State Road Commission Building  
(Charleston, WV)

WV DOH Rest Areas and Welcome Centers  
(21 Locations throughout WV)

Roark-Sullivan Lifeway Center Men's Shelter  
(Charleston, WV)

Mercer County Airport Terminal Building  
(Bluefield, WV)

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# David C. Hoy, P.E.

## Civil/Structural Engineer



**Years of Experience:** 8  
**Years with Chapman:** 8

### Education

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

### Registration

Civil Engineer: WV, KY, VA

### Affiliations

Chi Epsilon, National Civil Engineering  
Honor Society  
ASCE, Member

## Qualifications

### Structural Engineering

Experience with investigation and analysis of existing structures. Experience with the design of various building structural systems including timber, concrete, steel, and masonry construction. Experience with foundation design, including metal building foundations and also deep foundations. Experience with structural design of water and wastewater structures both above and below ground. Performs shop drawing reviews and makes periodic site visits during the construction phase of projects.

### Projects Include

Jane Lew Elementary School Renovation  
(Lewis County, WV)

State Road Commission Building Renovations  
(Charleston, WV)

Canaan Valley Resort State Park New Ski Lodge  
(Davis, WV)

St. Albans Fire/Police Station Renovations  
(St. Albans, WV )

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# Stephen M. Johnson, P.E.

## Civil/Environmental Group Manager



**Years of Experience:** 11  
**Years with Chapman:** 9

### Education

B.S., Civil Engineering, 2004,  
West Virginia University  
Institute of Technology

### Registration

Civil Engineer: WV, NC, VA

### Affiliations

Water Environment Association  
WV American Water Works Association  
WV & VA Rural Water Association  
Water for People

### Miscellaneous

National Electric Code Certified, 2011  
SDI Certified SCUBA Diver

### Projects Include

Bluefield Sanitary Board  
Wastewater System Improvements  
(Bluefield, WV/VA)

St. Albans Water/Wastewater/Stormwater  
Improvements (St. Albans, WV)

Elkins Road PSD Water System Improvements  
(Elkins, WV)

Middle Creek Decentralized Wastewater  
System Improvements  
(Tazewell County, VA)

## Qualifications

### Water Systems

Overall experience includes planning, design, bidding, and construction administration/management of various public and private water system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes distribution systems, river crossings, horizontal directional drills, wells, raw water intakes, transmission lines, booster stations, treatment plants, ground and elevated water storage tank design, painting, and rehab, SCADA systems, computer modeling, treatment process evaluation, and problem troubleshooting in existing systems.

### Wastewater Systems

Overall experience includes comprehensive system master plans, design, bidding, construction administration and management of various public and private wastewater system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes gravity and low-pressure collection systems, pump stations and force main transmission systems, treatment plant process evaluation and design, trenchless pipeline rehabilitation, bypass pump system design, odor and corrosion control, effluent infiltration ponds, decentralized and alternative on-site disposal systems, and SCADA systems.

### Storm Water Systems

Overall experience includes water management planning and facility design in West Virginia and Virginia. Specific project examples include MS4 compliance plans, NPDES construction storm water permitting, SWPPP preparation, design of bio-retention areas, infiltration basins, ponds, and underground storage/detention facilities.

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# Monty Maynard, PE, LEED AP BD+C

## GRW Electrical Engineer



**Years of Experience:** 37

**Years with GRW:** 18

### 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

NCEES Member allows reciprocity with other states

LEED Accredited Professional, Building Design + Construction

### Professional Affiliations and Training

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

Design Build Institute of America

Ohio Valley Region, Design Build Institute of America

### Qualifications and Similar Project Experience

Mr. Maynard has nearly four decades of experience with electrical and mechanical design, process instrumentation and control, and project management. Mr. Maynard has designed electrical and mechanical systems for more than 300 projects with total construction values as high as \$188 million. His areas of technical expertise include electrical power distribution, substation design, alarm systems, communications, lighting, lightning protection, instrumentation/controls/telemetry, power quality, energy efficiency and code compliance.

**Cumberland Valley Technical College Building One Renovation, Harlan, KY** - Electrical Engineer.

Renovation design for 31,000 SF building including updated exterior appearance, and modernized teaching spaces. Work included total replacement of building mechanical and electrical systems.

**Fort Knox Macdonald Elementary School Renovation, Ft. Knox, KY** - Principal-in-Charge. Renovation of a 63,000 SF Army school with year-round schedule. Involved a new standing seam roof installed over 48,000 SF to create an attic for 100% replacement of existing HVAC system equipment with geothermal-based heat pump system, new electrical service system, and fire alarm system upgrade.

**Lexington Catholic High School Phase II Addition, Lexington, KY** - Engineering Manager. 48,000 SF addition included 1800-seat two level gymnasium and running track, performing arts stage, art wing, and new administration area.

**Marshall University Weisberg Family Engineering Laboratory, Huntington, WV** - Electrical Engineer. New, 16,000 SF engineering laboratory building. Building security systems included access control and CCTV. HVAC systems feature rooftop VAV systems with variable electric reheat.

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# Doug Cage, PE

## GRW Mechanical Engineer



**Years of Experience:** 25

**Years with GRW:** 10

### Education

M.S., Mechanical Engineering, 1995, Missouri University of Science and Technology

B.S., Mechanical Engineering, 1988, Missouri University of Science and Technology

### Registration

Professional Engineer: WV, KY, MO, AL, OH, TX

### Professional Affiliations and Training

American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)

American Society of Mechanical Engineers (ASME), Member

Building Officials & Code Administrators International (BOCA), Professional Member

### Qualifications and Similar Project Experience

Mr. Cage has 25 years of experience with building mechanical (HVAC, plumbing and fire protection) and process systems. His background as an Army Energy Office Chief lends a critical eye to the energy efficiency of systems for which he is responsible. Mr. Cage has been responsible for the mechanical, plumbing, and fire-protection systems design and construction of over 100 new and renovated facilities including military, civic, educational, healthcare, historic, housing, institutional and religious facilities.

**Marshall University Weisberg Family Engineering Laboratory, Huntington, WV** - Lead Mechanical Engineer. New, 16,000 SF engineering laboratory building. HVAC systems feature rooftop VAV systems with variable electric reheat.

**Cumberland Valley Technical College Building One Renovation, Harlan, KY** - Mechanical Engineer. Renovation design for 31,000 SF building.

**Pulaski County Schools Area Technology Center Gas Appliance Training Laboratory, Somerset, KY** - Project Manager. Renovation of Area Technology Center to accommodate a new gas appliance training program

**Pulaski County Burnside Elementary School, Somerset, KY** - Project Manager. Replacement of coal-fired boilers with propane-fired high efficiency boilers.

**Pulaski County IT Data Center, Somerset, KY** - Engineering Manager. Renovation of retail building into school district's new IT hub. HVAC systems feature raised floor computer room systems (precision cooling and humidity control) and general office space conditioning with packaged rooftop units; and natural gas operated generator for emergency power backup.

**Pulaski County High School Cooling Towers, Somerset, KY** - Project Manager.

**Pulaski County Memorial Elementary School, Somerset, KY** - Project Manager. Replacement of collapsed plumbing within the school's kitchen.

**Pulaski County Nancy Elementary School, Somerset, KY** - Engineering Manager. Administrative area addition and classroom renovation project which included HVAC systems feature geothermal heat pump systems and demand-controlled ventilation.

## **SECTION 4.0 | Project Approach**

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# PROJECT APPROACH



## *First thoughts.*

Before we can begin to design the improvements to the various facilities, we need to understand how they are constructed, how they are being used, and the issues involved in the proposed improvements. To do this we will meet with State Police personnel, and those who use the facilities. We will also review all available plans, data, and documentation and incorporate them into the basic planning for the improvements. Once we have a good understanding of all of the existing conditions and issues, we can start to develop a program for the new improvements that will complement the existing operations.

## *Design Development.*

After we review our initial findings with you, we'll start to formulate recommendations based upon the results of our research to meet the goals and objectives of your project. We'll take all of your input and start to develop some ideas on paper. We'll estimate construction costs so that we can begin to prioritize your needs and we'll begin to look at any special issues that may affect your project.

Upon completion of our design concepts, we'll meet with you and go over your budget, establish priorities, help you make informed decisions, and determine our direction for the next phase of design development.

## *Tightening down the design.*

Once the basic concepts are determined, we'll start to move forward with the detailed design. We'll start to look at the specifics of everything from building types for the garage and storage facilities, to door types, roofing options, and generator sizing. At this stage of the project, most of the major decisions will have been made and we'll begin working on how it all goes together. Our opinions of construction cost will be refined and we'll likely begin to think about alternate bid items, to ensure your project remains within budget. This is one of the more critical phases of the project and we will work with you to evaluate all

of your options. By the time this phase is complete, you will have made 95% of the decisions that need to be made.

## *Back to the drawing boards.*

Well, not really. Of course we'll develop the construction drawings using the latest in computer design and drafting. At this phase, we are working out the smallest details of the project and writing specifications for the contractor to use in construction. Most of the decisions you will need to make at this point will be minor.

We'll fine-tune the opinion of construction costs and wouldn't expect any surprises. We will finalize the bidding strategy and make any adjustments in alternate bid items that we feel might be prudent. Once the project is reviewed by the appropriate entities, we'll be ready for bidding.

## *Tightening down the design.*

When we get the green light to bid, we'll assist you in plan distribution, conduct a pre-bid conference, answer bidder questions and issue addenda, assist you in the receipt of bids, evaluate the bids, and make a recommendation regarding the award of the contract. This is one of the most exciting parts of the project.

When the project is completed, we will ensure that the contract requirements have been met satisfactorily, that the systems have been tested and are running properly, and that the proper personnel have been properly trained.



## **SECTION 5.0 | References**

# REFERENCES



1. Mr. Nyle Fisher, P.E.  
West Virginia Division of Highways  
Building 5, Room A-350  
1900 Kanawha Blvd., E.  
Charleston, WV 25305  
(304) 558-9289

*"Your design, expertise and foresight brought this elementary facility into the 21st century. The diligence and professionalism demonstrated by your staff made the entire construction experience more pleasant and rewarding for all involved."*

- David Weekley, Ritchie County Schools
  
2. Mr. Bradley Leslie, P.E., Assistant Chief  
WV Division of Natural Resources  
Parks and Recreation  
324 4th Avenue  
South Charleston, WV 25303  
(304) 558-2764

*"I wish to express the appreciation of my department for your work in renovating the third floor of the Morrow Library. We had a thoroughly pleasant experience while you were working on this project."*

- Lisle Brown, Marshall University
  
3. John Gerlach, County Administrator  
Mason County Commission  
200 Sixth Street  
Pt. Pleasant, WV 25177  
(304) 675-1110

*"Your design work has resulted in the renovation of our 32,000 square-foot research and office complex, which has enhanced the facility's appearance and increased the building's energy efficiency. Your attention to detail and the guidance of the contractor made the renovation process painless."*

- Roger Anderson, WV Division of Natural Resources

*"Chapman Technical Group has been involved in three projects for us to date. All three were handled by your Group as if it were their only project. Additionally, all three projects were designed expertly and concisely, came in on budget, and managed pragmatically."*

- Steve Casto, Lewis County Schools