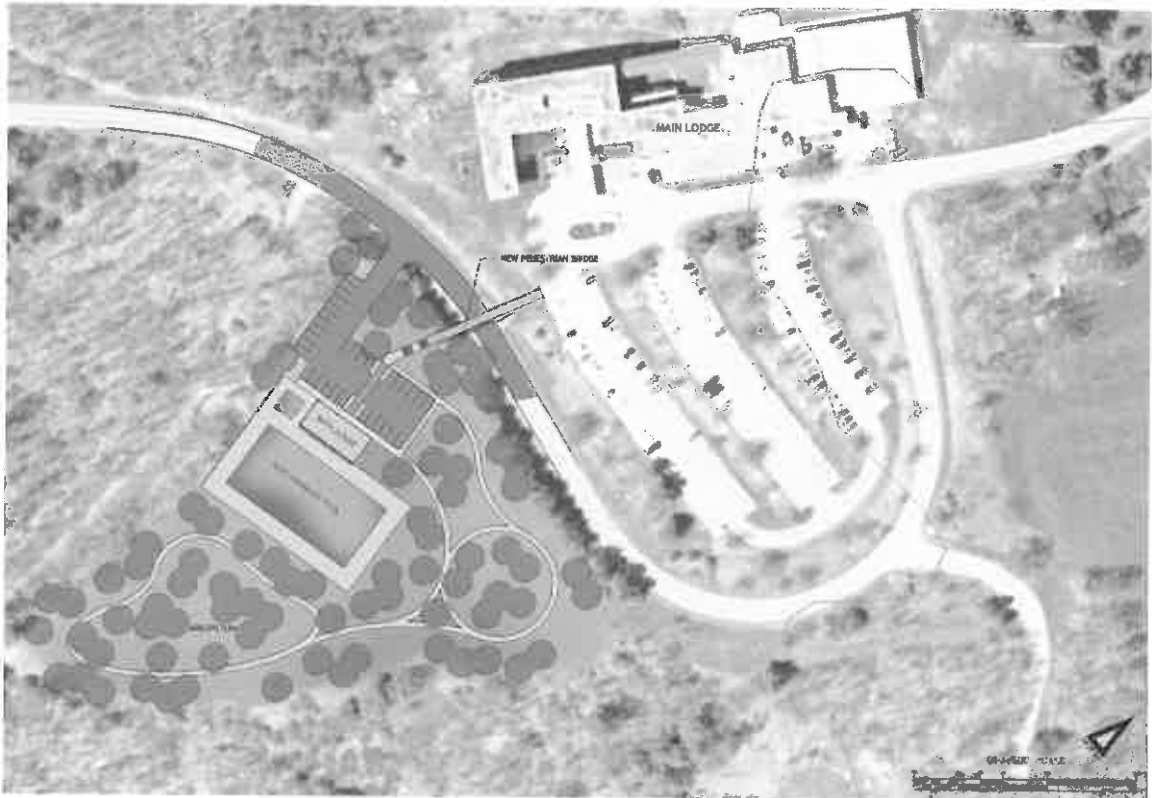


Expression of Interest for Pipestem Outdoor Pool Replacement CEOI 0310 DNR1600000007



PO Box 469
Alum Creek, WV 25003-0469



11/18/15 09:58:53
WV Purchasing Division



**Chapman
Technical
Group**

a division of
GRW

November 17, 2015

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



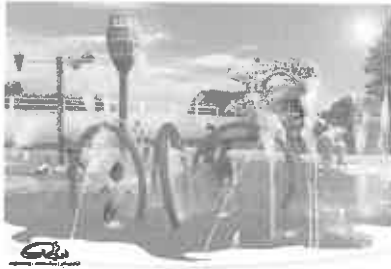
Re: Expression of Interest for Pipestem Outdoor Pool Replacement
CEOI 0310 DNR160000007

To the Selection Committee:

CAS Structural Engineering is most interested in providing the engineering and architectural services for the new pool at Pipestem State Park. With over 25 years of experience, **CAS Structural Engineering** provides professional structural engineering services for a variety of building projects, ranging from new construction to additions and renovations, to repairs and historic preservation. **Carol A. Stevens, PE**, is the firm president and will be the engineer of responsible charge for this project. Ms. Stevens has over 25 years of experience with building structures in West Virginia, Pennsylvania and Ohio. **CAS Structural Engineering is a small, local, West Virginia Certified Disadvantaged Business Enterprise that will give you personal attention.**



CAS Structural Engineering has been involved with numerous projects at the West Virginia State Parks over the years, including a number of pool projects. Located in Alum Creek, **CAS Structural Engineering** will serve as the prime consultant on this important project. The sub-consultants that we have teamed with are as follows: **Chapman Technical Group** (St. Albans, WV) for architecture, landscape architecture and civil engineering, and **Miller Engineering Inc.** (Morgantown, WV) for mechanical, electrical and plumbing engineering. This team has extensive experience both working together on projects as well as working with the West Virginia Department of Natural Resources. We have developed a concept plan for the new pool and the partial demolition of the existing recreation building. Additionally, we have a plan for working with WVDNR to ensure a successful project and it is described as follows:



2.1.a. Communication: **CAS Structural Engineering's** project management system, the Project Manager will be the point of contact for the DNR for all communications related to the project. It is the Project Manager's responsibility to ensure that all project team members receive design directives and are involved in resolving project issues. Having this single point of contact helps minimize confusion and is the most efficient communications method. The Project Manager will also coordinate all progress meetings and site visits during construction

PO Box 469 • Alum Creek, WV 25003-0469 **PHONE** 304-756-2564 **FAX** 304-756-2565 **WEB** www.casstruceng.com

PROVIDING STRUCTURAL ENGINEERING SOLUTIONS FOR YESTERDAY, TODAY AND TOMORROW
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A WEST VIRGINIA CERTIFIED DBE CONSULTANT - CERTIFIED IN THE PRACTICE OF STRUCTURAL ENGINEERING

and will ensure that all communications are forwarded to the appropriate DNR personnel. For this project, Carol Stevens will serve as the Project Manager.

2.1.b. Budget Control: *CAS Structural Engineering* and the *CAS Team* have an excellent track record of completing projects in budget. We recently completed work associated with repairs at Twin Falls and Hawks Nest State Parks, where the projects were under budget. Current work associated with the Fire Alarm Replacement and the Plaza Repairs at McKeever Lodge at Pipestem State Park have both come in under budget and construction work is ongoing and/or beginning.

Our method of cost control includes developing accurate opinions of cost in the early stages of design, so that decisions regarding the scope of the project can be addressed early when adjustments to the design are easier to achieve. As the project progresses, we will consider alternate systems that can provide the required result in a way that is cost-effective, both short-term and long-term, making sure that the Owner is in agreement with the end product. We will also develop alternate bid items to ensure that the project stays within the budget. During construction, we will work with the contractors to establish a team relationship so that as issues arise, we can work together to find the most cost-effective solution. We are often able to find alternative means of construction that help to costs associated with unforeseen conditions.

2.1.c. Schedule Control: We have completed many projects for the WV State Parks within the allotted schedule, including the repairs at Pipestem, Twin Falls and Hawks Nest State Parks. We have a history of timely turnaround on many projects which have been provided by this project team and can meet any schedule required for this project. Our Project Manager will establish internal review deadlines with all parties which will ensure compliance with your schedule for bidding and construction. Our full service team will allow us to address the peripheral issues of the project, such as water and sanitary sewer as well as power supply, effectively and efficiently.

During construction, we will strive to maintain a true team relationship so that issues are resolved quickly with input from all parties, including your field representative. As you know, work in West Virginia State Parks can be subject to extreme weather conditions, which must be taken into consideration when scheduling construction activities. Additionally, coordination with Park Staff is important as many times activities at the park are scheduled in advance and interruptions need to be minimized. As always, it takes a coordinated effort from the Design Professionals and the Owner to apply the appropriate pressure to keep the project moving expeditiously, while maintaining a positive relationship with the Contractor. I believe that we have demonstrated that balance in past projects.

2.1.d. Experience: The *CAS Team* will include *CAS Structural Engineering* with Carol Stevens, who will serve as Project Manager as well as the structural engineer for the project. *Chapman Technical Group* will perform functions related to architecture, landscape architecture

and civil engineering. **Miller Engineering** will provide mechanical/electrical and plumbing engineering. The **CAS Team** and all individual firms have demonstrated experience with WV State Parks.

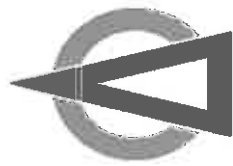
The following information should serve to introduce and qualify the various members of the team that we propose to complete the tasks outlined in the scope of the request for proposal. As you review the following information, it will become evident that as a team we bring extensive experience to your project. **CAS Structural Engineering** invites an opportunity to present our design team for your evaluation and we are available to work on your project immediately. If you have any questions or require any additional information, please contact us. Thank you for considering our team for your project.

Sincerely,

CAS Structural Engineering, Inc.

A handwritten signature in cursive script that reads "Carol A. Stevens".

Carol A. Stevens, P.E.
President



**Chapman
Technical
Group**
a division of
GRW



1 Qualifications and Experience

2 Project Approach

3 References

4 Required Forms



QUALIFICATIONS AND EXPERIENCE

The CAS Structural Engineering Team (CAS Team) consists of several firms that have a history of working together over the years as well as experience working on a variety of projects with the State Parks Section of the West Virginia Department of Natural Resources. Our experience has included new construction, renovations and repairs, additions and demolition. Our experience has included a number of pool projects, both new construction and renovations. Having team members with direct hands-on experience working on pools is an added benefit of the CAS Team.

Communication with the Owner and Park Staff during each phase of the project is also a critical part of the success of this project. The CAS Team members that are performing design functions are the same team members that will be participating in the construction phase of the project, reviewing submittals and reviewing construction activities. Prior to progressing to another phase of the project, the CAS Team will have the approval of the Owner on the direction of the project and the project budget.

The CAS Structural Engineering Team has been involved with a number of projects recently at Pipestem, Twin Falls and Hawks Nest State Parks, with the projects being completed within budget and with successful results. This team knows a wealth of information about the facilities at Pipestem, which should be considered an asset to the Owner. We believe that we have assembled a highly qualified team of engineers, architects and landscape architects that will provide the necessary experience for this important project.

This section of our submittal includes the CAS Team Qualifications and Experience relevant to this important project.





FIRM PROFILE

CAS Structural Engineering, Inc. – Founded in 2001, CAS Structural Engineering, Inc. is a **West Virginia Certified Disadvantaged Business Enterprise** structural engineering firm located in the Charleston, West Virginia area. As a **local engineering firm**, CAS Structural Engineering has easy access to the project location and is able to meet with the Owner whenever needed on short notice.

Providing structural engineering design and/or analysis on a variety of projects throughout the state of West Virginia, CAS Structural Engineering has experience in excess of 25 years on the following types of building and parking structures:

- Governmental Facilities (including Institutional and Educational Facilities)
- Industrial Facilities
- Commercial Facilities

Projects range from new design and construction, additions, renovation, adaptive reuse, repairs and historic preservation (including use of The Secretary of the Interior's Standards for Rehabilitation) to condition surveys/evaluation studies/reports and analysis.

CAS Structural Engineering utilizes AutoCAD for drawing production and Enercalc and RISA 2D and 3D engineering software programs for design and analysis. Structural systems designed and analyzed have included reinforced concrete, masonry, precast concrete, structural steel, light gauge steel and timber.

Carol A. Stevens, PE is the firm President and will be the individual responsible for, as well as reviewing, the structural engineering design work on every project. Carol has over 25 years of experience in the building structures field, working both here in West Virginia and in the York, Pennsylvania vicinity. Carol is also certified by the Structural Engineering Certification Board for experience in the field of structural engineering.

Carol A. Stevens, PE, F.ASCE

Structural Engineer



EDUCATION

West Virginia University, BSCE, 1984
Chi Epsilon National Civil Engineering Honorary
The Pennsylvania State University, ME Eng Sci, 1989

PROFESSIONAL REGISTRATION

P.E. 1990 Pennsylvania
P.E. 1991 West Virginia
P.E. 1994 Maryland
P.E. 2008 Ohio
P.E. 2010 Kentucky

BACKGROUND SUMMARY

2001 – Present President, Structural Engineer
CAS Structural Engineering, Inc.

1999 – 2001 Structural Engineer
Clingenpeel/McBrayer & Assoc, Inc.

1996 – 1999 Transportation Department Manager
Structural Engineer
Chapman Technical Group, Inc.

1995 – 1996 Structural Engineer
Alpha Associates, Inc.

1988 – 1995 Structural Department Manager
Structural Engineer
NuTec Design Associates, Inc.

1982 – 1988 Engineer
AAI Corporation, Inc.

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
National Society of Professional Engineers
American Concrete Institute
American Institute of Steel Construction
West Virginia University Department of Civil and
Environmental Engineering Advisory Committee Chair
West Virginia University Institute of Technology
Department of Civil Engineering Advisory Committee

CIVIC INVOLVEMENT

ASCE Christmas in April Project
Engineer's Week Speaker

RELEVANT EXPERIENCE

West Virginia, Twin Falls Resort State Park Lodge
Addition: Structural design for new 28,000 SF addition to existing facility, including new entrance lobby, conference areas, sleeping rooms and indoor pool.

West Virginia, Pipestem State Park Recreation Building:
Condition assessment of existing facility which includes the current outdoor pool, laundry and golf club house. Recommendations for repairs and/or partial demolition have been provided to the Owner.

West Virginia, McKeever Lodge at Pipestem State Park:
Current projects include complete fire alarm replacement and replacement of outdoor plaza above indoor pool shower/locker rooms, renovation of locker rooms, and structural repairs to columns and beams.

West Virginia, Hawks Nest State Park Lodge: Analysis of structural cracks in lodge building. Work included probes to determine condition of existing connections between structural elements. Subsequent projects have led to preparing construction documents for repairs with some repairs being completed.

West Virginia, Beech Fork State Park Pool, Bathhouse and Cabins: Designed structure for new bathhouse, swimming pool and cabins (while under the employ of Chapman Technical Group).

West Virginia, Moncove Lake State Park Pool: Designed structure for new swimming pool (while under the employ of Chapman Technical Group).

West Virginia, Canaan Valley Resort State Park: Structural investigation and recommendations for repairs to the five (5) existing overnight sleeping facilities.

West Virginia, Cabwaylingo State Forest: Structural evaluation of existing dormitory buildings constructed in the 1950's.

West Virginia, Shinnston Park: Structural design of new outdoor pool.

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A WEST VIRGINIA REGISTERED PROFESSIONAL ENGINEER • CERTIFIED IN THE PRACTICE OF STRUCTURAL ENGINEERING

WV OH PA MD VA NC SC GA

CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

*The West Virginia State Board of Registration for Professional Engineers
having verified the person in responsible charge is registered in
West Virginia as a professional engineer for the noted firm, hereby certifies*

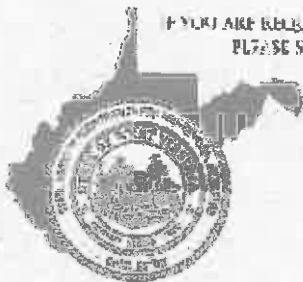
**CAS STRUCTURAL ENGINEERING, INC.
C01212-00**

Engineer in Responsible Charge: CAROL STEVENS - WV PE 011291

*has complied with section §20-13-17 of the West Virginia Code governing
the issuance of a Certificate of Authorization. The Board hereby notifies you of its
certification with issuance of this Certificate of Authorization for the period of:*

July 1, 2015 - December 31, 2015

provided for the practice of engineering services in the State of West Virginia.



IF YOU ARE REQUESTED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE,
PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.

IN TESTIMONY WHEREOF THE WEST VIRGINIA STATE BOARD OF
REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS OGA
UNDER ITS SEAL AND SIGNED BY THE PRESIDENT OF SAID BOARD.

[Signature]

BOARD PRESIDENT



**West Virginia State Board of Registration
for Professional Engineers**

CAROL A. STEVENS
[Redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the
requirements of the law, is duly registered and is entitled to practice engineering
in the State of West Virginia.

EXPIRES December 31, 2016

BEECH FORK STATE PARK POOL AND BATHHOUSE

Barboursville, West Virginia



**Project Owner: West Virginia Division
of Natural Resources**

Contact Person: Brad Leslie, PE

Contact Phone: (304) 558-2764

**A new pool was part of the design for the project,
which also included several cabins.**



The project included design of a new bathhouse to serve the new pool.



**Designed While Employed by
Chapman Technical Group**

MONCOVE LAKE STATE PARK POOL

White Sulphur Springs, West Virginia



A new pool was designed for the park that is located in White Sulphur Springs.

**Project Owner: West Virginia Division
of Natural Resources
Contact Person: Brad Leslie, PE
Contact Phone: (304) 558-2764**



**Designed While Employed by
Chapman Technical Group**

TWIN FALLS STATE PARK LODGE AND POOL ADDITION

Mullens, West Virginia



Performed structural design for new 28,000 SF addition to existing lodge facility. Addition includes new lobby and conference areas, sleeping rooms, indoor pool facility and all support spaces.

Construction materials consisted of timber, concrete, masonry, pre-cast plank and structural steel.



Project Owner: West Virginia Division of Natural Resources

Contact Person: Brad Leslie, PE

Contact Phone: (304) 558-2764



STRUCTURAL INVESTIGATION PIPESTEM STATE PARK RECREATION BUILDING

Pipestem, West Virginia



The pool deck is supported by this structure, thus the severe deterioration due to leaking joints in the deck. Once the decking is repaired, a new coating system must be installed to prevent chemically treated water from deteriorating the structural members.



A steel pipe column was added below the bearing end of this beam due to the severe deterioration at the end of the beam.



Project includes investigation into causes of structural cracking in existing recreation building and preparing a construction cost estimate for repairs.

Project Owner: West Virginia Division
of Natural Resources

Contact Person: Brad Leslie, PE

Contact Phone: (304) 558-2764



STAIR TOWER #4 STRUCTURAL REPAIRS HAWKS NEST STATE PARK LODGE

Ansted, West Virginia



Project included structural repairs to masonry wall . An expansion joint was placed in the roof but never in the wall, resulting in a crack in the wall below the joint in the roof.



An expansion joint was cut completely through the exterior wall, an angle was installed in the corners of the stair tower and reinforcing steel and grout were installed to reinforce the walls.

Project Owner: West Virginia Division
of Natural Resources

Contact Person: Brad Leslie, PE

Contact Phone: (304) 558-2764





**Chapman
Technical
Group**
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GRW

COMPANY OVERVIEW



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 providing high-quality design projects, while meeting client schedules and budgets and have received numerous awards for our work. In late 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. We are a full-service consulting firm with offices in St. Albans, Buckhannon, and Martinsburg, West Virginia offering an extensive range of professional services.



Chapman Technical Group offers a broad range of professional services.

- Airport Design
- Architecture
- Civil Engineering
- Interior Design
- Landscape Architecture
- Recreational Facilities
- Roads, Highways, & Bridges
- Site Development
- Space Planning
- Surveying
- Water & Wastewater Systems
- Geospatial

AWARDS



- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS - HONOR AWARD FOR EXCELLENCE IN PLANNING & DESIGN PROJECTS, 2012 - Upper Big Branch Miners Memorial.
- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS - MERIT AWARD FOR EXCELLENCE IN PLANNING & DESIGN PROJECTS , 2012 - Nuttallburg Mine Complex.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2012, Gold Award - Water & Wastewater Category for the Corporation of Shepherdstown Wastewater Treatment Plant Project.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2012, Gold Award - Transportation Category for the Appalachian Regional Airport Project, Mingo County.
- WINNER - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 2013, Large Roadway Category for WV10 Rum Creek to Stollings; 2013, Small Roadway Category for Corridor H Paving WV 42/93 Interchange to 2.8 miles east WV 42/93; 2011, Large Roadway Category for WV10 North Davy Branch to Rum Creek; 2000: Large Bridge Category for WV10 Buffalo Creek Bridge, Logan County, West Virginia.
- WV CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS - MERIT AWARD FOR EXCELLENCE IN ARCHITECTURE, 2009 - Interstate 79 Rest Areas.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2009, Gold Award - Special Projects Category for the Mercer County Airport Runway Safety Area Project
- AMERICAN SOCIETY OF CIVIL ENGINEERS, 2009, National Superior Employer in the Private Sector Award.
- WV CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS - HONORAWARDFOR EXCELLENCE IN ARCHITECTURE, 2008 - Upshur County Courthouse Restoration and Renovations.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2008, Bronze Award - Wastewater Category for the Spring Run State Fish Hatchery Improvements
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2007, Silver Award - Structures Category for the Mercer County Airport Runway Safety Area Project.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2003, Gold Award - Water Treatment Category for the City of Fairmont Water Treatment Plant Project.
- FINALIST - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 1999: Large Roadway Category for WV10 Buffalo Creek-Taplin Project; 2000: WV10 Buffalo Creek-Huff Junction Project, both in Logan County, West Virginia.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 1999, Silver Award - Water and Wastewater Category, for the City of Beckley Piney Creek Wastewater Treatment Plant Project.
- ENTREPRENEUR OF THE YEAR AWARD - FINALIST, 1999 and 2000, Sharon L. Chapman, President, was named one of twenty finalists in the West Virginia Area Entrepreneur of the Year Award. Sharon was recognized for leading Chapman Technical Group to become one of the most highly regarded engineering firms in the state after the death of her husband and company founder, Harvey R. Chapman.
- "EXPECT THE BEST FROM WEST VIRGINIA AWARD", 1998, Charleston Regional Chamber of Commerce.
- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS - HONORAWARD, 1994, Shrewsbury Street Area Redevelopment Plan, for excellence in planning and design projects. Joseph E. Bird, ASLA, Project Manager.
- "GOVERNOR'S AWARD FOR ENGINEERING EXCELLENCE", 1990, The West Virginia Chapter of the American Public Works Association, in recognition of outstanding Public Works Engineering and Design of Projects within West Virginia.
- "GEORGE WARREN FULLER AWARD", Harvey R. Chapman, P.E., 1984, Robert G. Belcher, P.E., 2001, and Sharon L. Chapman, 2005, American Water Works Association, for distinguished service in the water supply field in the State of West Virginia.

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.

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)

Roger J. Kennedy, ASLA

Landscape Architect

Project Manager



Years of Experience: 26
Years with Chapman: 25

Education

B.S., Landscape Architecture,
1990, West Virginia University

Registration

Landscape Architect: WV, KY

Affiliations

Trustee, WV Chapter,
American Society of
Landscape Architects
President, St. Albans Rotary Club
Member, Sigma Lambda Alpha Honor
Society of Landscape Architects

Qualifications

Site Development

Responsibilities include grading design, site planning and layout, analysis of existing features and services, storm water design and management, erosion control, as well as project management. Projects include prisons, landfills, military complexes, banks, airports, subdivisions, gas stations and other public facilities.

Bridge and Highway

Responsibilities include the design of horizontal and vertical road alignments, superelevation design, intersection layout, slope design and quality control review. Projects include several multi-lane highways and bridges throughout West Virginia.

Miscellaneous

Other experience includes the use of various civil design software packages for use in site development and road design, digital terrain modeling, hydraulic analysis and related computer aided design tools. Additional responsibilities include the development and management of the computing resources of the company. This includes the management of software and hardware inventories, as well as the development and management of all local area networks in each office and the wide area network which links them.

Robert D. Dinsmore, PLA, ASLA

Landscape Architect, Project Designer



Years of Experience: 5
Years with Chapman: 5

Education

B.S., Landscape Architecture,
2010, West Virginia University

Registration

Landscape Architect: WV, KY, IN

Affiliations

WV Chapter, American Society of
Landscape Architects Director
Sigma Lambda Alpha Landscape
Architecture Honorary WVU President
G.E.R.M.A.N. Club of Virginia Tech
Sunnyside Up Campus Neighborhoods
Revitalization Corporation Volunteer

Awards

Honor Award, WV ASLA
Design Excellence

Merit Award, WV ASLA,
Design Excellence

Outstanding Senior
Honor Award, ASLA Student

Qualifications

Site Design and Land Development

A landscape architect with a creative thought process and an eye for problem solving spatial design relating to master planning, parks and recreational design, and urban design and streetscapes. Project tasks include site inventory and analysis; design development; construction document production; and 3d Modeling and presentation graphic production.

Recreation Design and Master Planning

Developed master plans and designs for various athletic and recreational facilities projects. Focusing on delivering on the goals and objectives of the client, while establishing the optimum functional relationships and circulation patterns.

Landscape Design

Designed and Installed numerous landscape plans for high-end residential and resort projects through out Florida and the Bahamas.

Projects Include

Upper Big Branch Miners Memorial
(Whitesville, WV)

Nuttallburg Mine Complex Trails
(New River Gorge, WV)

Teays Acres Master Plan
(Putnam County, WV)

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

Anderson Athletic Complex Master Plan
(Anderson, IN)

Frankfort Plant Board Administration Building Site
Design
(Frankfort, KY)

WV Dept. of Highways District 1 Master Plan
(Charleston, WV)

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.





Firm Profile

Our engineered solutions involve a detailed assessment process: investigation, observation, communication with stakeholders, system analysis, building modeling and engagement from our entire team. We approach each and every project with this process and the guiding principle that buildings are designed to be livable and function in their intended purpose.

Over the past 13 years Miller Engineering, Inc. (MEI) has engineered solutions for over \$17.2M in mechanical system upgrades, repairs and renovations for projects of all scopes and sizes, with clients ranging from private owners to local and state governments.

With a strict attention to detail and commitment to delivering a job done well and done right the first time, every time, MEI has accumulated a change order percentage of less than 0.1% over the past 8 years.

Our team has unique skill-sets regarding engineered renovation solutions. Each member of the team has hands-on mechanical system experience including installation, construction, design and maintenance.

*Miller Engineering takes pride in being **different by design**, and that difference shines through in all phases of our work and continued relationships with our clients.*

Additional Benefits

- Experienced and Licensed Professional Engineers
- Quality, Value-Engineered Project Delivery
- Qualified Construction Representative on Staff
 - LEED-AP Certified
- Below Industry Change Order Status
- Building Information Modeling
- Interactive Solutions Provider
- Emergency Facility Response



Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction

Aquatic Facility Design

- Public Pools & Areas
- ADA Compliance
- Indoor & Outdoor (air flow)
- Chlorination/Filteration

Construction Administration

- Maintenance/Facility Improvement Plans
- Contract Administration
- Code Observation

Communication System

- Intercomm & Public Address
- Voice/Data/CATV
- Urgent Response

Energy

- Power Supply (main & backup)
- Green & Renewable Consulting
- Systems Utilization & Upgrades
- Sustainable Solutions

Facility Utilization

- Systems Assessment & Solutions
- Adaptive Re-use
- Planning/Life-Cycle Control
- Engineered Replacement

Life Safety Inspection/Design

- Fire Protection & Alarm Systems
- Access Control
- Fire & Electrical Investigation

Industry Experience

- Education
- Local & State Government
- Commercial Development
- Healthcare
- Public Pools (indoor & outdoor)
- Department of Parks & Recreation



B. Craig Miller, PE

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 25 years experience in pool design, specification, operations and project management. He specializes in retrofits and upgrades to existing systems and what he terms “operational engineering”: implementing changes to, while maintaining, the operational requirements of a facility or system. He has worked extensively in multiple environments, most notably in educational, city and state park settings. Craig is well served by his several years spent as a systems mechanic performing various trades work prior to obtaining his engineering education. His trades work gives him a distinctive “hands on” approach to engineering application and design. One of Craig’s specialties through the years has been swimming pools and aquatic facilities. Craig has helped build, repair, maintain and operate pools in some form or fashion since 1983, and has continued to work in the industry designing the repair and replacement of pools throughout West Virginia and Pennsylvania.

Project Role: Relationship Manager – Primary Point of Contact

- *Primary Pool Specialist*
- *Engineer in Responsible Charge*
- *Design and Project Management of Mechanical, Electrical, Plumbing Projects*
- *Concept and Construction Design*
- *Business Operations and Financial Management Oversight*
- *Quality Assurance and Control*

Professional Project Highlights

- *Bluestone State Park Pool Replacement*
- *City of Grafton Pool Repairs and Wading Pool Replacement*
- *Greenbrier State Park Pool and Filtration System Replacement*
- *Hundred Pool Renovation and Filtration System Replacement*
- *Moorefield City Pool Repair*
- *Tomlinson Run State Park Pool Repair*

Professional History

2003- Present	Miller Engineering, Inc.	President, Relationship Manager
2002-2003	Casto Technical Services	Existing Building Services Staff Engineer
2001-2002	Uniontown Hospital	Supervisor of Engineering
1995-2001	West Virginia University	Staff Engineer
1990-1995	BOPARC	Caretaker – Krepps Park
1983-1988	University of Charleston	Electrician/HVAC Mechanic

Education

1995	West Virginia University	BS- Mechanical Engineering
1988	University of Charleston	BA- Mass Communications

Licenses and Certifications

- Professional Engineer (West Virginia, Pennsylvania, Maryland, and Ohio)
- Licensed Master Plumber
- LEED-AP Certified



Travis Taylor, PE

Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. As lead engineer he provides HVAC, mechanical, plumbing and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both

planning and MEP design through construction administration.

Project Role: Lead MEP Engineer

- *Design of Mechanical, Electrical, and Plumbing Systems*
- *Constructible Materials Evaluation*
- *Site Evaluation and Mechanical System Review*
- *Submittal and RFP Review*
- *RFI Coordination, Review, and Response*
- *Construction Observation*

Professional Project Highlights

- *Krepps Park ADA Upgrades*
- *Holly River State Park Primary Electric Service Replacements Phase I & II*
- *Beech Fork State Park Lodge Design Development*
- *Pipestem Lodge McKeever Lodge HVAC Piping Replacement*
- *WV Veterans Memorial Restoration*
- *Bobtown Elementary School HVAC Upgrades*

Professional History

2011-Present	Miller Engineering, Inc.	Staff Engineer
2006-2011	Tri-County Electric, Co.	Project Manager
2006-2006	Schlumberger	Field Engineer Trainee - MWD

Education

2006 West Virginia University, BS – Mechanical Engineering

Licenses and Certifications

- *Professional Engineer - State of West Virginia*
- *OSHA 10-hour Course: Construction Safety & Health*



Jack Jamison

Jack brings 15 years as an electrical/building inspector and over 25 years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller's complete assessment process.

Project Role: Code and Construction Specialist

- Facility Review, Code Research, and Project Evaluation
- Field Observations and Issue Resolutions

Professional Project Highlights

- Board Member of the WV Code Officials
- Founder and Secretary of the West Virginia Division of the International Association of Electrical Inspectors
- IAEI Ohio Chapter – Membership Chair

Professional History

2010- Present	Miller Engineering, Inc.	Code and Construction Specialist
1999-2010	Megco Inspections	Chief Inspector
1972-1998	Jamison Electrical Construction	Master Electrician

Education

1971 Fairmont State College, BS-Engineering Technology-Electronics

Licenses and Certifications

- Master Code Professional, IAEI Master Electrical Inspector, Class C Electrical Inspector – WV, PA, MD, & OH
- ICC Commercial Building, Building Plans, Commercial Plumbing, Residential Energy, and Accessibility Inspector/Examiner
- WV Master Electricians License
- NCPCCI-2B, 2C, 4B, 4C: Electrical & Mechanical General/Plan Review
- OSHA 30 Hour Course: General Industry
- NFPA Code Making Panel 14 – NEC 2014 Edition



Joseph Machnik

Joe has experience with AutoCAD, MEP and Revit MEP. He provides design modeling, drafting and supervised design services and construction support for Miller Engineering.

Project Role: MEP Designer

Revit/CADD Coordination of New Construction and Renovation Designs

Professional History

2010 – Present Miller Engineering, Inc. MEP Designer

Education

2008 Penn State – Fayette, AS - Building Engineering Systems Technology: *Building Environmental Systems Technology*
 2007 Penn State – Fayette, AS - Building Engineering Systems Technology: *Architectural Engineering Technology*



Robert Angus

20 Years of maintenance, operations, and construction management precede Rob's engagement with Miller Engineering. Professional expertise of construction project management was gained as an owner of his own contracting company specializing in residential and commercial construction, electrical, plumbing, and HVAC projects. Rob's hands-on approach, common sense and valuable work history knowledge enables him to interface with construction personnel seamlessly alongside engineers and architects. With over 10 years of operational experience in pools and water features, he is adept at preventing and handling issues commonly associated with similar projects. Rob is involved at the estimation phase to allow for continuity within the project's design and construction.

Project Role: Construction Project Representative/Estimator

- *Construction Project Representation and Management*
- *Project Cost Estimation*
- *Submittal Review*
- *RFI, RFPCO Review and Response*

Professional Project Highlights

- *Bluestone State Park Pool Replacement*
- *City of Grafton Pool Repairs and Wading Pool Replacement*
- *Greenbrier State Park Pool and Filtration System Replacement*
- *Hundred Pool Renovation and Filtration System Replacement*
- *Moorefield City Pool Repair*
- *Tomlinson Run State Park Pool Repair*

Professional History

2009- Present	Miller Engineering, Inc.	Aquatic Construction Representative
2000-2009	Angus Contracting, LLC	Owner/Operator
1991-2000	BOPARC	Director of Maintenance

Education

2000	Monongalia County Technical Education Center	Heating, Cooling, and Refrigeration Certification
1996	West Virginia University	Recreation and Parks Administration

Licenses and Certifications

- Licensed West Virginia General Contractor
- Licensed West Virginia HVAC Contractor
- Certified HVAC Mechanic Contractor
- Licensed West Virginia Journeyman Electrician
- Licensed West Virginia Master Plumber
- OSHA 10-Hour Construction Safety & Health

Descriptions of Past Projects Completed – Pool Replacement

Greenbrier State Park

Eastern, WV

Services Provided:

- Aquatic Design
- Plumbing
- Electrical

Estimated Budget: \$760K

Facility Area: 5,500 ft²

Owner: West Virginia Division of Natural Resources



A field study and assessment determined that several plumbing and mechanical systems were inadequate and needed more efficient, code-compliant replacement. The goal of the project was to efficiently use existing piping tunnels that were in good condition and place a new basin within the existing one in order to meet budget demands. The innovative isolation method saved on excavation cost and construction time. New filtration and heating systems were designed for the wading pool and an attractive aquatic design element was also added to increase water movement. The filtration and heating systems were sized and configured not just for the existing pool but also to accommodate a larger pool renovation that was planned during our design process and implemented the following year.

High-rate fiberglass sand filters provide circulation and filtration of the pool water.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
(304) 558-2764 ext. 51826*

Descriptions of Past Projects Completed – Pool Replacement

Bluestone State Park

Hinton, WV

Services Provided:

- Aquatic Design
- Plumbing
- Electrical

Estimated Budget: \$1M

Facility Area: 56,000 ft²

**Owner: West Virginia
Division of Natural
Resources**



The pool at Bluestone resides within the flood plain of Bluestone Lake and special consideration was required to actually allow the pool basin, if empty at the time, to flood to prevent it from “floating” should the lake level reach the pool.

To our knowledge, the approach selected has never been utilized in the area before and was of our own design. The pool had experienced total basin failure and could not be filled completely during its last few weeks of operation in 2011.

The project replaced the entire basin, wading pool and all equipment but the main pool filters.

The beach area, which had been described as “prison like” due to concrete retaining walls, was reconfigured to increase sunbathing area. The wading pool incorporated a mountain fountain that was outside the pool with arched spray bars. An addition to the existing bathhouse gave a place for the wading pool equipment to reside.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
(304) 558-2764 ext. 51826*

Descriptions of Past Projects Completed – Pool Repairs

City of Grafton

Grafton, WV

Services Provided:

- Mechanical
- Plumbing
- Pool Systems

Estimated Budget: \$70k

Facility Area: 4,500 ft²

Owner: City of Grafton



The project included a complete re-design of the filter room equipment serving the existing main pool. The wading or “baby” pool was in poor condition, disliked by the public and suffering from chemistry problems due to poor circulation. Miller Engineering worked with the owner to upgrade the filtration system and install a chemical feed system on the main swimming pool. Miller Engineering, Inc. (MEI) designed a new wading pool which is zero grade entry, incorporates a water-spray feature and increases the play area of the pool. The redesigned wading pool now includes a castle with an interactive waterfall, as well as a new filtration system and chemical feed system which are located in a pump-house addition. MEI provided plans and construction guidance to permit the city to construct the new pool and associated pump-house using city workers, allowing substantial savings to the city.

Project Contact:
Busty Webber, Director of Public Works
Grafton, West Virginia
(304) 265-1234

Descriptions of Past Projects Completed – Pool Repair

Tomlinson Run State Park

New Manchester, WV

Services Provided:

- Mechanical
- Plumbing
- Pool Systems

Estimated Budget: \$850k

Facility Area: 15,000 ft²

Owner: West Virginia Division
of Natural Resources



The existing pool was constructed in approximately 1980 by a local pool contractor. The owner indicated they were experiencing significant leaking and could not determine the precise cause. Additionally, the pool was experiencing significant cracking at the tops of the pool walls. The water slide was reportedly difficult to keep in operation due to various maintenance issues. The pool also had a rather unique CMU (concrete block) and tension rod wall configuration which was evaluated for the potential to perform an extensive repair. As part of the repair, the owner wished to significantly alter the depth profile of the pool and make the pool ADA accessible. The repair also included the installation of a new filtration system, gutter system, PVC liner and addressed several longer term maintenance concerns.

Project Contact:

Brad Leslie, PE

WVDNR Parks and Recreation

(304) 558-2764 ext. 51826



PROJECT APPROACH

Working as a team with CAS Structural Engineering as the lead consultant, the CAS Team will meet with the Owner and Park Staff to evaluate possible locations for the new pool and support facilities. Communication between all entities involved with this project is paramount to obtaining a successful project.

We will also be involved with the following phases during the course of this project, each described in detail below.

Review of Existing Conditions:

Our team will perform a comprehensive visual condition assessment of the existing Recreation Building that houses the outdoor pool, laundry facility and golf pro shop. Part of this project includes demolition of a portion of this structure. Careful evaluation of the architectural, structural and MEP components of the facility will be necessary to ensure the integrity of the structure as well as the infrastructure or utilities. Recommendations for portions to be demolished vs portions to remain will be discussed with the Owner.

Review of Existing Plans and Specifications:

The CAS Team will review any existing plans and specifications for the existing recreation building as well as utilities within the park. Water and power service will be important to coordinate with the proposed location of the new pool and bathhouse as well as any demolition of the existing recreation building.

Conduct Meetings with WVDNR Engineering and Park Staff:

During meetings conducted with WVDNR Engineering and Park Staff, work to obtain any additional information related to work that has been completed but possibly not documented.

Prepare Schematic Design Drawings:

Based on the conditions observed while on site, review of the existing documents, and the results of meetings as discussed above, the CAS Team will prepare Schematic Design Drawings for review with the Owner. A preliminary construction budget will also be developed and presented during this phase of the project.

Prepare Preliminary Design Drawings and Specifications:

Following approval of the Schematic Design Drawings, the CAS Team will continue with the development of the drawings and specifications and present them with an updated construction budget to the Owner.

Prepare Construction Documents:

During this phase of the project, drawings and specifications for construction, including the demolition of a portion of the recreation building, will be completed and submitted to the Owner. The CAS Team will also update the construction budget for the Owner's use.

Bidding:

The CAS Team will attend the Pre-Bid meeting. During this phase, we will answer any questions that pertain to the construction documents and assist the Owner with the bid evaluation after the receipt of pricing.

Construction Administration:

During the construction phase of the project, we will participate in periodic progress meetings as needed at the site to evaluate the progress and report to the Owner. Additionally, CAS will review all pay applications, the CAS Team will review shop drawings, product submittals, and the remediation of any systems. Foremost, the CAS Team can evaluate and answer contractor questions, create solutions and adjust the work to overcome any "found" conditions, which are inevitable in demolition and renovation projects. The same individuals that were key in developing the construction documents will perform the construction administration functions. We will also assist the Owner in project close-out.

Pipestem State Park Outdoor Pool Replacement

DNR 1600000007

CAS Project Team Organization Chart



West Virginia
Department of
Natural Resources

CAS Structural Engineering
Carol A. Stevens, PE
Project Manager
Structural Engineer

Chapman Technical Group

Joseph E. Bird, ASLA
Vice President
Project Officer

W. Thomas Cloer, III
NCARB, AIA
Project Architect

Roger J. Kennedy, ASLA
Landscape Architect
Project Manager

Robert D. Dinsmore, PLA, ASLA
Landscape Architect
Project Designer

Stephen M. Johnson, PE
Civil/Environmental
Group Manager



**Chapman
Technical
Group**
a division of
GRW



Miller Engineering, Inc

B. Craig Miller PE, LEED-AP
Relationship Manager
President

Travis Taylor, PE
Staff Engineer

Joseph Machnik
MEP Designer

Jack Jaminson
Code Professional
Electrical Designer

Robert Angus
Construction Project
Representative



REFERENCES

1. **Mr. Robert P. Krause, PE, AIA**
State of West Virginia, General Services Division
Building 1, Room MB60
Charleston, WV 25305
(304) 957-7143
Robert.P.Krause@wv.gov

2. **Mr. Timothy Lee**
Former Director, Plant Operations and Security at Thomas Memorial Hospital
Former Project Manager at State of WV, General Services Division
(304) 372-3047/(304) 532-3569
leewebwv2@gmail.com

3. **Mr. William S. Kostelic**
Environmental Historic Preservation Advisor
FEMA HQ
500 C Street SW
Washington, DC 20472
(202) 304-7731

4. **Mr. William "Willie" Parker**
County Administrator
Harrison County Commission
301 W. Main Street
Clarksburg, WV 26301
(304) 624-8500

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 exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that 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:

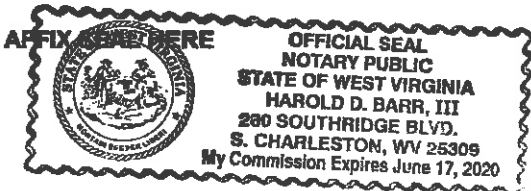
Vendor's Name: CAS Structural Engineering, Inc.
Authorized Signature: Carola Stewart Date: 11/9/15

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 9th day of November, 2015.

My Commission expires June 17, 2020, 2020.



NOTARY PUBLIC [Signature]

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

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

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

Addendum Numbers Received:
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input 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 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.

CAS Structural Engineering, Inc.
Company

Carol Stevens
Authorized Signature

11/17/15
Date

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

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained 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.

CAS Structural Engineering, Inc.
(Company)

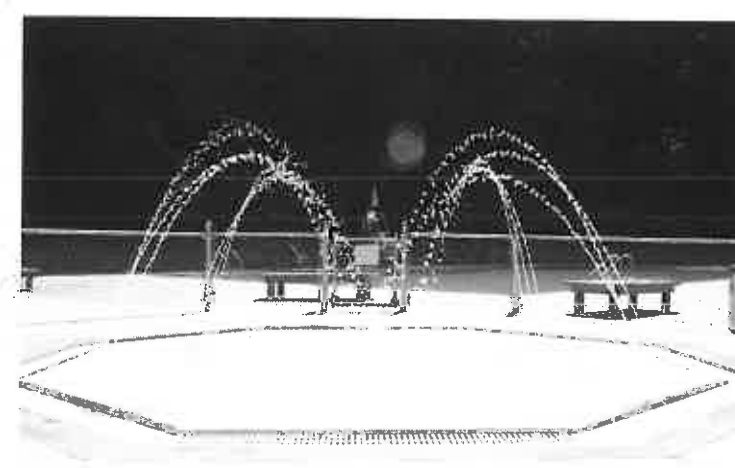
Carol A. Stevens Carol A. Stevens, PE, President
(Authorized Signature) (Representative Name, Title)

(304) 756-7564 / (304) 756-7565 / Nov. 17, 2015
(Phone Number) (Fax Number) (Date)



Laurel Lake Swimming Pool Mingo County, West Virginia

The West Virginia Division of Natural Resources swimming pool at the Laurel Lake Wildlife Management Area near Lenore, West Virginia had fallen into serious disrepair and had actually closed down. Chapman Technical Group designed a rehabilitation of the pool that included a new stainless steel gutter recirculation system, a membrane liner, a new interactive wading pool, and new concrete decks. After the demolition of the old bathhouse, a new bathhouse was built which also houses the filtration equipment for the wading pool. The project was completed in 2010 at a cost of \$714,000.





Beech Fork State Park Swimming Pool and Bathhouse Wayne County, West Virginia

Chapman Technical Group designed \$4.5 million worth of improvements at the state park near Barboursville including a 50-meter swimming pool, bathhouse, six modern cabins, and campground upgrades. The pool and bathhouse were constructed on 12 feet of fill, carefully designed by our landscape architects to blend naturally with the surrounding terrain. The project also included a one-half mile access road to the cabins, as well as storm water management for the entire project.





Canaan Valley Resort Ski Area Improvements Canaan Valley, West Virginia

Chapman Technical Group led a team of specialists in the development of a wide range of improvements at the ski area of Canaan Valley Resort State Park.

A new tubing park features a 10-lane tube run in excess of 800 feet long with a vertical drop of 90 feet. A new boardwalk conveyor carries tubers back up the hill and at the base, a tubing lodge includes a wood-burning fireplace, rest rooms, and a concession stand for hot drinks, and an outdoor patio. In the same area, a wobble clay shooting range will be used as a seasonal activity.

Another major improvement is the new beginners slope and ski school area. This new slope will be easily accessible by beginning skiers and includes snow guns and lighting for night skiing. A boardwalk conveyor carries skiers back to the head of the slope.

The original ski lodge buildings received a much-needed face lift, including new wall and floor finishes, new furnishings, new lighting and upgrades to the heating and ventilation systems. Outside, a new plaza with a fire pit provides more options for outdoor seating. Important infrastructure improvements include upgrades and major maintenance to the existing ski lifts; snow-making waterline repairs and upgrades; new snow guns; and major storm drainage improvements. A new waterline from the Canaan Valley golf course ponds provides expanded snow-making capabilities.

