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

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder: 1853967 **Doc Description:** A&E - Calvin Price State Forest Storage Building **Proc Type:** Central Purchase Order			**Reason for Modification:**
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2025-12-09	2026-01-08 13:30	CEOI 0310 DNR2600000004	1

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VENDOR

Vendor Customer Code:

Vendor Name : ZMM Architects and Engineers

Address : 222 Lee Street West

Street :

City : Charleston

State : WV **Country :** Kanawha **Zip :** 25302

Principal Contact : Adam Krason

Vendor Contact Phone: 304.342.0159 **Extension:** 234

FOR INFORMATION CONTACT THE BUYER
Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X AG RK **FEIN#** 550676608 **DATE** 1.8.26

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

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

(Printed Name and Title) Adam Krason, Principal

(Address) 222 Lee Street West

(Phone Number) / (Fax Number) 304.342.0159 304.345.8144

(email address) ark@zmm.com

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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise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

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

ZMM Architects and Engineers

(Company)

AC RK

(Signature of Authorized Representative)

Adam Krason, Principal

(Printed Name and Title of Authorized Representative) (Date)

304.342.0159 304.345.8144

(Phone Number) (Fax Number)

ark@zmm.com

(Email Address)

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)

- ☐ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5
- ☐ Addendum No. 6
- ☐ Addendum No. 7
- ☐ Addendum No. 8
- ☐ Addendum No. 9
- ☐ 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.

ZMM Architects and Engineers

Company

Authorized Signature

January 8, 2025

Date

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

ZMM
ARCHITECTS
ENGINEERS

EXPRESSION OF INTEREST

To Provide Professional
Architecture/Engineering Services

CALVIN PRICE STATE FOREST STORAGE BUILDING

DNR2600000004
January 7, 2026

ZMM.COM

January 6, 2026

Joseph (Josh) E. Hager III, Buyer Supervisor
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305

ZMM
ARCHITECTS
ENGINEERS

Subject: Architectural/Engineering Services for Calvin Price State Forest Storage Building (DNR2600000004)

Mr. Hager:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and qualifications to provide professional architectural and engineering services for the design and construction administration of a 40 FT x 60 FT steel building that will be utilized as a heavy equipment maintenance and storage facility located within Calvin Price State Forest in Pocahontas County. It is our understanding that this project includes a geotechnical investigation to identify soil properties and design a foundation capable of supporting WVDNR equipment on a cleared and rough-graded site, with careful attention to bearing capacity and stability given existing subsurface conditions. The project will include grading and the design of utilities to include power, water, and waste management and the plans must include stormwater runoff and erosion/sediment control.

ZMM has extensive experience working with the State of West Virginia, including projects for the WV Division of Natural Resources such as the Claudia L. Workman Wildlife Education Center at Forks of Coal State Natural Area, renovations to the McKeever and Mountain Creek Lodges at Pipestem State Park, the Tomblin WMA project, the proposed cabins at Beech Fork State Park, and the award-winning design of the Stargazing Cabins at Coopers Rock State Forest. ZMM's commitment to design quality has been recognized by the American Institute of Architects West Virginia Chapter with 27 design awards since 2005 – an achievement that is unrivaled in West Virginia.

Additionally, we have significant experience designing pre-engineered metal buildings for various State of West Virginia agencies including a new State of West Virginia Surplus Property Division project in Dunbar. This project included multiple site improvements, including demolition, paving, and utilities, as well as multiple structures for exterior storage, warehousing, and offices. The project also required that the Surplus Property campus remain operational throughout the construction process. ZMM has also designed pre-engineered metal buildings for multiple local development authorities, boards of education, the West Virginia Army National Guard, the West Virginia Department of Highways/Division of Transportation, the West Virginia Parkways Authority, and for the West Virginia Division of Natural Resources at the Tomblin Wildlife Management Area.

We have supported many projects for the State of West Virginia General Services Division, WV Army National Guard, WV Lottery, as well as many other state agencies and other governmental entities. We are hopeful that you observed our commitment to design quality, budget and schedule control, and client service demonstrated on past projects.

With a team of more than 70 professionals, ZMM provides all building-related design services in-house, including architecture, engineering (structural, mechanical, civil, and electrical), interior design, and construction administration. ZMM engineers are industry leaders involved in developing strategies and best practices for design issues on local and national levels. Our team of professionals is built around designing and improving facilities across the state. If selected for this project, we would partner with Terracon for the geotechnical investigation. They are exceptional collaborators with whom we work regularly on these types of projects and have the experience and expertise to support the geotechnical investigation.

ZMM has a proven record of delivering projects on time and within budget by clearly defining scope, developing cost-effective design solutions, and validating construction costs through independent estimates. We work closely with our clients to ensure budgets and schedules reflect current market conditions, helping each project move forward efficiently and successfully.

Thank you for taking the time to review the attached expression of interest that includes information about our team, our proposed approach for the heavy equipment maintenance and storage facility located within Calvin Price State Forest, as well as ZMM's qualifications, and relevant project experience. Please visit our website at zmm.com to see the full range of projects that we have designed and Terracon's website at terracon.com to learn more about their geotechnical experience.

We take great pride in our resume, and we are confident that we are the most qualified team to deliver professional design services for this project. We appreciate your consideration and look forward to the opportunity to continue working with the WV Division of Natural Resources.

Respectfully submitted,
ZMM Architects and Engineers

Adam R. Krason, AIA, NCARB, LEED-AP
Principal

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FIRM PROFILES

ABOUT
ZMM ARCHITECTS AND ENGINEERS

ZMM was founded in 1959 in Charleston, West Virginia by Ray Zando, Ken Martin, and Monty Milstead. Since the inception of the firm, ZMM has been dedicated to providing an integrated approach to building design for our clients.

ZMM delivers this integrated approach by providing all building-related design services, including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration with our in-house team. Our integrated design approach makes ZMM unique among architecture/engineering firms, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.

ZMM has maintained a diverse portfolio since the founding of the firm. Early commissions included higher education projects for West Virginia University and Concord College, WV State Capitol Complex Buildings 5, 6, & 7, and armories for the West Virginia Army National Guard.

Maintaining a diverse practice for more than 60 years has provided ZMM with extensive experience in a variety of building types, including educational facilities, governmental facilities (military, justice, correctional), healthcare facilities, recreation facilities, commercial office space, light industrial facilities, and multi-unit residential buildings.

The original partners transferred ownership of the firm to Robert Doeffinger, PE and Steve Branner in 1986. Mr. Doeffinger and Mr. Branner helped guide and expand the firm to 35 staff. David Ferguson, AIA, and Adam Krason, AIA, LEED-AP joined in ownership of the firm 20 years ago. Randy Jones joined the firm in a leadership role when ZMM acquired Blacksburg-based OWPR Architects & Engineers in 2020 to create a regional design firm that employs more than 70 highly-skilled professionals.

ZMM has become a leader in sustainable / energy-efficient design, and a trusted resource on complex renovation projects. ZMM's unique renovation project approach and ability to

ZMM ARCHITECTS ENGINEERS

About ZMM Architects and Engineers (cont.)

provide comprehensive design services has also led the firm to be selected to improve landmark buildings, including the Charleston Coliseum & Convention Center, the Clay Center for the Arts and Sciences, the West Virginia Culture Center, and the West Virginia State Capitol Building. Additional significant projects designed by the firm include the Explorer Academy (Cabell County Schools), the Logan-Mingo Readiness Center, the Manassas Park Community Center and Natatorium, the design of the Fourth High School (Frederick County Public Schools), the new Harrington Waddell Elementary School (Lexington City Schools), CAMC Teays Valley ICU, and Ridgeview Elementary School (Raleigh County Schools). ZMM has also provided design services on more than 300 school projects throughout the region.

ZMM's building-related design services include the following.

Pre-Design

- Educational Facility Planning
- Existing Building Evaluation
- Space Planning
- Master Planning
- Programming
- Feasibility Studies
- Site Evaluation and Analysis
- Construction Cost Estimating

Design

- Architectural Design
- Interior Design
- Lighting Design
- Sustainable Design
- Landscape Architecture

Engineering

- Civil Engineering
- Mechanical Engineering
- Energy Consumption Analysis
- Structural Engineering
- Electrical Engineering
- Net-Zero Buildings

Post-Design

- Construction Administration
- Life Cycle Cost Analysis
- Value Engineering
- Post-Occupancy Evaluation

As ZMM looks to the future, we remain committed to providing high-quality, client-focused design solutions that meet budget and schedule requirements. We listen, respond promptly with innovative and efficient solutions, and deliver quality projects and develop lasting relationships. Because at ZMM, it's about more than architecture, it's about building your legacy.

Award Winning Design (cont.)

2017

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Cabell County Explorer Academy - Huntington, WV

AIA Merit Award, West Virginia Chapter
Achievement in Sustainability
Logan-Mingo Readiness Center - Holden, WV

2016

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interior Design
Christ Church United Methodist Education Wing - Charleston, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interior Design
Christ Church United Methodist Education Wing - Charleston, WV

2015

AIA Honor Award, West Virginia Chapter
Excellence in Architecture in Sustainable Design
Edgewood Elementary School - Charleston, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Kenna Elementary School - Kenna, WV

2014

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Sustainable Design
Huntington East Middle School - Huntington, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Southern WV Community & Technical College
Applied Technology Center - Williamson, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interiors/Graphics
Girl Scouts of Black Diamond Council - Charleston, WV

2012

AIA Honor Award, West Virginia Chapter
Excellence in Architecture
West Virginia Housing Development Fund - Charleston, WV

Company Profile

Wherever you are on your project journey, Terracon's employee-owners are ready to meet you where you are and help you reach your goal. Since our founding in 1965, Terracon has grown into a thriving, employee-owned, multidiscipline engineering consulting firm delivering facilities, environmental, geotechnical, and materials services. Our more than 7,000 curious minds include engineers, scientists, architects, facilities experts, and field professionals focused on solving engineering and technical challenges from more than 180 locations nationwide. On-time and real-time data-driven insights, provided by our talented employee-owners, create an unmatched client experience that spans the lifecycle of any project from earth to sky.

Terracon consistently ranks as a top 20 design firm by *Engineering News-Record*. Our successful growth has included organic expansion and innovation and acquiring more than 60 firms with specialized capabilities. A focused and uncompromising dedication to safety has been integral to how we support our employees, clients, and communities.

***ENR* Rankings 2024**

*2023 Ranking**

#2	***Asbestos and Lead Abatement***
#10	***Top 100 Pure Designers***
#18	***Top 500 Design Firms***
#44	***Top 150 Global Design Firms****
#63	***Top 200 Environmental Firms****

Throughout the life of your project, we won't just point the way – we'll go with you. Together, we are explorers turning big ideas into reality for our partner clients, employees, and the world around us.

From site selection to the design and construction to maintaining the structure's life, we'll help you succeed through engineering and scientific expertise, a passion for problem-solving, and a drive to explore.

We're ready when – and where – you are. **Explore with us!**

100%
EMPLOYEE-OWNED

PROJECTS IN ALL 50 STATES

85,000+
PROJECTS COMPLETED IN 2023
WITH OVER 23,000 CLIENTS

Terracon

2

RELEVANT DESIGN EXPERIENCE

COOPERS ROCK STARGAZING CABINS

LOCATION	SIZE	COMPLETION	AWARDS
BRUCETON MILLS, WV	800 SF EACH	2025	2025 AIA WV HONOR AWARD - EXCELLENCE IN ARCHITECTURE 2025 AIA WV HONOR AWARD - EXCELLENCE IN CRAFTSMANSHIP

Coopers Rock State Forest's stargazing cabins offer a unique blend of modern comfort and immersive celestial experiences, featuring A-frame architecture, telescopes, retractable skylights, and a prime location in one of the darkest sky regions on the East Coast, further positioning West Virginia as a premier destination for outdoor adventure and astrophotography.

Coopers Rock State Forest is revolutionizing outdoor lodging with West Virginia's first stargazing cabins, designed to provide an immersive celestial experience in one of the darkest sky regions on the East Coast. Strategically located along the main ridge between Raven Rock and the park's renowned overlook, these five A-frame cabins merge rustic charm with modern comfort, offering guests unparalleled views of the night sky. A direct result of the state's $200 million investment in state park improvements, this project aligns with West Virginia's broader commitment to enhancing outdoor tourism, preserving natural landscapes, and supporting the state's growing reputation as a premier stargazing destination.

The A-frame architectural design harmonizes with the surrounding forest, featuring large, floor-to-ceiling windows and retractable skylights for an uninterrupted view of the cosmos. Each cabin is equipped with

ZMM ARCHITECTS ENGINEERS

Coopers Rock Stargazing Cabins (cont.)

high-powered telescopes, spa-like amenities, and an energy-efficient design that ensures both comfort and sustainability. The strategic location of these cabins minimizes light pollution, enhancing visibility and tying into the state's larger "Dark Sky" initiative. The Coopers Rock Stargazing Cabins redefine outdoor adventure by blending modern innovation with nature's breathtaking beauty.

We are sure that guests will be excited to snap photos during their relaxing stay to share with friends.

CLAUDIA L. WORKMAN FISH & WILDLIFE EDUCATION CENTER

LOCATION	SIZE	COMPLETION	COST
ALUM CREEK, WV	7,000 SF	2021	$5M

ZMM provided design services for the Education Center, which includes exhibits about West Virginia's native wildlife, including conservation, game management, forestry, stream restoration, and how to identify native plants and animals.

The center is located on 102 acres of land, along with the WVDNR District 5 Headquarters. ZMM's services included the development of the site and facility, as well as coordination with civil/environmental, exhibit design, and marketing team members. The facility, nestled in the beautiful landscape, concentrates on visitor and user experience, while creating a dynamic space to celebrate West Virginia's greatest natural treasures. One of the key concepts is to represent our wild and wonderful state by incorporating natural materials such as stone, a variety of woods, and natural finishes.

A central axis frames an inspiring view and sets the tone for the visitor with heavy timber, vaulted ceilings, and natural light. The northwest quadrant is dedicated to administration and classroom functions, while the southwest quadrant is composed of utilitarian spaces. The eastern half of the building is devoted to exhibit space. The angled walls and exterior glass create a vibrant exhibit space, as the outdoors become part of the exhibit, as a large, elevated deck spans across the landscape, creating the ultimate viewing platform for the breathtaking views of the Forks of Coal State Natural Area.

BEECH FORK STATE PARK LODGE

LOCATION	COMPLETION	COST
LAVALETTE, WV	TBD	$28.49M

The goal of the lodge study was to help determine the feasibility for a new lodge at Beech Fork.

This objective was achieved through the development of a concept for a 75-room lodge, located on the banks of Beech Fork Lake in Wayne County, WV, which is designed to benefit a variety of visitors. The form of the building was influenced by the site configuration, as well as the functions contained within it.

The floor plan is arranged in a way to separate the guestrooms and other guest-only facilities from the more public functions of the building, such as the restaurant, pub, gift shop, and meeting room. This allows visitors who may not be staying at the lodge to use these areas, without encroaching on the privacy of lodge guests. All of the guestrooms are arranged to have access to views of the lake. Those views are also shared by the restaurant, meeting room, and the recreation areas.

The exterior of the building is designed to simulate the craftsman style to evoke a more relaxed, comfortable, and informal feel for guests and visitors. The brick, stone, siding, and roof materials are common to the area and offer low-maintenance and durability to provide a long-lasting, attractive structure.

ZMM ARCHITECTS ENGINEERS

GENERAL SERVICE DIVISION SURPLUS PROPERTY

LOCATION	SIZE	COMPLETION	COST
DUNBAR, WV	19,250 SF	2016	$4M

This project consists of a 19,250 SF pre-engineered metal building storage facility that includes 5,000 SF of administrative space.

The property originally had multiple structures that were scattered throughout the site. The layout of the buildings created a variety of issues for Surplus Property and made it difficult for them to operate efficiently. The new pre-engineered metal building replaced the existing structures, which were located in the floodplain, and addressed several site issues including proper drainage, traffic flow, and correct floor elevations in regard to current floodplain requirements. Since the existing site contained a large amount of fly ash, ZMM employed a unique approach to constructing the foundation system. Instead of completing a full excavation of the site, ZMM recommended installing the foundations by selectively demolishing the existing pavement to allow for the installation. This improved constructability and led to an enhanced construction process.

The exterior of the pre-engineered building was designed to reflect the branding of the state agency, and the demolition of the existing structures, along with the new construction, was phased to maintain continuous operation of the facility.

ZMM ARCHITECTS ENGINEERS

CABELL COUNTY TRANSPORTATION COMPLEX

LOCATION	SIZE	COMPLETION	COST
HUNTINGTON, WV	21,950 SF	2014	$7.5M

The Cabell County Transportation Complex is located on the site of the old Cox Landing Junior High School. Challenges on the project involved retrofitting the old school and site to accommodate the new use.

A small portion in the rear of the building was removed, and storage rooms and a link to the new bus maintenance facility were added. The high-bay bus maintenance facility accommodates 14 buses. This full-service metal garage is outfitted with lifts and all services to make this a state-of-the-art facility. Along with the new service bays the building includes both automatic and manual bus-washing facilities. Site amenities include parking with charging locations for every bus, along with parking for dormant buses on standby. There is also a fueling station for all bus traffic.

The existing school facility was renovated into the transportation administration area, along with conference rooms, driver break rooms, and rest rooms for staff and drivers. The building also plays host to a Staff Development room that is designed with technology and distance learning capability. This will accommodate all bus drivers at one time for training and safety seminars. Principals and teachers throughout the county can also use this for a staff training facility.

FREDERICK COUNTY TRANSPORTATION FACILITY

LEED SILVER

LOCATION	SIZE	COMPLETION	COST
WINCHESTER, VA	52,638 SF	2013	$17M

The design of the transportation complex consists of two separate primary buildings: one for administration offices, the other houses vehicle maintenance.

The Administration Building contains eleven offices, two conference rooms, a lobby with receptionist area, a work area, a storage area, and restrooms. This building also contains a driver training room for 50 drivers, and a driver lounge. The interior is designed to allow for future expansions. The Administration Building was awarded LEED Silver Certification.

The Vehicle Maintenance Building has office space in the center with repair bays on each side. The office space includes seven offices (with the potential to grow), a lobby with receptionist area, restrooms, a waiting room, a separate employee lounge with restrooms and showers, a technical research room, a work room, and a custodial closet. A separate area of this building includes a tool storage room, a component room, parts storage, fluid storage, a pump room, and a compressor room. Heavy-duty bays are grouped together on one side of the facility. The opposite side houses light-duty bays.

The Wash and Fuel Facility has four fueling service bays, a tire service bay, two wash bays, and an office. The complex also has a Storage Facility.

JACKSON COUNTY ARMED FORCES RESERVE CENTER

LOCATION	SIZE	COMPLETION	COST
MILLWOOD, WV	75,000 SF	2011	$20M

The building design was inspired by the adjacent Georgian-style Order of the Eastern Star facility.

The primary user for the WVARNG will be DET 1 821st Engineering Company, supported by a FSC of the 1092nd. USAR occupants include PLT AMMO 261 OD and PLT 1 (Postal) and PLT 6 (Postal) of the 44th Personnel Company. An expanded drill hall serves as a convention and meeting space. The relationship between the structures became crucial to the site layout. Once the aesthetic of the building was established, the massing of the facility was defined by breaking down the facility into smaller mass elements. The larger programmatic elements, such as the drill hall and the storage areas, employ an aesthetic that more closely implies their function.

The layout of the facility includes a main entry with the recruiting, family support, and administrative areas located on separate sides. A transverse wing houses all functions that have the potential for public use, while all primary military spaces developed along a similar perpendicular wing. This allows for separate entries to be developed for public functions, while the remainder of the facility can be secured. The layout also creates a large central courtyard, or parade field, that would be located at lower grade to define the edge facing the river. This edge is defined by a canopy that connects storage and locker areas to the expanded drill hall.

GLEN JEAN
ARMED FORCES RESERVE CENTER

LOCATION	SIZE	COMPLETION	COST
GLEN JEAN, WV	110,000 SF	2004	$17M

The Glen Jean Armed Forces Reserve Center contains three distinct military functions: a facility for routine maintenance of over-the-road and tracked military vehicles, an armory housing four West Virginia National Guard units, and the Southern West Virginia Military Entrance Processing Station, where new recruits officially enter the military system.

The brick exterior walls are highlighted with limestone and metal trim accents. A large assembly hall, plus classroom and training space, enhance the ability of the armory building to provide training for military personnel, while also providing much-needed space for community functions.

The Glen Jean AFRC also employs a sloped natural-stone buffer to meet federal anti-terrorism and force protection guidelines. The project has also become an important community resource and served as a meeting location during the development of the nearby Summit Bechtel Family National Scout Reserve.

WV STATE POLICE & PARKWAYS AUTHORITY MAINTENANCE BUILDING

LOCATION	SIZE	COMPLETION	COST
BECKLEY, WV	19,400 SF	2016	$4.5M

The West Virginia Parkways Authority needed to replace a variety of existing aging buildings with a new maintenance facility.

The 19,400 SF building includes offices for maintenance staff, training staff, a training center, and a WV State Police branch facility. The maintenance portion of the building includes four large bays equipped with an overhead crane, truck lifts and equipment to maintain the large fleet of trucks. Existing buildings were removed to allow for the new building to be located on the existing site along with other support buildings.

ZMM, in consultation with HNTB engineers, was selected to design the new facility. The WV Parkways Authority had programmed the building requirements, which ZMM developed into a building program to fit the existing restricted site. The four 26-foot-high truck bays will be located next to a two-story supply and support facility. The second-story portion of the building will contain offices, training and meeting rooms along with lockers and exercise areas. The two-story state police facility is located next to the maintenance facilities and includes a common entrance, lobby, elevator, and stairs.

ZMM ARCHITECTS ENGINEERS

ZMM.COM

ADDITIONAL EXPERIENCE

WVDNR Chief Logan Recreation Center - Metal Building Gymnasium addition - Logan, WV

Coonskin Park Maintenance Building - Charleston, WV

Marshall County Commission Elections/Storage Building - Moundsville, WV

WVARNG Camp Dawson STF Building - Kingwood, WV

WVDNR Hawks Nest State Park Miscellaneous Projects - Ansted, WV

WVDNR Twin Falls State Park - Lodge and Convention Expansion and Master Plan - Mullens, WV

WVDNR District V Headquarters Renovation - Alum Creek, WV

WVDNR Beech Fork Cabins - Lavalette, WV

WVDNR Tomblin Wildlife Management Area Shop, Elk Viewing Platform, and Visitor Center - Alum Creek, WV

ZMM
ARCHITECTS
ENGINEERS

3

PROJECT APPROACH

PROJECT APPROACH

Project Understanding
According to the solicitation, it is our understanding that the WV Division of Natural Resources seeks professional architectural and engineering services for the design and construction administration of a 40 FT x 60 FT steel building that will be utilized as a heavy equipment maintenance and storage facility located within Calvin Price State Forest in Pocahontas County. The project will involve a geotechnical investigation and required soil properties identification, and the design of the foundation capable of supporting the weight of the Agency equipment. We further understand that the site has been cleared and rough graded. Special consideration shall be given to the soil bearing capacity and stability due to the nature of the disturbance and existing subsurface conditions. The project will include grading and the design of utilities to include power, water, and waste management. The plans must include stormwater runoff and erosion/sediment control.

Approach
2.1 Goal/Objective 1
Review existing plans, conditions, and operation of the facility while communicating effectively with the owner to determine a plan that can be implemented in a manner that will minimize disruption to concurrent operation of the facility/structures and meet all objectives.

The first step in any successful new facility project is to develop a program for the project to identify the required spaces needed, as well as spaces that would be a positive impact on the project without affecting the established budget. Once this is established, this will dictate the floor plan for the facility that fits the intended site. Site constraints can be a concern and ZMM will provide site design as part of our services, as well as the review of potential site. ZMM will work with the key stakeholders to help establish the Owner's vision for the project.

Once the plans are reviewed with WVDNR leadership and other stakeholders, ZMM will refine the design until it reflects your vision. The ZMM team will then develop conceptual plans and renderings to meet each need identified, while looking toward potential future growth. The renderings will be used to help communicate your vision for the facilities to all stakeholders. Once the conceptual design is approved our team will develop plans, specifications, and bidding documents for the project.

ZMM will develop a staged construction plan to maintain building function with the least amount of disruption during construction. We have extensive experience in completing projects while the facilities are in use, including recent projects at Cedar Grove Elementary School, Goodwill Industries of the Summit, and the Charleston Coliseum and Convention Center. For the Coliseum, the building was occupied and operational throughout all phases of construction. For the westside retail location for Goodwill Industries that is currently under construction, we phased the project to allow continuous operation of their warehouse and donation center during the loading dock addition and renovation to the retail space.

If selected for this project, we would partner with Terracon for the geotechnical investigation. They are exceptional collaborators with whom we work regularly on these types of projects. Terracon has extensive geotechnical experience and capabilities for this type of work. Terracon has a fleet of five (5) drill crews within West Virginia and will perform all

subsurface exploration with Terracon-owned drill rigs. All soil and rock testing will be performed at one of Terracon's in-state certified laboratories in either Charleston or Morgantown. Terracon has a team of professional engineers, geologists, and engineering technicians to perform all analysis and develop the necessary recommendations for this project.

2.2 Goal/Objective 2

As a portion of this process outlined in Objective 1, provide all necessary services to design the facilities described in this EOI in a manner that is consistent with The Division of Natural Resources needs, objectives, current law, and current code, while following the plan to design and execute the project within the project budget and time requirements.

ZMM Architects and Engineers has significant experience designing pre-engineered metal buildings for various State of West Virginia agencies including the State of West Virginia Surplus Property Division project in Dunbar. This project included multiple site improvements, including demolition, paving, and utilities, as well as multiple structures for exterior storage, warehousing, and offices. The project also required that the Surplus Property campus remain operational throughout the construction process. ZMM has also designed pre-engineered metal buildings for multiple local development authorities, boards of education, the West Virginia Army National Guard, the West Virginia DOH/DOT, the West Virginia Parkways Authority, and for the West Virginia Division of Natural Resources at the Tomblin Wildlife Management Area.

Drawings, specifications, and estimates will be submitted for review at the end of each design phase (schematic, design development, and construction documents). Our previous relevant experience working on similar projects in West Virginia will help ensure that all documents meet your requirements and standards – saving the WVDNR from expending additional effort and expediting the design phase of the project. The ZMM team will also submit the drawings and specifications to all required regulatory agencies including the State Fire Marshal's Office for approval prior to the project going out to bid.

Once the documents have been approved, ZMM will assist with the bidding and construction phases of the project, including participation in a pre-bid meeting, developing any required addenda, responding to RFI's, reviewing submittals, and conducting and preparing minutes of construction progress meetings. Our efforts will continue through substantial and final completion inspections and include an 11-month warranty walk-through. Our goal throughout this process will be to act as part of your team, with the objective of ensuring the seamless delivery of the project for the WVDNR.

Quality Control

Quality control during the design phase begins with the selection of team members with experience working on projects that are similar to the current effort. ZMM Architects and Engineers staff possesses the design experience to ensure the success of the project. Quality control during the design phase will occur through regular, documented, project meetings between the design team and the WVDNR. In addition to the regular design phase meetings more formal QA/QC will occur at the end of each design phase. A more detailed description of the design phase quality control plan is noted below.

1. Selecting the Project Team

ZMM's diverse staff ensures that each project team is made up of highly qualified members, each dedicated to the project's success. Project team members are selected based upon relevant experience and ability to help achieve the client's vision.

ZMM Architects and Engineers proposes providing services on the project with a team of design professionals that have worked together on a variety of projects for the State of West Virginia, including projects for the WVDNR. Our team members are familiar with the standards, requirements, and processes that are utilized by the WVDNR and the State of West Virginia.

▪ Adam Krason, AIA, NCARB, LEED AP, ALEP	Principal-in-Charge
▪ Nathan Spencer, AIA	Project Manager and Senior Architect
▪ John Pruett, PE, LEED AP	Director of Engineering, Mechanical Engineer
▪ Frankie Kantsios, PE	Electrical Engineer
▪ Mike Flowers	Plumbing / Mechanical Designer
▪ Billy Simms	Designer
▪ Mark Epling, AIA	Specifications Writer
▪ David Gilmore, PLA, MBA	Landscape Architecture and Site Development
▪ Perry McCutcheon, PE	Civil Engineer
▪ Jeffrey Bruns, PE	Structural Engineer
▪ Todd Griffith, PE	Geotechnical Engineer
▪ Alex Sovine, PE	Geotechnical Project Manager
▪ Joe Doeffinger	Construction Administrator
▪ Amy Rhodes	Construction Administrative Assistant



2. Identifying Project Requirements
Project team members are fully integrated in each phase of the design process, ensuring a quality project from the commencement. The project requirements are included in a 'Basis of Design' that each member of the project team can access. The 'Basis of Design' helps guide important project decisions.

3. Identifying Client Expectations
Knowing and understanding our clients' expectations is our goal. This knowledge gives ZMM a baseline for exceeding expectations. We will commence the design effort with a planning session to help identify your vision for the project.

4. Ongoing Project Reviews
As part of the ongoing project reviews, we conduct quality assurance evaluations during each stage of the project.

- Schematic Design Phase (35%)
- Design Development Phase (65%)
- Construction Documents Phase (95%)
- Construction Administration Phase

ZMM has developed a series of QA/QC review documents that are completed during each phase, that include a programmatic review, technical review, and review of the project schedule and budget.

5. Post Project Review
At the completion of every project, our team members participate in a learning session to gain insight useful for future projects.

6. Staff Training, Assessment, and Enhancement
Ongoing staff development and training is very important and providing increased opportunities for learning and advancement leads to improved employee performance and more successful projects for our clients.

ZMM
ARCHITECTS
ENGINEERS

2.3 Goal/Objective 3

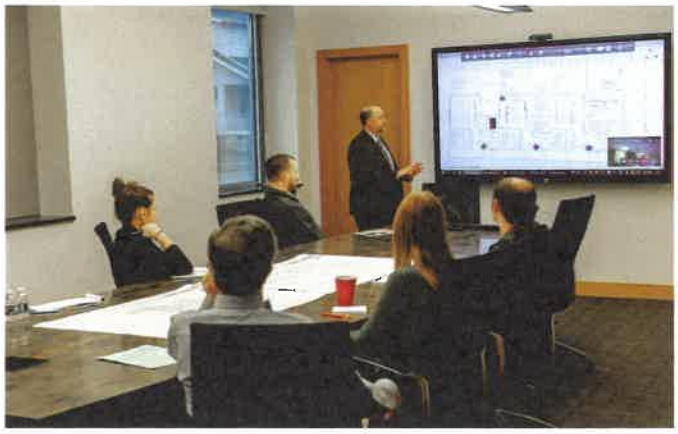
Provide Construction Contract Administrative Services with competent professionals that ensures the project is constructed and functions as designed.

During the construction phase, ZMM will provide additional resources to help manage a timely flow of information between all parties (Owner, Architect, and Contractor). The ZMM project manager will continue to serve as the primary representative of our team and will attend all construction progress meetings. Our team also employs in-house construction administrators (who will assist the project manager) and construction phase administrative staff who track all information (incoming and outgoing) during the construction phase to ensure that the design team is being responsive to project needs. This information, as well as the design progress noted above, is reviewed at weekly internal coordination meetings to verify that we are meeting all expectations and deadlines.

During project construction, the design team will continue to be engaged in assuring that the materials and systems being provided and installed comply with the design intent.

The standard construction phase services include the items below.

- Attend construction progress meetings regularly.
- Review and respond to shop drawings and submittals.
- Respond to RFI's generated during construction.
- Review and respond to change orders as needed.
- Participate as needed in weekly progress update conference with Owner.
- Make site visits to review construction progress and generate an inspection report for each visit.
- Assist with developing a punch-list of remaining work.
- Complete a substantial and final completion inspection.
- Assist as needed in the startup and project closeout process.



Our team has a demonstrated history of delivering projects on schedule and within the client's budgetary constraints. We accomplish this by helping to clearly define the scope and then working as a team to develop affordable design solutions. ZMM also utilizes independent cost estimates to validate the anticipated construction cost. One of the biggest hurdles a project can face is to have budgets and schedules that have not been reflective of the construction market updates. ZMM works with the client to review all aspects of a project and how best to move it forward, on time and on budget.

Summary

ZMM has extensive experience successfully collaborating with state agencies, including the WVDNR. Our team possesses unparalleled experience for clients throughout West Virginia and regularly provides design solutions for projects with similar scope and complexity. Our team's commitment to design quality, as well as schedule and budget control, makes us the right partner to assist WVDNR as you undertake this project for the new facility at Calvin Price State Forest in Pocahontas County.

ZMM ARCHITECTS ENGINEERS

4

TEAM QUALIFICATIONS

ADAM KRASON

AIA, LEED AP, ALEP

Principal

EDUCATION

Bachelor of Architecture
The Catholic University of America, 1998

Bachelor of Civil Engineering
The Catholic University of America, 1997

LICENSURE

Virginia, West Virginia, Ohio, Kentucky, Maryland, New Jersey, North Carolina, Louisiana

AFFILIATIONS

Association for Learning Environments

WV Board of Architects, President (2019 - Current)

American Institute of Architects, Stategic Council (2033/23)

Charleston Area Alliance, Board Chair

Goodwill Industries of Kanawha Valley, Past Board Chair

Clay Center, Board of Directors

WV Symphony Orchestra, Board of Directors

Charleston Urban Works, Board of Directors

Charleston Municipal Planning Commission

Charleston Historic Landmarks Commission

Education Alliance, Board Chair (2022/23)

Mr. Krason has served in the capacity of Architect and Project Manager for a variety of projects at ZMM. This experience includes Military, Educational (K-12 and Higher Education), Office, Justice (Courthouses, Correctional, Justice Centers), and Multi-Unit Residential projects. Mr. Krason's responsibilities include programming, design, documentation, coordination of the architectural and engineering team, as well as construction administration. Mr. Krason began his career in 1998, working on a variety of educational, commercial office, and co rrectional pr ojects th roughout Oh io, West Virginia, and North Carolina.

Mr. Krason has been an advocate of sustainable design and energy efficiency and has participated and presented at sustainable design seminars throughout the region. Mr. Krason is responsible for firm management, business development, and corporate philanthropy at ZMM. In addition to his role at ZMM, Mr. Krason is actively engaged in the community, serving on a variety of statewide and local civic and non-profit boards.

PROJECT EXPERIENCE

WV State Laboratory - So. Charleston, WV

WV Department of Agriculture Laboratory Evaluations - Guthrie, WV

Capital Sports Center - Charleston, WV

Shawnee Sports Center - Institute, WV

The Clay Center for the Arts and Science (Multiple Projects) - Charleston, WV

State Office Building #5, 10th Floor Renovation - Charleston, WV

Charleston Coliseum and Convention Center - Charleston, WV

Claudia L. Workman Fish and Wildlife Education Center - Alum Creek, WV

Wood County Justice Center - Parkersburg, WV

Wood County Resiliency Center - Parkersburg, WV

Construction and Facilities Management Office (WVARNG) - Charleston, WV

Joint Interagency Training and Education Center (WVARNG) - Kingwood, WV

Girl Scouts of Black Diamond Council - Charleston, WV

Goodwill Prosperity Center - Charleston, WV

ZMM ARCHITECTS ENGINEERS

Nathan Spencer

AIA

Project Architect

Mr. Spencer is responsible for coordinating the efforts of the design team in preparing thorough and clear design documents. He has experience in all phases of design working on a wide range of building types including; military, educational, office, justice, and residential.

He has worked on several projects that are currently pursuing LEED certification. In addition to production, Mr. Spencer, is also experienced in 3D modeling. He has worked on several preliminary concept study models as well as high quality renderings and 3D models later in the design process. Mr. Spencer is also experienced in high quality physical models.

EDUCATION

Bachelor of Architecture
University of Tennessee, 2007

LICENSURE

West Virginia

AFFILIATIONS

WV Chapter, American Institute of Architects, Member

PROJECT EXPERIENCE

Charleston Coliseum & Convention Center - Charleston, WV

Shawnee Sports Center - Institute, WV

Logan-Mingo Readiness Center - Holden, WV

Jackson County AFRC - Millwood, WV

Joint Interagency Training and Education Center (JITEC) - Kingwood, WV

Buckhannon Readiness Center - Buckhannon, WV

Parkersburg Readiness Center (not built) - Parkersburg, WV

Marshall Readiness Center - Moundsville, WV

Kenova AFRC SCIF Building - Kenova, WV

AASF #1 and #2 Hangar Additions - Wheeling, WV

Mountaineer Challenge Academy South - Montgomery, WV

Morgantown Readiness Center - Morgantown, WV

Tucker County Courthouse Annex - Parsons, WV

Judge Black Courthouse Annex - Parkersburg, WV

Intuit Prosperity Hub - Bluefield, WV

ZMM ARCHITECTS ENGINEERS

JOHN PRUETT

PE, LEED AP

Senior Mechanical Engineer

John Pruett has worked on a wide variety of projects, including educational (PK-12 and Higher Education), commercial, retail, natatoriums, military, and government facilities. One of his projects, Huntington East Middle School, received an ASHRAE Technology Award for energy and water conservation.

He is a member of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), ASHRAE Technical Committee 4.7 - Energy Calculations, the ASHRAE 90.1 Standing Standard Project Committee, and the ASHRAE 209 Standard Project Committee. John has also served as the handbook chair of Technical Committee 4.7 and is currently vice chair of that committee.

John received a Bachelor of Science in Mechanical Engineering from Purdue University. Having served in the Marines for 14 years, Mr. Pruett also led a design team for a "virtual memorial" for the birthplace of the U.S. Marine Corps.

EDUCATION

Bachelor of Science
Purdue University, West Lafayette, IN, 1993

LICENSURE

West Virginia, Virginia, Indiana, Maryland, Louisiana

LEED Accredited Professsional

AFFILIATIONS

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Member

United States Marine Corps – 14 Years

PROJECT EXPERIENCE

WVDNR District 5 Headquarters - Alum Creek, WV

WV State Police Headquarters - So. Charleston, WV

Wood County Resiliency Center - Parkersburg, WV

WV State Capitol Renovations - Charleston, WV

General Services Division Surplus Property - Dunbar, WV

WV Housing Developemnt Fund Office Building - Charleston, WV

Tucker County Courthouse Renovations - Parsons, WV

Gilmer County Courthouse Renovations - Glenville, WV

St. Margaret's Judicial Center 3rd Floor Renovations - Martinsburg, WV

Jackson County Maintenance and Transportation - Ripley, WV

Jackson County EMS Building - Ripley, WV

WV Army National Guard - WV
- **Camp Dawson Building 106**
- **Camp Dawson Building 245**
- **Camp Dawson Building 246**
- **Camp Dawson Building 301**
- **Camp Dawson Mail Facility**
- **Marshall County Readiness**
- **Camp Dawson Job Challenge Academy**

JEFFREY BRUNS

SE, LEED AP

Structural Engineer

Mr. Bruns has a distinct understanding of built structures that enables him to develop and incorporate his designs with our comprehensive team of architects and engineers. He has worked on a wide range of project types from structural design to failure analysis of the building.

EDUCATION

Colorado State University, Fort Collins,
Bachelor of Civil Engineering

University of Illinois at Urbana-Champaign,
Master of Civil Engineering

LICENSURE

Structural Engineer - Multiple States

Structural Engineering Certification Board

LEED Acredited Professional

AFFILIATIONS

American Society of Civil Engineers

Structural Engineers Association of Illinois

American Concrete institute

PROJECT EXPERIENCE

Oswego Community Unit School District 308 - Oswego, IL
- Southbury Elementary School and Early Childhood Center
- Bednarcik Junior High School
- Karl Plank Junior High School
- Hunt Club Elementary School
- Thompson Junior High School Addition and Renovation
- Traughber Junior high School Addition and Renovation
- Oswego East High School Expansions
- Oswego High School Addition and Renovation

Davinci Academy - Elgin, IL
- Classroom and Front Entry Renovation

Elgin Area School District - Elgin, IL
- Bartlett High School
- Multiple Elementary School Additions
- Multiple New Elementary Schools
- Multiple Middle Schools

Elgin Community College - Elgin, IL
- Health and Life Sciences Center (LEED Silver Certified)
- Health and Business Technology Center
- Health and Business Technology Chemistry Labs Addition
- Health and Business Technology Greenhouse Addition
- Student Resource Center Addition and Renovation

ZMM ARCHITECTS ENGINEERS

JAMES LOWRY

PE, BCxA

Mechanical Engineer

James has been a member of the ZMM team since 2018. He has extensive experience in all phases of design and project management in a wide range of building types including industrial, educational, commercial, and health care.

James received his Bachelor of Science in Mechanical Engineering from West Virginia University Institute of Technology. He is a professional engineer licensed in West Virginia, Pennsylvania, Ohio, and Maryland. He is American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Building Commissioning BCxP certified.

James has been volunteering with ASHRAE. At a local level, he has provided leadership as the president of the local chapter WV ASHRAE. On the national level, he advises on Technical Committees (TC) 9.7 Educational Facilities and 4.1 Load Calculations, and is the current programs chair for TC 4.1.

EDUCATION

Bachelor of Science in Mechanical Engineering, West Virginia University Institute of Technology, 2004

LICENSURE

West Virginia, Pennsylvania, Ohio, and Maryland

ASHRAE Building Commissioning BCxP Certified

AFFILIATIONS

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

PROJECT EXPERIENCE

WVARNG - WV
- Mountaineer Challenge Academy South Renovations
- Kenova SCIF
- Camp Dawson Building 202
- STF Building B

WV State Capitol Building #6 - Charleston, WV

Capitol Guard House - Charleston, WV

Charleston Fire Department Fitness Center Assessment - Charleston, WV

GSD ASHRAE Building Assessment - Charleston, WV

GSD Consulting Survey-Elect Media - HVAC - Charleston, WV

The Greenbrier Chiller and HVAC Projects - White Sulphur Springs, WV

Marshall University - Huntington, WV
- Drinko Library Mechanical and Electrical Study
- Replacement Multizone HVAC
- Prichard Hall Chiller Replacement
- Drinko/Science Building
- Smith Hall Cooling Tower Replacment

Charleston Area Medical Center (Memorial) 6th Floor Fit-out, Boilers, Laboratory Renovations - Charleston, WV

Charleston Area Medical Center (General) Chiller Plant One-Line, and Chiller Replacement - Charleston, WV

FRANKIE KANTSIOS

PE

Electrical Engineer

As an electrical engineer, Mr. Kantsios is consistently motivated to adapt to the team's needs in assessing and finalizing the project on time. He is an experienced professional with a proven record of managing projects from concept to completion while supporting the unique needs for the specific project at hand. By carrying out engineering and design services for a diverse field of projects since 2013, Mr. Kantsios has expanded his knowledge and understanding of the industry. He has been actively involved in the design of a wide array of new structures and renovations to include K-12 educational buildings, higher education buildings, healthcare facilities, office buildings, banks, restaurants, hotels, automotive dealerships and service centers, apartment complexes and dorms, industrial facilities and warehouses, and athletic facilities. Mr. Kantsios excels at creating effective solutions and developing opportunities that further establish organizational goals.

EDUCATION

Bachelor of Science
Old Dominion University, 2019

Associate of Applied Science
New River Community College, 2016

LICENSURE

Virginia, West Virginia, Ohio

PROJECT EXPERIENCE

WV Regional Technology Park - Charleston, WV
- Street Lighting Replacement

West Side/ Elk City Street Lighting Replacement - Charleston, WV

WV General Services - Charleston, WV
- Building 31 Parking Garage Lighting and Security Replacement
- Building 35 Lightning Protection Replacement
- Building 37 HVAC Replacement and Energy Improvements

Remington (TC Energy) Office Building - Charleston, WV

Goodwill Industries of Kanawha Valley - Charleston, WV

HOPE Community Center - Charleston, WV

Trace Fork Soccer Complex Improvements - Charleston, WV

Nicholas County Schools - Nicholas County, WV
- Glade Creek Elementary School

Raleigh County Schools - Raleigh County, WV
- Shady Spring Elementary School Access Road

Mineral County Schools - Mineral County, WV
- New Frankfort PK-4 School Site Design

Jefferson County Schools - Jefferson County, WV
- New Ranson Elementary School
- New Shepherdstown Elmentary School

J. PERRY MCCUTCHEON, II

PE

Civil Engineer

Mr. McCutcheon is a seasoned civil engineer with extensive land development experience across the eastern United States, supporting a variety of clients and projects. Known for his efficiency and precision, he excels at navigating complex permitting and regulatory processes across multiple states. Perry is skilled in 3D modeling and animation, enhancing project visualization and stakeholder communication. His diverse background spans traffic engineering, dam safety, and abandoned mine lands, and he's dedicated to mentoring the next generation of professionals.

EDUCATION

Bachelor of Science, Civil Engineering
West Virginia Institute of Technology, 1988

LICENSURE

West Virginia, Virginia, Ohio

PROJECT EXPERIENCE

Kanawha County Schools - Dupont City, WV
- Eastern Kanawha County Elementary School
- Ona Elementary School
- Hurricane Middle School

Kanawha County Sheriff's Department - Training Center - Charleston, WV

CAMC Clinic - Beckley, WV

Abandoned Mine Lands Reclamation - WV*

Dam Safety Study and Emergency Action Plan - Cross Lanes, WV*

East Wilkes Middle School - Wilkes County, NC*

Wilkes Central Middle School - Moravian Falls, NC*

Multiple Lowe's Home Improvement Center locations - NC, SC, VA + PA*

Multiple Hilton Hotel locations - WV, NC, SC, VA + OH*

Multiple Branch Bank locations - WV + OH*

Multiple Food Lion Grocery Store locations - NC, SC, VA + PA*

Multiple Worship Center locations - WV + NC*

Several Light Industrial Facilities - WV*

Several Residential Developments - WV + NC*

Alex Sovine, PE

Senior Staff Engineer, Geotechnical Services

PROFESSIONAL EXPERIENCE

Ms. Sovine currently serves as the Senior Staff Engineer for the Geotechnical Department in Terracon's Charleston, West Virginia office. She is responsible for establishing boring programs, coordinating field activities, preparing lab testing programs, performing and assisting the project manager with analysis and calculations, preparing reports to discuss encountered conditions, results of laboratory testing, discussion of site hazards, and specific design recommendations for geotechnical projects. She has worked on numerous projects with a variety of clients in different areas including transportation, landslide remediation, power generation and transmission, retail/commercial developments, local and state infrastructure, and retaining walls in multiple states. She is proficient in the use of commercial software gINT Version 8, and is familiar with additional commercial software including LPILE, GRL WEAP, Slope/W, and Settle3.

PROJECT EXPERIENCE

South Court Street Sinkhole – Lewisburg, WV

Ms. Sovine served as the senior staff engineer under the project manager for the design team. The project involved the remediation of a karst sinkhole in a commercial building located in Lewisburg, WV. Design work included a deep foundation design to repair the existing sinkhole as well and provide new support for the adjacent wall.

KDMC Imaging and Emergency Addition – Ashland, KY

Ms. Sovine served as the senior staff engineer under the project manager for the design team. She assisted in developing the boring plan, coordinated field activities, and preparing foundation recommendations for the addition of two large additions for the existing King's Daughters Medical Campus in Ashland, KY.

WVPA Morton Travel Plaza – Beckley, WV

Ms. Sovine served as the senior staff engineer under the project manager and assisted in coordination of field activities as well as preparation of the geotechnical report. Design work included both shallow and deep foundations, mitigation for support on boulders and cobbles, and pavement recommendations to support heavy traffic flows.

Grapevine Slip – Mingo County, WV

Ms. Sovine served as staff engineer under the project manager. The project involved a roadway slip on a heavily traveled road for coal transportation. She assisted in preparing the boring location plan, coordinating field activities, preparing boring logs and lab schedules, and developing soil and rock parameters to be used in LPILE analysis for the design team.

Nauvoo Ridge Substation – Cameron, WV

Ms. Sovine served as staff engineer under the project manager. The project involved three areas to receive significant fill on existing slopes for the construction of a substation. Ms. Sovine assisted in coordination of field activities and the preparation of the geotechnical report, which included slope stability analysis using Slope/W software.

EDUCATION

B.S., Civil Engineering
Marshall University, 2018

REGISTRATIONS/ CERTIFICATIONS

WV EI Certificate #10224
American Red Cross for Adult First Aid CPR AED
eRailSafe-Norfolk Southern
OSHA 30-Hour Construction Safety, OSHA
Project Manager
UTV/ATV Operator Training

WORK HISTORY

Terracon Consultants, Inc.
Senior Staff Engineer
Charleston, West Virginia
2021-Present

Michael Baker International
Civil Associate I
Charleston, West Virginia
2020-2021

Terracon Consultants, Inc.
Staff Engineer
Charleston, West Virginia
2018-2021

Terracon

Alex Sovine (continued)

Harvey Chapel Bridge – Leon, WV

Ms. Sovine served as field engineer under the project manager. The project involved the replacement of a single span bridge with two lanes, including wingwalls and abutments. She coordinated and performed field activities including geotechnical inspection of soil and rock samples and assisted in the preparation of the geotechnical report.

NS Retaining Wall – Freeburn, KY

Ms. Sovine served as staff engineer under the project manager. The project involved the design of a new retaining wall below an active Norfolk Southern railway to replace the existing crib wall which had begun to fail in various areas along the site. Ms. Sovine assisted in the coordination of field activities and also assisted the structural design team in analyzing and comparing various retaining wall designs.

AEP Teays Valley Service Center – Teays Valley, WV

Ms. Sovine served as senior staff engineer under the project manager. The project involved the construction of a two-story service center. Ms. Sovine assisted by coordinating field activities as well as preparing foundation recommendations and performing LPILE analysis.

Todd Griffith, P.E.

Senior Associate, Department Manager, Geotechnical Services

PROFESSIONAL EXPERIENCE

Mr. Griffith currently serves as the Geotechnical Department Manager in Terracon's Charleston, West Virginia office. He is responsible for operational oversight of field and engineering activities in the Geotechnical (GEO) Department, mentoring staff, and management and analysis of geotechnical projects. He has over 17 years of geotechnical engineering experience working with public agencies such as WVDOH and USACE, working on projects involving site and subsurface investigations, design and construction of new or modified bridge foundations, cut slope analysis and design, fill slope analysis and design, the elevation and design of earth retainage structures (i.e., earthen dams, MSE walls, reinforced soil slopes), laboratory testing, and stream bank erosion mitigation.

He is proficient in the use of commercial software such as Sleep/W and Slope/W, SLIDE, Settle 3, ReSSA 3.0, MSEW+, gINT Version 8, and DigiPro 2. He has worked on numerous projects and variety of clients in different areas including transportation, landslide remediation, landfill, power generation and transmission, oil and gas transmission, retail/commercial developments, local and state infrastructure, and retaining walls in multiple states.

PROJECT EXPERIENCE

Tri-State Airport Landslide Remediation - Huntington, WV

Mr. Griffith provided engineering expertise and project management for remediation of a large landslide near the western edge of the safety area of the main runway of the airport. The slope failure was approximately 140 feet in height and 300 feet wide. The project included subsurface investigation and laboratory testing to aid in the design of the remediated slope as well as to aid in determination of the probable causes of the slope failure. It was determined that a combination of improper drainage at the toe of the slope, unauthorized earthwork at the crest of the slope, and removal of trees and vegetation from the face of the slope contributed to causing the landslide. Based on slope stability analyses performed by Mr. Griffith, the remediated design included removal of all failed material and excavation into the underlying bedrock and the slope design consisted of placement of a rock drainage layer and separation fabric, moisture conditioning of the excavated material and replacement as structural fill to a 2. 5H:1V slope. During construction, Mr. Griffith oversaw the excavation and placement of fill material to the designed specifications.

Tri-State Airport Taxiway A Stability - Huntington, WV

Mr. Griffith directed work and developed monitoring plans for potential slope movement on Taxiway A of the Huntington Tri-State Airport. Several years after the taxiway was extended and re-routed, large cracks indicating possible adjacent slope movement were observed. Inclinometers were installed and monitored for 7 months to aid in determination of ground movement at the top of the slope. Prepared a geotechnical engineering report providing information on the subsurface condition of the fill slope as well as the inclinometer data.

US Route 35 Public Private Partnership - Putnam & Mason Counties, WV*

Served as the project manager and lead geotechnical engineer for the design-build team for the final section of US Route 35 for the West Virginia Department

EDUCATION

M.S., Civil Engineering, Geotechnical Specialization, Virginia Tech, 2005
B.S., Civil Engineering, West Virginia University, 2004

REGISTRATIONS/ CERTIFICATIONS

Professional Engineer
West Virginia #18217
Pennsylvania #79360
Kentucky #27791
Maryland #40119
Ohio #78282
Virginia #64858

American Red Cross for Adult First Aid CPR AED
OSHA 30-Hour Construction

AFFILIATIONS

Member of American Society of Civil Engineers (ASCE)
Member of American Council of Engineering Companies of WV (ACEC-WV) Geotechnical Committee

WORK HISTORY

Terracon Consultants, Inc. Geotechnical Department Manager, Charleston, West Virginia, 2021-Present
Project Engineer: 2010-2013
Staff Engineer: 2006-2009

Triad Engineering, Geotechnical Department Manager, St. Albans, West Virginia, 2019-2021

TRC Engineers, Office Practice Lead – Geotechnical Engineering, Charleston, West Virginia, 2013-2019

(Continued on next page)

Todd Griffith, P.E. (continued)

of Highways. Mr. Griffith developed and oversaw the subsurface investigation for the 14.7-mile section of highway, including two bridges. Design work included cut slope design in marginal rock and soil, fill slope design, reinforced soil slope abutment design, and foundation design for the bridges. Engineering during construction included observation of subgrade for large diameter pipes, observing soil and rock material for usefulness in reinforced soil slope designs, and coming up with solutions to obstructions in geogrid layout for the reinforced soil slope abutments.

WORK HISTORY (continued)

US Army Corps of Engineers – Huntington District, Soils Engineering Section, 2009-2010

* *Work performed prior to joining Terracon*

West Virginia Division of Highway District 10 & District 2 Landslide Repair Projects*

Served as the geotechnical project engineer and provided engineering analysis and pile and lagging retaining wall design for the eighteen (18) FEMA funded roadway slide repair projects. Mr. Griffith developed and oversaw the execution of the subsurface investigations, as well as the development of the construction documents for each of the projects.

WVDOT Bridge Street Bridge Replacement - Taylor County, WV

Served as the project manager for all geotechnical aspects of this bridge replacement project. In addition to the project management role, Mr. Griffith also performed other activities for this project. His duties included oversight during drilling and sampling, analysis of soil and bedrock conditions, development of foundation recommendations, slope stability analyses of the riverbanks at each abutment, MSE wall external stability calculations and analyses for MSE wall global slope stability.

Laurel Branch Reinforced Soil Slope Design, West Virginia Route 10 Relocation – Logan County, WV

Mr. Griffith designed an approximate 140 feet tall, 600 feet long O.75H:1V reinforced slope for a valley fill at the Laurel Branch section of the Relocated WV Route 10 project in Logan County, WV. The reinforced soil slope was divided into 5 designed sections as the valley fill placed for the roadway extended from no fill at the beginning of the project, to 160 feet deep, and back to no fill on the other side of the valley. Design of the slope included subgrade preparation and benching requirements, required geogrid strength, spacing, and length, as well as slope facing recommendations. Design was performed using the ReSSA 3.0 computer program.

Rum Creek Connector Reinforced Soil Slope Design, West Virginia Route 10 Relocation - Logan County, WV

Mr. Griffith designed an approximate 300 feet long, 40 feet high reinforced soil slope for the bridge approach of the Rum Creek Connector of the relocated WV Route 10 project. The project was originally to consist of a 2H:1V unreinforced slope which required removal of several structures within the footprint of the embankment. It was later determined that it would be more cost effective to leave the structures in place and construct the bridge approach embankment as a reinforced soil slope with a slope of 0.75H:1V. Design for this slope also included subgrade preparation and benching recommendations, geogrid strength, spacing, and length requirements, as well as facing recommendations. Design was performed using the ReSSA 3.0 computer programs.

Natural Gas Power Plant - Follansbee, Brooke County, WV*

Served as the project manager and lead geotechnical gineer for the subsurface investigation and development of geotechnical recommendations for the proposed natural gas power plant. The development included analysis of foundation types based on the subsurface profile which included up to 200 feet of existing fill placed by contractors for the WVDOH during construction of a nearby highway. Additional challenges included concurrent environmental and geotecnical sampling, mining and mine spoil from the nearby Pittsburgh coal seam, and potential settlement of exisiting and proposed new structural fill.

5

CLIENT REFERENCES

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