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Header 1

- General Information
- Contact
- Default Values
- Discount
- Document Information
- Clarification Request

Procurement Folder: 1523821	SO Doc Code: CEOI
Procurement Type: Central Purchase Order	SO Dept: 0313
Vendor ID: 000000203587	SO Doc ID: DEP2500000001
Legal Name: TRIAD ENGINEERING INC	Published Date: 10/8/24
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Response Date: 10/29/2024	Status: Closed
Response Time: 12:11	Solicitation Description: AML - EOJ Morgantown Airport Subsidence Phase II
Responded By User ID: shaas	Total of Header Attachments: 1
First Name: Stacy	Total of All Attachments: 1
Last Name: McGhee	
Email: smcghee@triadeng.com	
Phone: 13048077598	



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 1523821
Solicitation Description: AML - EOI Morgantown Airport Subsidence Phase II
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2024-10-29 13:30	SR 0313 ESR10292400000003124	1

VENDOR
 000000203587
 TRIAD ENGINEERING INC

Solicitation Number: CEOI 0313 DEP2500000001
Total Bid: 0
Response Date: 2024-10-29
Response Time: 12:11:05
Comments:

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

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

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI Engineering Design Services				

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments: Statement of Qualifications

Extended Description:

EOI Engineering Design Services

Triad Engineering, Inc.

Triad Proposal No. 01-24-0494

October 29, 2024



WV Department of Environmental Protection AML - EOI Morgantown Airport Subsidence Phase II

1097 Chaplin Road; Morgantown, WV 26501

304.296.2562 | www.com

TRIAD
TRIAD ENGINEERING, INC.

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Section I: Cover Letter



October 29, 2024

Mr. Joseph E. Hager III
Department of Administration, Purchasing Division
2019 Washington St E
Charleston, WV 25305-0130

RE: Expression of Interest
AML Morgantown Airport Subsidence Phase II
Solicitation No. CEOI 0313 DEP 2500000001
Triad Proposal No. 01-24-0494

Dear Mr. Hager:

Triad Engineering, Inc. (Triad) appreciates the opportunity to submit this Expression of Interest (EOI) for the West Virginia Department of Environmental Protection (WVDEP), Division of Land Restoration, Office of Abandoned Mine Lands and Reclamation regarding the Morgantown Airport Subsidence Phase II,

The Morgantown Airport is constructed over an Abandoned Mine Lands (AML) eligible coal mine which is susceptible to subsidence and could result in catastrophic impacts to the airport facilities and the public. Triad believes that we are well qualified to design and provide construction oversight of a mine grouting program to stabilize the Morgantown Airport facility to help make it a safe facility for operations for the future of Morgantown. Triad possesses the relevant resources and expertise to successfully complete this project as described below.

Understanding of Project Scope

Based on Triad's research, we have identified the deep mine to be in the Pittsburgh coal seam. The subject mine was operated under the name "No. 25" and shown as "Unknown", operated by an unknown mining company with unknown dates. The estimated elevation of the seam ranges from approximately 1170 to 1190 feet.

Extraction of the Pittsburgh coal was done utilizing the conventional room and pillar method of mining. As mining retreats from a given area, miners typically extract as much of the coal as possible from the remaining pillars, further decreasing roof support. In most instances, where secondary mining occurred, documentation was negligible, if at all.

Although subsidence events occur within a relatively short period after mining, subsidence over room and pillar mines may occur years after mining operations have ceased. Subsidence in a room and pillar mine is caused by a number of factors including the deterioration of the remaining pillars, deterioration of mine props/roof bolts, thickness and width of the mine cavity, in-situ properties of the overlying rock, as well as the depth of the extraction.

The primary method of providing long-term stability of underground mining is grouting. This is completed by drilling holes into the mine on an established pattern and pumping a grout mixture into the mine voids. The main variable for the grouting process includes hole spacing,

consistency of the grout, and the number of grouting phases within the same area. Additional variables include methods of controlling grout from flowing away from the site.

In-situ conditions affecting the grouting include the amount of roof fall, the presence of gob in the mine, and the presence of groundwater in the mine. In order to evaluate these conditions, a comprehensive subsurface exploration will be required to adequately design an efficient grouting program. This subsurface exploration program is anticipated to include:

- Standard NX Coring through the mine coal seam.
- PQ Coring to provide larger coring hole for camera work.
- Downhole camera work into the mined seams.
- Additional borings to provide additional light sources into the coal room.
- Second phase of borings using air-track holes to confirm findings and limits from original phase of borings.

Triad proposes to provide these services with our in-house drill rigs. Borehole inspection will be performed using Triad's staff of trained geologists.

Relevant Experience

Triad Engineering's staff has completed numerous similar mine subsidence investigation/remediation projects for such clients as the Office of Surface Mining and the WVBRIM, both private and public. Our project leadership team and QC team members have over one hundred (100) years of combined experience in the mining industry addressing abandoned mine features. Triad's long history within the region working on mine and mine-related projects has provided a depth of experience that will serve us well for this project.

Client Manager – David Hooper, P.E.: Over 36 years of experience performing geotechnical engineering in the region. He has been involved with various private projects involving mine grouting and has managed projects directly or indirectly for the WVDOH, PennDOT, MSHA, and other government agencies. He will be responsible for overall client satisfaction.

Project Manager – Jeremi Stawovy, E.I.: Over 11 years of experience and has worked on WVAML projects including the S3 Contract 2023 WVDEP-AML, Sardis Landslide, and Lake Lynn Complex. In addition to WVAML projects, Mr. Stawovy has worked on Maryland AML projects as well as other mine stabilization projects. Jeremi will be the primary point of contact for the project, and will be responsible for coordination, scheduling, analysis, design and construction observation.

Quality Control Reviewer – Steve Lowden, P.E.: Over 34 years of experience of progressive engineering experience. He has been involved with several mining stabilization projects for both private and public clients such as the U.S. Department of Interior, PennDOT, and other governmental agencies. He will be responsible for design assistance and quality control reviews.

Please see the attached resumes for additional information regarding these team members, as well as other members of the project team. Their experience has also been cross-referenced on the included Project Experience matrix.

Under the direction and supervision of John Haynes, Triad's drilling team has performed extensive drilling for underground mining at the Morgantown Airport for other consultants.

Available Resources

Location of Offices

Triad operates four regional offices with various smaller offices within West Virginia, Maryland, Virginia, Pennsylvania, and Ohio. This project will be supported by Triad's Morgantown office, located within 8.5 miles of the project site. Other offices (St. Albans, Hagerstown, and Winchester) are all located less than 2.5 hours from the project site. Triad's Morgantown office has 38 employees, making up approximately 20% of the entire organization.

Current Staffing

Triad's proposed staffing for this project includes 6 geologists, 6 geotechnical engineers, 3 environmental scientists, 2 civil engineers, 2 drilling managers, 2 licensed surveyors (and 1 crew chief), 4 QC testing managers, and 1 safety professional. The proposed staffing organizational chart can be found in Section III.

Current and Future Workload Commitment

Triad's current AML workload involves the S3 Contract for WVDEP - AML including drilling and survey services for 14 sites and is pending receipt of a contract. This work will be centered around our St. Albans location.

Triad's resources also include our in-house drilling capability. We currently operate 5 drill crews in-house which will provide a consistent and timely response for our engineering projects. In addition, our drilling capabilities include the ability to perform PQ coring, resulting in a larger core hole diameter which permits better quality optical imaging of the mined-out coal seam.

Triad's services also include quality control testing services. Reporting for our quality control testing is performed through Agile Frameworks Metafield software for field reporting and Agile Port as a real-time web-based data portal. Triad will use this system to document construction observations on this project. Agile Port reporting will provide the client and stakeholders the ability to see the progress of grouting in near real time.

Performance History

Triad has completed successful grout stabilization projects such as:

- The NOAA NESCC AWIPS Antenna in Fairmont, West Virginia for March Westin, Inc. The project involved a geotechnical exploration and recommendations for a grout stabilization plan associated with room and pillar mining in the Pittsburgh Coal Seam.
- The CBU Antenna in Fairmont, West Virginia for KBR, Inc. The project included an evaluation of previous deep mining activities, geotechnical evaluations and preparation of recommendations involving deep mine grouting of room and pillar mining of the Pittsburgh Coal Seam.

Triad has completed drilling projects in the northern and southern counties for WVDEP-AML and has worked on other aspects of specific AML projects such as:

- The Blue Knob Complex in Barbour County, West Virginia. This project involved drilling 14 borings as well as providing drilling inspection services.
- The Winter Portals in Winter, West Virginia. This project included surveying support services for the contractor including horizontal positioning, alignment staking, grade

staking, and related professional surveying services associated with construction support.

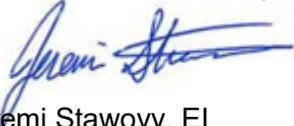
Our experience is also outlined in the project experience matrix and shown on the individuals' resumes in Sections IV and VI.

In addition to a strong focus on safety, Triad believes that communication and responsiveness are critical elements of these Abandoned Mine Lands and Reclamation (AML) projects and are woven into every project our firm undertakes. In conjunction with our experienced team, this culture will result in project success for the West Virginia Department of Environmental Protection Office of Abandoned Mine Lands and Reclamation.

We look forward to the opportunity to work with WVDEP on this project. Please do not hesitate to contact us with any questions regarding our submittal.

Sincerely,

TRIAD ENGINEERING, INC.



Jeremi Stawovy, EI
Project Manager



David W. Hooper, P.E.
Principal Engineer

Section II: Company Background





WHO WE ARE

Triad is a multi-discipline, employee-owned firm of engineers, surveyors and scientists who provide geotechnical and civil engineering, environmental services, drilling, surveying and construction testing and inspection services. Since 1975, Triad has grown from a small office in West Virginia to nine offices across five states. Triad can provide practical solutions to meet your project needs and exceed your expectations.

TRIAD Listens, Designs, & Delivers™

WHAT WE DO

GEOTECHNICAL ENGINEERING

Subsurface Explorations; Geological and Geophysical Surveys; Landslide Studies and Remediation; Dam and Impoundment Design; Foundation Design Recommendations; Soil Characterization and Stabilization; Sinkhole Remediation; Infiltration Studies

CIVIL ENGINEERING

Site Grading and Development Plans, Commercial/Industrial Site Developments, Landscape Design, Storm Water Best Management Practices, Hydrologic Studies, Green Sustainable Design, Retaining Wall Design, Utility Design, Land Use and Planning Consultation, Construction Specifications and Contract Documents, Construction Contract Administration

DRILLING AND SAMPLING

Geotechnical and Environmental Drilling and Sampling; Monitoring Well and Piezometer Installation; Rock Coring; Bridge Pier Borings; Air Track Probes

CONSTRUCTION MATERIALS ENGINEERING AND TESTING

Soils and Fills; Concrete; Asphalt and Aggregate; Footings; Pile Foundations; Floor Flatness; Structural Steel; Seismic Monitoring; Welds; Paint and Fireproofing; Roof; Compressive Strength; EFAS; NDT; Mortar and Grout; Laboratory Analysis of Soil and Rock; Special Inspections

ENVIRONMENTAL

Hydrogeological Studies; Fracture Trace Analysis; Groundwater and Soil Assessment; Site Remediation Design; Phase I/II ESAs; Brownfield Site Assessment; Asbestos, Mold and Lead-Based Paint Inspection; Wetland and Forest Management Services; Regulatory Compliance Assistance & Permitting

SURVEYING AND MAPPING

Topographic & Planimetric Mapping; Construction Layout; Subdivision Platting; ALTA / NSPS Surveys; Property Boundary Surveys; Aerial Photogrammetry; Drone Surveying

MARYLAND

Hagerstown
301-797-6400

Frederick
240-259-3468

OHIO

Portsmouth
740-249-4304

LOCATIONS

VIRGINIA

Winchester
540-667-9300

Sterling

703-729-3456

WEST VIRGINIA

Scott Depot
304-755-0721

Morgantown

304-296-2562

PENNSYLVANIA

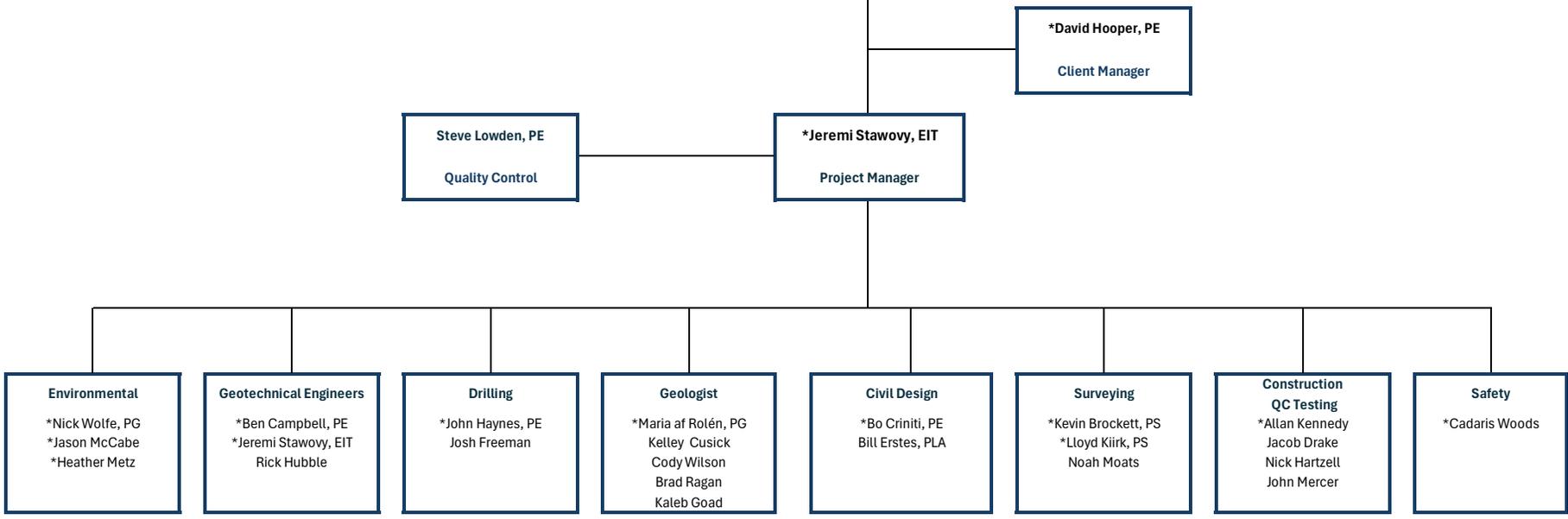
Mechanicsburg
717-590-7429

New Stanton

412-257-1325

Section III: Project Team





*asterisks indicates the inclusion of resume/professional experience has been included in this submittal.

Section IV: Staff Qualifications and Experience





EDUCATION

West Virginia University,
Bachelor of Science,
Geology, 2016

PROFESSIONAL EXPERIENCE

6 Years

REGISTRATIONS & LICENSES

PG005601 Pennsylvania

CERTIFICATES

- PennDOT
Certified Drilling
Inspector #472-20
- MSHA Surface Miner
Training
- Class 32 Safety
Sensitive Personnel
- OSHA 10-Hour Hazard
Recognition Training
- CONSOL Hazard
Training
- SafeLand USA Training

PUBLICATIONS

- Roadside Geology of
West Virginia, Mountain
Press Publishing
Company, 2018

HIGHLIGHTS OF EXPERIENCE

Ms. af Rolén is a geologist experienced in all phases of field investigations from geotechnical drilling coordination and inspection, soil and rock core logging, geological mapping, slope stability analysis and landslide remediation, mine subsidence investigations, piezometer installation, and environmental site assessments. She is well versed in preparing geotechnical reports, boring logs, and laboratory sample data. Maria was a substantial contributor to the publication Roadside Geology of West Virginia.

RELEVANT PROJECT EXPERIENCE / GEOTECHNICAL

Mine Subsidence Investigations, WV. *West Virginia Bureau of Risk Insurance Management.* Geologist. Research past coal mining activities within the project area to determine if deep mining has been conducted within influence of the damaged structure and is responsible for damage. Responsibilities include, project coordination, site visit and damage assessment, site investigation, geotechnical drilling oversight, logging and interpretation of rock core, report development and remediation recommendations. Completed approximately 17 projects in various locations throughout West Virginia.

Environmental Well Pad Inspections in West Virginia, Pennsylvania, and Ohio. *EQT Corporation.* Geologist. Inspection and mapping of numerous well pads across West Virginia, Pennsylvania, and Ohio for preparation of Spill Prevention, Control, and Countermeasure (SPCC) Plans.

Yost #6 Well Pad Slip Area, Greene County, Pennsylvania. *Diversified Gas and Oil.* Geologist. Remediation design of the slope failure which occurred on the reclaimed site of a vertical well pad. Responsibilities included performing site reconnaissance, test boring inspection, logging of subsurface conditions, selection of samples for laboratory analysis, stability analyses of existing slopes and viable remedial alternatives, and reporting.

4 North No. 1 Portal, Greene County, Pennsylvania. *The Monongalia County Coal Company.* Geologist. Slope stability and fill embankment analyses for construction of a coal mine portal. Responsibilities included performing site reconnaissance, test boring and test pit inspection, logging of subsurface conditions, selection of samples for laboratory analysis, slope stability analysis, preparation of design and construction recommendations, and reporting.

Proposed Coal Mine, Elizabeth, Pennsylvania. *Navigator Environmental & Technical Services.* Geologist. Design of proposed coal mine. Responsibilities included performing site reconnaissance, test boring inspection, logging of subsurface conditions, selection of samples for laboratory analysis, preparation of design and construction recommendations, and reporting.

Westridge Pad 4B-1 Geotechnical Study, Morgantown, West Virginia. *Falcon Consulting.* Geologist. Design of mixed used development on a reclaimed abandoned mine site. Responsibilities included performing site reconnaissance, test boring inspection, logging of subsurface conditions, selection of samples for laboratory analysis, foundation recommendations, and reporting.

Commonwealth of Pennsylvania



Department of State

Bureau of Professional and Occupational Affairs

The State Registration Board for Professional Engineers, Land Surveyors and Geologists hereby certifies that

MARIA AF ROLEN

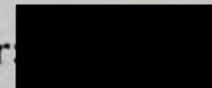
*having complied with the licensure laws
of the Commonwealth of Pennsylvania is authorized to practice as a/an*

PROFESSIONAL GEOLOGIST

*In Witness Whereof, we have hereunto set our hand and caused the seal of the Bureau of
Professional and Occupational Affairs.*

Certification Date: 05/04/23

License Number



Arion R. Claggett

Acting Commissioner Arion R. Claggett





EDUCATION

A.S. Land Surveying, Glenville State College

B.A., History, West Virginia University

B.S., Mining Engineering, West Virginia University

REGISTRATIONS & LICENSES

- West Virginia Professional Surveyor #2405
- Tennessee Registered Land Surveyor #3143
- Kentucky Professional Land Surveyor #4 [REDACTED]
- Pennsylvania Professional Land Surveyor #SU075651
- Maryland Professional Land Surveyor # [REDACTED]
- West Virginia Engineer Intern #10335
- FAA Remote Pilot

TECHNICAL COMPUTER SKILLS

- ADOBE ACROBAT
- PIX4D
- ARCGIS
- AUTOCAD WITH CARLSON CIVIL SITE

HIGHLIGHTS OF EXPERIENCE

As the manager of Triad Engineering's surveying department in Morgantown, West Virginia, Mr. Brockett leads a team of experienced geospatial professionals while leveraging his technical skills to support and achieve the continuous goals of safety, efficiency, accuracy, and client satisfaction. His diverse range of past project work has encompassed many aspects of surveying for both private and public clients. In addition to his other responsibilities, Mr. Brockett has engaged in hydrologic analysis, easement negotiations with project stakeholders, and management of traffic monitoring data collection. During his 5+ years of experience as a surveyor, Mr. Brockett has demonstrated proficiency with boundary surveys for private homeowners, commercial ALTA surveys, topographic surveys, right-of-way alignment surveys, and construction layout surveys.

RELEVANT PROJECT EXPERIENCE

Unmanned Aerial Photogrammetry, Numerous Locations in OH, PA and WV

Mr. Brockett collected topographic survey data by means of an unmanned aerial vehicle. He set ground control targets, operated a small UAV as an FAA-certificated remote pilot, ensured compliance with applicable regulations and laws, established appropriate ground control points with conventional instrumentation and/or GPS equipment, operated equipment with a strong emphasis on public safety, performed quality assurance on captured images, and processed images to produce orthographic mosaic photographs and three-dimensional models.

U.S. Army Corps of Engineers (Youghiogheny River Lake Recreation Area), Confluence, PA

Mr. Brockett oversees on-call construction layout surveying services. This includes proposed grades, features, and/or structures. At the request and direction of the client, Triad's surveying personnel mark the proposed limits-of-disturbance/work, the site grading, and the project baseline. Triad also conducts pre- and post-construction surveys of embankment areas as directed by the Client.

Friends-of-Decker's-Creek (Gamble Hollow), Preston County, WV

Mr. Brockett oversaw actual field-run survey of a proposed easement area for an acid-mine drainage treatment system. The limits of the easement area were defined on the basis of electronic design files provided to Triad by the client. Triad located existing boundary corner monuments identified on a plat of survey by a third-party. The existing monuments were referenced to the proposed easement area for the purpose of defining its extents. Additional existing features within the area of interest were located, as necessary, to more fully describe the proposed easement. Permanent physical monuments were placed at the corners of the proposed easement area. A plat of the proposed easement area and an accompanying legal description was prepared.

Longview WWTS Survey Services, Madsville, WV

Mr. Brockett was responsible for the conduct of a field run survey to create an existing conditions survey drawing to assist in the layout of a water treatment system at Longview Power Plant. Proposed grades, structures, column lines, utilities and other features were marked with a combination of wooden stakes, hubs-and-tacks, nails, and other acceptable markers for construction layout. A post-construction survey was conducted to create as-built mapping of the final product.

Leer South D2-D3 Powerline Survey, Phillippi, WV

Mr. Brockett was responsible for oversight of construction stakeout of a proposed powerline for a bleeder shaft site. The client and technician determined structure locations from field evaluations. Proposed structure and overhead line location mapping was provided after field reconnaissance. Powerline existing condition exhibits need to be created when crossing roadways or other overhead powerline right of ways to determine the safest route.

Leer South 2022 Quarterly Drone Surveys, Phillippi, WV

Mr. Brockett is responsible for collection of quarterly topographic survey data of coarse coal refuse piles and an impoundment by means of an unmanned aerial vehicle. This field data is used to generate orthographic mosaic photographs and three-dimensional models for comparison. These models are used to create existing conditions plans, calculate quarterly site fill volumes, and cross sections to show project progress of each fill location.

Mt. Storm Anchor Bolts As-Builts, Mt. Storm, WV

Mr. Brockett was responsible for the conduct of a field run as-built survey of approximately six hundred installed anchor bolts at the Mount Storm Power Station. Triad then utilized the as-built survey data gathered to make redline drawings that indicate the relative dimension of the installed anchor bolts for comparison and created a coordinate file summary for each measured point.

Leer South Mine Office Pond Soundings, Phillippi, WV

Mr. Brockett was responsible for the conduct of a field run topographic survey of a pond behind Leer South Mine offices. Soundings of the base of the pond were to be collected in order to contour the bottom surface and to draw pond cross sections. Survey locations of the surrounding area were taken to generate contours, create an existing centerline profile of the pond, and profile of the embankment. Surface features to be included were the pond dam, spillway, embankment, streams, springs feeding the pond, nearby parking lot, and utilities. Storm calculations were also performed to determine if the existing spillway outlet pipe would handle potential rainfall events without breaching the emergency spillway.

2025 WEST VIRGINIA PROFESSIONAL SURVEYOR 2025

The West Virginia Board of Professional Surveyors certifies that the individual listed below is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, Code of West Virginia, and has met the requirements for license renewal for the period ending June 30, 2025



KEVIN M. [REDACTED] BROCKETT
P.S. # [REDACTED]



Board Members

Sefton Stewart, PS, Chairman

Tom Rayburn, PS, Secretary

Gary Facemyer, PE, PS

Lantz Rankin, PS

Douglas McElwee, Esq.

Issued
07/01/2024



Expires
06/30/2025

Executive Director
Carla Williams

2025

State of West Virginia
Board of Professional Surveyors



KEVIN M. BROCKETT
P.S.LIC. # [REDACTED]

Is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, Code of West Virginia, and has met the requirements for license renewal for the period ending June 30, 2025

Expires:
06/30/2025

State of West Virginia
Board of Professional Surveyors
1124 Smith Street, Suite 1200
Charleston, WV 25301

Phone (304) 558-0350

Website: www.wvbps.wv.gov
Email: wvbps@wv.gov



EDUCATION

Marshall University
MS, Engineering

Fairmont State University
*BS, Civil Engineering
Technology*

Potomac State College
AA, Civil Engineering

PROFESSIONAL EXPERIENCE
14 Years

REGISTRATIONS & LICENSES

Professional Engineer

- [West Virginia](#)

SKILLS

- Project Management
- Soils Classification
- Construction Materials Engineering & Testing

PROFESSIONAL AFFILIATIONS

- ASHE
- ASCE
- NSPE

HIGHLIGHTS OF EXPERIENCE

Mr. Campbell has over 14 years of engineering experience. He is responsible to Triad's Geotechnical Engineering Services. Mr. Campbell performs geotechnical explorations, assessments, and evaluation of exploration results, foundation recommendations and reporting, laboratory testing, field inspections, and special inspections.

RELEVANT PROJECT EXPERIENCE / GEOTECHNICAL

Summit Community Bank Due Diligence, Granville, WV

Mr. Campbell provided a due diligence subsurface exploration for a proposed two-story steel framed structure with masonry walls and slabs-on-grade. As project engineer, Mr. Campbell was responsible for baseline site and foundation recommendations. Challenges associated with this project included existing fill with mine spoil and the potential for mine subsidence.

Preparation Plant Expansion, Wana, WV

As project engineer, Mr. Campbell provided geotechnical exploration for the expansion of an existing preparation plant. Mr. Campbell's responsibilities included providing baseline foundation and site preparation recommendations. Project challenges included undocumented fill, pyritic materials, and moisture sensitivity of site soils.

Various Well Pad Sites, Greene County, PA

As project engineer, Mr. Campbell provided geotechnical exploration and initial earthwork recommendations for these well pad sites. Project challenges included fill slope stability, site location near landslide susceptible materials, vehicular traffic loads, and moisture susceptibility of site soils.

17 Monument Lane Settlement, Monongalia County, WV

As project engineer, Mr. Campbell provided a geotechnical exploration for this foundation settlement and distress of a housing property. Both a significant thickness of uncontrolled and a void within the bedrock were encountered. Foundation mitigations were recommended to the owner which included underpinning and grout stabilization.

Green Hills Slide, Morris Township, PA

As project engineer, Mr. Campbell provided geotechnical exploration for landslide repairs of an approximate 300 cubic yard slip along trunk line right of way. Mr. Campbell's responsibilities included supervision of the field exploration program, drilling inspection, logging of boring locations, and initial slide repair recommendations.

I-79 Technology Park, Marion County, WV

As Project Engineer, Mr. Campbell oversaw the drilling and laboratory testing for a geotechnical exploration of 560 linear feet of this roadway project for the business park located at a former site of a surface mining

operation. A detailed discussion of the site geology and subsurface conditions was provided along with recommendations for site preparation and controlled fill construction.

Hilton Garden Inn Retaining Wall, Monongalia County, WV

As part of the due diligence phase of the prospective property purchase of this hotel, Triad was retained to conduct visual observation of the existing Redi Rock segmental retaining wall to assess potential issues such as bulges, displaced face, cracks, water seepage or settlement. Mr. Campbell performed this observation and generated a report discussing his findings.

Mountain State Clean Energy (Longview Power Plant), Maudsville, WV

Triad was retained during the preparation of this site for the construction of 1,200 MW gas-fired power plant. The project scope included drilling a total of fourteen (14) test borings including Standard Penetration Testing of the soil overburden and coring of the encountered bedrock. The borings were drilled at the specified locations on the provided boring location plan. Upon completion of the field work, Mr. Campbell conducted soil and rock testing in the laboratory and prepared a detailed geotechnical report.

Little Hackers Creek Slurry Impoundment, Barbour County, WV

As Project Engineer, Mr. Campbell provided geotechnical engineering services for the expansion of this coarse refuse impoundment. Triad drilled one test boring at the specified location and included Standard Penetration Testing of the soil overburden. Upon completion of the field work, Triad conducted soil testing in our laboratory, prepared a boring log and lab test results.

Leer South D2_D3 Shaft Blackrock Site, Barbour County, WV

As Project Engineer, Mr. Campbell provided geotechnical engineering services associated with the installation of the bleeder shaft. The site proposed was the location of an old strip bench and spoil area and was covered by approximately 75 feet of surface mine spoils material. The exploration was performed with considerations for both shallow and deep foundations. Upon completion of the field work, Triad conducted soil and rock testing in our laboratory, prepared a detailed geotechnical report along with foundation design recommendations.

WVBRIM Projects (7), Various Locations and Counties, WV

Other Recent Mining Projects in WV Includes:

- 6 South, No. 2 Shaft, Marshall County, WV, 01-21-0344
- 7 West Bleeder Shaft, Harrison County, WV, 01-21-0229
- Leer South Slope Tail, Barbour County, WV, 01-20-0208

Other Recent Dam/Impoundment Work in WV Includes:

- Cobun Creek Dam No. 1 Inspection, Morgantown, WV, 01-21-0336
- Cobun Creek Dam Inspection, Monongalia County, WV, 01-18-0414
- Upshur Refuse Impoundment Spillway, Upshur County, WV, 01-22-0056

Other Recent Slip Projects in WV Includes:

- Cedar Stone Townhomes Slip, Morgantown, WV, 01-21-0121
- Brown's Run Beltline Slip, Marshall County, WV, 01-18-0498
- Newbrough Access Road Movement, Tyler County, WV, 01-20-0206

Other Recent Retaining Wall Projects in WV Includes:

- Lodgeville Road Retaining Walls, Harrison County, WV, 01-18-0184
- Laborers International Union Building Retaining Wall, Ohio County, WV, 01-17-0481

Search: Details

Name:	BENJAMIN G. CAMPBELL
WV Professional Engineer:	PE License Number: [REDACTED]
	PE License Status: Active
	PE Issue Date: 12/05/2013
	PE Expiration Date: 12/31/2024
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement: 57.50
	Carryover Hours for Next Renewal: 15.00
	Last Renewal or Reinstatement Date*: 12/3/2022
WV Engineer Intern:	EI Certification Number: [REDACTED]
	EI Issue Date: 06/22/2009
Primary Address of Record:	29 MERLE YOST ROAD CORE, WV 26541
Primary Employer of Record:	TRIAD ENGINEERING INC. 1097 CHAPLIN ROAD MORGANTOWN, WV 26501
	<div style="border: 1px solid black; padding: 5px;"> <p>* This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.</p> </div>

This data was retrieved on 8/15/2023.



EDUCATION

West Virginia University, WV
BA (1995), Chemistry

West Virginia Institute of
Technology, BS (2008), Civil
Engineering

PROFESSIONAL EXPERIENCE
15 Years

REGISTRATIONS & LICENSES
Professional Engineer, WV

SKILLS

1. Civil Engineering
2. Hydrologic and Hydraulic Analysis and Design
3. Erosion and Sediment Control Plans
4. Stormwater Management
5. Permitting

HIGHLIGHTS OF EXPERIENCE

Mr. Criniti is currently a Project Engineer and is responsible for civil and surveying projects. He has participated in the design and management of numerous projects. These projects have included retail/commercial site preparation, airports, parking lots, buildings, retaining walls, foundations, sanitary structures, as well as boundary and topographic and photogrammetric surveys. Duties have included hydrologic and hydraulic analysis and design, erosion and sediment control plans, storm water management, field surveying, preparation of construction and as-built drawings, project specifications and preparation of various permit applications. Mr. Criniti also performs construction management, construction inspection, quality control testing, shop drawing review, project management, contract administration, and report preparation. He performs engineering calculations, studies, plans, reports and data analysis. Mr. Criniti assists in the coordinating of construction projects including conducting pre-bid, pre-construction and progress meetings, schedule review and pay request review and approval. He also assists in conducting interim and final inspections of construction projects to determine compliance with applicable laws, regulations, and specifications.

RELEVANT PROJECT EXPERIENCE

WV BRIM Engineering Services, Various locations, WV

As a Senior Engineer, Mr. Criniti conducted surface and subsurface investigations related to mining activities which included reviewing provided documentation, conducting site visits, and preparing a report of the observations. Mr. Criniti has been providing this service for WV BRIM for more than ten years.

AEP SWPPP Inspections, Various Locations, WV & KY

Mr. Criniti is the Senior Engineer for multiple stormwater pollution prevention plan (SWPPP) monitoring and inspection contracts for various project sites for AEP. Triad is responsible for inspecting the erosion and sediment controls at least once every four calendar days as well as within 24 hours after any storm event greater than 0.25 inch of rain per 24-hour period in accordance with the West Virginia NPDES General Storm Water Construction Permit. These inspections determine if the control measures have been installed correctly and within the required timeframes, whether damage has occurred to the measure after installation, and document what needs to be done to correct problems identified throughout the construction phase.

AEP Substations, Various Locations, WV, KY and OH

As Staff Engineering, Mr. Criniti provided engineering services for multiple substation projects for AEP. Triad performed civil/site design services including demolition, site layout, grading and drainage design as well as temporary erosion and sediment control. Triad provided required documents and submittals for permitting from appropriate agencies.

APG Polytech Railyard Expansion Erosion & Sediment Control Inspections, Apple Grove, WV

Triad was responsible for the stormwater pollution prevention plan (SWPPP) monitoring and inspection for the APG Polytech Railyard Expansion project. Mr. Criniti was responsible for the inspection of the erosion and sediment controls at leads once every seven calendar days as well as within 24 hours after any storm event equal to or greater than 0.25 inch of rain, in accordance with the West Virginia NPDES General Storm Water Construction Permit. These inspections determine if the control measures have been installed correctly and within the required timeframes, whether damage has occurred to the measure after installation, and document what needs to be done to correct problems identified throughout the construction phase.

Belle West Reynolds Avenue Sewer and Storm Sewer Improvements, Belle, WV

The Town of Belle experiences excessive inflow/infiltration during wet weather events in the West Reynolds area of Town. Mr. Criniti, as Senior Engineer worked with the team to prepare plans, specifications, bid/contract documents, and for construction management. Triad also providing surveying, permitting, funding assistance and construction observation services.

City National Bank – Construction Administration Services, WV

This project consists of a statewide contract to provide construction administration services for City National Bank on bank loans for commercial construction projects. On this project Mr. Criniti is responsible for performing periodic job site inspections of work progress, reviewing contractor pay requests, monitoring project schedules as they pertain to percent completion and pay requests, and conducting periodic progress meetings.

Crawley Creek Road – County Route 3 Slide, Logan County, WV

Mr. Criniti worked on the Triad team that provided full civil engineering services including wall and roadway design for this landslide repair project on Crawley Creek/County Route 3, Logan County, West Virginia that caused the road to be reduced to one travel lane with alternating traffic. The services Triad provided consisted of surveying, drilling oversight, design, site grading, drainage and road repair. The design consisted of a retaining structure acceptable to WVDOH standards. Construction documents provided by Triad included existing conditions, site grading and drainage, erosion and sediment control, pertinent details, wall layout, wall profile and design calculations.

Mason Campground Waterline Extension, Mason, WV

The Town wished to use the remaining project contingency funds to extend the waterline service to the Clifton Campground and adjacent existing customers. The project involved boring under US62 and the CSX railroad. As Senior Engineer, Mr. Criniti worked with the team to design and obtain all applicable permits for the project. Triad provided construction management and observation for the project.

Tolsia Athletic Fields, Fort Gay, West Virginia

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design and permitting for this project. In this capacity he has to coordinate with the project architect, local municipalities, the WVDOH and the project developer. Work on this project included, utility routing, storm drainage design, storm water management design and preparation of WVDOH encroachment permit applications, health department permit application and NPDES permit application for handling surface water during construction. Mr. Criniti was responsible for performing construction administration on this project consisting of site inspections, pay application review and approval and construction schedule monitoring.

US 52 – Maher Slide, Mingo County, WV

This project consisted of the repair a landslide on US 52 near the town of Maher that caused the road to be reduced to one travel lane with alternating traffic. The work consisted of surveying, drilling oversight, and the design, site grading, drainage and road repair. Mr. Criniti was on the Triad team that provided full civil engineering services including roadway design for this project, which consisted of a retaining structure acceptable to WVDOH standards. Construction documents included existing conditions, site grading and drainage, erosion and sediment control, pertinent details, wall layout, wall profile and design calculations.

US 52 – Stonecoal Slide, Wayne County, WV

Mr. Criniti was on the Triad team that provided full civil engineering services including wall and roadway design for this landslide repair project on US 52 near the town of Stonecoal, Wayne County, West Virginia that caused the road to be reduced to one travel lane with alternating traffic. The services Triad provided consisted of surveying, drilling oversight, design, site grading, drainage and road repair. The design consisted of a retaining structure acceptable to WVDOH standards. Construction documents provided by Triad included existing conditions, site grading and drainage, erosion and sediment control, pertinent details, wall layout, wall profile and design calculations.

WV 37 – Twelve Pole Creek Slide, Wayne County, WV

This project consisted of the repair a landslide on US 52 near the town of Wayne that caused the road to be reduced to one travel lane with alternating traffic. The work consisted of surveying, drilling oversight, and the design, site grading, drainage and road repair. Mr. Criniti was on the Triad team that provided full civil engineering services including roadway design for this project, which consisted of a retaining structure acceptable to WVDOH standards. Construction documents included existing conditions, site grading and drainage, erosion and sediment control, pertinent details, wall layout, wall profile and design calculations.

Search: Details

Name:	JAMES RALPH CRINITI, JR
WV Professional Engineer:	PE License Number: 022418
	PE License Status: Active
	PE Issue Date: 06/23/2017
	PE Expiration Date: 12/31/2024
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement: 33.50
	Carryover Hours for Next Renewal: 3.50
	Last Renewal or Reinstatement Date*: 12/28/2022
WV Engineer Intern:	EI Certification Number: 9007
	EI Issue Date: 07/06/2009
Primary Address of Record:	707 JEFFERSON STREET SOUTH CHARLESTON, WV 25309
Primary Employer of Record:	TRIAD ENGINEERING INC 10541 TEAYS VALLEY ROAD SCOTT DEPOT, WV 25560
	<p>* This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.</p>

This data was retrieved on 8/14/2023.



EDUCATION

West Virginia Institute of
Technology
BS, Mechanical Engineering
BS, Civil Engineering

PROFESSIONAL EXPERIENCE

32 Years

CERTIFICATIONS

1. Certified Monitoring
Well Installer (WV
██████████)

REGISTRATIONS & LICENSES

1. Professional
Engineer, West
Virginia #016859
2. Professional
Engineer,
Maryland #50585

SKILLS

1. Managing Multiple Drill
Crews
2. Organizing drills, crews,
and supplies for drilling
projects
3. Design of Subsurface
Explorations

HIGHLIGHTS OF EXPERIENCE

Mr. Haynes serves as the Senior Drilling Manager for Triad's drilling operations where he manages all drilling and sampling activities conducted by the firm's regional offices. Mr. Haynes previously served as a Project Geotechnical Engineer. Mr. Haynes' duties include design and implementation of the subsurface investigations, assignment of laboratory testing, approval of design drawings, development of technical specifications, and preparation of drilling and geotechnical engineering cost proposals and reports.

RELEVANT PROJECT EXPERIENCE

WV Department of Environmental Protection Drilling for Northern Counties

Triad was responsible for providing geotechnical investigation on these various projects to assist in the construction reclamation for these abandoned mine line projects. Triad's duties included geotechnical, surface drilling, subsurface drilling, standard penetration testing and sampling and laboratory testing reporting for the geotechnical drilling investigation completed for WVDEP in the northern counties.

WV Department of Environmental Protection Drilling for Southern Counties

Triad was responsible for providing geotechnical investigation on these various projects to assist in the construction reclamation for these abandoned mine line projects. Triad's duties included geotechnical, surface drilling, subsurface drilling, standard penetration testing and sampling and laboratory testing reporting for the geotechnical drilling investigation completed for WVDEP in the southern counties.

Blue Knob Complex AML, Barbour County, WV

This project consisted of drilling 14 borings, providing boring logs that presented soil/rock descriptions, SPT results at ground water level, soil/rock layers and bedrock surface.

S3 Contract- WVDEP 2023 AML, Fayette and Greenbrier Counties, West Virginia (Pending Contract)

Geotechnical Project Manager for the design of fourteen sites including access road upgrades, channel improvements, wet and dry mine seals for portals, bat gates, splash-pads, highwalls, mine subsidence features, etc. Attended scoping meetings, coordinated with landowners including National Park Service, preparation of geotechnical scope of work and contracts.

Cenalli Impoundment, Barbour County, WV

The project consists of the construction of an impoundment with an approximate total volume of 10.2 million gallons, located in Barbour County, WV. We understand that the impoundment will be used as a centralized pit for the storage of water used in development of natural gas wells. Mr. Haynes provided drilling supervision and oversight during the subsurface investigation portion of the project. The subsurface investigation consisted of drilling 4 test borings to depths ranging

from 30 to 40 ft. beneath the existing ground surface. Standard Penetration Testing and rock coring was performed at each location.

Flatbush Highwall, Randolph County, WV

Triad's duties included drilling 10 borings, soil drilling with Standard Penetration Testing & Sampling, Boring Access & Reclamation, observation of groundwater level and backfilled test borings.

Morris Impoundment, Doddridge County, WV

The project consists of the construction of an impoundment for the construction of a secondary containment system for a centralized water storage tank in Doddridge County, WV to be used in development of natural gas wells. Mr. Haynes provided drilling supervision and oversight during the subsurface investigation portion of the project. The subsurface investigation consisted of drilling 7 test borings to depths ranging from 16.5 to 45 ft. beneath the existing ground surface. Standard Penetration Testing was performed at each location and rock coring was performed at select borings.

Appalachian Corridor "H", Tucker and Grant County, WV

As a Staff Geotechnical Engineer, Mr. Haynes worked closely with the field inspectors during the subsurface investigation phase by helping make decisions concerning boring locations, depths, and subsurface descriptions. He entered boring logs, assigned laboratory testing, and prepared geological stick bar borings to be placed on the project cross sections. Mr. Haynes also designed cut and fill slopes, performed slope stability analysis on critical embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment for these sections of the Corridor. He compiled all information into a final geotechnical roadway report, including the three bridges in this section. Bridge reports provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Coalfields Expressway, Sophia, WV

As a Project Geotechnical Engineer on this project, Mr. Haynes initially developed a boring layout based on the project cross-sections provided by the client. He also worked with field inspectors during the subsurface investigation to design cut and fill slopes, perform settlement calculations for embankment fills, estimate shrink/swell factors for excavated materials, and tabulate probable sources of select embankment. After the original subsurface investigation and geotechnical report was completed, WVDOT decided to extend the project 800 ft. to balance borrow and waste. Mr. Haynes then developed a recall boring list to continue the project.

Corridor H Drilling-Kerens to Parsons, Section 2, Tucker County, WV

The project consists of the geotechnical drilling for a 3.69-mile section of a 4 lane Expressway which extends from Interstate 79 near Weston, WV east to the Virginia state line near Wardensville, WV. Mr. Haynes was the project manager for this project which consisted of 166 Borings for a total drilling footage of 10,616 feet. This project was extremely difficult due to the extremely steep terrain and strict environmental requirements.

Corridor H Drilling-Kerens to Parsons, Section 1B, Randolph, Tucker County, WV

The project consists of the geotechnical drilling for a 5.62-mile section of a 4 lane Expressway which extends from Interstate 79 near Weston, WV east to the Virginia state line near Wardensville, WV. Mr. Haynes was the project manager for this project which consisted of 272 Borings for a total drilling footage of 15,757 feet. This project was extremely difficult due to the extremely steep terrain and strict environmental requirements.

Ohio University Southern Center for Development, Athens, OH

Mr. Haynes worked with drill teams from Triad during the subsurface investigation phase of this project, and then prepared computer-generated borings logs and assigned laboratory testing. From this, he prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

St. Mary's Hospital, Huntington, WV

Mr. Haynes escorted Triad's drillers to this project site and staked the test borings utilizing measurements from existing site features. Following the subsurface investigation, Mr. Haynes then prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

West Virginia Route 9, Jefferson and Berkeley County, WV

As a Staff Geotechnical Engineer on the first section of this project, Mr. Haynes worked as the Lead Inspector in the field during the subsurface investigation by logging soil and rock from bore holes, keeping track of drill rigs, and aiding other inspectors. He designed cut and fill slopes, performed slope stability analysis on critical embankment fills, performed settlement calculations for embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment.

WV Statewide Geotechnical Drilling IDIQ, Various Locations, WV

This project consists of an as-needed, on-call 1-to-2-year contract for providing geotechnical drilling to the West Virginia Division of Highways. Triad has maintained this contract since 1998 and Mr. Haynes has managed the contract since 2012. Recent projects have included water borings (offshore drilling) for the I-64 Nitro, St. Albans, Bridge and borings for several bridge replacements in various locations in Berkeley and Hampshire Counties, WV.

Western Juvenile Detention Center, Barboursville, WV

As a Project Engineer, Mr. Haynes developed and implemented the subsurface investigation for this detention facility. His responsibilities included coordination with our in-house survey department, determination of access for drill rig and equipment, and supervision of all field work.

Your **ACTIVE PE** renewal fee has been received...

Your ACTIVE PE renewal fee has been received. Your pocket card indicating you are entitled to practice engineering in West Virginia until the noted expiration date may be detached and used unless invalidated as a result of Board audit of your renewal form or formal disciplinary action.

IMPORTANT REMINDERS:

1. Please include your WV ACTIVE PE license number on any correspondence to this office.
2. To use this license as a pocket card, please cut along the dotted line and laminate if desired.
3. You are required to immediately notify the Board, in writing, of the following: loss or theft of license or seal, any name change, any address change, or any employment change.

West Virginia State Board of Registration for Professional Engineers

300 Capitol Street, Suite 910
Charleston, West Virginia 25301
304-558-3554 Phone
800-324-6170 Toll Free
www.wvpebd.org

THIS IS ONE FORM OF YOUR RENEWAL RECEIPT

PLEASE SAVE THIS FOR YOUR RECORDS

Date of Renewal: December 29, 2022
Amount Paid: \$63.00



West Virginia State Board of Registration
for Professional Engineers

JOHN I. HAYNES
WV [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, 2024

JOHN J. HAYNES
770 SUPPER CLUB ROAD
LETART, WV 25253



Education

State University of New York at Buffalo
BS, Civil Engineering

Professional Experience

36Years

Registrations and Licenses

- Professional Engineer
- Pennsylvania
[REDACTED]
- West Virginia
[REDACTED]
- Maryland [REDACTED]
- Ohio #P [REDACTED]
- New York [REDACTED]

Affiliations

- ASCE

Skills Highlights

- Project Management
- Geotechnical Evaluations
- Impacts of Mining in the Ohio River Valley
- Slope Stability
- Soils Classification
- Construction Materials Engineering & Testing

HIGHLIGHTS OF EXPERIENCE

Mr. David Hooper brings more than 30 years of geotechnical engineering and project management experience to Triad Engineering, Inc., where he leads engineering projects operations in North Central West Virginia and Western Pennsylvania along with Energy projects for all of Triad's Regional operations. Mr. Hooper's specialties include geotechnical engineering assessments and design for transportation, public works, energy, and other public and private projects, project and client management, and personnel leadership to ensure contractual, schedule and budgetary requirements are maintained. In addition, he supports multiple regions for project scheduling, staff mentoring, quality assurance, management of projects and staff personnel to ensure contractual, schedule and budgetary requirements. His recent experience includes geotechnical engineering and construction observation and material testing projects for operations in West Virginia, Pennsylvania and Eastern Ohio. He has experience with WVDOH, PennDOT, Pennsylvania Turnpike Commission, MSHA, WVDEP, WV Conservation Districts and various local government agencies and counties.

RELEVANT PROJECT EXPERIENCE / GEOTECHNICAL

University Town Center, Morgantown, WV

Geotechnical Project Manager for design and construction oversight of mine grouting along main access road and adjacent pads. Grouting was performed in the Sewickley seam. Developed specifications to work to minimize grout flow outside the project limits and minimize grout takes. Built database of mined conditions as grouting progressed. Oversaw verification drilling.

New Castle Multi-Family Housing, New Castle, PA

Project manager for construction oversight of grouting program to stabilize active subsidence zone around five multi-family residences. Reviewed pre-installation cores, construction issues and made recommendations for acceptance of foundations for support of the structure.

Distribution Warehouse, West Ridge Commerce Centre, Falcon Development, Morgantown, WV

Performed peer review and alternate earthwork, ground improvement, slope stability, mine grouting and foundations recommendations for the 350,000 square foot warehouse facility located on a previous mining site where strip mining, deep mining and restoration had been performed. Recommendations included dynamic compaction, mine grouting and a load transfer mat. Also involved in geotechnical aspects of construction administration.

Canvas Apartments Retaining Wall Repair, Morgantown, WV.

Project Manager for repair of a failing 170-foot section of geogrid reinforced slope system. The system had a wire mesh face and retaining a rock backfill. Geogrid reinforcement is used with this system. In addition to performing a geotechnical exploration, three options including a soldier pile wall, reconstruction with a similar system and soil nailing were developed included estimates of costs. Responsibilities also included identifying design build contractors for the soldier pile wall, interviewing contractors, reviewing wall designs and overseeing construction inspection and testing.

S3 Contract- WVDEP 2023 AML, Fayette and Greenbrier Counties, West Virginia (Pending Contract)

Geotechnical Project Manager for the design of fourteen sites including access road upgrades, channel improvements, wet and dry mine seals for portals, bat gates, splash-pads, highwalls, mine subsidence features, etc. Attended scoping meetings, coordinated with landowners including National Park Service, preparation of geotechnical scope of work and contracts.



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity, and Discretion, of

David W. Hooper

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he, having submitted satisfactory evidence, of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [REDACTED]

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.

Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 9th day of Oct. in the year of our Lord One Thousand Nine Hundred and Ninety Seven and of the State the One Hundred Thirty-Fourth



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Frank Gaddy

By Patrick R. Egan Secretary 5/2/2011SSD

H. Ben J. Diner President [Signature]



PROFESSIONAL EXPERIENCE
27 Years

CERTIFICATIONS

WVDOH:

- Soil Compaction Inspector
- Portland Cement Concrete Inspector

MSHA:

- Impoundments
- 24-hour Surface Mine Operations

APNGA:

- HAZMAT Portable Nuclear Gauges

ACI

- Concrete Strength Testing - Level 1
- Concrete Lab Testing - Level 1
- Aggregate Testing - Level 1
- Field Concrete Testing - Level 1

OSHA 10

SKILLS

- Field & Laboratory Testing
- Compaction Inspection & Testing
- Impoundment Skill

HIGHLIGHTS OF EXPERIENCE

Mr. Kennedy started his career as an Engineering Technician with Triad Engineering over 26 years ago. He has provided QA / QC services including field tests for soils, asphalt and aggregate compaction, concrete placements, mortar and grout testing, and structural bolt testing for numerous private industry and government / public sector clients including coal / energy companies and the WV Department of Highways. Mr. Kennedy has experience in conducting soil foundation and rebar and subgrade inspections. He is knowledgeable in most laboratory testing procedures for soil, concrete, asphalt, and aggregates. He has been involved with a variety of construction projects throughout his career, which enables him to read plans and specifications, complete clear and thorough field reports, and organize and manage on-site projects as needed to complete inspection tasks. Mr. Kennedy has maintained a leadership role in Triad's QC/QA department in the role of department manager.

RELEVANT PROJECT EXPERIENCE

Galloway Shaft, Grafton, WV

Mr. Kennedy provided quality control oversight for the construction of this mine shaft. Field testing included verification of stripping, proof-rolling, installation of drainage features, documentation of lift thickness, and moisture density testing. Observation of spread footings and drilled piers was also included. Laboratory testing included concrete strength testing and moisture-density testing.

Marion County Mine, Marion County, WV

Mr. Kennedy provided supervision to his team for providing quarterly and annual WVDEP and MSHA inspections, certifications, and material testing.

Nolan's Run Expansion, Harrison County, WV

Responsible to the Harrison County Coal Company, Mr. Kennedy provided oversight for testing and inspection services for this renovation of 304,700 cubic yards of random soil fill. Specific services included field and laboratory testing of fill and concrete.

Murry 8 South Shaft, Knoxville, WV

Responsible to the contractor, Mr. Kennedy provided oversight for the construction of a proposed mine shaft pad and access road. Specific services included project management, reporting, field and laboratory fill testing, and construction observation.

Quality Control Services, Various Mines, Various Locations WV/PA/MD

For over 10 years, Mr. Kennedy performed quality control and materials testing services for the following mines throughout West Virginia, Pennsylvania, and Maryland. Specific services included mine refuse compaction testing and site inspection.

- Harrison County Mine, Robinson Run, WV
- Monongalia County Mine, Blacksville No. 2, WV

- Marion County Mine, Loveridge, WV
- Federal No. 2 Mine, Monongalia County, WV
- Ohio County Mine, Shoemaker, WV
- Marshall County Mine, McElroy, WV
- Sentinel Mine, Barbour County, WV
- Mt. Storm Power Station, Grant County, WV
- Mettiki Mine, Oakland, MD
- Bailey Mine, Green County, PA

Impoundment Inspections, Various Mines, Numerous Locations, WV, PA, MD

Mr. Kennedy provided Quarterly and Annual Impoundment Inspections for over 20 years for the following mines:

- Harrison County Mine, (formerly) Robinson Run, WV
- Monongalia County Mine, (formerly) Blacksville No. 2, WV
- Marion County Mine, (formerly) Loveridge, WV
- Ohio County Mine, (formerly) Shoemaker, WV
- Marshall County Mine, (formerly) McElroy, WV
- Mettiki Mine, Oakland, MD
- Robena Mine, PA

Impoundment Quality Control – Performed quality control testing and observation for construction of the following impoundments:

- Harrison County Mine Slurry Cell
- Bailey Mine, WV

Cobun Creek Dam, Morgantown, WV

Mr. Kennedy provided oversight for quality control testing and observation services for the General Contractor throughout construction of a new dam for the Cobun Creek reservoir. Services included compaction and backfill, proof-rolling, spread footings, concrete placement, along with laboratory testing of soils and concrete. Project management and consultant services were also provided during this project.

Antero Industrial Landfill, Pennsboro, WV

Responsible to the contractor, Mr. Kennedy provided oversight for construction quality control services for this landfill project. Specific services included field and laboratory testing for fill soil and concrete along with project management and reporting.

State of West Virginia, Dent's Run Industrial Solid Waste Landfill, Mannington, WV

As a subcontractor for the general contractor, Mr. Kennedy served as Project Manager and was responsible for the administration and oversight of Construction Inspection, Materials Testing and Lab Testing Services associated with the Dents Run Stage 2B Landfill Expansion. In doing so, Triad performed services including construction observation for site work (subgrade, compacted fill, liner installation), along with extensive lab testing on soil and aggregates used on the project.



EDUCATION

West Virginia Institute of
Technology, WV
AS, Mining Engineering
Technology, 1987

PROFESSIONAL EXPERIENCE

22 Years

REGISTRATIONS & LICENSES

- Licensed Professional Surveyor – WV# [REDACTED] NC # [REDACTED]
- FEMA Certified Flood Plain Surveyor – NC [REDACTED]
- OSHA 10

SKILLS

- Construction Layout
- Boundary Subdivision
- Right of Way Plans
- Photogrammetric Control
- Mine Surveying
- Topographic Location

PROFESSIONAL AFFILIATIONS

- WV Society of Professional Surveyors
- NC Society of Professional Surveyors
- National Society of Professional Surveyors

HIGHLIGHTS OF EXPERIENCE

Mr. Kirk is currently the Survey Manager for the Scott Depot office of TRIAD. In this capacity, he is responsible for the supervision of the survey crews, overseeing the field work through drafting to the finished product delivered to the client, meeting with clients, and performing field work on large and complex projects. Mr. Kirk is experienced in construction layout, boundary and roadwork surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of work including surface mine surveying for coal mine facilities, site surveys and construction layout for landfill facilities, site surveys and right of way plans for WVDOH and NCDOT highway projects, and site surveys and construction layout for site development projects. Mr. Kirk has been involved in survey projects in several states including West Virginia, Kentucky, Ohio, Virginia, South Carolina and North Carolina.

In his capacity, he is responsible for schedules, project budgets, and the overall coordination of all survey projects. He works with all levels of engineering staff, the overall project team, and the project owner to produce a quality work product which satisfies all project requirements.

RELEVANT PROJECT EXPERIENCE

Winter Portals AML Surveying, Winter, WV

Triad provided construction surveying support services to Wiseman Excavating for this WV Department of Environmental Protection Abandoned Mine Lands project near Winter, WV. Mr. Kirk was the lead surveyor and project manager for the project and provided horizontal positioning, alignment staking, grade staking, and related professional surveying services to include pre- and post-construction topo location surveys in support of construction.

S3 Contract- WVDEP 2023 AML, Fayette and Greenbrier Counties, West Virginia (Pending Contract)

– Surveying Manager for the design of fourteen sites including access road upgrades, channel improvements, wet and dry mine seals for portals, bat gates, splash-pads, highwalls, mine subsidence features, etc. Attended scoping meetings, coordinated with landowners including National Park Service, preparation of surveying scope of work and contracts.

Various AEP Projects, WV

Mr. Kirk acted as the lead Project Manager and Lead Surveyor for several Appalachian Power projects, providing whatever surveying-related services were required. Mr. Kirk conducted on-site field operations to establish working survey control for the construction site, established a best-fit alignment of existing mooring cells for computations to provide layout and positioning of the proposed breasting system to be installed on the existing mooring cells at the coal and/or limestone unloading dock. For some projects, Mr. Kirk provided over-all site grade staking and off-set grade and alignment staking of the proposed storm drainage pipe and end-sections. Mr. Kirk conducted field and office survey operations to provide layout for the installation of caissons and anchor bolt alignment for construction of new transmission towers. Mr. Kirk provided horizontal and vertical positioning, grade and alignment staking, general layout, and location survey services per client needs and direction to

support of construction efforts associated with the installation of a TECCO Mesh slope stabilization system.

Goff Mountain Landfill – Goff Creek Stream Restoration, Nitro, WV

Mr. Kirk was the project manager and lead surveyor for this project with CJ Hughes Construction Company to restore Goff Creek in the Bayer CropScience Goff Mountain Landfill. Services provided by Triad included construction staking and as-built survey services.

Bluestone Park Fishing Pier Construction Staking and Layout, Bluefield, WV

This project consisted of the construction of the Bluestone Park Fishing Pier for the US Army Corp of Engineers project. Mr. Kirk was the lead surveyor and project manager for this project, providing drilled-pier foundation layout, and anchor bolt positioning. Triad staked the centerline of the proposed foundations to facilitate drilling operations. In addition, Triad provided positioning and alignment of the proposed anchor bolts by client-provided template placement in coordination with the concrete pour.

Bridges Christian Church FEMA Elevation Certificate, Russel, KY

This project consisted of the presentation of a FEMA Elevation Certificate for each existing structure onsite for the Bridges Christian Church in Russell, KY. Triad conducted field operations to determine the adjacent grade elevations at the exterior building corners and finished-floor elevation of the existing structures.

Capitol Complex Steam Distribution Line Replacement Surveying, Charleston, WV

This project consisted of the replacement of the existing steam distribution line servicing the WV State Capitol building and several other Capitol Complex buildings. Triad provided a complete topographic location survey, including subsurface utilities location and finished floor elevations of the subject buildings to ZDS Design/Consulting Services.

Dingess Street Bridge, Logan WV

This project consisted of the replacement of the Dingess Street Bridge in Logan, WV. Mr. Kirk was the project manager and lead surveyor for this project which entailed generating an existing conditions survey of the existing bridge, approaches and affected roadway areas.

Kenney Hamrick Sr. Memorial Bridge, Webster County, WV

This project consisted of the replacement of the existing bridge. Mr. Kirk was the project manager and lead surveyor for this project which entailed generating an existing conditions and topographic survey of the existing bridge, approaches and affected roadway areas, stream cross sections and R.O.W. surveys.

Ona Mall I-64 Bridge, Cabell County, WV

This project will eventually consist of the widening of I-64 in the area of the Ona Mall, which will affect the I-64 Bridge in this area. Mr. Kirk was the project manager on this project. Survey work on this project consisted of mapping existing conditions and a topographic-location survey of the bridge and surrounding area.

Pendleton – Pocahontas County ADA Ramps, Pendleton and Pocahontas Counties, WV

This project consisted of the installation of ADA compliant curb ramps at various locations along US 33 and US 220 in Franklin, Pendleton County and WV 39 and CO 39/2 in Marlinton, Pocahontas County, WV. As the project manager and lead surveyor, Mr. Kirk provided base mapping of 64 ramp locations, extending 25 feet on either side of the existing crosswalk along the existing sidewalk, and from the existing edge of pavement/gutter to the back of the sidewalk, throughout the project site.

Rt. 10 Roadway, Man, WV

Mr. Kirk was the project manager and lead surveyor on this project which consisted of providing a localized GPS control network to support machine guidance construction efforts for the realignment of WV State Route 10 near Logan, WV.

US Methanol Liberty Plant Structural Deformation Monitoring, Institute, WV

Mr. Kirk was the project manager and lead surveyor for this project. US Methanol had concerns about the possible movement of structural members associated with the Liberty methanol manufacturing plant. Triad conducted field and office survey operations to determine 3-dimensional locations and provided the information to the client for their use in evaluation of the potential deformation and movement of the structures.

Bluestone Park Fishing Pier Construction Staking and Layout, Bluefield, WV

This project consisted of the construction of the Bluestone Park Fishing Pier for the US Army Corp of Engineers project. Mr. Kirk was the lead surveyor and project manager for this project, providing drilled-pier foundation layout, and anchor bolt positioning. Triad staked the centerline of the proposed foundations to facilitate drilling operations. In addition, Triad provided positioning and alignment of the proposed anchor bolts by client-provided template placement in coordination with the concrete pour.

Bridges Christian Church FEMA Elevation Certificate, Russel, KY

This project consisted of the presentation of a FEMA Elevation Certificate for each existing structure onsite for the Bridges Christian Church in Russell, KY. Triad conducted field operations to determine the adjacent grade elevations at the exterior building corners and finished-floor elevation of the existing structures.

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WV Turnpike Pavement Reconstruction Survey and Mapping, Mercer County, WV

Triad provided professional surveying and mapping services to HNTB Corporation in support of design and engineering efforts related to the replacement of a section of failing pavement in the northbound lanes of the WV Turnpike (US 77) in Mercer County, WV between the northern abutments of the Bluestone River Bridge for approximately 1.4 miles of roadway. As the project manager and lead surveyor, Mr. Kirk coordinated with Blue Mountain Aerial Mapping to provide planimetric and topographic mapping of the site, including placing and locating the aerial target control network.



To all to whom these presents shall come Greeting
Know Ye that the Board of Professional Surveyors
Of the State of West Virginia *reposing special confidence in the
Intelligence, Integrity and Discretion of*

Lloyd Allen Kirk

*Does in Pursuance of Authority Vested In It
by law, hereby certify that this person, having submitted
satisfactory evidence of their ability and experience, is a*

Professional Surveyor

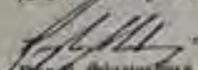
License Number [REDACTED]

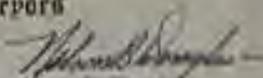
*To Hold and use such title in the surveying profession, subject to the
conditions prescribed by law.*



*Given under the hand and the Seal of
the Board this 25th day of May in the
year of our Lord Two Thousand and
Twelve and of the State the 148th.*

Board of Professional Surveyors


Roy C. Sherrill, Jr.
Chairman


Melan B. Douglas
Secretary



EDUCATION

*Pennsylvania State University
BS, Civil Engineering*

PROFESSIONAL EXPERIENCE

34 Years

REGISTRATIONS & LICENSES



CERTIFICATIONS

- PENNDOT Certified Drilling Inspector
- 40-Hour OSHA – Health & Safety Training
- 10-Hour OSHA – General Industry
- Radiation Safety & Nuc. Soil Gauge Certification
- SafeLand Safety Training

SKILLS

- Mine Subsidence Remediation
- Slope / Stability
- Retaining Wall Design
- Foundation Design

AFFILIATIONS

- ASCE

HIGHLIGHTS OF EXPERIENCE

Mr. Lowden specializes in geotechnical engineering with 34 years of progressive engineering experience. He is responsible for both the technical aspects of projects and project management. His experience has provided him with a broad range of technical and managerial experience in geotechnical engineering, civil engineering and construction project management. His design experience includes subsurface investigations, embankment and slope design, deep foundation design (micropile, drilled shaft and pile design), spread foundation design, stabilization and remediation of failed slopes, deep mine stabilization, rockfall fence design, retaining wall design (gravity wall, soldier-pile and lagging wall, tieback wall, MSE wall, soil nail wall), and reinforced earth slope design. He has experience in all phases of field investigations from geotechnical drilling coordination and inspection with field logging per ASTM D5434 standard, soil and rock core logging per ASTM D2488 and D2113 standards. He has experience with WVDOH, OSMRE, WVDEP, PennDOT, Pennsylvania Turnpike Commission, USACOE and various local government agencies and counties.

RELEVANT PROJECT EXPERIENCE

Mon-Fayette Transportation Project, I-70 to SR 0051, Bridge Structure MF 315 & 316, Washington County, PA. Pennsylvania Turnpike Commission. Preliminary and final design of a dual bridge structure carrying a limited-access highway. These bridge structures consist of nine-span, dual, high-level (250 feet) viaducts traversing Mingo Creek, the Wheeling & Lake Erie Railroad, Ginger Hill Road, Froman Run, and SR 0088. The project required designs for a dual concrete box and a dual steel continuous composite welded multi-girder bridge. Performed the remediation of abandoned deep mine, remediation of a landslide, and the design of deep foundations.

Bills/Keefe Subsidence, Cambria County, PA. U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement. Investigation and remediation of a subsidence feature in a residential neighborhood.

West Virginia Board of Risk & Insurance Management, Open-end Agreement, Various Locations, WV. Director providing quality control and interim technical reviews. The projects consist of field assessments and preparation of reports pertaining to insurance claims for mine subsidence for various structures. Work included identifying damages and potential causes. Project also included subsurface explorations to the mined seam to assess the potential for mine subsidence damage at some locations.

Wallace Subsidence, Allegheny County, PA. U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement. Investigation and remediation of a subsidence feature in a residential neighborhood.

- I performed a records search, field reconnaissance
- I developed and performed a subsurface investigation which included boring layout, boring inspection, mine camera work and choosing lab samples.
- I instrumented and monitored structure distress
- I prepared mine grouting remediation program and prepared the final report and construction documents.

Bedford Reservoir Subsidence, Allegheny County, PA. U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement. Investigation and remediation of a

subsidence feature in a public water reservoir. The project consisted of a records search, field reconnaissance, a subsurface investigation which included boring layout, boring inspection, mine camera work, instrumented and monitored structure distress, prepared mine grouting remediation program and prepared the final report and construction documents.

USMC PFC Danny Marshall Memorial Bridge, Wood County, WV, WVDOH

Senior Engineer for geotechnical exploration and foundation recommendations for the dual 3-span structures that carries WV 14 over Big Run. Both sets of piers are supported on 4-foot diameter drilled shafts with 3.5-foot rock sockets. The structure has both an integral and a semi-integral abutment both supported on driven piles. Performed analysis for lateral loads, driveability, slope stability, bearing capacity and settlement.

I-64 Widening, 29th St. Guyandotte River Bridge, Huntington, WV, WVDOH

Senior Engineer for caisson foundation installation. Reviewed pre-installation cores, construction issues and made recommendations for acceptance of foundations for support of the structure.

Expansion of Communications Building, 911th Air Wing Project, Greater Pittsburgh International Airport, Moon Township, Allegheny County, PA. US Air Force. Geotechnical Project Engineer for the design of a 5,100 sq. ft. addition to the communication building. Performed site investigation, foundation design and geotechnical report.

Repair/Alter POL Access Routes, 911th Air Wing Project, Greater Pittsburgh International Airport, Moon Township, Allegheny County, PA. US Air Force. Geotechnical Project Engineer for the replacement of 12 concrete slabs (14 ft by 12 ft) along the Petroleum Oil Lubricants (POL) access routes and an approximately 28 by 40-foot additional area. Performed site investigation to determine the mode of failure and the design of new slabs and geotechnical report.

Retaining Wall Investigation, 911th Air Wing Project, Greater Pittsburgh International Airport, Moon Township, Allegheny County, PA. US Air Force. Geotechnical Project Engineer for the evaluation of a Mechanically Stabilized Earth Wall. Performed site investigation, foundation design and geotechnical report.

Butera Development Mine Investigation, Beaver County, PA. Baker worldwide Consulting, LLC. Geotechnical investigation to determine the risk of mine subsidence of a clay mine for a residential development project.

Hawkins Subsidence Investigation, Shinnston, West Virginia. State of West Virginia Board of Risk & Insurance Management. Investigation of a subsidence claim involving a records search, an onsite evaluation and report.

Morgan and Ingram Subsidence Investigation, Marion County, West Virginia. State of West Virginia Board of Risk & Insurance Management. Investigation of a subsidence claim involving a records search, an onsite evaluation and report.

Drake Subsidence Investigation, Morgantown, West Virginia. State of West Virginia Board of Risk & Insurance Management. Investigation of a subsidence claim involving a records search, an onsite evaluation and report.

Harris Subsidence Investigation, Morgantown, West Virginia. State of West Virginia Board of Risk & Insurance Management. Investigation of a subsidence claim involving a records search, an onsite evaluation and report.

Atha Subsidence Investigation, Marion County, West Virginia. State of West Virginia Board of Risk & Insurance Management. Investigation of a subsidence claim involving a records search, an onsite evaluation and report.



EDUCATION

B.S., Geology, Juniata College

*Graduate Certificate,
Geotechnics, Missouri
University of Scient and Tech.*

REGISTRATIONS & LICENSES

- PennDOT Certified Drill Inspector
- USACE Construction Quality Management Certification
- HAZWOPER 40HR/8HR Refresher

HIGHLIGHTS OF EXPERIENCE

Mr. McCabe has over 20 years of experience, specializes in the management and completion of environmental assessments, including Phase I and II ESAs; soil, groundwater, and waste characterization; site remediation; waste management planning; hazardous materials assessments; field operations oversight and documentation; construction monitoring; and geophysical investigations. Mr. McCabe has also overseen and carried out environmental and geotechnical drilling at various airports and completed sampling and analysis for AMD/AML focused projects. Additionally, Mr. McCabe managed a small general aviation airport overseeing on- and off-taxiway/runway projects, ensuring working activities did not foul or obstruct aircraft operations by managing Notice to Air Mission (NOTAM) filings and FAA Advisory Circulars. Through his work with federal and private clientele in more than a dozen states, Mr. McCabe has an intimate familiarity with the operations, regulations, and special need for projects of all shapes and sizes, turning site specific challenges into project highlights.

RELEVANT PROJECT EXPERIENCE

AIRPORT/SUBSURFACE INVESTIGATIONS

UST Abandonment, Allegheny County Airport Authority, Pittsburgh, PA

As part of the abandonment of two underground storage tanks (USTs) at the former Payless Rental center at Pittsburgh International Airport (PIT), Mr. McCabe prepared the permitting, subsurface investigation, and tank closure program on behalf of PIT. The work was completed under an environmental on-call with ACAA and required close coordination with airport environmental and operations staff due to the vicinity of the facility to an active runway and on-going construction for the new terminal at PIT.

PennDOT Environmental Remediation Services, Statewide, PA

Mr. McCabe manages the work orders completed under the western Pennsylvania environmental remediation contract for PennDOT. Services provided include Phase I/Phase II ESAs; soil, groundwater, and waste characterization; site remediation; waste management planning; asbestos and lead paint inspections and abatement; storage tank management, removal, and remediation; and hazardous waste management.

Subsurface Investigation, Somerset County Airport, Somerset County, PA

As part of Somerset County Airport's fuel farm upgrade from a UST to AST system, Mr. McCabe developed the subsurface investigation program and oversaw the field work associated with the pre-abandonment activities associated with the decommissioning of the existing UST fuel farm. Drilling activities were completed on the active fuel farm apron and the fuel system remained operational throughout the investigation. Mr. McCabe also acted as the point of communications with the airport manager to ensure aircraft operations remained safe.

Runway Safety Area Extension, Wheeling Ohio County Airport, WV

As part of the safety required extension of Runway 03 at the Wheeling Ohio County Airport, Mr. McCabe oversaw on-site geotechnical drilling for engineered slope benching. Over two dozen geotechnical borings were advanced upon the existing difficult/high slope runway approach with soil and bedrock logging used for slope design. Of critical importance was the proper identification and logging of mine voids or coal seams within the subsurface.



EDUCATION

Marshall University, WV
BS, Environmental Science,
2001

PROFESSIONAL EXPERIENCE
22 Years

REGISTRATIONS & LICENSES

- Licensed Remediation Specialist, No. 269, West Virginia
- Monitoring Well Driller Certification, No. WV00400, West Virginia
- OSHA HAZWOPER 40 Hour Training/8 Hour Update (current)
- OSHA 8 Hour Supervisor Certification

SKILLS

- Due Diligence
- CERCLA
- Hazard Ranking System (HRS)
- Environmental Assessments

HIGHLIGHTS OF EXPERIENCE

Ms. Metz is currently the Environmental Services Manager and Senior Environmental Scientist at the Scott Depot office of Triad. Ms. Metz is responsible for the personnel management of the Environmental Services Group as well as the technical quality and management control of all Environmental projects in the southwest region. Additionally, Ms. Metz is a Licensed Remediation Specialist (LRS) and performs a variety of tasks for sites in the West Virginia Voluntary Remediation Program (VRP).

RELEVANT PROJECT EXPERIENCE

Artistic Cleaners Phase I & II ESAs, Huntington, WV

As Environmental Services Manager and LRS, responsible for oversight of Phase I & Phase II ESAs and asbestos inspection at the Artistic Cleaners site located in Huntington, WV utilizing the City of Huntington Hazardous Brownfields Assessment grant funding.

Baltimore Gardens, Mineral County, WV

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of a Phase I ESA and a NEPA Environmental Assessment (EA) for the construction of Baltimore Gardens, a 32-unit residential housing project on a 3.75-acre tract in Keyser, West Virginia.

Beaver County Emergency Services (FCC), Beaver County, PA

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of a NEPA screening at the proposed Beaver County Emergency Services tower site, which is a 150-foot tall, self-supportive structure. The review revealed that the construction and operation of a wireless telecommunications antenna at the project site would have no effect on the quality of the human environment.

Black Diamond, Wayne County, WV

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of an Environmental Narrative and checklist for the Black Diamond site in accordance with the National Environmental Policy Act (NEPA) and the U.S. Economic Development Administration (EDA). She also conducted site reconnaissance along with the NEPA EA review and provided an Environmental Narrative and Checklist.

Former Dairy Mart, Terra Alta, WV

As Senior Scientist and LRS, responsible for performing characterization and remediation activities at the gasoline station under the WV LUST/UECA Program. Additional tasks included groundwater monitoring well installation, risk evaluation, site specific land use covenant (LUC) and area-wide groundwater use restriction.

Kanawha Manufacturing, Charleston, WV

As Senior Scientist and LRS, responsible for performing characterization and remediation activities at 100+ year manufacturing facility under the WV VRP. Tasks

included VRP Application and Agreement preparation, Sampling and Analysis Work Plan (SAWP) generation, monitoring well installation and multi-media sampling.

Lauryn Lane Gardens, Mason, Mason County, WV

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of a Phase I ESA and a NEPA Environmental Assessment (EA) for the construction of Lauryn Lane Gardens, a 30-unit residential housing project on a 3.94-acre tract in Mason, West Virginia.

Nenni Building Revitalization, Mingo County, WV

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of a Phase I ESA and a NEPA Environmental Assessment (EA) for the rehabilitation of 3 structures comprising the Nenni Building in Matewan, West Virginia – Testerman Jewelry store, UMWA Meeting Hall/CE Lively's Building, and the Schaeffer Building. The building is located within the Mateway Historic District, a National Historic Landmark designation through the US Department of Interior, National Park Service.

Prichard Building, Cabell County, WV

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of an Environmental Review (ER) with HTF Environmental Provisions checklist for the site in accordance with the National Environmental Policy (NEPA) and the U.S. Department of Housing and Urban Development (HUD) guidelines for the preparation of a NEPA environmental Review with the HTF Environmental Provisions. Those provisions included site reconnaissance, NEPA Environmental Review along with the required submittal process and ER checklist.

Sunrise Gardens, Romney, West Virginia

As the Environmental Department Manager, Ms. Metz was responsible for the oversight of the project which consisted of a Phase I ESA, Phase II ESA, and NEPA Environmental Assessment (EA) activities at the Sunrise Gardens property in Romney, West Virginia. During Phase I ESA activities, the vacant property was discovered to be located in a region of West Virginia that was historically used as apple orchards, leading to concerns of arsenic contamination and residential redevelopment. A Phase II investigation confirmed elevated levels of arsenic in the top layer of soil and a Soil Management Plan (SMP) was implemented for future construction activities. Due to anticipated federal funding for the redevelopment into low-income housing, Ms. Woods performed a required HUD NEPA EA.

West Virginia Department of Environmental Protection, Multiple Locations, WV

As Senior Scientist and Program Manager, responsible for performing various assessment tasks at USEPA Superfund sites throughout West Virginia. Tasks have included performing Preliminary Assessments, Site Inspections, Combined Preliminary Assessment/Site Inspections, Expanded Site Inspection, and Site Inspection Reassessments under CERCLA. Specific tasks have included performing regulatory file reviews, site reconnaissance's, Hazard Ranking System (HRS) site scoring using USEPA software, USEPA Contract Laboratory Program (CLP) data management using USEPA software, providing electronic laboratory data deliverables for the WVDEP in EQUIS® data management format, Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) generation, field sampling, and report preparation. These tasks have been performed at over 50 Superfund sites throughout West Virginia.

West Virginia Department of Environmental Protection, Charleston, WV

As Program Manager, implemented the WVDEP Statewide Hazardous Brownfield Assessment Grant program. Tasks include preparing site assessment work plans, acting as liaison between WVDEP and USEPA, conducting Phase I ESAs, conducting Phase II ESAs, preparing reports, reporting status to WVDEP and USEPA, monitoring budgets, managing field activities, and managing community outreach.



west virginia department of environmental protection

Division of Land Restoration
601 57th Street SE
Charleston, WV 25304

Harold D. Ward, Cabinet Secretary
dep.wv.gov

October 4, 2023

Heather Metz
Triad Engineering, Inc.
10541 Teays Valley Road
Scott Depot, WV 25560

Renewal - Licensed Remediation Specialist Certification

Dear Ms. Metz:

Congratulations! We are pleased to inform you that you have filed your renewal application in accordance with appropriate time frames along with evidence of continuing education in the environmental remediation field. You have completed in a timely manner all of the license renewal requirements.

Please find your Licensed Remediation Specialist Renewed License Certificate enclosed and you may continue to practice as a licensed remediation specialist.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Robert Rice', is positioned above the printed name.

Robert Rice
Director

Enclosure: LRS License Renewal Certificate
cc: LRS file: Registration Number 269

Renewal



West Virginia
Department of
Environmental Protection

METZ, HEATHER

Licensed Remediation Specialist

Registration Number: 269

A handwritten signature in blue ink, appearing to read "Heather Metz".

Director, Division of Land Restoration

10/01/2023 - 09/30/2025

Date Issued - Date Expires



EDUCATION

West Virginia University
BS, Civil Engineering
MS, Civil Engineering with an
emphasis in Geotechnical
Engineering

PROFESSIONAL EXPERIENCE

13 Years

REGISTRATIONS & LICENSES

- WV: EIT- 9068

SKILLS

- Project Management
- Geotechnical Engineering
- Subsurface Explorations
- Slope Stability
- Seepage Analysis
- Retaining Wall Design
- Foundation Design
- Laboratory Testing

PUBLICATIONS

MINING, METALLURGY &
EXPLORATION JOURNAL-
STUDY ON MINE TAILINGS
CLASSIFICATION EFFECTED BY
CO-DISPOSAL OF DRILLING
WASTES WITH GEOCHEMICAL
CATIONS- JULY 5, 2022

HIGHLIGHTS OF EXPERIENCE

Over thirteen years of experience in civil and site development projects, emphasizing geotechnical engineering and construction. Responsibilities have included geotechnical evaluations including management of subsurface explorations, construction monitoring, settlement analysis, slope stability modeling, seepage analysis, foundation analysis, landslide repairs, well pads, horizontal directional drill construction, roadway improvements/repairs, and commercial/residential construction. Mr. Stawovy has extensive experience working for various public and private sector clients ranging from small-scale construction to large government projects.

RELEVANT PROJECT EXPERIENCE

Lake Lynn Complex, Monongalia County, West Virginia– WVDEP AML. Geotechnical Project Manager for the design of three sites including 15 mine portals, 3 highwalls totaling approximately 1400 lineal feet, and mine subsidence features. Project design included re-grading refuse piles to stabilize the highwalls, drainage control structures with passive limestone treatment, wet/dry mine seals, bat gates, and aggregate plugs. Performed a subsurface exploration, prepared construction drawings, technical specifications, bid documents, cost estimate, and calculation package. Prepared and submitted WVDEP stormwater and West WVDOH entrance permits.

Sardis Landslide, Harrison County, West Virginia– WVDEP AML. Geotechnical Project Manager for the design of two sites that included existing wet seals and other acid mine AMD that created a landslide that was encroaching on the WVDOH road along with AMD impacting a landowner's home. Project design included HDD installation of wet seals, landslide stabilization, curtain drain design, and other drainage control structures. Performed a subsurface exploration, assisted in preparation of construction drawings, technical specifications, bid documents, cost estimate, and calculation package. Prepared and submitted WVDOH entrance permit.

S3 Contract- WVDEP 2023 AML, Fayette and Greenbrier Counties, West Virginia (Pending Contract)– Geotechnical Project Manager for the design of fourteen sites including access road upgrades, channel improvements, wet and dry mine seals for portals, bat gates, splash-pads, highwalls, mine subsidence features, etc. Attended scoping meetings, coordinated with landowners including National Park Service, preparation of geotechnical scope of work and contracts.

Frostburg Freeze, Frostburg, Maryland– Maryland Department of the Environment Bureau of Mines. Geotechnical Project Manager for an investigation into subsidence of a small existing business that was experiencing subsidence from previous mining activities. Managed the geotechnical investigation and preparation of a report with recommendations along with details for the subsidence repair.

Mill Run Doser, Alleghany County, Maryland– Maryland Department of the Environment Bureau of Mines. Geotechnical Project Manager. Geotechnical investigation for an existing large seepage collection and lime doser that was performing poorly. Installation of a piezometer to monitor the water level in the mine. Assisted in structural evaluation of the doser structure and recommendations for replacement of the doser along with upgraded drainage structures.

Miners and Merchants Bank, Thomas, West Virginia– Geotechnical Project Manager of an investigation for a bank rebuild that was previously deep mine grout stabilized. The investigation included checking the condition of the mine overburden and designing a grout stabilization plan for the expansion. Responsibilities included managing the geotechnical investigation and preparation of the geotechnical report with recommendations. Assisted in the management of quality control during construction.

Islamic Community of Morgantown, West Virginia– Geotechnical Project Manager for an investigation that led to a recommendation of a grout stabilization of a deep mine for a school and a mosque. Project was investigated in two phases. The first phase included conventional drilling with rock coring that encountered open mine voids. The second phase was with an air rotary and a downhole camera. Recommended a grout stabilization plan and worked with a local contractor to prepare a cost estimate.



EDUCATION

*BS, Geology, Juniata College,
2003*

PROFESSIONAL EXPERIENCE

21 Years Total
19 Years Triad

REGISTRATIONS & LICENSES

- PG #PG004859
(Pennsylvania)

SKILLS

- 40-hour HAZWOPER
Certified 29 CFR
1910.120(e)
- Confined Space Certified
- Maryland E&S
[REDACTED]
- PA ESCGP-1 Certified
Pennsylvania
- Hands-On Electrical
Troubleshooting, Lewellyn
Technology

HIGHLIGHTS OF EXPERIENCE

As Principal Geologist/Hydrogeologist, Mr. Wolfe's technical expertise includes geologic and hydrogeological evaluations to include fracture trace analyses, groundwater feasibility studies, sinkhole evaluations, geophysical surveys, evaluations of deep and surface mines, rock cut field investigations, hydrogeological evaluations/assessments, environmental risk assessments, regulatory compliance, underground storage tank (UST) assessments and removals, soil and groundwater assessments, Phase I and II Environmental Site Assessments, and remediation system development and design. Experience has included projects for state and local agencies, municipal water supplies, public schools, retail petroleum fueling stations, large petrochemical bulk plants and terminals, limestone quarries, and coal mines.

RELEVANT PROJECT EXPERIENCE

Fracture Trace Analysis UBP Matrix Development, Shippensburg, PA
Project Geologist responsible for performing a fracture trace analysis to locate areas with an increased risk of sinkhole development. Approximately 46 fracture traces were identified across the site.

CORE 5 at Mason Dixon

Principal Geologist responsible for overseeing a hydrogeological assessment to include well/piezometer installation and monitoring, fracture trace analysis, groundwater modeling, and karst assessment for the development of three large warehouses.

Jefferson Village Appropriations Assessment, Frederick County, MD

Senior Geologist responsible for the assessment of the site prior to development. The project consisted of completing a water supply feasibility study including hydrogeological assessment and fracture trace analysis.

I-81 Commerce Park Hydrogeologic Study, Shippensburg, PA

Project Geologist responsible for the development of groundwater for the supply of two proposed warehouse buildings. The project consisted of a fracture trace analysis, feasibility study, well drilling and well pump testing/development.

Rock Spring Farm, Hagerstown, MD

Senior Geologist responsible for the assessment of the site prior to development. This project consisted of a hydrogeological desktop study with fracture trace analysis, the installation of monitoring wells, and groundwater monitoring prior to site construction.

Hykes Farm Industrial Groundwater Assessment

Senior Geologist responsible for the assessment of the site prior to development. The project included hydrogeological assessment with fracture trace, drilling, and groundwater monitoring.

U.S. Silica Company Tonoloway Ridge Quarry, Washington County, MD

Project Environmental Geologist/Hydrogeologist responsible for performing a Hydrogeological Evaluation to obtain a water appropriation permit from the MDE. This evaluation included the construction of one test/production well and two monitoring wells; an approximate seven-hour, four stage step-test; and a 72-hour constant rate pump test.



EDUCATION

Marshall University, WV
MS, Environmental Science,
2017

Marshall University, WV
BS, Safety Technology, 2015

PROFESSIONAL EXPERIENCE
6 Years

REGISTRATIONS & LICENSES

- Graduate Safety Practitioner
- OSHA Construction Safety and Health: 30 Hr.
- OSHA 40 Hr. HAZWOPER
- WV Asbestos Building Inspector
- Licensed Remediation Specialist (LRS)
- Ohio Asbestos Management Planner

SKILLS

- Phase I & II Investigations
- NEPA
- Groundwater Remediation
- Asbestos Inspection

HIGHLIGHTS OF EXPERIENCE

Ms. Woods is currently a Staff Environmental Scientist with Triad's Scott Depot, West Virginia office. In this capacity she assists Project Managers with Phase I and Phase II Environmental Site Assessments, and soil and groundwater remediation projects. These activities include performing direct push investigations, subsurface soil and groundwater sampling, file reviews, site reconnaissance, data analysis, and report preparation. Along with being Triad's Staff Environmental Scientist, Ms. Woods is also Triad's Corporate Safety Manager.

RELEVANT PROJECT EXPERIENCE

West Virginia High Technology Foundation Road Improvement (AML Project), Marion County, WV

Ms. Woods performed an environmental assessment (EA) for the High Technology Foundation to extend the existing infrastructure in the I-79 Technology Park into an undeveloped phase. The road expansion will make industrial sized building pads available for offer to federal anchors. And the project area was documented as a known problem area on the federal website and AML Inventory System.

Baltimore Gardens, Mineral County, WV

Ms. Woods performed both a Phase I ESA and a NEPA Environmental Assessment (EA) for the construction of Baltimore Gardens, a 32-unit residential housing project on a 3.75-acre tract in Keyser, West Virginia.

Black Diamond, Wayne County, WV

Ms. Woods prepared an Environmental Narrative and checklist for the Black Diamond site in accordance with the National Environmental Policy Act (NEPA) and the U.S. Economic Development Administration (EDA). She also conducted site reconnaissance along with the NEPA EA review and provided an Environmental Narrative and Checklist.

Elk View Development (HUD), Clarksburg, WV

This project involved the construction of Glen Elk Apartments, a 36-unit rental housing project with on building containing rental units four stories in height. The site also included an office, tenant lobby, elevator, and on and off-street parking encompassing a 1.04-acre parcel. Ms. Woods performed a NEPA screening at the proposed site.

Keith-Albee Performing Arts Center, Cabell County, WV

Ms. Woods assisted in a Phase II ESA to evaluate the property and to provide technically sound data to determine whether hazardous substances or petroleum products were present. Vapor intrusion guidelines were also used to determine if residual environmental contamination was present. Ms. Woods also assisted in preparing an environmental review with an HTF Environmental Provisions checklist for the site in general accordance with the National Environmental Policy Act (NEPA).

Lauryn Lane Gardens, Mason, Mason County, WV

Ms. Woods performed both a Phase I ESA and a NEPA Environmental Assessment (EA) for the construction of Lauryn Lane Gardens, a 30-unit residential housing project on a 3.94-acre tract in Mason, West Virginia.

Nenni Building Revitalization, Mingo County, WV

Ms. Woods assisted in performing a Phase I ESA and performed a NEPA Environmental Assessment (EA) for the rehabilitation of 3 structures comprising the Nenni Building in Matewan, West Virginia – Testerman Jewelry store, UMWA Meeting Hall/CE Lively's Building, and the Schaeffer Building. The building is located within the Mateway Historic District, a National Historic Landmark designation through the US Department of Interior, National Park Service.

Sunrise Gardens, Romney, West Virginia

Ms. Woods assisted in performing Phase I ESA, Phase II ESA, and NEPA Environmental Assessment (EA) activities at the Sunrise Gardens property in Romney, West Virginia. During Phase I ESA activities, the vacant property was discovered to be located in a region of West Virginia that was historically used as apple orchards, leading to concerns of arsenic contamination and residential redevelopment. A Phase II investigation confirmed elevated levels of arsenic in the top layer of soil and a Soil Management Plan (SMP) was implemented for future construction activities. Due to anticipated federal funding for the redevelopment into low-income housing, Ms. Woods performed a required HUD NEPA EA.

Vickers Parke II Apartments (HUD), Kanawha County, WV

This project involved the construction of Vickers Parke II Apartments, a 48-unit residential housing project located on a 3.94-acre tract in South Charleston, West Virginia. Ms. Woods performed a NEPA screening at the proposed site.

Brownfield Coalition Assessment – Queen Shoals Full Gospel Church, Clay/Kanawha County, WV

Ms. Woods performed both a Phase I Environmental Site Assessment and an Asbestos Inspection of the former Queen Shoals Full Gospel Church that had been flooded during the 2016 Floods. The purpose of the studies was to identify potential economic development sites for the Advantage Valley Inc.

Hanover Substation, Wyoming County, WV

Ms. Woods provided oversight for an AST cleaning of approximately 5,000 gallons of gasoline and approximately 5,000 gallons of diesel fuel that was vacuumed from the existing 10,000-gallon compartmented aboveground storage tank (AST). Each compartment was pressure cleaned and the filtered fuel was returned to the AST.

City of Huntington, Huntington, WV

Ms. Woods assisted in the preparation of multiple Phase I Environmental Site Assessments for the City of Huntington utilizing USEPA Brownfield petroleum and hazardous assessment funding. Ms. Woods assessed 12 parcels as part of the City of Huntington's efforts on the Hal Greer Corridor Management Plan; 3 parcels along the 20th Street Corridor; and an additional 2 parcels along 14th Street West area to assist with redevelopment efforts. Specific tasks included site reconnaissance, asbestos inspection, records review, and report preparation.

Kanawha Manufacturing, Charleston, WV

Ms. Woods assisted in Phase II ESA activities at the Kanawha Manufacturing facility on behalf of the West Virginia Department of Environmental Protection utilizing USEPA Brownfield assessment funding. The industrial facility had been operation since 1902, manufacturing and repairing equipment used to support coal, electrical power generation, and metal industries. Soil contamination was identified Site-wide during the investigation. Triad recommended the installation of groundwater monitoring wells and evaluating the human and ecological health risk of COC identified during the investigation.

The Point Industrial Park, Lawrence County, OH

Ms. Woods assisted in providing asbestos remediation oversight services for The Point Industrial Park site. She also assisted in conducting inspections of the asbestos abatement contractor to validate the schedule and construction quantities.

Wayne County Economic Development Authority, Wayne County, WV

Ms. Woods assisted in the preparation of various Phase I Environmental Site Assessments on behalf of the Wayne County Economic Development Authority utilizing USEPA Brownfield hazardous assessment grant funding. Work tasks included site reconnaissance, file reviews, data evaluation, and report preparation.



west virginia department of environmental protection

Division of Land Restoration
601 57th Street SE
Charleston, WV 25304

Harold D. Ward, Cabinet Secretary
dep.wv.gov

October 10, 2024

Cadaris Woods
Triad Engineering, Inc.
1209 Shady Way
South Charleston, WV 25309

Renewal - Licensed Remediation Specialist Certification

Dear Ms. Woods:

Congratulations! We are pleased to inform you that you have filed your renewal application in accordance with appropriate time frames along with evidence of continuing education in the environmental remediation field. You have completed in a timely manner all of the license renewal requirements.

Please find your Licensed Remediation Specialist Renewed License Certificate enclosed and you may continue to practice as a licensed remediation specialist.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Robert Rice', is positioned above the printed name and title.

Robert Rice
Director

Enclosure: LRS License Renewal Certificate
ec: LRS file: Registration Number 499

Renewal



West Virginia
Department of
Environmental Protection

WOODS, CADARIS LUBERTA
Licensed Remediation Specialist

Registration Number: 499

A handwritten signature in blue ink, appearing to read "C. Woods", is positioned above a horizontal line.

Director, Division of Land Restoration

10/01/2024 - 09/30/2026

Date Issued - Date Expires

CLIENT:

Civil & Environmental
Consultants, Inc.
Barbour County, WV

PROJECT MANAGER:

JOHN HAYNES
(304) 755-0721

PROJECT TYPE:

Energy – Coal Mining

TRIAD SERVICES:

- Dilling Services
- Soil Drilling with
Standard Penetration
Testing & Sampling
- Boring Access &
Reclamation
- Observations of
Groundwater Level
- Backfilled Test
Borings



OVERVIEW

This WV Department of Environmental Protection Abandoned Mine Lands project was for the purpose of reclamation of the Blue Knob Complex in Barbour County, West Virginia. The work included the demolition of a portal, mining structures, and grading of existing refuse piles. TRIAD was the drilling subcontractor for this West Virginia Department of Environmental Protection Office of Abandoned Mine Lands (WVDEP) project.

SERVICES

TRIAD drilled (14) borings at the project site and provided boring logs. The boring logs included soil/rock descriptions, SPT results at ground water level, soil/rock layers, auger refusal, and bedrock surface. Depth to cave-in the open borehole when tools were pulled were also noted. The open borings were backfilled with auger cuttings at completion, and the drill access sites were reclaimed including cleanup of auger cutting, re-grading access roads, provisions for surface drainage including water bars, hay bales, seeding and mulching.



CLIENT:

Civil Tech Engineering
Hurricane, WV

PROJECT MANAGER:

JOHN HAYNES
(304) 755-0721

PROJECT TYPE:

Energy - Coal Mining

TRIAD SERVICES:

- Dilling Services
- Soil Drilling with Standard Penetration Testing & Sampling
- Boring Access & Reclamation
- Observations of Groundwater Level
- Backfilled Test Borings

OVERVIEW

This project consisted of the reclamation of the Flatbush Highwall in Randolph County, West Virginia. Working with the prime engineer, TRIAD provided geotechnical surface drilling services.

SERVICES

TRIAD drilled ten (10) borings at the project site and provided boring logs. The boring logs included soil/rock descriptions, SPT results at ground water level, soil/rock layers, auger refusal, and bedrock surface. Depth to cave-in the open borehole when tools were pulled were also noted. The open borings were backfilled with auger cuttings at completion, and the drill access sites were reclaimed including cleanup of auger cutting, re-grading access roads, provisions for surface drainage including water bars, hay bales, seeding and mulching. TRIAD also furnished a dozer to assist with boring access and reclamation as required.



OVERVIEW

This WV Department of Environmental Protection Abandoned Mine Lands project consisted of the closure of the Winters Portals near the community of Winter, West Virginia. Working with the contractor, Wiseman Excavating, Inc., TRIAD provided surveying and layout services.

SERVICES

Services provided by TRIAD included horizontal positioning, alignment staking, grade staking, and related professional services to include pre-and post-construction topo-location services in support of construction efforts undertaken by Wiseman Excavating, Inc.

CLIENT:

Wiseman Excavating, Inc.
Liberty, WV

PROJECT MANAGER:

LLOYD KIRK
(304) 755-0721

PROJECT TYPE:

Energy – Coal Mining

TRIAD SERVICES:

- Survey
- Construction Layout



CLIENT:

West Virginia Department
of Environmental
Protection
Charleston, WV

PROJECT MANAGER:

JOHN HAYNES
(304) 755-0721

PROJECT TYPE:

ENERGY – COAL MINING

TRIAD SERVICES:

- Geotechnical, Surface and Subsurface Drilling
- Standard Penetration Testing and Sampling
- Laboratory Testing

OVERVIEW

The West Virginia Department of Environmental Protection Office of Abandoned Mine Land and Reclamation (WVDEP) procured TRIAD for an open-ended contract for Geotechnical, Surface and Subsurface Drilling services for the Northern Counties of West Virginia. The purpose of the geotechnical investigations was to assist in the reclamation of construction projects.



SERVICES

TRIAD conducted geotechnical drilling investigation for WVDEP by providing a variety of tasks including soil borings, soil borings with standard penetration tests/split spoon sampling, Shelby tube sampling, rock borings, rock core borings, installation of casing, installation of piezometers, and conducting various other tests. The tests included: Atterberg limits testing, sieve analysis, hydrometer analysis, unconfined compression, in-place density, standard Proctor compaction, temperature probe readings, float sink analysis, and various content analysis (i.e., ash, volatiles, fixed carbon, and sulfur). TRIAD also provided reports on the data collected from the field and laboratory activities.



CLIENT:

West Virginia Department
of Environmental
Protection
Charleston, WV

PROJECT MANAGER:

JOHN HAYNES
(304) 755-0721

PROJECT TYPE:

ENERGY – COAL MINING

TRIAD SERVICES:

- Geotechnical, Surface and Subsurface Drilling
- Laboratory Testing

OVERVIEW

The West Virginia Department of Environmental Protection Office of Abandoned Mine Land and Reclamation (WVDEP) procured TRIAD for an open-ended contract for Geotechnical, Surface and Subsurface Drilling services for the Southern Counties of West Virginia. The purpose of the geotechnical investigations was to assist in the reclamation of construction projects.



SERVICES

TRIAD conducted geotechnical drilling investigation for WVDEP by providing a variety of tasks including soil borings, soil borings with standard penetration tests/split spoon sampling, Shelby tube sampling, rock borings, rock core borings, installation of casing, installation of piezometers, and conducting various other tests. The tests included: Atterberg limits testing, sieve analysis, hydrometer analysis, unconfined compression, in-place density, standard Proctor compaction, temperature probe readings, float sink analysis, and various content analysis (i.e., ash, volatiles, fixed carbon, and sulfur). TRIAD also provided reports on the data collected from the field and laboratory activities.



OVERVIEW

This project consisted of the closure of the Meigs Mine in Langsville, Meigs County, Ohio. Working with the MCI Group, TRIAD provided testing services for this project.

SERVICES

TRIAD Provided a variety of field-testing services for the closure of the Meigs Mine including subgrade stripping, compacted fill and backfill, and cast-in-place concrete. TRIAD also provided laboratory testing services for concrete and soil samples.

CLIENT:

MCI Group
Kingwood, WV

PROJECT MANAGER:

JOBE HOPE
(304) 755-0721

PROJECT TYPE:

Energy – Coal Mining

TRIAD SERVICES:

- Field Testing
- Subgrade Stripping
- Compacted Fill & Backfill
- Cast-in-Place Concrete
- Laboratory Testing



OVERVIEW

This project consisted of the continual testing of the Quinwood Coal Company refuse piles in Leivasy, Nicholas County, West Virginia to meet regulatory permitting requirements. TRIAD provided testing services for this project.

SERVICES

TRIAD provided compaction testing of the coal refuse materials. The quarterly testing consisted of in-place nuclear moisture-density testing. TRIAD also provided laboratory testing services for this project, testing for moisture content.

CLIENT:

Quinwood Coal Company
Leivasy, WV

PROJECT MANAGER:

JOBE HOPE
(304) 755-0721

PROJECT TYPE:

Energy – Coal Mining

TRIAD SERVICES:

- Field Testing Services
- In-place Nuclear Moisture-Density Testing
- Laboratory Testing



OVERVIEW

This project involves the loss investigations and loss appraisals for state agencies and non-state entities insured by the Board of Risk and Insurance Management (BRIM). TRIAD was hired to provide engineering services in relation to these site investigations and has been providing this service for the Board for over 10 years.



CLIENT:

Board of Risk & Insurance Management
Charleston, WV

Project Manager:

James "Bo" Criniti, PE
(304) 755-0721

PROJECT TYPE:

Civil – Site Investigation

TRIAD SERVICES:

- Civil Engineering
- Geotechnical Drilling Services

SERVICES

Services provided by TRIAD included surface and subsurface investigations possibly relating to mining activities. This included reviewing provided documentation, conducting a site visit, and preparing a report of our observations. The subsurface investigation also included geotechnical drilling activities.



Section V: References



REFERENCES



Dr. John Quaranta, Professor
WVU, Statler College of Engineering
1306 Evansdale Drive
Morgantown, WV 26506
JDQuaranta@mail.wvu.edu
(304) 282-5091



Mr. James (Jim) Estep, President & CEO
West Virginia High Technology Consortium
1000 Galliher Drive
Fairmont, WV 26554
(304) 363-5482



Mr. Robert (Bob) Franks, Engineering/Permit Manager
Sheetz, Inc.
5700 6th Avenue
Altoona, PA 16602
(814) 935-4798



Mr. Benjamin Staud, Engineering Division Manager
Atlas Technical Consultants
270 William Pitt Highway
Pittsburgh, PA 15238
benjamin.staud@oneatlas.com
(412) 335-4256



Mr. Levi Cyphers, Engineer
West Virginia Conservation Agency
201 Scott Avenue
Morgantown, WV 26508
(304) 285-3118

Attachment A: Consultant Qualification Questionnaire



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

AML CONSULTANT QUALIFICATION QUESTIONNAIRE

Attachment "A"

PROJECT NAME AML - Mgtm. Airport Subsidence Phase II CEOI 0313 DEP250000001		DATE (DAY, MONTH, YEAR) 29 OCTOBER 2024		FEIN 55-0592364	
1. FIRM NAME TRIAD ENGINEERING, INC.		2. HOME OFFICE BUSINESS ADDRESS 10541 TEAYS VALLEY ROAD SCOTT DEPOT, WV 25560		3. FORMER FIRM NAME NA	
4. HOME OFFICE TELEPHONE (304)755-0721	5. ESTABLISHED (YEAR) 1975	6. TYPE OWNERSHIP Individual <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Joint-Venture <input type="checkbox"/>		6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 1097 Chaplin Road, Morgantown, WV 26501					
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM BRADLEY REYNOLDS, PE, CEO			8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS DAVID HOOPER, PE, PRINICPAL ENGINEER, (304) 296-2562		
9. PERSONNEL BY DISCIPLINE					
21 ADMINISTRATIVE ARCHITECTS		ECOLOGISTS		3 LANDSCAPE ARCHITECTS	
13 CADD OPERATORS		ECONOMISTS		MECHANICAL ENGINEERS	
10 CIVIL ENGINEERS		ELECTRICAL ENGINEERS		2 MINING ENGINEERS	
15 CONSTRUCTION INSPECTORS		ENVIRONMENTALISTS		PHOTOGRAMMETRISTS	
DESIGNERS		ESTIMATORS		PLANNERS:	
DRAFTSMEN		8 GEOLOGISTS		URBAN/REGIONAL	
		HISTORIANS		SANITARY	
		HYDROLOGISTS		ENGINEERS	
				12 SOILS ENGINEERS	
				SPECIFICATION WRITERS	
				20 SURVEYORS	
				55 OTHER (TECHNICIANS)	
				168 TOTAL PERSONNEL	
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 4					
*RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.					
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? <input type="checkbox"/> YES <input type="checkbox"/> NO					

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".

NAME AND ADDRESS: n/a	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Is your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES
 NO

Description and Number of Projects: Although Triad has few active/recent AML projects, we have a
number of personnel possessing the requisite knowledge, skills and abilities through prior AML
experience and current or recent associated mining projects, to perform these tasks.

B. Is your firm experienced in Soil Analysis?

YES
 NO

Description and Number of Projects: Triad is well-versed in the many areas of soil analysis through
our persistent work in the geotechnical and environmental sectors. Over the last ten years Triad has
produced dozens of designs, investigations and reports involving analysis of soils.

C. Is your firm experienced in hydrology and hydraulics?

YES
 NO

Description and Number of Projects: Over a hundred projects involving dams/impoundments, sediment, stormwater
analysis, culverts, waterlines, etc.

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES
 NO

Description and Number of Projects: Triad produces in-house aerial photography and contour mapping,
utilizing UAV and photogrammetric software to generate high-quality orthophotography and digital terrain
models. Triad has applied this capability to numerous projects for commercial, industrial, residential
and public clients, with project area ranging from less than one acre to more than 200 acres.

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES
 NO

Description and Number of Projects: Projects over the years involving domestic waterline design are
over a hundred...land development, municipal, industrial, residential, public utilities, etc.

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES
 NO

Description and Number of Projects: No active or recent projects.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Hooper, David W. Principal Engineer	11	36	0

Brief Explanation of Responsibilities

Client Manager for the project who will be responsible for overseeing overall project operations, providing necessary resources and verifying project objectives are met. Will be present throughout the project to verify appropriate resources are matched to client needs/schedule to ensure objectives are met/exceeded. Brings 36 years of experience to the project working in region of interest, and addressing underground mining on numerous projects including projects including grouting under various conditions.

EDUCATION (Degree, Year, Specialization)

BS, Civil Engineering, University of Buffalo

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers

REGISTRATION (Type, Year, State)

Professional EngineerL WV/PA/OH/MD/NY (current)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Stawovy, Jeremi J. Senior Engineer/Project Manager	11	11	0

Brief Explanation of Responsibilities

Project manager for the project that will coordinate service lines including geotechnical, surveying, site-civil, environmental, and quality control during construction. Attendance at scope meetings, preparation of contracts, design/bid packages, and permit applications to ensure project goals are met or exceeded. Experience with area geology, mining history and >10 years AML and grout stabilization .experience

EDUCATION (Degree, Year, Specialization)

BS, Civil Engineering, West Virginia University

MS, Civil Engineering w/ specialization in Geotechnical Studies, West Virginia University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

N/A

REGISTRATION (Type, Year, State)

EIT, 2009, WV

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

Air Meter	Slide II Stability Analysis Program
AutoCAD Civil 3D / Map 3D / LT	Slump Cone
Autodesk Storm and Sanitary Analysis	Submersible Pumps
AutoSketch 9	Sulfur Pot
Bentley Flow Master (Haestad Methods)	Surfer
Bentley HEC-Pack	Thermometers
Bentley MicroStation with InRoads	Topcon Automatic Levels
Bentley Pond Pack (Haestad Methods)	Topcon Robotic Total Substations
BlueBeam Revu	Topcon RTK-GPS
Calipers	Trimble Catalyst Antenna / PenMap / GPS
Carlson Software	Troxler 3430, 3440, 3450 (Nuclear Guages)
Concrete Press	
Data Logger	
DJI sUAS	
Drill Rigs (3X CME-55 Track Mount, 1X CME-45 Track Mount, 1X CME-55 ATV Mount) and associated support equipment	
EcoBot Field Delineation Software	
Electric Water Level Indicators (for boreholes)	
ESRI ArcGIS	
ESRI ArcView	
gINT (boring log software)	
GoCanvas	
Google Earth	
Greyline Logger	
Groundwater Modeling System	
HydroCAD	
iReportSource (field reporting safety software)	
Kofax Power PDF Standard	
Metafield (Agile Frameworks)	
Microsoft Office Professional	
Microsoft Project	
Microstation	
Molds	
Peristaltic Pumps	
Pix4D	
PQ Coring (>500 feet)	
Quire - Report Software	
RAE 3000 Portable Handheld VOC Monitor	
Scales (Manual/Digital)	
Settle3/Rocscience Slide II	

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
NOAA Area B (Mission Critical) Fairmont, WV	WV High Technology Foundation 1000 Galliher Dr. Fairmont, WV 26554	Geotechnical, drilling, civil, QA/QC, and survey.	\$20M	>50
Data Center Phase I Development (Mission Critical) Fairmont, WV	AERICO, Inc. 1253 N. Old Rand Rd. Wauconda, IL 60084	Geotechnical, drilling, civil, QA/QC, and survey.	\$3M	>50
Greystone Road Paving (Residential) Morgantown, WV	Greystone POA 706 Sunset Beach Rd. Morgantown, WV 26508	Geotechnical, drilling, civil, QA/QC, and survey.	\$.6M	>75
WVU HSC Transformer (Mission Critical) Morgantown, WV	W. Virginia University PO Box 6570 - 975 Rawley Ln. Morgantown, WV 26506	Geotechnical, drilling, civil, and survey.	\$1.5M	>90
BFS - Brookhaven (Commercial-Retail) Morgantown, WV	BFS Foods 116 Shannon Dr. Morgantown, WV 26508	Geotechnical, drilling, civil, QA/QC, and survey.	\$4M	>75
TOTAL NUMBER OF PROJECTS: 5			TOTAL ESTIMATED CONSTRUCTION COSTS: \$30M	

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
AML - S4 (Energy) Greenbrier County, WV	Geotechnical, drilling, civil, survey, QA/QC and environmental.	WVDEP AMLER 1000 Technology Dr. Fairmont, WV 26554	2026	Unknown.	\$1.9M
Upper Grave Dams 7, 8, and 9 (Dams/Impoundments) Marshall County, WV	Geotechnical, drilling, civil, survey, QA/QC and environmental.	WVACD 742 Airport Rd. Sutton, WV 26601	2025	Unknown	\$100K
W-1049 Well Plug (Energy) Center Township, PA	Geotechnical, drilling.	Iron Senergy 295 N. Hubbards Ln. Louisville, KY 40207	2024	Unknown	\$10K
Bridge Replacement - Maple Grove Rd. (Highway) Garrett County, MD	Geotechnical, drilling.	MDOT District 6 1251 Vocke Rd. LaVale, MD 21502	2024	Unknown	\$13K
Morgantown Capacity Increase - West Ridge HDD (Infrastructure) Morgantown, WV	Geotechnical, drilling.	Hope Gas	2024	Unknown	\$80K
Farmington Refuse Site	Geotechnical, drilling.		2024	Unknown	\$35K

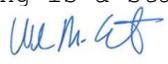
17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
LK Intake Substation Pad Barbour County, WV, 01-19-0301 (Energy)	Wolf Run Mining Co., 99 Edminston Way, Intersection County Route 12 and County Route 5/7, Buckhannon, WV 26201	Unknown	2019	YES
New Portal Bathhouse Office Building, Barbour County, WV, 01-19-0393 (Energy)	Arch Coal, Inc., 15 Morris Street, Buckhannon, WV 26201	Unknown	2019	YES
8.3 Acre Parcel Property, Wood County, WV, 01-20-0477 (Land Development)	Resource Consultants and Developers, Inc., 100 Star Avenue, Parkersburg, WV 26101	Unknown	2020	YES
WVU Parking Lots - Parking Area #1, Monongalia County, WV, 01-22-0186 (Higher Ed)	West Virginia University, Facilities Management, 975 Rawley Lane, Morgantown, WV 26506	Unknown	2022	YES
ADA Ramps - Holland Avenue, Monongalia County, WV, 01-22-0328 (Road/Highway/ Bridge)	West Virginia Department of Highways, Transportation Building, 5, 1900 Kanawha Blvd. E, Charleston, WV 25305	Unknown	2022	YES
Secondary Containment Improvements, Apple Grove, WV, 04-19-0777 (Industrial)	APG Polytech USA, LLC, 27610 Huntington Road, #8121, Apple Grove, WV 25502	Unknown	2019	YES
AEP Kanawha - Lurich SWPPP Inspections, Powellton, WV, 04-19-0308 (Utilities)	American Electric Power Transmission, 4600 Robert C. Byrd Drive, Beckley, WV 25801	Unknown	2019	YES
AEO Inez to Logan 138kV SWPPP and Inspections, Dingess, WV, 04-21-0908 (Utilities)	American Electric Power, 4600 Robert C. Byrd Drive, Beckley, WV 25801	Unknown	2021	YES

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Moorefield North Levee Project, Moorefield, WV, 01-19-0113, (Dam/Impoundment)	Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20024	\$50K (Construction Services)	2019	YES	Aterra Solutions
I-64 Widening, Barboursville, WV, (Road/Highway/Bridge)	WVDOH, Transportation Building, 5, 1900 Kanawha Blvd. E, Charleston, WV 25305	\$300K (Construction Services)	2020	YES	Mead & Hunt
Morgantown Municipal Airport Runway 18-36 Extension, Morgantown, WV (Airport)	Morgantown Municipal Airport, 100 Hart Field Road, Morgantown, WV 26505	\$90K (Construction Services)	2019	YES	Michael Baker International
FBI Clarksburg Office Building, Clarksburg, WV (Government)	Federal Bureau of Investigations, 1000 Custer Hollow Road, Clarksburg, WV 26306	\$40K (Survey Services)	2020	YES	Desbuild, Inc.
National Oceanic and Atmospheric Association AWHIPS Antennae, Fairmont, WV (Technology)	West Virginia High-Technology Foundation, 1000 Galliher Dr., Fairmont, WV 26554	\$25K (Geotechnical Services)	2022	YES	March-Westin Company, Inc.
Camden Wilson AML Drilling Project, Lewis County, WV (AML)	WVDEP Office of Abandoned Mine Lands and Reclamation, 601 57th Street SE, Charleston, WV 25304	\$20K (Drilling Services)	2020	YES	E.L Robinson Engineering, Inc.

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.
 Triad Engineering, Inc. possesses all of the necessary knowledge, skills and abilities required to plan and execute the requisite services for the performance of reclamation activities associated with abandoned mine land projects.

20. The foregoing is a statement of facts.

Signature:  Title: Vice-President Date: 29 October 2024

Printed Name: William M. Ernstes

Attachment B: Related Project Experience Matrix (RPEM)



AML and RELATED PROJECT EXPERIENCE MATRIX																							
PROJECT	Exp. Basis C=Corp P=Personnel	Additional Info Provided in Section(s)	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M = Management P = Professional					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/	Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	John Haynes, PE	Jeremi Stawovy, EIT	David Hooper, PE	Steven Lowden, PE	Lloyd Kirk, PS
Blue Knob AML	C	Section IV		X															P				
Flatbush Highwall	C	Section IV	X																P				
Winter Portals - AML	C	Section IV			X																	P	
WVDEP Drilling for Northern Counties - AML	C	Section IV	X	X	X			X	X		X						X		P				
WVDEP Drilling for Southern Counties - AML	C	Section IV	X	X	X			X	X		X						X		P				
2023 WV BRIM Investigations	C	Section IV							X								X						M
Lake Lynn Complex - AML	P	Section IV	X	X	X	X			X	X	X	X			X	X	X			M			
Sardis Landslide - AML	P	Section IV		X		X					X	X			X		X			M			
Miners and Merchants Bank	P	Section IV							X					X			X			M			
University Town Center	P	Section IV							X		X			X			X				M		
New Castle Multi-Family Housing	P	Section IV							X					X			X				M		
Distribution Warehouse - West Ridge Commerce	P	Section IV							X								X				M		
S3 Contract- WVDEP 2023 - AML (pending)	C	Section IV	X	X	X	X			X	X	X	X			X	X	X	X	P	M	M		P
Bedford Reservoir Subsidence	P	Section IV		X					X		X						X					M	

* List whether project experience is corporate or personnel based or both.
**Use this area to provide specific sections or pages if needed for reference.
***List Primary Design personnel and their functional capacity for the projects listed.

Attachment C: Office of Surface Mining AVS Documentation



ABANDONED MINELANDS (AML) CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining Reclamation and Enforcement (OSMRE) to determine if you are eligible to receive an AML contract. This requirement can be found under OSMRE's regulations at 30 CFR 874.16. **NOTE:** This form must be signed and **dated within 30 days** of submission to be considered for a current bid.

Part A: General Information

Business Name: Triad Engineering, Inc.
 Tax ID #: 55-0592364
 Address: 1097 Chaplin Road
 City, State, & Zip: Morgantown, WV 26501
 Phone Number: 304.296.2562
 Email Address: abush@triadeng.com

Part B: Obtain an Organizational Family Tree (OFT) from the Applicant Violator System (AVS)

If you plan to certify the existing AVS information or submit updates under Part C, you must include an OFT. Instructions for downloading an OFT from the AVS can be found at: <https://www.osmre.gov/sites/default/files/2022-02/OMB%201029-0119%20instructions.pdf>. If you require assistance you may contact the AVS Office by phone at: 800-643-9748, or by email at: avshelp@osmre.gov.

Part C: Certifying and updating information in the AVS

Select one of the options, follow the instructions for the selected option, sign, and date below.

I, T. Anders Bush, CAO, have express authority to certify that:
 (Print Name)

1. Our business is listed in the AVS. The information is accurate, complete, and up to date. (If you select this option, you must attach an Entity OFT from the AVS to this form). Do not complete Part D.
2. Our business is in the AVS. The information needs to be updated. (If you select this option, you must attach an Entity OFT from the AVS to this form). Complete Part D to provide the missing or corrected information.
3. Our business is not listed in the AVS. The information needs to be added. Complete Part D to provide the information.

10/25/2024

Date


 Signature

Chief Administrative Officer

Title

Part D: OFT Information

Contractor's Business Name: Triad Engineering, Inc.

If the current Entity OFT information for your business is incomplete in the AVS, or if there is no information in the AVS for your business, you must provide all of the following information as it applies to your business. Please include additional copies of this page if the space below is not sufficient to capture all information.

- Every officer (President, Vice President, Secretary, Treasurer, etc.);
- All Directors, Partners, and Members;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.
- **Please list an end date for any person who is no longer with your business.**

Name: Chad Brinkley
 Address: 311 Riva Ridge Rd
 City, State, Zip: Cranberry Township, PA 16066
 Begin Date: 01/01/2021
 End Date: _____
 % Ownership: 0
 Position/Title: Outside Director
 Phone Number: 412-260-2084

Name: T. Anders Bush
 Address: 10541 Teays Valley Rd
 City, State, Zip: Scott Depot, WV 25560
 Begin Date: 01/01/2021
 End Date: _____
 % Ownership: 0
 Position/Title: Director/CAO/Vice President/Regional Manager
 Phone Number: 304-755-0721

Name: David Bernhardt
 Address: 10 Eisenhower Blvd
 City, State, Zip: Lancaster, PA 17603
 Begin Date: 04/19/2021
 End Date: _____
 % Ownership: 0
 Position/Title: Outside Director
 Phone Number: 717-509-7000

Name: Nicholas Wolfe
 Address: 1075 D Sherman Ave
 City, State, Zip: Hagerstown, MD 21740
 Begin Date: 01/01/2021
 End Date: _____
 % Ownership: 0
 Position/Title: Chairman/ Regional Manager/ Vice President
 Phone Number: 301-797-6400

PAPERWORK REDUCTION STATEMENT

The Paperwork Reduction Act of 1995 (44 U.S.C 3501) requires us to inform you that: Federal Agencies may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a current valid OMB control number. This information is necessary for all successful bidders prior to the distribution of AML funds, and is required to obtain a benefit.

Public reporting burden for this form is estimated to range from 15 minutes to one hour, with an average of 30 minutes per response, including time for reviewing instructions, gather and maintaining data, and completing and reviewing the form. You may direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, 1849 C Street, NW, Room 4559, Washington, DC 20240.

Part D: OFT InformationContractor's Business Name: Triad Engineering, Inc.

If the current Entity OFT information for your business is incomplete in the AVS, or if there is no information in the AVS for your business, you must provide all of the following information as it applies to your business. Please include additional copies of this page if the space below is not sufficient to capture all information.

- Every officer (President, Vice President, Secretary, Treasurer, etc.);
- All Directors, Partners, and Members;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.
- **Please list an end date for any person who is no longer with your business.**

Name: Brendan Bishop
 Address: 1075 D Sherman Ave
 City, State, Zip: Hagerstown, MD 21740
 Begin Date: 01/01/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Director
 Phone Number: 301-797-6400

Name: Troy Hammond
 Address: 200 Aviation Dr
 City, State, Zip: Winchester, VA 22602
 Begin Date: 01/01/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Employee Director
 Phone Number: 540-667-9300

Name: Allan Kennedy
 Address: 1097 Chaplin Rd
 City, State, Zip: Morgantown, WV 26501
 Begin Date: 01/01/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Director
 Phone Number: 304-296-2562

Name: Tom Chandler
 Address: 10541 Teays Valley Rd
 City, State, Zip: Scott Depot, WV
 Begin Date: 02/22/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Treasurer
 Phone Number: 304-755-0721

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- All Directors, Partners, and Members;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.
- **Please list an end date for any person who is no longer with your business.**

Name: Brooke Wenger
 Address: 1075 D Sherman Ave
 City, State, Zip: Hagerstown, MD
 Begin Date: 02/22/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Secretary
 Phone Number: 301-797-6400

Name: Bill Ernstes
 Address: 1097 Chaplin Rd
 City, State, Zip: Morgantown, WV 26501
 Begin Date: 07/31/2020
 End Date: _____
 % Ownership: 0
 Position/Title: Vice President
 Phone Number: 304-296-2562

Name: Randy Moulton
 Address: 200 Aviation Dr
 City, State, Zip: Winchester, VA 22602
 Begin Date: 02/22/2023
 End Date: _____
 % Ownership: 0
 Position/Title: Assistant Secretary
 Phone Number: 540-667-9300

Name: Raymond Strother II
 Address: 200 Aviation Dr
 City, State, Zip: Winchester, VA 22602
 Begin Date: 11/16/2021
 End Date: _____
 % Ownership: 0
 Position/Title: Vice President
 Phone Number: 540-667-9300

PAPERWORK REDUCTION STATEMENT

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- All Directors, Partners, and Members;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.
- **Please list an end date for any person who is no longer with your business.**

Name: Bradley Reynolds
 Address: 1075 D Sherman Ave
 City, State, Zip: Hagerstown, MD
 Begin Date: 05/01/2017
 End Date: _____
 % Ownership: 0
 Position/Title: President
 Phone Number: 301-797-6400

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

Name: Larry Lee McCoy Jr
 Address: 10541 Teays Valley Rd
 City, State, Zip: Scott Depot, WV 25560
 Begin Date: 07/31/2020
 End Date: 08/21/2023
 % Ownership: 0
 Position/Title: Vice President
 Phone Number: 304-755-0721

Name: _____
 Address: _____
 City, State, Zip: _____
 Begin Date: _____
 End Date: _____
 % Ownership: _____
 Position/Title: _____
 Phone Number: _____

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U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Applicant/Violator System



Entities

Previous Search

153625

Search

10 per page

Entity Number: 153625
 Last Name: Triad Engineering Inc
 * First Name:
 Middle Name:
 Alias:
 Tax ID:
 Memo: AML CONTRACTOR
 Created: 5/14/2003
 Updated: 5/14/2003
 Source: avsky019
 Entity Type: Business
 Locked: Y

Entity #	Entity Name	Suffix	First	Middle	Lock	Type	
143392	Triad Engineering Inc				N	Business	Select
153625	Triad Engineering Inc				Y	Business	Select

Addresses Relationships Applications Permits Comments

	Entity #	Parent Entity	Relationship	Entity #	Related Entity	First	% Own	Begin	End	Hold	Hold Source	Create	Update	Description	Source
<input type="checkbox"/>	153625	Triad Engineering Inc	Chief Executive Officer	264773	Reynolds	Brad	0.00	5/1/2017		None		1/13/2022	1/13/2022		Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	President	264773	Reynolds	Brad	0.00	5/1/2017		None		1/13/2022	1/13/2022		Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Corporate Officer	264804	Bush	T	0.00	11/16/2021		None		1/13/2022	1/13/2022	Chief Administrative Officer	Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Executive Vice President	264804	Bush	T	0.00	11/16/2021		None		1/13/2022	1/13/2022		Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Director	264804	Bush	T	0.00	11/16/2021		None		4/13/2023	4/13/2023		benjamin.campbell
<input type="checkbox"/>	153625	Triad Engineering Inc	Manager	264805	McCoy Jr	Larry	0.00	7/31/2020		None		1/13/2022	1/13/2022	Regional Manager	Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Vice President	264805	McCoy Jr	Larry	0.00	7/31/2020		None		1/13/2022	1/13/2022		Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Manager	264806	Wolfe	Nick	0.00	7/31/2020		None		1/13/2022	1/13/2022	Regional Manager	Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Vice President	264806	Wolfe	Nick	0.00	7/31/2020		None		1/13/2022	1/13/2022		Lillian.Pickens
<input type="checkbox"/>	153625	Triad Engineering Inc	Director	264806	Wolfe	Nick	0.00	7/31/2020		None		4/13/2023	4/13/2023		benjamin.campbell

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