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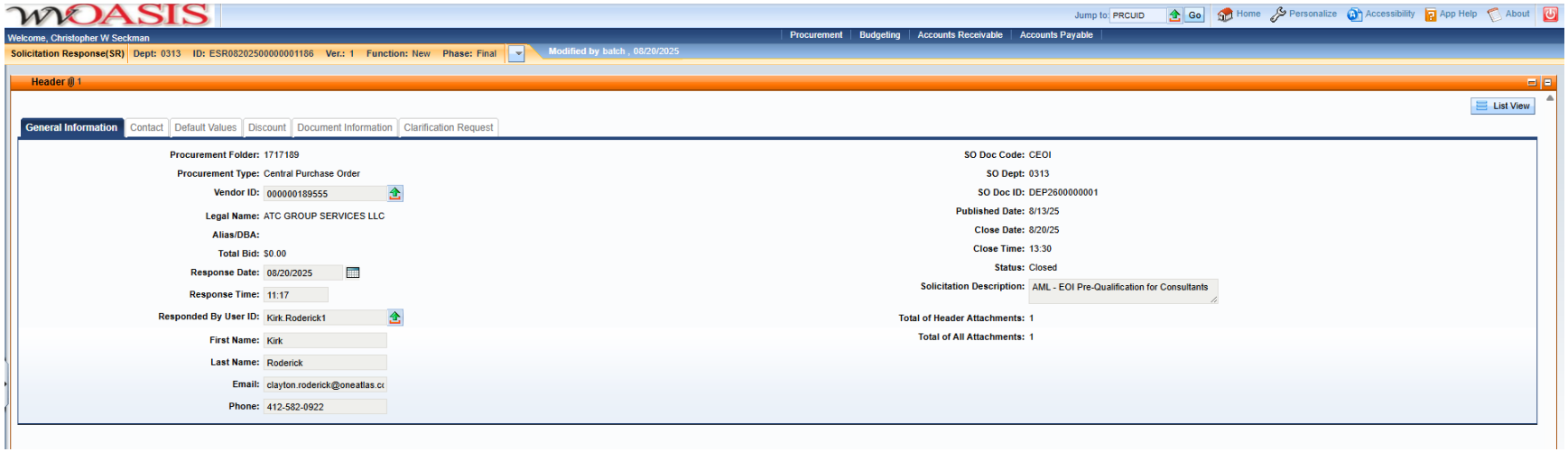
wvOASIS
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Welcome, Christopher W Seckman
Procurement | Budgeting | Accounts Receivable | Accounts Payable
Solicitation Response(SR) Dept: 0313 ID: ESR08202500000001186 Ver.: 1 Function: New Phase: Final
Modified by batch , 08/20/2025
Header 1
List View
General Information
Contact
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Document Information
Clarification Request
Procurement Folder: 1717189
Procurement Type: Central Purchase Order
Vendor ID: 000000189555
Legal Name: ATC GROUP SERVICES LLC
Alias/DBA:
Total Bid: $0.00
Response Date: 08/20/2025
Response Time: 11:17
Responded By User ID: Kirk.Roderick1
First Name: Kirk
Last Name: Roderick
Email: clayton.roderick@oneatlas.cc
Phone: 412-582-0922
SO Doc Code: CEOI
SO Dept: 0313
SO Doc ID: DEP2600000001
Published Date: 8/13/25
Close Date: 8/20/25
Close Time: 13:30
Status: Closed
Solicitation Description: AML - EOI Pre-Qualification for Consultants
Total of Header Attachments: 1
Total of All Attachments: 1

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

State of West Virginia
Solicitation Response

Proc Folder:	1717189
Solicitation Description:	AML - EOI Pre-Qualification for Consultants
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2025-08-20 13:30	SR 0313 ESR08202500000001186	1

VENDOR

000000189555
ATC GROUP SERVICES LLC

Solicitation Number: CEOI 0313 DEP2600000001

Total Bid: 0 **Response Date:** 2025-08-20 **Response Time:** 11:17:33

Comments:

FOR INFORMATION CONTACT THE BUYER
Joseph (Josh) 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				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

EOI Engineering Design Services

ATLAS

Expression of Interest

2025 Pre-Qualification Engineering Design

CEOI 0313 DEP2600000001

August 20, 2025

Submitted to:
West Virginia Department of Environmental Protection
Division of Land Restoration
Office of AML and Reclamation

Contract Via Electronic Submittal

August 20, 2025

State of West Virginia
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25304

ATTN: Joseph (Josh) E. Hager, III, Bid Clerk

RE: EOI 2025 Pre-Qualification for Engineering Design Services
Solicitation No. CEOI 0313 DEP2600000001

Dear Mr. Hager:

The West Virginia Department of Environmental Protection's (WVDEP) Abandoned Mine Lands (AML) Program requires experienced, responsive partners who understand the urgency, complexity, and regulatory landscape of mine land reclamation. Atlas Technical Consultants LLC (Atlas), formerly ATC Group Services LLC, recognizes the importance of delivering safe, timely, and environmentally sound solutions that align with the Department's mission and the requirements of the Infrastructure Investment and Jobs Act (IIJA) and the Surface Mining Control and Reclamation Act (SMCRA).

Atlas is a full-service engineering and consulting firm with a long-standing presence in north-central West Virginia. Our teaming partner, Triad Engineering, Inc., brings additional coverage through offices in both north-central and southern West Virginia. Together, we have successfully delivered a wide range of AML-related projects, as outlined in our Expression of Interest. Atlas was awarded the S3 AML bundle and is currently completing the reclamation design plans. Having a large, diverse staff within our AML group, we have successfully submitted design plans for most of the S3 projects. While meeting these deliverable dates, Atlas is on track to meet the expectations of the WVDEP and has the capacity to further assist in the development of reclamation design plans for other legacy coal mine sites located throughout West Virginia.

Our portfolio includes landslide analysis and remediation, reclamation of coal refuse sites, elimination of abandoned highwalls, drainage design, Acid Mine Drainage (AMD) mitigation, and the development of drainage infrastructure for mining-impacted areas. With more than 30 years of experience addressing abandoned mine features, our team is well-equipped to deliver practical, compliant, and sustainable solutions.

Atlas fosters a culture of safety, communication, and responsiveness—values that are embedded in every project we undertake. These principles, combined with our technical expertise and regional insight, position us to deliver successful outcomes for WVDEP.

We appreciate the opportunity to participate in the 2025 pre-qualification process and welcome any requests for additional information regarding our submittal.

Sincerely,

Atlas Technical Consultants LLC

Benjamin Staud, PE
Engineering Division Manager
412.335.4256
benjamin.staud@oneatlas.com

Clayton K. Roderick
Program Manager – Abandoned Mine Lands
412.582.0922
clayton.roderick@oneatlas.com

EOI 2025 Pre-Qualification for Engineering Design Services

STATEMENT OF QUALIFICATIONS

APPENDICES

1. PROJECT MANAGEMENT APPROACH

INTRODUCTION

Atlas Technical Consultants LLC (Atlas) is a full-service engineering and consulting firm with a deep understanding of the challenges and objectives of WVDEP's AML program. With a local office in north-central West Virginia and support from our subcontractor, Triad Engineering, Inc.—which maintains offices in both north-central and southern West Virginia—Atlas brings a strong regional presence and a history of successful project delivery. Our team is well-positioned to provide comprehensive engineering design services that directly support the Department's reclamation goals, as detailed in our Expression of Interest.

Atlas is a licensed engineering firm in the State of West Virginia with a proven history of delivering design and construction oversight services for complex reclamation projects. We anticipate that the contract will involve comprehensive "full service" engineering support—including planning, realty coordination, and construction oversight—with core capabilities in civil, geological, and hydrological disciplines. Our team is equipped to manage the full life cycle of AML projects, from initial site investigations and permitting through final design and field implementation.

Atlas holds a business license from the West Virginia Secretary of State and a Certificate of Authorization (COA) from the West Virginia Board of Registration for Professional Engineers for providing engineering services in West Virginia. Our team includes licensed Professional Engineers (PE) with active registrations through the West Virginia Board of Professional Engineers.

Altas was awarded the S3 AML project bundle, consisting of fourteen sites. Design work and ecological studies commenced in the spring of 2025, and Atlas is currently completing and submitting the remaining 30% Design Plans.

While holding recurring monthly site meetings with the Fayetteville WVDEP office, focusing on schedules and budgeting, being knowledgeable of the WVDEP AML rules and regulations, Atlas has delivered design plans and is currently ahead of schedule of our commitment to the S3 design plans submittal dates.

Atlas has a long history of delivering comprehensive environmental and engineering services in support of AML projects, including:

- Conducting National Environmental Policy Act (NEPA) consultations and preparing documentation
- Facilitating public participation and stakeholder engagement
- Supporting compliance with the Infrastructure Investment and Jobs Act (IIJA)
- Researching and verifying legal property ownership
- Securing exploratory and construction Rights-of-Entry (ROE)
- Preparing legal documentation to support ownership findings
- Providing current mapping, surveying, and related geospatial services
- Performing site and geotechnical investigations
- Designing temporary and permanent access routes for construction and maintenance
- Stabilizing slopes and embankments
- Designing multiple portal seals and regrading plans
- Developing reclamation plans for exposed coal refuse and mine spoil

- Designing drainage conveyance systems, including channels, underdrains, and other water control features
- Reclaiming landslide areas and mitigating subsidence features
- Delivering construction quality assurance and quality control (QA/QC) services
- Providing resident project representatives and on-site inspection
- Preparing daily construction activity logs
- Offering engineering support throughout construction
- Delivering final engineer's certification reports

Project and Goals

Planning Work

Atlas approaches planning for AML projects with a comprehensive and methodical strategy that integrates environmental consultation, technical investigation, and regulatory coordination. Planning efforts also include specialized studies such as bat habitat assessments, threatened and endangered species investigations, water quality sampling, and data analysis. Atlas prepares all required reports, applications, and supporting documentation to facilitate permitting and project advancement. Our integrated approach ensures that environmental, cultural, and ecological considerations are addressed early and thoroughly, laying a strong foundation for successful project execution.

Initially, Atlas will assess the project to determine the requisite agency notifications, including the necessary consultations, investigations, reporting, applications, and related tasks required to perform the planning work. This may include, but is not limited to:

- **Regulatory Consultations**
  - NEPA
  - West Virginia Division of Natural Resources (WVDNR)
  - West Virginia State Historic Preservation Office (SHPO)
  - West Virginia Regional Planning authorities
  - U.S. Forest Service (USFS)
  - U.S. Fish and Wildlife Service (USFWS)
  - Any additional federal, state, or local agencies as required

- **Environmental and Technical Studies**
  - Bat studies and related assessments
  - Threatened and endangered species investigations, analyses, and reporting
  - Water quality sampling
  - Data collection, analysis, and reporting

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Realty Work

Atlas approaches realty services with precision, diligence, and a deep understanding of the legal and logistical requirements necessary to support AML project development. Our team conducts thorough courthouse research to determine legal property ownership and prepares detailed documentation to substantiate findings. To successfully reclaim these legacy coal mine sites, all ROE agreements must be obtained. Atlas will be responsible for performing courthouse research to verify, establish, and document legal property ownership records relevant to the project area(s). This task requires a thorough review of deeds, titles, and other property records so that accurate ownership information is obtained and properly documented.

As part of the property access process, Atlas will obtain all Exploratory Rights-of-Entry (EROE) and Construction Rights-of-Entry (CROE) agreements from the affected landowners. The ROE agreements will be formally executed prior to commencement of any on-site fieldwork activities, and they will explicitly identify our design firm, the West Virginia Department of Environmental Protection – Division of Land Restoration – Abandoned Mine Lands (WVDEP-DLR-AML), and the Office of Surface Mining Reclamation & Enforcement (OSMRE) as authorized parties.

Throughout this process, Atlas will maintain detailed records of all communications with the landowners. This includes establishing and maintaining comprehensive logs of conversations, correspondence, and agreements to ensure transparency, accountability, and compliance with project requirements. Atlas will be responsible for collecting, maintaining, and reporting project data in a timely and accurate manner. If required, a questionable property boundary or questionable property boundaries to confirm property limits and support project development will be completed to verify ownership. These services will be performed on an as-needed basis and must meet applicable professional standards and regulatory requirements.

Atlas will meet all property access requirements, maintain accurate ownership documentation, and secure all necessary approvals to support the safe and lawful execution of fieldwork activities.

Design Work

Atlas provides comprehensive design services that address the full range of engineering and technical requirements for remediating abandoned mine lands throughout West Virginia. We deliver all necessary engineering and surveying services to support the development of effective reclamation design plans. Recognizing that each site presents unique challenges, Atlas develops tailored, permanent solutions that respond to the specific conditions of each location. Our design approaches may incorporate civil, structural, geological, hydrological, environmental, and process engineering disciplines, along with detailed surveying and mapping. *Atlas will utilize our successful design work experience on the current S3 contract to guide our design work on this next contract.*

Each design is grounded in thorough site and geotechnical investigations and developed to provide permanent engineered solutions that eliminate existing hazards without introducing new risks. Atlas' design work includes preparation of construction plans and technical specifications for mine portal closures, slope stabilization, drainage systems, coal refuse and mine spoil reclamation, stream restoration, subsidence repair, and access routes for construction and long-term maintenance. Our team is equipped to obtain, maintain, and release all required permits, supporting seamless project progression from concept through construction.

Tasks will include site reconnaissance, geotechnical investigations, and any additional studies necessary to support the final design. These designs will eliminate or mitigate existing hazards, protecting both the public and private individuals.

The scope of Design Work may include:

Preparation, submission and management of required permits:

- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit Registration
- West Virginia Department of Highways (WVDOH) MM-109 Encroachment Permits
- United States Army Corps of Engineers (USACE) consultations
- Stream Disturbance permits (Office of Land & Streams)
- County and local permits, including floodplain permits

Development of construction plans and technical specifications for:

- Mine portal reclamation
- Drainage controls and stormwater systems
- Slope stabilization
- Coal refuse and mine spoil reclamation
- Stream and channel restoration
- Subsidence repair
- Temporary and permanent construction and maintenance access
- Stormwater, erosion, and sediment control measures
- Site regrading and revegetation
- Design of water treatment systems, if required
- Remediation of other project-specific site conditions

Atlas will maintain all required permits to ensure project compliance and completion. The final drawings and reports-of-findings will be sealed by a Registered Professional Engineer licensed in the State of West Virginia, with all survey deliverables sealed by a Registered Professional Surveyor licensed in the State of West Virginia.

Construction Oversight

Atlas is well-qualified to provide comprehensive construction oversight services for the duration of the construction phase and warranty period. Our services include engineering support, daily inspections, and final certification. Our team brings a depth of experience, professional licensure, and a strong track record in delivering projects that meet or exceed regulatory, design, and client expectations.

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Inspection and Documentation

Our Field Quality Control (QC) Inspectors bring extensive experience in construction inspection, materials testing, and quality assurance. Atlas' field QC technicians serve as full-time, on-site inspectors, providing detailed Daily Field Reports (DFR) to the client. These reports document all aspects of construction progress, including visual and physical inspections for contract compliance, verification of material deliveries and storage methods, weather conditions, contractor equipment inventory, work performed, labor force, and photographic records.

All inspection data is submitted to the client within 24 hours and logged electronically via digital platforms to ensure real-time transparency and accountability.

Engineering

Atlas' engineering staff actively support field inspection personnel by reviewing reports, communicating with field staff daily, and assisting in resolving any technical issues encountered in the field. Atlas has extensive experience reviewing contractor-submitted as-built drawings for completeness and accuracy. Our engineers validate that as-built conditions are in compliance with design and regulatory requirements prior to final acceptance. At the completion of construction, Atlas provides a Final Engineer's Certification Report confirming the project was constructed in accordance with approved plans, specifications, and applicable standards. We assist with the preparation of closeout documentation, including punch list resolution, final inspections, and coordination with regulatory authorities, if requested.

Warranty Period Support and Final Release

Our team remains engaged throughout the warranty period to perform follow-up inspections, address latent deficiencies, and ensure contractor responsiveness. Atlas will support the Office of Abandoned Mine Lands & Reclamation office through to the final release of the project, providing final documentation and certification of compliance.

Technology and Communication

Atlas uses industry-standard construction management tools—including Bluebeam, AutoCAD Civil 3D, and ArcGIS—for tracking inspections, submittals, change-orders, and documentation. Our communication protocols ensure regular coordination meetings, issue tracking, and responsive reporting to all stakeholders.

Approach Description and the Internal Systems for Timely Performance

Atlas delivers a structured and responsive project management approach tailored to the unique demands of WVDEP's AML Program. Our strategy is built on proactive planning, transparent communication, and disciplined execution—supporting the successful delivery of projects that meet safety, regulatory, and stakeholder expectations.

Project Initiation

At project initiation, Atlas conducts a comprehensive kickoff meeting with WVDEP stakeholders to align scope, schedule, and performance objectives. This meeting informs the development of a customized Project Execution Plan (PEP), which outlines key milestones, deliverables, roles and responsibilities, permitting pathways, and risk mitigation strategies. The PEP serves as a dynamic guide throughout the project life cycle, adapting to site conditions and program needs.

Project Controls

Atlas employs a suite of industry-standard project controls to manage schedule, budget, and documentation across all phases of AML work. Tools such as Microsoft Project and BST software to support resource planning and financial tracking, while Bluebeam Revu and AutoCAD Civil 3D facilitate design coordination and document control. Secure cloud-based platforms provide centralized access to project files, enabling real-time visibility into progress and supporting timely decision-making. These technologies also streamline inspection tracking, submittals, change orders, and construction documentation. Atlas' communication protocols include regular coordination meetings, issue tracking, and responsive reporting to all stakeholders—promoting transparency, accountability, and efficient project delivery.

Summary of Personnel Availability and Resource Planning to Meet Overlapping/Expedited Deadlines

Atlas maintains a flexible and scalable staffing model designed to meet the demands of overlapping and expedited project schedules. Our team includes a diverse pool of cross-trained professionals—engineers, scientists, surveyors, and field technicians—who can be mobilized quickly based on project needs and geographic proximity. Resource planning is supported by internal workload tracking systems and scheduling tools that allow us to forecast availability, allocate personnel efficiently, and respond to shifting priorities without compromising quality. Project managers coordinate closely with discipline leads to adjust staffing levels in real time, and our regional presence across West Virginia enables rapid deployment to project sites. This approach allows Atlas to maintain continuity, meet aggressive timelines, and support multiple concurrent assignments with confidence and consistency.

Communication Plan, Progress Tracking, and Prompt Issue Resolution

Communication with WVDEP is central to our approach. A dedicated Project Manager, Ben Staud, serves as your point of contact, accountable for scope, budget, and schedule. Weekly internal reviews and bi-weekly client updates keep all parties informed and aligned. Atlas maintains a stakeholder engagement log to document interactions with landowners, permitting agencies, and other third parties, promoting transparency and accountability.

Maintaining equilibrium among Scope, Schedule, and Budget is essential to keeping the program on track and responsive to evolving conditions.

AML projects often present unexpected challenges, from adverse weather to unforeseen mine conditions. Our approach emphasizes proactive risk management and rapid issue resolution. Potential risks are identified early, with mitigation strategies developed and documented in advance. Should issues arise, our escalation procedures ensure they are resolved quickly—starting with the task lead, moving to the Project Manager, and involving senior leadership if needed. In addition, our technical experts, including geologists, engineers, and construction managers, are available to mobilize on short notice to address field conditions such as acid mine drainage, slope failures, or unstable structures.

Safety and environmental compliance are woven into every task. Site-specific health and safety plans are prepared for each project to address hazards common to AML sites, and best management practices are consistently applied to protect surface water, control erosion, and minimize habitat disturbance. Our goal is to support WVDEP's mission by restoring AML sites in a way that protects both workers and the surrounding environment.

At project closeout, we provide all required deliverables—such as as-built drawings, compliance documentation, and O&M manuals—and we conduct lessons-learned reviews with WVDEP to identify opportunities for improvement. This commitment to continuous improvement ensures that every project we complete strengthens our ability to serve the Department on future efforts.

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2. QUALIFICATIONS AND RELEVANT EXPERIENCE

Atlas is a national engineering and environmental consulting firm with more than 3,600 staff that operates out of over 130 offices across the country, including licensed professional engineers, licensed scientists, geotechnical engineers, certified inspectors, project managers, construction managers and support personnel. With our primary management office located at **125 Granville Square, Morgantown, West Virginia, 26501**, the Atlas team can mobilize quickly to the site to conduct the necessary site work and meet the needs of WVDEP-DLR-AML (Agency).

Nearby offices, such as Pittsburgh, PA, Cleveland, OH, Columbus, OH, Cincinnato, OH, and Louisville, KY, will provide project support, as needed.

As trusted advisors, we work to understand our clients' businesses and customize solutions to their environmental challenges. We live where we work, so every project benefits from our commitment to our communities, a deep understanding of local regulations and practices, a wealth of relationships, and world-class subject matter expertise.

Atlas has provided AML reclamation and AMD abatement design services to State programs for over 30 years.

Safety

At Atlas, we are committed to safety and work to strengthen our culture around it. The health of our employees, the prevention of incidents, and the protection of the environment are mandates incorporated into every aspect of our company, surpassing all other considerations. Our clients expect it, and we require it of ourselves.

Our **Think 12 safety mantra** means that you must always be aware of what is:
12 feet in front of you, 12 feet behind you, 12 feet to each side, 12 feet above you, and 12 feet below you.

In over eight months of work on the WVDEP AML S3 projects, Atlas has had zero reportable accidents.

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Performance History and Relevant Experience

Atlas has provided AML reclamation and acid mine drainage (AMD) abatement design services to State programs for more than 30 years. We have designed remedial measures for mine-related landslides, extinguishment of burning coal refuse piles, reclamation of acid-producing mine spoil and coal refuse, mine subsidence abatement, impoundment investigations, and other AML-related problems. We have also evaluated and designed AMD treatment techniques for many projects including anoxic limestone drains, open limestone channels, vertical flow wetlands, sulfate reducing bioreactors, limestone leach beds, steel slag leach beds, aerobic and anaerobic wetlands, and lime dosing units. **More information on our relevant experience is included in our Project Descriptions in Appendix A.**

Atlas has a team of geophysical scientists with an average of over 20 years of experience in the geotechnical, construction, environmental, and petroleum fields conducting geophysical and engineering evaluations throughout the United States. Their experience includes the use of EM (electromagnetic) and ERT (electrical resistivity tomography) data collection to find old mine shafts/voids as well as karst features and caves.

Our experience on the WVDEP S3 AML program over the past eight months will be transferred to our approach on the 2025 Engineering Design Services contract

Our reclamation and AMD treatment system operation, maintenance, and monitoring (OM&M) services staff are experienced at sampling, field parameter measurement and data collection, system operation/maintenance, staff gauge installation and gauging, field and laboratory analytical services, ASTM, and other sample handling/collection requirements. The staff currently provide remediation system operation and maintenance services (including blowers, pumps, and liquids/solids treatment/filtration) at numerous Appalachian sites and are experienced at system install, shakedown, troubleshooting, and preventive/routine maintenance.

CORE SERVICES INCLUDE:

- ✓ Project management
- ✓ Reclamation plan development and design
- ✓ Hydrologic-hydraulic engineering
- ✓ AMD evaluations
- ✓ Field services including water quality sampling, discharge measurements, soil sampling and spoil/coal refuse sampling.
- ✓ Wetland delineation, NEPA documentation
- ✓ File review
- ✓ Operation, maintenance, and monitoring of existing systems
- ✓ Construction quality assurance (CQA) and construction oversight
- ✓ Health and safety compliance
- ✓ Project controls
- ✓ Site reconnaissance
- ✓ Construction oversight
- ✓ Construction inspections
- ✓ Preparation of construction quality assurance plans
- ✓ Potential borrow area investigations.
- ✓ Soil classifications
- ✓ Field hydraulic conductivity testing
- ✓ Determination of in-place soil density
- ✓ Monitoring of installation of geomembranes, geotextiles, geocomposites, and geosynthetic clay layers
- ✓ Monitoring of placement of drainage collection systems
- ✓ Preparation of construction quality assurance/certification reports
- ✓ Phase I / II Site assessments

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3. AVAILABLE RESOURCES

Proposed Staffing Plan

Atlas is specifically qualified to lead teams responsible for the successful delivery of the 2025 Engineering Design Services contract of AML Reclamation projects. **Our proposed team Organizational Chart is presented on page 10.** Our team's resume includes 30+ years of experience providing abandoned mine reclamation and geotechnical engineering design services specifically related to the scope outlined in the EOI, including federal, state, municipal, and local public agencies. **Key team member resumes are also provided in Appendix D** as indicated by the gold key symbols on the Organizational Chart. Applicable West Virginia staff **certifications are noted on the Organizational Chart and included in Appendix E.**

AML Program Manager and Environmental Team Lead – Clayton (Kirk) Roderick

Clayton (Kirk) Roderick serves as a Senior Project Manager and National Lead for Atlas' AML Reclamation Program. A geologist with *26 years of experience in project management, regulatory compliance, and environmental services within the energy sector,* Mr. Roderick specializes in geologic and hydrologic investigations, as well as the design, permitting, and management of environmental, reclamation/remediation, and civil projects across the coal, aggregate mining, and oil and gas industries.

Kirk is Atlas' AML Program Manager and serves as the Senior Project Manager for the S3 AML projects. Kirk has been involved with the S3 projects since the WVDEP selected Atlas as the design firm responsible for the design plans. From the pricing and scoping phase of the project to the current day-to-day operations and management of the S3 project, Kirk is focused on helping develop successful reclamation design plans for each of the sites.

Over the past decade, his expertise has focused on the geologic, hydrologic, and environmental components of mining projects throughout western Pennsylvania and northern West Virginia. His responsibilities include conducting exploratory and overburden drilling, performing field reconnaissance to collect groundwater and surface water samples, taking joint readings, and gathering environmental data essential for completing surface and underground mine permit applications for both coal and non-coal (aggregate) units.

Mr. Roderick also performs acid-base accounting (ABA) of overburden materials, contributes to the development of mining and reclamation plans, designs erosion and sedimentation (E&S) control systems, and prepares all required notifications to support the review, compilation, and submittal of permit applications to regulatory agencies. He will oversee all environmental services for the project, collaborating closely with the engineering team to develop effective reclamation design plans and ensure the successful delivery of all project requirements.

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Senior Project Manager – Benjamin (Ben) Staud, PE

Ben Staud is a Senior Project Manager and licensed Professional Engineer in multiple states, including West Virginia, with *24 years of experience in project management and engineering design. Based in Atlas' West Virgina office, Mr. Staud has extensive expertise in leading large-scale engineering projects that require multidisciplinary technical knowledge. His specialties include acid mine drainage (AMD) treatment, water and wastewater treatment, site grading plan development, geotechnical evaluations, and stormwater control design*. His work focuses on the investigation, design, permitting, and management of environmental, geotechnical, and civil engineering projects.

Currently, Ben is the registered Professional Engineer and Senior Project Manager for West Virginia's DEP S3 contract. He is responsible for the overall management and design of the contract's 13 AML project sites. He develops the design plans with designers and civil engineers, works with the WVDEP, and certifies the final plans.

He has also managed operations, maintenance and reporting for multiple active remediation systems as well as managing the design and permitting for a municipal firing range reconstruction project. His portfolio includes landfill capping, stormwater control and leachate treatment projects, geotechnical investigations, slope stability and repair efforts in West Virginia, and large-scale manufactured gas plant remediation projects involving stream diversions and streambank restoration.

For this contract, Mr. Staud will serve as the primary client contact and Senior Project Manager. He will also act as the lead engineering manager, overseeing the development of work plans, execution of field activities, preparation of grading and reclamation plans, stormwater control strategies, AMD treatment options, and all final project deliverables. His administrative responsibilities will include client communications, progress reporting, and invoice management.

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TEAM ORGANIZATION

Resume included in Appendix C

SENIOR PROJECT MANAGER
Benjamin Staud, PE (WV)–24 yrs

PROJECT CONTROLS / IIJA COMPLIANCE
Jeff Rossi

LEGAL/PROPERTY ROE
George Pellegrino–6 yrs

QA/QC
Robert Campana, PE (WV)–6 yrs

ENVIRONMENTAL

Clayton (Kirk) Roderick–26 yrs

GEOPHYSICAL INVESTIGATION
Kenneth Pasterak, PG, LRS (WV)–30 yrs
Mark Edwards, RG
Patrick Lehrmann, PG, PGp

FIELD SAMPLING SERVICES
Jared Anthony–22 yrs
Benjamin Rudolph

AQUATIC ECOLOGY & BAT SURVEYS
Sarah Veselka[2]
Ben Smith[2]
Ryan Schwegman[2]

GEOLOGY/HYDROGEOLOGY
Lisa Weimer, PG–30 yrs
Mark Breting, PG–27 yrs
Heather Metz, LRS (WV)[1]

O&M
James Sturm, PG–40 yrs
Mait Walker, PE–20 yrs

NEPA/PUBLIC PARTICIPATION
James Kooser–38 yrs
Kyle Helal–17 yrs
Eric Goddard

ENGINEERING

Dominic Mandarino, PE (WV)–7 yrs
Caitlin Cochran–13 yrs
Christopher A. Fox
Jerry Kinder, PE (WV)[1]
James Criniti, PE (WV)[1]

RECLAMATION /AMD TREATMENT DESIGN
Michael Thornbrue, PE
Justin Petricko–6 yrs

GEOTECHNICAL ENGINEERING
James Romano, PE–13 yrs
Ryan Ortiz, PE–10 yrs
Jeremi Stawovy[1]

DRILLING
John Haynes, PE (WV)[1]

HYDRAULIC/STRUCTURAL ENGINEERING DESIGN
Steven Kreeley, BSCE, MS, PE–9 yrs

HYDROLOGIC ENGINEERING
Richard Kresge, Jr, PE–30 yrs
Zachary Twist, EIT–18 yrs
Carl Schimmel, PE

CAD/GIS SERVICES
James Gilligan–37 yrs
Joseph Chiusano–20 yrs
Jacob Kennedy
Taylor Maxwell

SURVEY SERVICES
Lloyd Kirk, PS, CFS (WV)[1]
Tyler Spiewak[1]
Doug Bell, PLS (WV)[1]
Mark Talkington[1]
Buddy Goff[1]

CONSTRUCTION

George Pellegrino–6 yrs
Benjamin Rudolph
Nick Frosini

CONSTRUCTION SERVICES
Patrick Dammier–25 yrs
Benjamin Rudolph
Jacob Drake[1]
Allan Kennedy[1]
John Hope[1]
Brett Morris[1]

TEAMING PARTNERS

1 Triad Engineering
2 BioSurvey

Subcontractors

Triad Engineering, Inc., will assist Atlas with surveying and geotechnical investigation. Triad has worked on hundreds of WVDEP AML&R projects. Triad provides many specialty engineering services to the mining and extraction industry. Typical clients include coal companies, contract miners, land companies, and design-build construction firms. Their professional staff has degrees in mining, civil and geotechnical engineering, geology, biology, physics, environmental technology, and surveying. Triad has developed and maintained excellent long-standing working relationships with many regulatory agencies, which can be invaluable in moving projects forward. The diverse education and experience of their professionals—combined with their in-house drilling, laboratory testing, and construction monitoring capabilities—provides clients with a full-service engineering firm that listens, designs, and delivers for their mining and extraction clients. In addition to mining and extraction, Triad has supported numerous reclamation projects over the decades. With in-depth knowledge of WVDEP, their team has assisted many communities, development authorities, and other organizations leverage funding to restore properties and return them to productive use. *Triad is currently completing all geotechnical drilling and surveying components of the S3 AML sites.* Their findings are forwarded to Atlas for development of the reclamation design plans. **More information on Triad is included in their firm profile on the following page.**

BioSurvey Group will support aquatic ecology and bat survey services for the project. A small, woman-owned biological consulting firm, BioSurvey Group specializes in surveys and consultations for rare, threatened, and endangered species. Their project experience ranges from single-species assessments for stream pipeline crossings to complex, multi-species, multi-agency surveys for interstate pipelines and Department of Transportation (DOT) projects.

Their services include freshwater mussel surveys and relocations, endangered crayfish surveys, fish community assessments, benthic macroinvertebrate sampling and identification, bat habitat assessments, and presence/absence surveys using mist netting, acoustic monitoring, and emergence surveys. They also provide Section 7 formal consultation support. Atlas and BioSurvey Group have begun collaborating on various projects and are currently partnering on bat survey services for abandoned mine restoration efforts in West Virginia.

Founded in 2022 and based in Morgantown, West Virginia, BioSurvey Group has worked with clients across the United States in transportation, commercial development, energy, non-profit, research, and government sectors. Their regional experience spans West Virginia, Pennsylvania, Ohio, Maryland, Virginia, and Kentucky. The firm's team of biologists specializes in mussel surveys, bat assessments, RTE investigations, and aquatic biological studies. BioSurvey Group is certified as a Women Business Enterprise (WBE) and a Certified Disadvantaged Business Enterprise (CDBE) through PennDOT (Certification No. 21353164).

24-01810

TRIAD
ENGINEERING, INC.

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.

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

→ Laboratory Materials Testing

Support for our geotechnical engineering and construction monitoring divisions; laboratory facilities where tests are conducted by experienced technicians under the supervision of professional engineers; materials tested include soil, concrete, aggregate, asphalt, rock and sprayed-on fireproofing; participation in national quality control programs administered by AMRL and CCRL which follow AASHTO and ASTM testing procedures

Our Locations:

MARYLAND
Hagerstown
301-797-6400
Frederick
240-259-3468

OHIO
Portsmouth
740-249-4304

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

→ *Please contact Triad for services that may not be listed.*

www.triadeng.com

4. REFERENCES

Atlas encourages the Agency to contact the following references to discuss our previous performance on similar projects. **More details of our project experience can be found in Appendix A.**

William F. Huggins, Jr.
ERS-3 Project Manager/Supervisor, Superfund/Federal Facilities Section
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Office Environmental Remediation
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304-238-1220, Extension 00098

Joshua D. Schaffer, PE
Senior Civil Engineer
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Bureau of Abandoned Mine Land Reclamation
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Kit Turpin
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Indiana Department of Natural Resources
Division of Reclamation
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812-665-2207

24-01810

Triad Engineering, Inc. is proud to have a good working relationship with its clients and to maintain repeat customers. Triad listens, designs, and delivers. Some of Triad's repeat clients you may contact for references include:

Mark Pennington, Principal Engineer
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304-757-8094

L. Jane Hicks, Principal
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Appendix A:
Project Descriptions

PROJECT DESCRIPTIONS

Atlas is located at 125 Granville Square in Morgantown, West Virginia.

Our location allows Atlas to serve the majority of West Virginia's environmental, geological, and engineering needs, while also assisting the Western Pennsylvania and Eastern/Southeastern Ohio markets.

The office facilitates communication with the WVDEP and many other WV-based agencies.

Our project summaries below detail the type and location of each project, PM contact information, the project goals and objectives, and key staff.

S3 Contract for Abandoned Mine Lands 2023 - WVDEP

PROJECT GOALS AND OBJECTIVES

The West Virginia Department of Environmental Protection procured our services to provide planning, realty, design, and construction oversight services for the 2023 Abandoned Mine Lands Contract S3, with locations in various sites throughout Fayette County, West Virginia. The projects include the following sites:

- Clifftop Strip Complex
- Clifftop Strip South
- Clifftop (Road Fork) Drainage
- Crozier Road (G.A. Pacific) Portals and Highwalls
- Lookout (Moore) Subsidence
- Fayette Station Slide
- Keeney Creek Mines
- Royal Loadout
- Nuttallburg South Bench
- Floyd Creek Highwalls and Drainage
- County Rt. 82 Portals
- Winona Complex
- Winona East Highwall and Drainage
- Buffalo Creek Complex

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
300+ acres in 14 sites in Fayette and Greenbrier Counties, WV

Project Manager
Jonathan Holbert, Southern Design Admin, WVDEP Division of Land Restoration / Office of AML&R
601 57th St. SE,
Charleston, WV 25304
304.926.0440
jonathan.r.holbert@wv.gov

Team Organization
- Atlas/ATC Group Services LLC
- Triad (Subcontractor)

PROJECT DESCRIPTIONS

The projects consist of addressing/correcting various aspects of AML reclamation:

- Dangerous slides
- Subsidence issues
- Dangerous refuse piles and embankments
- Dangerous slides
- Hazardous equipment and structures
- Industrial waste
- Portals
- Vertical openings
- Clogged streams

The Atlas services include:

- NEPA tasks and IIJA compliance
- Subsurface investigation and soil analysis
- Surveying and mapping
- Developing construction plans and technical specifications for all aspects to reclaim mine portals, drainage controls and systems, slope stabilization, coal refuse reclamation, stream restoration, subsidence repair, stormwater and erosion and sediment control, regrade and revegetation, and all other conditions encountered on the project sites
- Obtaining and maintaining required permits
- Providing resident project representation, quality assurance/quality control certification, and preparing daily field activity logs summarizing construction activities

Country Route 82 AML Site (S3 Contract) - WVDEP

PROJECT GOALS AND OBJECTIVES

The AML site involves the removal of a 0.50-acre refuse pile and two collapsed or draining mine entries. The refuse pile has a high content of coal refuse and red-dog material, which residents have been extracting from the pile for several years, leaving it very unstable with steep side slopes.

The pile is considered a safety hazard because it could collapse and fall on someone attempting to retrieve material. Additionally, due to the high concentration of coal, there is a concern that the pile could catch fire, spreading smoke and fumes throughout the area.

The two entries are alongside the access road leading to an active farm and flow directly into the headwaters of Keeney Creek, a known trout stream in the area. A blowout could easily damage the access road and place AMD into the headwaters of Keeney Creek.

Reclamation design plans include geotechnical investigations, installing piezometers to monitor the mine pool, regrading the coal refuse pile, demolishing and disposing of abandoned concrete foundations and footings, installing wet seals at the entries, and directing the mine waters toward Keeney Creek while developing a plan to successfully revegetate the site.

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Fayette County, WV

Project Manager
Jonathan Holbert, Southern Design Admin, WV DEP Division of Land Restoration / Office of AML&R
601 57th St. SE
Charleston, WV 25304
304.926.0440
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Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan
- Triad (Subcontractor)

FAYETTE STATION LANDSLIDE (S3 CONTRACT) - WVDEP

PROJECT GOALS AND OBJECTIVES

The Fayette Station Slide and Drainage AML project involves several mine drainage areas throughout the site. Multiple small discharges and seeps are in an area where the waters have perched, causing a land slump. Previous mitigation efforts by the WVDEP were undertaken, but the area still retains a significant amount of water and the hillside remains unstable.

A major mine discharge, approximately 500 gallons per minute, is situated just above a hiking trail in the New River Gorge National Park. In the past, this discharge has blocked access to the trail by moving about 2,300 cubic yards of material onto the path.

A total of 15 smaller collapsed and draining portals have been identified within the area, and the ongoing saturation continues to cause slumping and slide-prone zones. The reclamation and mitigation plans include installing wet seals at the entrances, designing a 'hydrologic curtain' to capture and direct low-volume discharges to a common swale, which will then discharge into Wolf Creek.

The 500-gallon-per-minute discharge will be addressed by capturing all waters and channeling them into engineered drainage ditches with dissipators, directing flow to its current location. This final site will feature culverted systems along the trail, over the hill, and into Wolf Creek.

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Fayette County, WV

Project Manager
Jonathan Holbert, Southern Design Admin, WV DEP Division of Land Restoration / Office of AML&R
601 57th St. SE,
Charleston, WV 25304
304.926.0440
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Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan
- Caitlin Cochran
- Triad (Subcontractor)

Additional mitigation measures include geotechnical activities such as exploratory drilling, installing piezometers and groundwater monitoring wells, and conducting site surveys.

BLUE BALL EAST AML SITE - PADEP

PROJECT GOALS AND OBJECTIVES

The project includes design for the reclamation of an AML site that has been impacted by surface mining activities. Project goals include:

- Backfill two separate abandoned highwalls, totaling approximately 3,800 linear feet, with heights varying between 20 and 50 feet. Coal refuse and spoil, left abandoned on the site, will be used as backfill material to reclaim the highwalls
- Grade and vegetate specific areas of unreclaimed mine spoil to help minimize the production of AMD and reduce the level of sediment being transported from the site to different receiving streams, while developing a plan to successfully revegetate all disturbed areas
- Re-establish a township road at the southern flank of the project area

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Clearfield County, PA

Project Manager
Ethan Cree, EIT; Civil Engineer
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400 Market Street
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Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Zachary Twist, EIT
- James Gilligan

EAGLE EYE SCHOOL EAST AML SITE - PADEP

PROJECT GOALS AND OBJECTIVES

The Eagle Eye School East AML Site has been impacted by previous surface mining activities. The site, comprised of two abandoned highwalls totaling 5,000 linear feet and three spoil areas, encompasses 28 acres. The site was mined and abandoned more than 50 years ago with the Maple Hill Coal Co. conducting the surface mining activities on the Middle Kittanning and Lower Kittanning coal seams. The AML site consists of two separate abandoned highwalls and their respective coal refuse areas and one adjacent coal refuse area. Project goals include:

- Backfill two highwalls, 40 feet in height, using existing spoil material while grading the unreclaimed mine site to improve drainage
- Grade and vegetate specific areas of unreclaimed mine spoil to help minimize the production of AMD and reduce the level of sediment being transported from the site to Laurel Run and its tributaries
- Develop a grading plan to divert surface waters away from the nearby residences and source waters to an existing pond located within the project

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Clearfield County, PA

Project Manager
Joshua D. Schaffer, PE
Senior Civil Engineer
286 Industrial Park Road
Ebensburg, PA 15931
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Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan

Fishing Creek AML Site - PADEP

PROJECT GOALS AND OBJECTIVES

The Fishing Creek AML Site is a legacy mine site that has been impacted by previous surface and underground mining activities. The AML project is comprised of 160 acres located on a parcel of land owned by the Pennsylvania Game Commission containing the Swatara State Game Lands. Project goals include:

- Backfill numerous vertical highwalls, averaging 85-100 feet in height using existing spoil material while grading the unreclaimed mine site to improve drainage
- Grade and vegetate specific areas of unreclaimed mine spoil to help minimize the production of AMD and reduce the level of sediment being transported from the site to Fishing Creek and its tributary
- Develop a plugging and grading plan for vertical openings and collapsed mine openings
- Design habitat structures for native bat species and the Allegheny woodrat
- Inventory and update resources, identifying all AML features within the project area

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Schuylkill County, PA

Project Manager
Mr. Anthony Bernardi
2 Public Square, 5th Floor
Wilkes-Barre, PA 18701-1915
570.830.3178
anbernardi@pa.gov

Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan

CONIFERS COUPON EAST AML SITE - PADEP

PROJECT GOALS AND OBJECTIVES

The project includes the design for the reclamation of a legacy mine site that has been impacted by previous surface mining activities. Project goals include:

- Backfill an 85-foot high abandoned highwall using existing spoil material while grading the unreclaimed mine site to improve drainage
- Grade and vegetate specific areas of unreclaimed mine spoil to help minimize the production of acid mine drainage (AMD) and reduce the level of sediment being transported from the site to Kittanning Run
- Develop a plan to successfully revegetate the disturbed eight-acre site
- Design a pit drain to convey aluminum-laded AMD from the source to a natural drainage swale

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Blair County, PA

Project Manager
Joshua D. Schaffer, PE
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Key Staff
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- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan
- Zachary Twist, EIT

INCLINED PLANE AMLER REMEDIATION – Conemaugh Valley Conservancy

PROJECT GOALS AND OBJECTIVES

This project includes the reclamation and mitigation design plans for abandoned mine lands features (AMLF's) at a 2.5-acres of abandoned mine lands (AML) project. Once complete, the walking trail that will become part of the September 11th National Memorial Trail. Project goals include:

- The remediation of the existing rock ledges/overhangs
- The development of an ADA-compliant grading plan
- The design of a replacement cap/enclosure for an abandoned vertical mine slope
- The completion of a stormwater design plan to convey surface waters from the trail
- The design of a new bat gate replacement and a new bat gate at two abandoned mine portals
- The demolition design plan for several concrete structures
- The completion of a wetland enhancement plan

AT A GLANCE.

Type of Project
AMLER- Ongoing

Project Location
Cambria, PA

Project Manager
John W. Wenzel, PhD
Executive Director
Box 218, Johnstown, PA 15907
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Conemaughvalleyconservancy.org

Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- James Gilligan
- Zachary Twist, EIT
- Justin Petricko

"Our committee was impressed with similar and more extensive projects Atlas has completed, and we found their bid to be distinctly the most attractive to us. Over this past year, our project with Atlas has been very successful. They are responsive to our concerns, proactive when they see something we did not anticipate, and sensitive to limitations of funding imposed by restrictions on grant dollars. They are graceful under pressure. They are efficient in advancing portions of the project with minimal bureaucracy, yet they are also eager to provide face-to-face meetings where concerns or ideas can be sorted out among a group of stakeholders. Our partners at Atlas are personable and easy to work with."

- John Wenzel, AMLER Conemaugh Valley Conservancy

ROHR HIGHWALL RECLAMATION - ODNR

PROJECT GOALS AND OBJECTIVES

Atlas is currently working with the Ohio Department of Natural Resources (ODNR), Division of Mineral Resource Management, Abandoned Mine Lands program team to implement reclamation efforts for the Rohr Highwall project. Atlas was contracted specifically to provide design services to address the dangerous highwall conditions left over from decades of coal and surface mining activities.

The scope of the reclamation effort includes restoring approximately 7,300 feet of dangerous highwall, 44 acres of spoil, 2 acres of gob, demolishing remnants of several mining buildings, and remediating a 0. 5- acre flooding area that poses a slide and safety risk to residents and farmers.

Over the past year, Atlas has proactively led a dedicated team to implement a strategic phased approach to critical tasks such as utility locating, asbestos surveying, geotechnical assessments, and civil design.

During the development of the civil design plan, Atlas identified an innovative, mutually beneficial solution by integrating the existing gob pile, which not only creates valuable additional land for stakeholders but also promotes environmental sustainability.

AT A GLANCE.

Type of Project
AML - Ongoing

Project Location
Carroll County, OH

Project Manager
Mr. Jeffrey Clark, Environmental Specialist, Ohio Department of Natural Resources, Division of Mineral Resources Management
3601 Newgarden Road
Salem, OH 44460
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Key Staff
- Clayton Roderick, Senior PM
- Benjamin Staud, Senior PE
- Dominic Mandarino, PE
- James Gilligan
- Caitlan Cochran

AWARD-WINNING PROJECTS

Mulga Run/Dutcher Residence Reclamation, Jackson County, Ohio

Atlas compiled and analyzed water quality data and evaluated potential reclamation alternatives to address both flooding and the presence of AMD in Mulga Run. The data was used to prepare conceptual design recommendations that were summarized in a design feasibility report.

2005 ODNR
Abandoned Mine Land Reclamation Award

- Reclamation techniques that were analyzed included road raisings, drainage improvements, and passive treatment systems such as open limestone channels, steel slag leach beds, and wetland enhancement
- The final design included hydrologic/hydraulic modeling of portions of Mulga Run watershed to assist in the design of raising the surface of Township Road 957 to an elevation above the 10-year flood level and raising the residence to an elevation above the 100-year flood level
- The scope of work included the preparation of environmental assessments in compliance with NEPA and the coordination of wetland issues and permitting with the U.S. Army Corps of Engineers

Lyons AMD Reclamation, Tuscarawas County, Ohio

An investigation was conducted of the Lyons site in Mineral City, Ohio, to identify potential reclamation plans for treating the AMD that had degraded the surface water quality of Huff Run.

2006 ODNR
Abandoned Mine Land Reclamation Award

Reclamation alternatives that were considered for this site included:

- Regrading and vegetation of barren spoil
- Construction of open limestone channels, anoxic limestone drains, successive alkaline producing systems, alkaline recharge ponds, and the construction of a steel slag leach bed
- Final design plans and technical specifications were developed for the reclamation of approximately 21 acres, open limestone channels, a steel slag leach bed, and alkaline recharge ponds

Misco Mine Reclamation, Perry County, Ohio

2007 ODNR
Abandoned Mine Land Reclamation Award

Atlas compiled and analyzed water quality data and evaluated potential reclamation alternatives for the Misco West Gob Pile, which was burning and a significant source of the AMD that was being discharged into Bennett Run. Based on the data, Atlas formulated conceptual design recommendations that were summarized in a design feasibility report. Treatment techniques that were analyzed included the complete excavation of the gob pile and various alternatives that would save the freshwater pond created by the gob pile.

Final design plans and technical specifications were developed that included:

- Hydrologic and hydraulic modeling of a spillway system for the freshwater pond
- Construction of a soil/bentonite slurry wall to help control the generation of AMD

Belden AMD Reclamation, Carroll County, Ohio

2008 ODNR
Abandoned Mine Land Reclamation Award

An investigation was conducted of the Belden site in Carroll County, Ohio, to identify potential reclamation options for treating the AMD that discharges into Huff Run. Past surface water quality data, along with related studies and other general information, were obtained from the Division of Mineral Resources Management, reviewed, and summarized. Reclamation and treatment alternatives were prepared for consideration in a reclamation plan.

The alternatives that were considered at this site included:

- Regrading and vegetation of barren spoil and mine refuse
- The construction of sediment ponds, open limestone channels, steel slag leach beds and vertical flow wetlands
- Final design plans and technical specifications were developed for the reclamation of approximately 15 acres of unvegetated mine spoil/mine refuse
- The construction of two steel slag leach beds and enhancements to existing ponds to provide a consistent source of water for the steel slag leach beds
- The construction of steel slag cross berms to pre-treat portions of the water supply used in the steel slag leach beds

The final design ultimately included capping the two coal refuse hills with a geomembrane cap to prevent infiltration; stabilizing and improving stormwater runoff elements; and a three-stage oxidation and sediment pond system near the downstream portion of the project.

OTHER RELEVANT PROJECTS

Operations and Maintenance of Remediation System – Vienna, West Virginia - West Virginia Department of Environmental Protection - Atlas contact: Mait Walker; 440 262 2383

Atlas has been responsible since April 2021 for the routine operation and maintenance (O&M) of a complex remediation system, located in Vienna, West Virginia (Site). This superfund project was initiated in 2005 to address Tetrachloroethene (PCE) present in the groundwater across the city. The Site's remediation system includes an air sparge (AS) system, a soil vapor extraction (SVE) system, and a groundwater (GW) pump and treat system to remove VOCs from the groundwater and vadose zone. To accomplish this, the site is currently remediated by two distinct systems, Treatment System (TU) 1 and TU3. The remedial goal for this site is the continued operation of both TU1 and TU3, as well as providing remedial improvement recommendations, when feasible, for both systems. Additional responsibilities are discussed in subsequent sections.

Included in the O&M responsibilities for the Site are weekly site visits to ensure proper working order of the system, to collect measured data points (pressure values, temperatures, flow rates, etc.), and to keep the site in good working order. Upon review of the weekly data, as well as review of additional data collected, such as semi-annual groundwater sampling, monthly influent and effluent air sampling, and total hours run, Atlas supplied various improvement recommendations for ensuring proper system operation, to prevent plume migration, and to maintain the overall effectiveness of the system. These improvements ranged from selection of additional monitoring wells for GW analysis to improvements to the air sparge cycles to maximize efficiency of the system. Monthly, quarterly, and semi-annual O&M responsibilities, including equipment inspections, repairs, etc. were also completed to maintain consistent system operations.

Atlas was additionally responsible for the generation of weekly, monthly, quarterly, and semi-annual O&M reports, detailing O&M activities completed at the Site during that timeframe, any deficiencies noted in the normal operations of the system, additional recommended improvements to the remedial system, and a comprehensive assessment of PCE removed from both air and groundwater during each quarter.

Atlas performed this work with a cost-effective mindset, ensuring the DEP was aware of what recommendations were priority for the operation of the remedial system. Atlas also worked with the DEP to efficiently complete groundwater gauging, sampling, and extraction events, as well as other system improvement work, such as AS/SVE line continuity evaluations, compressor repair/replacement cost comparisons , and supplemental figure generation to support ongoing discussions with the USEPA.

AutoCAD work for this project included generation of site maps, showing important treatment unit features, the shallow and intermediate/deep groundwater monitoring network, plume migration, and isoconcentration maps.

Due to the location of the treatment system adjacent to an urban residential area, an important aspect of the project is maintaining and fostering positive relationship with the surrounding community by ensuring the remediation system is operated in a safe and responsible manner, maintaining the cleanliness of the Site, and ensuring an open line of communication is available for concerned citizens to contact.

UECA Site Assessment and Remediation – Retail Petroleum Distribution Facility – Confidential Client - Ripley, West Virginia – Atlas contact: Kenneth Pasterak, PG, LRS; 412 337 8621

Atlas was retained to conduct site assessment, baseline human health and ecological risk assessment, and remedial planning/implementation in response to a gasoline release from a UST system at an active retail petroleum distribution operation, pursuant to the WVDEP UECA program. Soil, groundwater, surface water and soil vapor were investigated, the extent of petroleum hydrocarbons were delineated, vapor intrusion to indoor air was evaluated, and a conceptual site model was developed. Off-site impacts were delineated following third-party property access agreement execution. A UECA LUST Agreement identifying a cost effective and feasible path to closure was developed and executed by WVDEP and the Client. A monitored natural attenuation approach with pathway elimination was selected as the remedy, and groundwater attainment monitoring is on-going.

UECA Program #18009/WV DEP Leak # 89-013/WVID #2002425 – Retail Petroleum Distribution Facility – Confidential Client - Glasgow, West Virginia – Atlas contact: Kenneth Pasterak, PG, LRS; 412 337 8621

The former Kayo/Jet Convenience Store property, U.S. Route 60 East, Glasgow, Kanawha County, West Virginia operated as a retail petroleum facility and convenience store until 1989. Currently the Site is a vacant, inactive property that is situated on a terrace elevated approximately 50 feet above the Kanawha River. A release was discovered in February 1989 during manual tank gauging and gasoline was subsequently observed seeping into the Kanawha River, located approximately 130 feet south of the Site. A hole was noted in the super grade unleaded gasoline UST and all USTs at the Site were removed in June 1989. The Site was originally reported to the West Virginia Leaking Underground Storage Tank (WV LUST) program in February 1989 when the release was discovered. The client addressed on- and off-site contamination that resulted from the February 1989 release of unleaded gasoline.

Historical Site assessment activities in the form of monitoring well installation and soil and groundwater sampling were conducted from April 1989 through November 2008 and December 2010 through December 2011. In 2016, the client proposed to enter into a Remediation Agreement with the WVDEP, which was finalized in 2019 [(ATC) Atlas was the consultant]. A final RAWP was proposed in July 2020 to complete corrective actions for on and off-site impacts via land use restrictions and natural attenuation. The final land use covenant was issued in 2022.

North Central Regional Jail – Monthly Wastewater Sampling – West Union, West Virginia - West Virginia Department of Homeland Security - Atlas contact: Nick Ciccotelli; 724 689 5592

Since February 2023, Atlas has been responsible for the monthly wastewater sampling at the North Central Region Jail (NCRJ), located at 1 Lois Lane Drive in West Union, West Virginia (Site). This Site utilizes a composite sampler to collect representative samples over a 24-hour period from the waste stream leaving the Site, before it enters the local Publicly Owned Treatment Works (POTW). These samples are collected according to relevant sampling and handling methods, and immediately kept on ice for delivery to a WV-approved laboratory.

Once the analytical lab report is received, Atlas compares the results against the Site's discharge limits and completes the electronic discharge monitoring report (eDMR) and submits it to WV's online database, on behalf of the NCRJ. A summary report is generated each month and sent to both the Site representative and the Homeland Security representative. Any deficiencies noted during the sampling event or any issues with the analytical report are discussed at this time.

AST Emergency Discharge Efforts– Lookout, West Virginia - West Virginia Department of Environmental Protection - Atlas contact: Kenneth Pasterak, PG, LRS; 412 337 8621

In early February 2023, an above-ground storage tank (AST) was overfilled during normal operations. Approximately 400 gallons of diesel fuel flowed out of the AST and into the secondary containment for the AST. This secondary containment was later determined to be deficient, and the fuel escaped the containment, impacting soils across the site. The fuel made its way into a nearby drainage swale and eventually into a catch basin that feeds an off-site pond. Said pond feeds into an unnamed tributary, which eventually runs into Keeney Creek. A sheen was initially observed impacting the pond and flowing towards the unnamed tributary.

Atlas's objectives at this site included characterization of the soils to determine the overall extent of impact, to remediate impacted on-site soils, and to maintain oil adsorbent booms used in the pond on a weekly basis. Atlas characterized and arranged for disposal of the used booms in accordance with all applicable local, state and federal regulations.

Atlas was also responsible for completing a Wetland Delineation Report for the site, prior to beginning remediation, as the impacted site triggered wetland protection regulations. Atlas also submitted a summary report to the DEP, detailing the specific site incident summary, emergency actions taken, remedial measures implemented, and final site conditions. Atlas also coordinated the removal and disposal of all impacted soils at the Site.

Emergency Discharge Efforts – Saulsville, West Virginia - West Virginia Department of Environmental Protection - Atlas contact: Kenneth Pasterak, PG, LRS; 412 337 8621

In September 2022, an unleaded gasoline trailer truck was overturned along West Virginia Route 97, releasing between 700 and 1,200 gallons of unleaded gasoline. The released gasoline was contained around the spill location, impacting soils in an approximate 54 feet by 8 feet area. Atlas was then contracted to perform site characterization and soil sampling, to facilitate soil removal and Site clean-up.

Atlas performed a non-intrusive geophysical survey of the area using a ground penetrating radar and cable location tools to assess the impacted area for any underground utilities. Once underground utilities were located and appropriately marked, Atlas oversaw the removal of approximately 17.75 tons of impacted soils from the Site. The excavation efforts were guided by the combined use of a hand-held field PID and visual and olfactory characterization. During excavation, Atlas screened all soils for relative PID readings, and performed confirmatory soil sampling once the extent of the excavation was fully realized in a particular direction. All soil samples were collected according to applicable guidance documents and regulations, and all samples were kept on ice and under proper CoC procedures during delivery to a WV-approved laboratory for analysis. Following all excavation activities, the impacted areas were backfilled with #57 stone, according to all applicable regulations and procedures.

Atlas submitted an Incident Summary Report to the DEP, detailing the specific site incident, emergency actions taken, remedial measures implemented, and final site conditions.

Foundation Settlement Investigation – Fairmont, West Virginia - Retail Restaurant - Atlas contact: Ben Staud, PE; 412 335 4256

Atlas was retained to investigate the cause of interior floor slab cracking and settlement for a retail restaurant located in Fairmont, WV restaurant in July 2022. After an initial site visit, Atlas identified additional issues around the site including differential movement observed at the ceiling line of internal walls, settlement of the parking lot around existing catch basins, and reoccurring issues with exterior doors.

Atlas completed a review of historical documentation, including site civil and architectural plans, pre-construction designs, Phase I ESA, and Phase II Site Investigations, geotechnical reports, etc. Atlas then recommended and completed additional geotechnical exploration activities, including advancement of borings along the exterior of the building and a limited hand-cleared boring in the interior of the store. Atlas also performed video scoping efforts in the adjacent storm line for visible evidence of movement or structural failure.

After collection of data from the newly advanced borings, Atlas performed a settlement analysis based on data pulled from said borings and subsurface conditions noted across the site. This analysis was included in a limited geotechnical report, offering additional monitoring and remediation options through grout injections. Included in this report were observations regarding the subsurface conditions and possible soil compaction issues related to the observed settlement of the existing building.

Geotechnical Investigation, Phase I ESA and ACM Survey – Weirton, West Virginia – Retail Store - Atlas contact: Ben Staud, PE; 412 335 4256

Atlas was contracted by a retail store in September 2022 to perform a geotechnical investigation, Phase I ESA and ACM Survey of an existing building for a proposed new building and adjacent parking lot for Dollar General Corporation. Atlas's objectives at this site were to obtain subsurface data to provide geotechnical recommendations for the above-mentioned planned site development. To accomplish this, Atlas oversaw the drilling of soil test borings to evaluate subsurface soils, performed laboratory analysis of collected soils, and the delivery of the geotechnical engineering report to the client.

Atlas oversaw the advancement of eleven test soil borings across the site, which were advanced to varying depths at auger refusal. All soil samples collected during these advancements were collected in accordance with all applicable standards and regulations and were analysed in an accredited PA soils lab. The results of the soil samples were used, in conjunction with soil boring information, to develop foundation, retaining wall, and pavement recommendations for the proposed store. Additional construction recommendations, including general surface conditions, design recommendations, and additional laboratory investigations, were included in the final construction report. Atlas is currently pursuing the construction monitoring and oversight work with the client.

Phase I investigation included a review of all applicable site documents, including previous owners and any underground storage tanks and utilities. The ACM survey was conducted, in accordance with all applicable regulations and procedures, including ASTM E1527-21, to access potential impacts to health and safety of the construction crew during final construction activities.

Snow Hill Reclamation Project - Vigo County, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

The Snow Hill Reclamation Project site, located just north of Terre Haute, included two previously reclaimed coal refuse hills that are separated by North Coal Creek. Despite the previous reclamation efforts, North Coal Creek remained significantly impacted by acid mine drainage (AMD) and discharged considerable acidity and metal loads to its receiving water bodies, Coal Creek and the Wabash River.

Quarterly surface water quality and flow data was obtained at various locations throughout the site over a year period to identify the intensity of the water quality problems at the site and to conduct a feasibility analysis to evaluate potential AMD treatment alternatives. In general, the feasibility analysis concluded that 1) the water quality had degraded to the extent that typical AMD treatment options were neither feasible nor cost effective and 2) there appeared to be a considerable AMD load entering North Coal Creek through groundwater flow through the reclaimed coal refuse hills.

In response, a hydrogeologic evaluation of the site was conducted to evaluate methods of preventing AMD generation at the site. The hydrogeologic evaluation included:

- Installing groundwater monitoring wells throughout the site to obtain groundwater quality and elevation data
- Identifying groundwater elevations and flow paths in relation to acid-producing coal refuse
- Estimating the horizontal and vertical extent of coal refuse
- Evaluating the potential for use of the coal refuse as a fuel source
- Estimating surface water flow through the site, as well as the portions of surface water flow that result from groundwater and infiltration through the reclaimed coal refuse hills

The hydrogeologic evaluation generated the following significant conclusions:

- Surface water flows increased by about 40 gpm to 60 gpm through the Snow Hill project site and this increase could primarily be attributed to groundwater discharge to North Coal Creek
- Groundwater discharge to North Coal Creek was estimated at ~ 50 gpm, with about 60% attributed to vertical infiltration through the two (2) reclaimed hills and about 40% attributed to horizontal groundwater flow through the reclaimed hills
- Groundwater levels within the reclaimed hills did not decrease during an extended drought period, indicating groundwater base flows of upgradient horizontal flow sources into the project area
- A bedrock dip is present below the South Hill, with coal refuse being present below the base of North Coal Creek. Therefore, upstream groundwater flow and surface water flow could recharge the low-lying coal refuse in the South Hill
- The summary report concluded that installing a geomembrane cap over the coal refuse (i.e., eliminating vertical infiltration into the reclaimed hills) could reduce about 63% of the AMD generated at the project site and eliminating horizontal groundwater flow into the reclaimed hills could reduce about 37% of the AMD generated at the project site

"Atlas/ATC has provided the Indiana Abandoned Mine Land Program with quality consultation, Engineering, and Geotechnical services for 20+ years. (They) are well-versed in safety and environmental issues associated with legacy mining."

- Kit Turpin, IN DNR

The project then transitioned into the preliminary and final design phase to determine the construction feasibility and costs associated with alternatives to reduce infiltration and/or horizontal groundwater flow into the reclaimed

hills, and to develop construction drawings and specifications for the reclamation plan preferred by the Indiana Department of Natural Resources – Division of Reclamation (DOR).

The final design ultimately included capping the two (2) coal refuse hills with a geomembrane cap to prevent infiltration, stabilizing and improving stormwater runoff elements and a three-stage oxidation and sediment pond system near the downstream portion of the project.

Yankeetown Landslide Correction Project- Newburgh, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

A significant landslide had formed at an Abandoned Mine Lands (AML) site near Newburgh, Indiana. A house was reportedly constructed at the top of a hill above Old State Road 66 in about 2015. A portion of the top of the hill was cut to develop a relatively flat area to construct the house. A driveway was also cut into the hillside to provide access to the house. It is likely that fill may have been placed on the hillside as a result of cutting for the house and driveway.

Based upon available coal mine mapping as well as the results of test borings indicating the presence of voids in the underlying coal seam, it appears that the areas beneath the house and possibly beneath a portion of the slide area were undermined. Evidence of a drift mine opening reportedly exists east of the slide area.

The current slide is estimated to be about 65 ft to 70 ft from the crown of the main scarp to the toe and is estimated to be about 280 ft wide and about 285 ft laterally from the head of the main scarp to the toe of the slide at Old State Road 66. The current main scarp (head scarp) appears to be about 15 ft to 20 ft deep and is located just south of the existing house.

Atlas is currently developing reclamation alternatives to remove displaced soil, install surface and subsurface drainage systems designed to maintain an inundated underground mine, and redevelop a stable project area. The project will likely include an anoxic limestone drain (ALD), or at least an area for future installation, in order to treat reduced, low aluminum acid mine drainage that seeps from the underground mine.

Ash Storage Area Closure – Edwardsport, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

The site is a former coal-fired power generation station that operated from approximately 1918 to 2011. The station was decommissioned and demolished in 2012. Prior to 1974, coal ash was deposited in several ash storage areas near an adjacent river. These ash storage areas encompass approximately 25 acres, much of which has been developed to some extent and contain critical infrastructure such as active power lines and poles, underground utilities, and other structures.

Based on previous experience and expertise in site evaluation, restoration, permitting and design, Atlas was contracted to characterize the existing site conditions, evaluate feasible and cost-effective alternatives to restore the site, obtain environmental permitting/approvals, and develop final design plans and specifications. Specifically, Atlas conducted the following tasks:

- Conducted a detailed subsurface investigation to determine the vertical and horizontal extents of the coal ash and identify groundwater elevations in relation to the coal ash
- Worked with sub-contract engineering firm Marino Engineering Associates, Inc. (MEA) to identify the extent, void depth and subsidence risk of an underground mine that exists beneath the ash storage areas and to evaluate the feasibility of grouting the void to stabilize the area
- Worked with a sub-contract subsurface engineering firm to identify the locations and depths of underground utilities

- Worked with a power company to determine power line voltage and safe clearances as well as potential power line relocation costs
- Developed nine restoration alternatives and preliminary cost estimates to consider the many challenges on-site, including utilities, power lines, an adjacent river, slope and site stability and the underground mine
- Developed a final restoration plan that includes the consolidation of the coal ash and stabilizing with a compacted soil cover protected with a perimeter berm that extends above the 100-year flood elevation of the adjacent river.
- Developed a surface water control plan to safely convey storm discharges from the restoration area
- Evaluated slope stability to confirm acceptable factors of safety
- Currently in final negotiations with the Indiana Department of Environmental Management (IDEM) Office of Land Quality for approval of the site restoration and developing additional permit applications for approval by the US Army Corps of Engineers (404 permit), IDEM – Office of Water Quality (401 permit) and the Indiana Department of Natural Resources – Division of Water (Construction in a Floodway permit)
- In conjunction with the permitting process, Atlas is developing construction plans and specifications for the design, bid, build process, which includes a grouting plan and specifications for stabilizing the underground mine

Ash and Mine Refuse Area Closure – Confidential Power Generation Client - West Terre Haute, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

The site is a former coal-fired power generation station that operated in West Terre Haute, Indiana, from the mid-1920s to 1975. The station was decommissioned and demolished in approximately 1976. At various times during station operations and during the operation of a nearby underground coal mine, “historic materials” consisting of coal ash, cinders, and mine refuse (aka, coal refuse) were deposited within the limits of material management areas at the site, adjacent to a river.

Atlas was contracted to characterize the existing site conditions, evaluate feasible and cost-effective alternatives to restore the ash and mine refuse areas, obtain environmental permitting/approvals, develop final design plans and specifications, and provide engineering support and quality assurance oversight during construction. Specifically, Atlas conducted the following tasks:

- Conducted a detailed subsurface investigation to determine the vertical and horizontal extents of the coal ash and mine refuse
- Conducted a site inventory and evaluation of existing subsurface piping systems under and within the coal ash that, if degraded, could pose a risk of ash and or mine refuse release to the adjacent river
- Conducted an asbestos survey to identify and mitigate asbestos-containing materials that had been mixed in with the coal ash
- Developed a final restoration plan that included the consolidation of the coal ash and stabilizing with a compacted soil cover and the reclamation of the mine refuse by flattening the slopes and installing a compacted soil cover
- Conducted a borrow soils evaluation to identify suitable cover material
- Developed a surface water control plan to safely convey storm discharges from the restoration area, including an on-site stormwater retention system
- Evaluated slope stability to confirm acceptable factors of safety for the coal ash and mine refuse restoration areas
- Prepared permit drawings and a technical report to successfully permit the project with the Indiana Department of Environmental Management (IDEM) Office of Land Quality and obtain approval concurrence from the Indiana Department of Natural Resources – Division of Reclamation for the mine refuse aspects of the project

- Developed supporting permit applications and approvals by the Indiana Department of Natural Resources – Division of Water (Construction in a Floodway permit) and the local soil and water conservation district, including the development of Stormwater Pollution Prevention Plan
- Developed construction plans and specifications for the design, bid, build process, and provided engineering support and construction quality assurance during construction

207 Acre Ash Pond System Closure – Confidential Power Generation Client - West Haute, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

The site is a former coal-fired power generation station that operated in West Terre Haute, Indiana, from the mid-1920s to 1975. The site is a former coal-fired power generation station that operated in West Terre Haute, Indiana, from 1953 to 2016. The station is currently being decommissioned and demolished. The station includes five coal ash storage areas that encompass approximately 207 acres and contain over 7 million cubic yards of coal ash.

Atlas was contracted to characterize the existing site conditions, evaluate feasible and cost-effective alternatives to close the ash storage areas, obtain environmental permitting/approvals, develop final design plans and specifications, and provide engineering support and quality assurance oversight during construction. Specifically, Atlas conducted the following tasks:

- Conducted a detailed subsurface investigation to determine the vertical/horizontal extents and in-place volume of coal ash and identify groundwater elevations in relation to the coal ash
- Conducted an options analysis that evaluated five alternatives to close the ash storage areas with consideration of feasibility, financial impacts, environmental impacts, public health and safety impacts, and permitting issues
- Developed a final closure plan that included in-place capping of two of the ash storage areas and ash removal and restoration of the remaining three ash storage areas that will be re-connected to the historic floodplain of the adjacent river. The project also included a natural channel design concept to drain the restored area
- Coordinated with railroad company to remove ash from the railroad right-of-way
- Coordinated with a local gas utility company to ensure the closure project could be executed without damage or interruption to gas lines located within the ash
- The final cover system over the ash areas capped in-place included a geomembrane liner, a geocomposite drainage layer and a 3 ft thick vegetative layer seeded with pollinators
- Conducted a geotechnical/borrow soils evaluation to identify suitable cover material
- Developed a surface water control plan to safely convey storm discharges from closure areas that included diversion berms, downdrains and plunge pool outlets
- Presented the restoration and closure concept to the public at a public meeting
- Prepared permit drawings and a technical report to successfully permit the project with the Indiana Department of Environmental Management (IDEM) Office of Land Quality
- Developed supporting permit applications and approvals by the Indiana Department of Natural Resources – Division of Water (Construction in a Floodway permit) and the local soil and water conservation district, including the development of Stormwater Pollution Prevention Plan
- Developed construction plans and specifications for the design, bid, build process, and currently providing engineering support and construction quality assurance during construction

Adams County Landslide - Adams County, Ohio - Atlas contact: Cindy Taylor; 513 771 2112

Atlas performed the investigation of 12 landslides affecting various roadways and utilities along the Allegheny Escarpment and Appalachian Plateau areas of Adams County. We provided recommendations for remediation and remedial design parameters for the failures on cut, fill and natural slopes.

The project involved soil test borings with truck and all terrain-mounted drilling rigs, disturbed and undisturbed soil sampling, rock core sampling, triaxial shear and ancillary laboratory testing, field mapping and data collection and interpretation of field instrumentation (slope inclinometers).

Widely variable subsurface conditions included colluvial, residual, alluvial and lacustrine soil deposits as well as bedrock formations ranging from extremely soft, weathered and fissile shale to hard massively bedded sandstone and dolomitic limestone.

Atlas used LPILE v2012 software to analyze stability and evaluate remedial design options such as re-grading and retaining structures, including soil/structure interaction. Provided Engineer's construction cost estimates on all projects and served as Design Engineer-of-Record for 5 sites.

Master Service Agreement – Geotechnical, Environmental, Construction Inspection – Cincinnati, Ohio - Atlas contact: Cindy Taylor; 513 771 2112

Atlas maintains two contracts with the City. We were selected by both Department of Transportation and the Office of Environmental Services (DOT-E) to provide geotechnical engineering, construction materials testing services and environmental engineering under multi-year master service agreements extended through 2023 throughout Greater Cincinnati for multiple city agencies for more than 25 consecutive years.

In addition to the Department of Transportation Engineering, Atlas has provided services for Metropolitan Sewer District, Cincinnati Water Works, Hamilton County Engineer, and University of Cincinnati. Tasks assignments have included hundreds of geotechnical investigations and construction materials testing projects.

Recent projects in the past five years have included Wasson Way Bike Trail, Hirsch Recreation Center, Multiple Street Rehab Projects, Gray Road & Groesbeck, Este Avenue Rehabilitation, Delta Avenue Reconstruction, Ida Street Bridge Rehabilitation, and numerous landslides.

The Wasson Way and Salem to Sutton Bike Trail expansion, is a specific project example encompassing Atlas's full range of environmental and geotechnical services, like those required to address the full scope requirements for ODNR/AML projects. Atlas's combined environmental/geotechnical scope included:

- Environmental: Coordination, management, and completion of environmental site assessment tasks per ODOT requirements, including field investigations and data collection across a portion of the former Wasson Way rail line per NEPA and ODOT RMR requirements. Project scope included evaluation and characterization of potentially contaminated sites in and around the project area to assess liability associated with acquisition as well as handling of affected media during construction and redevelopment.

- Geotechnical: Tasks included test borings, soils laboratory testing and subsurface characterization. Study areas for the Wasson Way Trail project included approaches to the bridge carrying the trail over the I-75 southbound ramp to Dana Avenue. Atlas also provided construction material testing and inspection for the bridge's reinforced concrete, and for the subgrade and asphaltic paving for the bridge approaches. The Salem to Sutton Trail is an approximately 2.2-mile-long paved hike/bike trail along the west side of Kellogg Avenue (an Ohio River Scenic Byway in this area), extending from Salem Road at the project's north end to

Sutton Road at the south end. In addition to the trail paving itself, the project included infrastructure items such as fill embankments, traffic barriers and retaining walls. All geotechnical exploration, testing and reporting were performed in accordance with the Ohio Department of Transportation's Specifications for Geotechnical Explorations, and all construction testing and inspections per applicable American Society for Testing and Materials methods.

Ash Pond A, B, and C Closure – Confidential Power Generation Client - Petersburg, Indiana - Atlas contact: Kirk Roderick; 412-582-0922

The site is a coal-fired power generation station operating near Petersburg, Indiana. The station includes three coal ash storage ponds that combined encompass approximately 152 acres. Ash Ponds B and C have been closed, and Ash Pond A is currently undergoing closure. At all three ponds, closure has been performed with the coal ash materials being left in place. The site also includes a landfill for coal ash disposal.

Atlas has been contracted to prepare applications for environmental permitting/approvals of the pond closure plan, develop final design plans and specifications, and provide engineering support and quality assurance oversight during construction. Atlas has also prepared plans and permit applications for expansion of the coal ash landfill.

The scope included the following tasks:

- Developed a final closure plan that included in-place capping of all three ash storage ponds
- The final cover system over the ash capped in-place included a geomembrane liner, a geocomposite drainage layer and a 3 ft thick vegetative layer seed with pollinators
- Conducted a geotechnical/borrow soils evaluation to identify suitable cover material
- Developed a surface water control plan to safely convey storm discharges from closure areas that included diversion berms, downdrains and plunge pool outlets
- Prepared permit drawings and a technical report to successfully permit the project with the Indiana Department of Environmental Management (IDEM) Office of Land Quality
- Developed construction plans and specifications for the design, bid, build process, and currently providing engineering support and construction quality assurance during construction
- Conduct drilling investigations around the ash ponds for characterizing the nature and extent of possible groundwater impacts from the coal ash ponds
- Conduct subsurface investigation to delineate the extent of underground coal mines within the proposed footprint of the landfill expansion

TRIAD ENGINEERING, INC.

WINONA EAST HIGHWALL AND DRAINAGE

WINONA, WEST VIRGINIA

Overview

This project consisted of the highwall remediation, mine portal closure, streambank protection, and drainage control improvements to an abandoned mine site near Winona in Fayette County, West Virginia. The site sits directly above the Town of Winona and had sixteen (16) mine portals requiring closure – fifteen (15) collapsed and draining portals and one (1) partially collapsed portals. The site also included seven (7) highwalls consisting of more than 8,500 linear feet of exposed soil and crumbling rock. Near vertical walls ranging from 40 to 60 feet in height with several areas of drainage at the base of the walls contained numerous rockslides. Three (3) hazardous bodies of water sat at the base of the highwalls, ranging in depth from 2 to 4 feet. A subsidence hole approximately 20' x 20' and 20 feet in depth opened at the base of one highwall. Multiple refuse piles were found. One refuse pile measured approximately 0.25 acres and consisted of blocks of coal and smaller eroding particles that were eroding into a nearby stream. A second refuse pile was partially vegetated but still contained dangerously steep slopes. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included eight (8) borings, installation of eight (8) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

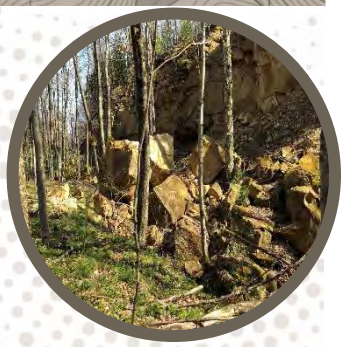
- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

CLIFFTOP STRIP COMPLEX
WINONA, WEST VIRGINIA



Overview

This site consisted of a 3,800 linear foot highwall, composed largely of sheer rock faces with visible rock falls and cracks. A segment of this highwall lies parallel and adjacent to a heavily traveled county road, posing a significant safety concern, three open mine portals requiring closure and several thousand linear feet of stream channel, portions of which are impacted by coal refuse piles, leading to severe clogging and impaired hydrology. The proposed scope of work included Highwall Remediation, Mine Portal Closure, Stream Restoration, Drainage Control and Revegetation.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 14 borings, installation of 3 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

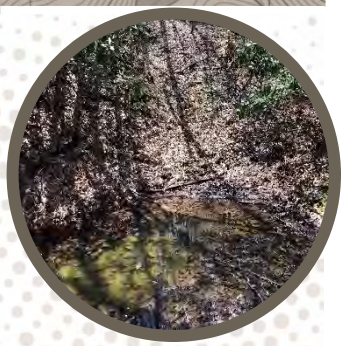
PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

CLIFFTOP DRAINAGE PROJECT

CLIFFTOP, WEST VIRGINIA



Overview

This project will significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site. The site consisted of fourteen mine portals requiring closure – one open portal and thirteen collapsed portals with drainage entries. The proposed scope of work included Mine Portal Closure, Removal of Refuse pile, stream restoration, drainage control and revegetation.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 2 borings, installation of 2 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

CROSIER ROAD PORTALS
RAINELLE, WEST VIRGINIA

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

Overview

This project consisted of the highwall remediation, mine portal closure, and drainage control improvements to an abandoned mine site near Rainelle in Greenbrier County, West Virginia. The site had sixteen (16) mine portals requiring closure – seven (7) open portals and nine (9) collapsed portals with drainage entries. The portals were located along a county road and above an active railroad. The site also included four (4) highwalls consisting of approximately 4,250 linear feet of exposed sandstone and earth with several areas of impounding water at the base of the walls. The vertical walls contain numerous rockslides and the heavy vegetation along the top of the walls males it difficult to locate the edge of the walls. The impounding water created four (4) hazardous water bodies ranging in depth from 1 to 5 feet in dept, three (3) along the base of the highwalls and an isolated one across from an open mine portal. A refuse pile was located on a slope above an active railroad and presented a dangerous situation for both a fire hazard and a possible slide.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included five (5) borings, installation of five (5) standpipe piezometers, and a geotechnical report

New loop

TRIAD ENGINEERING, INC.

LOOKOUT (MOORE) SUBSIDENCE

CLIFFTOP, WEST VIRGINIA

Overview

This project consisted of mine portal closure, and drainage control improvements to an abandoned mine site near Clifftop in Fayette County, West Virginia. The site had two (2) mine portals requiring closure – one (1) partially collapsed and one (1) collapsed portals with drainage entries. The portals were located within 100' of a heavily used county road. A portion of the original mineworks ran under the road; only approximately10' of coverage existed between the workings and the roadway. The mine drainage contained high iron concentrations. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included two (2) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

New loop

TRIAD ENGINEERING, INC.

FAYETTE STATION SLIDE AND DRAINAGE

KAYMOOR, WEST VIRGINIA

Overview

This project consisted of mine portal closure, and drainage control improvements to an abandoned mine site near Kaymoor in Fayette County, West Virginia. The site had sixteen (16) mine portals requiring closure – one (1) open portal and fifteen (15) collapsed portals with drainage entries. The portals were causing drainage issues and created multiple slides that impacted nearby hiking trails and a county road. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included four (4) borings, installation of four (4) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

New loop

TRIAD ENGINEERING, INC.

KEENEY CREEK MINES
WINONA, WEST VIRGINIA

Overview

This project consisted of the highwall remediation, mine portal closure, stream restoration, mine refuse removal/regrading, and drainage control improvements to an abandoned mine site near Winona in Fayette County, West Virginia. The site had eleven (11) mine portals requiring closure – two (2) open portals and nine (9) collapsed portals with drainage entries. The site also included two (2) highwalls ranging from 60 – 70' in height with vertical walls, The vertical walls contain numerous rockslides and the heavy vegetation along the top of the walls males it difficult to locate the edge of the walls. The highwalls were split by a drainage hollow. Some of the site drainage ran through a refuse pile located on a slope above an active railroad and presented a dangerous situation for both a fire hazard and a possible slide. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included two (2) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

ROYAL COAL #5 LOADOUT

FAYETTEVILLE, WEST VIRGINIA

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

Overview

This project consisted of the highwall remediation, mine portal closure, stream restoration, and drainage control improvements to an abandoned mine site near Rainelle in Greenbrier County, West Virginia. The site had sixteen (16) mine portals requiring closure – seven (7) open portals and nine (9) collapsed portals with drainage entries. The portals were located along a county road and above an active railroad. The site also included four (4) highwalls consisting of approximately 4,250 linear feet of exposed sandstone and earth with several areas of impounding water at the base of the walls. The vertical walls contain numerous rockslides and the heavy vegetation along the top of the walls males it difficult to locate the edge of the walls. The impounding water created four (4) hazardous water bodies ranging in depth from 1 to 5 feet in dept, three (3) along the base of the highwalls and an isolated one across from an open mine portal. A refuse pile was located on a slope above an active railroad and presented a dangerous situation for both a fire hazard and a possible slide. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included two (2) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

TRIAD ENGINEERING, INC.

NUTTALLBURG SOUTH BENCH

EDMOND, WEST VIRGINIA

Overview

This project consisted of the mine bench remediation, mine portal closure, and drainage control improvements to an abandoned mine site near Edmond in Fayette County, West Virginia. The site had an existing mine bench that has cut into two (2) sections by a large washout. Water has pooled at the base of the bench and ran across a hiking trail causing trail erosion and washouts. There were 37 identified mine portals requiring closure – eight (8) open and 29 collapsed draining portals. Eight (8) of the portals were located along a much-used hiking trail. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included seven (7) borings, installation of seven (7) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

FLOYD CREEK HIGHWALLS AND DRAINAGE

CLIFFTOP, WEST VIRGINIA

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

Overview

This project consisted of highwall remediation, mine portal closure, stream restoration, and drainage control improvements to an abandoned mine site near Clifftop in Fayette County, West Virginia. This site is located within the eastern portion of Babcock State Park and posed serious safety hazards for Park staff and visitors. The site had fourteen (14) mine portals requiring closure – ten (10) collapsed and draining portals and/auger holes, and four (4) partially collapsed portals. Water from some of the portals had created four (4) hazardous water bodies along the base of the highwalls. There were nine (9) highwalls consisting of approximately 2,900 linear feet of exposed unstable rock and soil. The vertical walls, ranging in height from 40 to 70 feet, contain numerous rockslides and heavy vegetation along the top of the walls making it difficult to locate the edge of the walls. Several slump/subsidence holes existed along the main park road and hiking trails, one was approximately 16’ x 10’ and 8 feet in depth. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included three (3) borings, installation of three (3) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

TRIAD ENGINEERING, INC.

COUNTY ROUTE 82 PORTALS

WINONA, WEST VIRGINIA

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

Overview

This project consisted of mine portal closure, removal and/or regrading of refuse pile to eliminate fire hazards and/or erosion, and the installation of drainage control improvements to an abandoned mine site near Winona in Fayette County, West Virginia. The site had two (2) collapsed and draining mine portals requiring closure. The portals were located along a county road and above the headwaters of a trout stream. The site also included a 0.5 acre refuse pile. The refuse pile contained high percentage of coal that was being mined by locals, creating the potential for collapse. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included four (4) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

TRIAD ENGINEERING, INC.

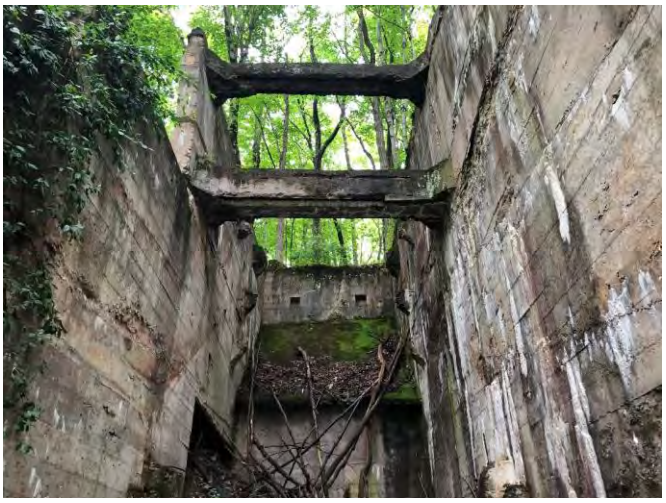
WINONA COMPLEX

WINONA, WEST VIRGINIA

Overview

This project consisted of the highwall remediation, mine portal closure, stream restoration, drainage control improvements, and dismantling, removal and proper disposal of existing mining structures and materials at an abandoned mine site in Fayette County, West Virginia. The mine features were scattered around and in the Town of Winona. The area is a popular outdoor recreational area for ATV and hiking trails, hunting, and mushroom harvesting. The site had six (6) mine portals requiring closure – one (1) collapsed with a subsidence area, and five (5) open portals. The open portals were within a highwall; one contained an immediate vertical drop of more than 25 feet. The site also included ten (10) highwalls ranging from 30 – 50' in height with near vertical walls. The approximate 4,500 linear feet of highwalls consisted of rock and soil with numerous rockslides. Scattered structural remains included concrete and stone foundations, brick walls, concrete piers and tipple remnants, as well as general mining "junk" (i.e. steel beams, metal, etc.). The site also included several areas of clogged stream from coal refuse, resulting in impaired hydrology. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services



Services provided by Triad Engineering included Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included twenty-two (22) borings, installation of five (5) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

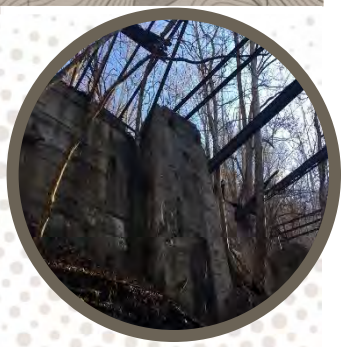
PROJECT TYPE:
- AML

TRIAD SERVICES:
- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

TRIAD ENGINEERING, INC.

BUFFALO CREEK COMPLEX

THAYER, WEST VIRGINIA



CLIENT:
Atlas Environmental (WV Department of Environmental Protection)

PROJECT TYPE:

- AML

TRIAD SERVICES:

- Drilling
- Geotechnical Exploration
- Piezometer Installation
- Topographical Survey
- CAD Drawings

Overview

This project consisted of the dismantling, removal and proper disposal of existing mining structures and materials, the removal and/or regrading of refuse pile to eliminate fire hazards and/or erosion, and the installation of drainage control improvements to an abandoned mine site near Thayer in Fayette County, West Virginia. The site consisted of scattered structural remains of a mine, including coal silos, concrete piers, and tipple remnants, as well as general mining “junk” (i.e. steel beams, metal, etc.). The natural drainage from the site followed an old mining tramway channel causing severe erosion. The structures and the refuse pile were located on a slope above an active railroad and a trout stream and presented a dangerous situation for a possible slide. The objectives of the project were to significantly reduce physical safety hazards, restore hydrological function, and improve the ecological integrity of the site.

Services

Services provided by Triad Engineering included topographical survey in support of project design. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.

TRIAD ENGINEERING, INC.

ARTISTIC CLEANERS
HUNTINGTON, WEST VIRGINIA

Overview

The Artistic Cleaners site, located at the intersection of 9th Avenue and 20th Street in Huntington, Cabell County was historically occupied by a dry cleaner, a gas station, and residential housing. The objectives of the project were to assess and remediate the property to help facility redevelopment while being protective of human health. The site was redeveloped by the City of Huntington as the Mayor Joesph L. Williams, Jr. Fire Station.

Services

Triad completed the initial Phase I Environmental Site Assessment (ESA), Asbestos Inspection, and Phase II ESA at the site utilizing the City of Huntington Hazardous Brownfield Assessment grant funding. As additional parcels were purchased and the site area expanded, Triad completed additional Phase I ESA Update and Phase II ESA activities utilizing the Region 2 Planning & Development Council Assessment grant funding. Assessment activities revealed multi-media contamination. The City of Huntington entered the site into the West Virginia Department of Environmental Protection (WVDEP) Voluntary Remediation Program (VRP), where assessment and remediation activities are still ongoing.

CLIENT:
Region II Planning & Development Council

City of Huntington

PROJECT TYPE:
- Environmental

TRIAD SERVICES:
- All Appropriate Inquiry
- Phase I ESA
- Owner/Occupant Interviews
- Site Reconnaissance
- Environmental Regulatory Database Reviews
- Historic Records Reviews
- Asbestos Inspection
- Site Assessment Work Plan
- Multi-media Environmental Sampling
- Phase II ESA
- WV VRP
- Remedy Evaluation
- Human Health Risk Assessment

New loop

TRIAD ENGINEERING, INC.

FLINT PIGMENTS
HUNTINGTON, WEST VIRGINIA

Overview

The initial Flint Pigments investigation was for a 1.63-acre parcel located along 5th Avenue in Huntington, Cabell County, West Virginia. The larger approximately 13-acre facility was developed in 1912 as a pigment manufacturing facility Standard Ultramarine Company (SUCo.). Subsequent occupants included Holland-SUCo Color Company, Chemetron Company, BASF Wyandotte Corporation, and BASF Printing Systems, who all operated at the site as a pigment manufacturing facility. All manufacturing operations ceased in 2017. The objectives of the project were to assess and remediate the property to help facility redevelopment while being protective of human health. Triad Engineering worked with Region II Planning & Development Council to assist them in evaluating and updating their brownfield site inventory for the Interstate 64 Corridor in the Metro Valley Region to include this property

Services

Triad completed a Sampling and Analysis Work Plan (SAWP) and subsequent Phase II ESA. The site area was modified and expanded, and Triad completed additional Phase II ESA investigations. A 2.08-acre portion of the larger facility was purchased, and assessment and remediation activities continued through the West Virginia Department of Environmental Protection (WVDEP) Voluntary Remediation Program (VRP). Additionally, polychlorinated biphenyls (PCB) were managed and remediated under the Toxic Substances Control Act (TSCA). The Certificate of Completion (COC) was issued in June 2025.

CLIENT:
Region II Planning & Development Council

The PM Company

PROJECT TYPE:
- Environmental

TRIAD SERVICES:
- Sampling & Analysis Work Plan
- Phase II ESA
- Multi-media Environmental Sampling
- WV VRP
- Remedy Evaluation
- Site Remediation
- TSCA PCB Remediation
- Human Health Risk Assessment

PROJECT BRIEF

Walkersville Truss Bridge Replacement Bat and Mussel Assessment

The West Virginia Division of Highways (WVDOH) contracted BioSurvey Group to conduct a bat habitat assessment and mussel survey for the Walkersville Truss Bridge replacement project in Lewis County, WV. The bridge crossing is within the range of several federal and state-listed species, including the federally endangered Indiana Bat (*Myotis sodalis*), Northern Long-eared bat (*Myotis septentrionalis*), Round Hickorynut mussel (*Obovaria subrotunda*), and Snuffbox mussel (*Epioblasma triquetra*). BioSurvey Group conducted a bat habitat and bridge assessment along with a qualitative freshwater mussel survey to support the environmental permitting process. Potential bat roost trees were mapped and no evidence of bat occupation was found on the bridge. No live mussels were found within the project boundary, and no evidence of T&E mussel species was observed.

BIOSURVEY GROUP

Year: 2024

Dates: June 28 - 29

Value: $25K

West Fork River, Lewis County, WV

Phone
+ 888-712-0566

Email
Info@BioSurveyGroup.com

Website
BioSurveyGroup.com

PROJECT BRIEF

James P. Spano Jr. Bridge Replacement Project Mussel Survey

BioSurvey Group performed a mussel survey for a West Virginia Division of Highways bridge project on Sandy Creek in Jackson County, West Virginia. The existing Birch River Road bridge is proposed to be removed and replaced, and all freshwater mussels in the project area need to be relocated before any construction work can begin. Sandy Creek is a West Virginia Group 1 mussel stream, meaning it is not known habitat for federally listed species. The survey followed the 2022 West Virginia State Mussel Survey Protocol. The majority of the survey area was searched using surface-supplied air commercial diving methods due to an average depth of approximately 7.0 feet. A total of 20 live freshwater mussels representing six species were collected from the survey area. The survey findings were submitted to WVDNR, and a mussel salvage and relocation effort will be required before any construction can begin.

BIOSURVEY GROUP

Year: 2024
Dates: May 20
Value: $20K

Jackson County, West Virginia

Phone
+888-712-05663

Email
Info@BioSurveyGroup.com

Website
BioSurveyGroup.com

PROJECT BRIEF

Brushy Fork Pipeline Crossing Mussel Survey

BioSurvey Group conducted a Mussel Survey for a proposed gas pipeline crossing Brushy Fork in Harrison County, West Virginia. Brushy Fork is a West Virginia Group 1 mussel stream, meaning federally threatened and endangered mussel species are not expected to occur. The survey followed the 2022 West Virginia State Mussel Survey Protocol. Visual and tactile methods were used to survey for evidence of freshwater mussels throughout the survey area. Habitat and depth were recorded for each area within the survey area extent. Despite extensive areas of suitable freshwater mussel habitat, no live, fresh dead, or relic freshwater mussels were located within the project survey area. No further mussel survey or relocations were required for project progression.

BIOSURVEY GROUP

Year: 2024
Dates: May 13
Value: $6K

Brushy Fork, Harrison County, WV

Phone
+ 888-712-0566

Email
Info@BioSurveyGroup.com

Website
BioSurveyGroup.com

Appendix B:

AML Consultant Qualification Questionnaire

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE Attachment "A"

PROJECT NAME:	DATE (DAY, MONTH, YEAR)	FEIN
EOI 2025 Pre-Qualification for AML Engineering Design Services CEOI DEP26*01	August 20, 2025	46-0399408

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
Atlas	125 Granville Square Morgantown, WV 26501	ATC Group Services LLC

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
304-533-0367	DE 12-14-87; Converted to LLC (S Corp) November 2015	Corporation	NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE
125 Granville Square, Morgantown, WV 26501 / 304-533-0367 / Benjamin Staud, PE / 8
270 William Pitt Way, Pittsburgh, PA 15238 / 412-826-3120 / Clayton K. Roderick / 26

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Don Beck, Senior Vice President	Jacqueline Hinman, CEO

9. PERSONNEL BY DISCIPLINE

350 ADMINISTRATIVE	5 ECOLOGISTS	1 LANDSCAPE ARCHITECTS	15 STRUCTURAL ENGINEERS
10 ARCHITECTS	ECONOMISTS	MECHANICAL ENGINEERS	25 **SURVEYORS**
5 **BIOLOGISTS**	ELECTRICAL ENGINEERS	2 **MINING ENGINEERS**	7 TRAFFIC ENGINEERS
280 **CADD OPERATORS**	325 ENVIRONMENTALISTS	PHOTOGRAMMETRISTS	293 OTHER
250 CHEMICAL ENGINEERS	ESTIMATORS	7 PLANNERS: URBAN/REGIONAL	
250 **CIVIL ENGINEERS**	218 **GEOLOGISTS**	8 SANITARY ENGINEERS	
655 CONSTRUCTION INSPECTORS	HISTORIANS	5 SOILS ENGINEERS	
280 DESIGNERS	10 HYDROLOGISTS	SPECIFICATION WRITERS	3,236 TOTAL PERSONNEL
275 DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 3
***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

Benjamin T Staud, PE

Dominic Mandarino, PE

Robert Campana, PE

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ✓ YES ☐ NO

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

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
Triad Engineering, Inc. 1097 Chaplin Road Morgantown, WV 26501 304-296-2562	Geotechnical Services Surveying Services Drilling Services Civil Site Design	✓Yes No
NAME AND ADDRESS: BioSurvey Group Morgantown, WV	SPECIALTY: Rare, Threatened, Endangered Species Consultations Environmental Surveys	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 Description and Number of Projects: Atlas has extensive experience with AML and mine-reclamation engineering/design. To date, Atlas has completed over **20** AML projects West Virginia, Pennsylvania, and Ohio.

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: Atlas has a team dedicated to the sampling and analyses of soils. This team works as support to our geotechnical group and aids in the completion of geotechnical studies and reports-of-findings. The last five years, Atlas has completed over **35** projects from our Pittsburgh office.

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: Description and Number of Projects: Atlas has experience in completing hydrologic and hydraulic studies. Over the past five years, we have completed over **25** projects focused on hydrology and hydraulics.

NO

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

YES Description and Number of Projects:

NO: The Aerial Photography and Development of Contour Mapping services will be provided by Triad Engineering, Inc.

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 Description and Number of Projects: Atlas has provided water line designs for projects across the United States. Additionally, our staff has individual experience in evaluating the degradation of aquifers as a result of mining activities.

NO

12.

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

YES Description and Number of Projects: Atlas has extensive experience in acid mine drainage and has developed abatement plans for AML-related projects.

G. Is your firm experienced in construction oversight?

YES Description and Number of Projects:

Yes, Atlas has extensive experience providing construction oversight services on a variety of projects including well pad construction for the oil and gas industry, wetland restoration projects, stormwater management projects, riverbank restoration, landfill capping and retail petroleum compliance projects. Atlas has provided eight example projects for this EOI in Section 18, but the firm has provided oversight services on many additional projects not included in this questionnaire.

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:
Roderick, Clayton K.	26	26	0

Brief Explanation of Responsibilities

With over **26** years of mining and mining-reclamation experience, Clayton's role is the Program Manager for Atlas' AML Group. He will manage the projects from inception to completion, act as a liaison for the WVDEP, complete and manage all environmental aspects of the AML design plan. He will ensure all timelines and milestones are being met throughout the life of the project.

EDUCATION (Degree, Year, Specialization)

B.S. – Earth Sciences; Geology, 1997, Structural Geology, Hydrogeology, Environmental Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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:
Staud, Benjamin T	5	24	1

Brief Explanation of Responsibilities

Mr. Staud's responsibilities include: Mr. Staud will act as the Senior Project Manager / Senior Engineer for the AML projects. He will oversee the engineering components of the projects and will certify and seal all reclamation design plans.

EDUCATION (Degree, Year, Specialization)

B.S., Engineering, 1997, M.S., Engineering, 2000, Civil Engineering, Hydraulics

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
	Professional Engineer, WV, 2013

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:
Mandarino, Dominic PE	6	6	6

Brief Explanation of Responsibilities:

Mr. Mandarino will serve as the Engineering Team Lead. He is the Engineer in Responsible in Charge for ATC Group Services' Certification of Authorization (COA)and has Professional Engineering license in WV. He will oversee the engineering components of the projects and will certify and seal all reclamation design plans.

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering and B.S. Mining Engineering, West Virginia University, Hydraulics / Civil Eng.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
OSHA 40 Hour HAZWOPER	Professional Engineer: WV, PA, OH, VA – all 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:
Pasterak, Kenneth, PG, LRS	8	35	0

Brief Explanation of Responsibilities

With over 30 years of reclamation and remediation experience, Mr. Pasterak will provide insight for the management, design and oversight of the AML reclamation plans.

EDUCATION (Degree, Year, Specialization)

M.B.A., University of Pittsburgh, Katz Graduate School of Business; M.S., Earth Science (Hydrology), Adelphi University; B.S, Geology, West Virginia University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
	Licensed Remediation Specialist in WV #243; Professional Geologist PA and NY – all current

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

Microsoft Office Professional, Microsoft Project, Bentley Pond Pack, Adobe Acrobat, FoxIt, AutoCAD Civil 3D, ESRI ArcGIS, ESRI ArcView, AutoDesk Civil 3D, Bentley Flow Master, Bentley HEC-Pack, STBBL5M, GMS, AutoDesk Storm and Sanitary Analysis, HydroCAD

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
Vienna PCE Superfund Site	WVDEP 601 57th Street, SE Charleston, WV 25304		$500,000 / Annually	100%
Ripley Duchess BP Petroleum Station Site Assessment / Risk Mgmt. & Remedial Planning	Englefield Oil Company 1935 James Parkway Heath, OH 43056		$100,000	70%
Former Petroleum Retail Risk Assessment Reporting; Glasgow, WV	WVDEP 601 57th Street, SE Charleston, WV 25304		$100,000	Monitoring through 2030
USACE Section 404 Individual Permit / OEPA Individual 401; Water Quality Cert.	North Royalton City Schools 6579 Royalton Road Royalton, OH 44133		$22,000	Monitoring through 2030
USACE Section 404 Individual Permit / OEPA Individual 401; Water Quality Certification / Stream & Wetland Mitigation	Knight Development Corporation 3933 Center Road Brunswick, OH 44212		$100,000	2024 (Anticipated End of Mitigation / Monitoring)
PQ NEPA Services	WVDOT Division of Highways 1900 Kanawha Blvd, E Charleston, WV 25305		On-Call Contract, Variable	N/A
PQ Asbestos Inspection Services	WVDOT Division of Highways 1900 Kanawha Blvd, E Charleston, WV 25305		On-Call Contract, Variable	N/A

TOTAL NUMBER OF PROJECTS:	TOTAL ESTIMATED CONSTRUCTION COSTS: See Next Page

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
S3 2023 AML Sites	WVDEP – AMLR 1047 Nick Rahall Greenway Fayetteville, WV 25840	Reclamation Design Plans, Environmental Studies, Realty and Construction Oversight	$6.2M	50%
Conifers Coupon East AML Site	PADEP – BAMR 286 Industrial Park Road Ebensburg, PA 15931-4119	Reclamation Design Plans, Environmental Studies	$65,000	90%
PADEP – BAMR: Blue Ball East AML Site	PADEP – BAMR Rachel Carson State Office Bldg PO Box 69205 Harrisburg, PA 17106-9205	Reclamation Design Plans, Environmental Studies	$75,000	60%
PADEP – BAMR: Eagle Eye School East AML Site	PADEP – BAMR 286 Industrial Park Road Ebensburg, PA 15931-4119	Reclamation Design Plans, Environmental Studies	$147,000	60%
PADEP – BAMR: – Fishing Creek AML Site	PADEP BAMR 2 Public Square 5th Floor Wilke Barre, PA 18701-1915	Reclamation Design Plans, Environmental Studies	$585,000	30%
Johnstown Incline AMLER Project	Conemaugh Valley Conservancy PO Box 1889 Johnstown, PA 15907	Reclamation Design Plans, Environmental Studies	$68,000	75%
Rohr Highwall AML Site	ODNR – DMRM 3601 Newgarden Road Salem, OH 44460	Reclamation Design Plans	$374,000	50%

TOTAL NUMBER OF PROJECTS:14	TOTAL ESTIMATED CONSTRUCTION COSTS: $8,373,000

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
N/A					

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)
Cheat Lake, WV Spill Response. Cheat Lake, West Virginia	Herrygers Environmental Services, LLC 602 Northwood Road Lexington, SC 29072	$25,000	2018-2019	N/A
Mountain Funeral Group – Phase I Environmental Site Assessments, various locations	The Huntington National Bank PO Box 1558 Columbus, OH 43216	$14,500	2020	N/A
Major Elbert L. Bias United States (US) Army Reserve Center (USARC) 1550 Spring Valley Drive, Huntington, West Virginia	US Army Reserve (USAR)	$6,000	2011	N/A
Atlas has conducted thousands of projects nationwide. For the purpose of the EOI, only a sample is provided.				

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS CONSTRUCTION OVERSIGHT ON PROJECTS				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
EQT Shipman Well Site, Services included well pad development QA/QC, Washington Twp, PA	Keystone Consultants, LLC/EQT 32 East Main Street Carnegie, PA 15106	$79,385	2020	Yes
Jackson Hills Housing Development. Services include Conservation Easement Enhancement and Restoration Oversight. Millcreek District, WV	Moonlight Engineering 424 Landmark Estates Jane Lew, WV 26378	$34,080	2025	No
Walmart, Store Remodel with Pick up area/Pick up Storage Addition. Services included earthwork inspection, monitoring and observations. Kittanning, PA	Walmart Stores, Inc. 2001 S.E. 10th Street Bentonville, AR 72716	$11,266	2023	Yes
Kwik Fill, Retail petroleum facility tank removal and replacement. Services included QA/QC and site inspection. Erie, PA	United Refining 15 Bradley Street Warren, PA 16365	$150,000	2021-2024	Yes
Gary Miller Chrysler, Millcreek stream restoration. Construction oversight. Erie, PA	Gary Miller Chrysler 5746 Peach Street Erie, PA 16509	$61,200	2024	Yes
Erie bayfront construction of one commercial and two residential structures. Services include site development inspection, testing and oversight. Erie, PA	Baldwin Brothers 2540 Village Common Drive Erie, PA 16506	$60,000	2026	No

19. 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
Columbia Gas Pipeline Point of Delivery (POD) replacement project. Services included site development QA/QC - reporting, testing, and oversight. Bradford, PA	Keystone Consultants, LLC/Columbia Gas 32 East Main Street Carnegie, PA 15106	$16,398	2024	Yes	Keystone Consultants
Columbia Gas, Pipeline Replacement. Services included QA/QC - reporting, testing, and oversight. Coraopolis, PA	Keystone Consultants, LLC/Columbia Gas 32 East Main Street Carnegie, PA 15106	$30,000	2025	Yes	Keystone Consultants

20. 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.

Atlas has extensive knowledge and resources capable of designing reclamation plans for several types of AML projects. With a presence in Morgantown, WV and several offices located within a short distance from West Virginia, Atlas is regularly performing work in the State.

21. The foregoing is a statement of facts.

Signature: Clayton K. Roderick Title: Program Manager, AML

Printed Name: Clayton K. Roderick

Date: 08/20/2025

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNIARE ATTACHMENT "A"

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
AML-EOI Prequalification for Consultants	**14, August, 2025**	**55-0592364**

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME (IF APPLICABLE)
Triad Engineering, Inc.	**10541 Teays Valley Road Scott Depot, WV 25560**	**NA**

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OF OWNERSHIP	6a. WV REGISTERED DBE (DISADVANTAGED BUSINESS ENTERPRISE)
304-755-0721	**1975**	[ ] Individual [X] Corporation [ ] Partnership [ ] Joint-Venture	Yes [ ] No [X]

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. (name particular type) PERSONNEL IN EACH OFFICE

10541 Teays Valley Road
Scott Depot, WV 25560
304-755-0721

T. Anders Bush/CAO & Acting SW Regional Manager

56	**Scott Depot, WV**
37	**Morgantown, WV**
41	**Hagerstown, MD**
34	**Winchester, VA**
13	**Satellite Offices**

(Portsmouth, OH, New Stanton, PA, Mechanicsburg, PA, Frederick, MD, Sterling, VA)

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8A. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Brad Reynolds, PE, CEO 301-797-6400	**T. Anders Bush, CAO/VP 304-755-0721**

9. KEY PERSONNEL (Check mark key personnel below that you have on staff and will work on project)

[X]	ADMINISTRATION	[X]	ECOLOGISTS	[X]	LANDSCAPE ARCHITECTS	[X]	MECHNICAL E STRUCTURUAL ENGINEERS
[X]	ARCHITECTS	[ ]	ECONOMISTS	[X]	MECHNICAL ENGINEERS	[X]	SURVEYORS
[ ]	BILOLOGOSITS	[X]	ELECTRICAL ENGINEERS	[X]	MINING ENGINEERS	[ ]	TRAFFIC ENGINEERS
[X]	CADD OPERATORS	[X]	ENVIRONMENTALISTS	[ ]	PHOGRAMMETRISTS	[ ]	OTHER
[ ]	CHEMICAL ENGINEERS	[X]	ESTIMATORS	[X]	PLANNERS: URBAN/REGIONAL		
[X]	CIVL ENGINEERS	[X]	GEOLOGISTS	[ ]	SANITARY ENGINEERS	200	TOTAL PERSONNEL
[X]	CONSTRUCTION INSPECTORS	[X]	HISTORIANS	[X]	SOILS ENGINEERS		
[X]	DESIGNERS	[ ]	HYDROLOGISTS	[ ]	SPECIFICATION WRTIERS		
[X]	DRAFTSMEN	[X]	LABORER				

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERINGS IN PRIMARY OFFICE: _____

*RPEs other than Civil and Mining must provide supporting documentation that qualifies them to spervise and perform this type of work.

10a. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? Yes [X] No [ ]

NA

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML CONSULTANT QUALIFICATION QUESTIIONNAIRE".

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
NA		☐ 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?

[X] **YES** Description and Number of Projects:

Yes, Triad is experienced in Abandoned Mine Lands Remedation/Mine Reclamation Engineering. Triad has provided drilling, geotechnical, and surveying services for several different WVDEP AML projects. Those projects include the 2023 S3 Constract which consolidated 14 projects in Fayette and Greenbrier County. More detail about these projects is included in Section 16.

Triad has also worked with the WVDEP by providing drilling services under an open ended contract in Northern and Southern counties. The purpose of these geotechnical investations were to assist in the reclamation of construction projects. Services provided for these projects in various counties included soil borings, soil borings with standard penetration tests/split spooon sampling, Shelby tube sampling, rock borings, rock core borings, installation of casing, installation of piezometers, and conducting various other tests. 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. Reports on the data collected from the field and laboatory activities were also provided.

12b. Is your firm experienced in Soil Analysis?

[X] **YES** Description and Number of Projects:

Triad was originally formed in 1975 as a geotechnical engineering firm, and our expertise in this discipline is superior. The combined education and professional experience of our staff provides our clients with cost-effective and practical solutions for the most difficult soil, rock and groundwater problems. Our clients include industrial and mining companies, governmental agencies, contractors, architects, engineers, developers, owners and commercial organizations. Geotechnical projects have included investigations for hospitals, churches, hotels, schools, shopping centers, communication towers, wind turbines, water and petroleum product storage tanks, coal and mineral processing facilities, landslides, bridges and highways, parks and recreation facilities, river docks and impoundments of all types.

Triad had over 70 projects in the year of 2024 that included soil analysis. Examples for some of those projects are included in Sections 15-19.

[ ] **NO**

12c. Is your firm experienced in hydrology and hydraulics?

[X] **YES** Description and Number of Projects:

Yes, Triad is experienced in hydrology and hydraulics. Triad has a team of professional personnel which provides civil engineering design services in a variety of markets including land planning, site development of residential subdivisions, commercial development, education (K-secondary), healthcare facilities, water/wastewater, landfills, reservoirs, and many other facets of land development. We can combine many other inhouse services, from surveying to construction inspection and testing, to provide a complete project from start to finish. Our goal is to design a cost-effective project that incorporates good engineering science, meets the local, state and federal regulations while exceeding our clients' expectations.

Triad provides drainage studies, flood plain analysis, stream restoration, reservoir rehabiliation/construction, LEED site design and consulting and certificiation processsing, and water conservation design. Triad has projects referencing this experience in Sections 15 & 19.

[ ] **NO**

12d. Does yout firm produce its own Aerial Photogprahy and Develop Contour Mapping?

[X] **YES** Description and Number of Projects:

Triad subcontracts for aerial photography. We have an established working relationship with an experienced company who provides the aerial photography. Triad also does develop contour mapping.

Triad's surveying professionals utilize an array of state-of-the-art geospatial technologies and software engines to process field data in an efficient manner that results in a high quality deliverable for our clients. All our survey work documents are completed and certified in accordance with applicable local, state and national standards. We frequently work with and for architects, other engineers, owners, developers, general contractors and other industry professionals.

We provide transportation corridor mapping, design level base mapping and topographic and planimetric survey mapping.

[ ] **NO**

12e. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

[X] **YES** Description and Number of Projects:

Yes, Triad has experience designing domestic waterline systems in WV.

Triad provides planning, design and construction administration for potable water systems ranging in size from relatively small line extensions to county-wide utility programs. Our dedicated staff of professional engineers and designers provide personal attention and put our client's interests first. They are knowledgeable in all federal and state regulations related to potable water systems, and their experience and expertise in working with funding agencies is unmatched.

Our staff members have designed numerous water distribution systems and water treatment plants for a wide variety of clients. We offer assistance and guidance in resolving problems while delivering high quality and innovative solutions through sustainable design. We can provide a turn-key project or serve in a limited role depending on the client's needs. Our background includes design of new facilities of varying magnitude, as well as system expansion and cost-effective rehabilitation of existing systems. We can provide operation and maintenance assistance as well as troubleshooting systems.

Consistent sources and quantities of potable water are crucial for the health of the population. You can depend on Triad's assistance in the development of a reliable potable water system to meet the needs of your community and its businesses.

[ ] **NO**

12f. Is your firm expereinced in Acid Mine Drainage Evaluation and Abatement Design?

[ ] **YES** Description and Number of Projects:

[X] **NO**

12g. Is your firm experienced in construction oversight?

[X] **YES** Description and Number of Projects:

Triad is experienced in construction oversight. Quality Assurance/Quality Control (QA/QC) construction monitoring services have been core specialties since Triad was founded in 1975. We maintain a staff of experienced construction inspectors and technicians who are certified by ACI, WVDOH, VDOT, MARTCP and numerous other local, state and/or nationally recognized organizations. Our growth has been the result of staff dedication, client satisfaction and significant repeat business from clients, many of whom have been with us for 25+ years. Triad will provide efficient, cost-effective services focused on safety and the construction quality your project deserves. Constuction observation and quality control testing has remained one of the main services lines that Triad has provided in our 50 years of service. More informaton is provided for these specific projects in Section 18.

[ ] **NO**

13a. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Hooper, Dave, W., Principle Engineer, PE**
Years & Type of Experience:	**36**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
Mr. David Hooper brings more than 30 years of geotechnical engineering and project management experience to Triad Engineering, Inc., where he leads engineering project 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.	
EDUCATION (Degree, Year, Specialization)	
B.S., Civil Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State) **American Society of Civil Engineers**	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	
PE: MD, NY, OH, PA, WV	
13b. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Haynes, John J., Geotechnical & Drilling Practice Leader, PE**
Years & Type of Experience:	**35**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
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.	
EDUCATION (Degree, Year, Specialization)	
B.S., Civil Engineering & BS, Mechanical Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	
PE: WV, MD, IN, TN, KY, OH, NC	

13c. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Stawovy, Jeremi J., Project Engineer**
Years & Type of Experience:	**17**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
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.	
EDUCATION (Degree, Year, Specialization)	
B.S., Civil Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	

13d. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Kirk, Loyd, PS, CFS, Survey Practice Leader**
Years & Type of Experience:	**23**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
Mr. Kirk is currently the Survey Practice Leader 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 road work 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.	
EDUCATION (Degree, Year, Specialization)	
A.S., Mining	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)	
West Virginia Society of Proessional Surveyors, NC Society of Professional Surveyors, & National Society of Proessional Surveyors	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	
PS: WV & NC; CFS: NC; OSHA 10	

13e. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Spiewak, Tyler, Survey Supervisor**
Years & Type of Experience:	**6**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	

Brief Explanation of Responsibilities

Mr. Spiewak is a Survey Supervisor for the Scott Depot office of Triad. In this capacity, he is responsible for field coordination of construction projects, quality assurance of survey practices in the field, collection and drafting of survey data, project and client coordination, revision of construction plans, and drafting completed field work. He works with all levels of engineering, construction staff and project owners. Mr. Spiewak is experienced in construction layout, boundary; both metes and bounds and PLSS (public land survey system), road work surveying, photogrammetric control and topographic surveying. He has supervised and/or performed survey work on various types of projects to include military construction projects with NATO partner nations, hydrographic impact surveys at iron ore mines, state sponsored large scale solar farms, site surveys and construction layout for hospitals and airports, construction layout for MNDOT highway projects, and site surveys and construction layout for land development projects. Mr. Spiewak has been involved in projects in several states including West Virginia, Ohio, Kentucky, Georgia, Tennessee, California, Minnesota, Wisconsin, Illinois and Indiana.

EDUCATION (Degree, Year, Specialization)

B.S., 2023, Science

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

13f. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Bell, Douglas, A., Survey Practice Leader**
Years & Type of Experience:	**8**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	

Brief Explanation of Responsibilities

Mr. Bell is the Survey Practice Leader for Triad's Morgantown office. 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. Bell is experienced in construction layout, boundary and road work surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of projects, including surface and underground mine surveying for coal mine facilities, construction layout for residential and commercial projects, boundary surveys for residential, commercial, and public entities. 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.

EDUCATION (Degree, Year, Specialization)

A.S., Forestry and Land Surveying Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

WV Society of Professional Surveyors, PA Society of Professional Surveyors & National Society of Professional Surveyors

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

PS: WV PLS: PA

13g. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Criniti, James, "Bo", Civil Design Engineer, PE**
Years & Type of Experience:	**17**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
Mr. Criniti is currently a Senior 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 coordinating 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.	
EDUCATION (Degree, Year, Specialization)	
B.S., Civil Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	
PE: WV	
13h. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Hope, John, B., Field Services Manager**
Years & Type of Experience:	**35**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	
Brief Explanation of Responsibilities	
Mr. Hope is currently the Field Services Manager for the Scott Depot office of Triad. In this capacity he oversees the field staff, by handling calls from technicians on technical matters, staffing and scheduling and serving as the branch Radiation Safety Officer. Mr. Hope also keeps all records of inspections and calibrations. He assigns new jobs and lab work and writes Quality Control (QC) plans. Mr. Hope's duties include the completion and/or review and submission of required field reports for clients and owners.	
EDUCATION (Degree, Year, Specialization)	
WV State College	
MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)	
PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)	
WVDOH Certified Tech Training, Troxler 8 Hour Nuke Safety & Operation, Troxler Radiation Safety Officer Training, 40 Hour OSHA Training, MSHA Impoundment Inspector Training, USACOE-Contractor QC Training, WVDOT/DOH Potland Cement Inspector, ACI-Grade I Field & Lab Tech, MSHA Above Ground Hazard Trained, PCI Level I and II, etc.	

13i. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**McCabe, Jason, T., Project Manager**
Years & Type of Experience:	**17**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	

Brief Explanation of Responsibilities

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; NEPA environmental assessments, and geophysical investigations. Additionally, Mr. McCabe's experience with NEPA-focused EAs includes federally funded transportation, housing, healthcare, and economic development/ redevelopment projects. 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.

EDUCATION (Degree, Year, Specialization)

B.S., Geology & Graduate Certificate, Geotechnics

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

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

13k. PERSONAL HISTORY STATEMENT OF PRINCIPLES AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials).	
NAME & TITLE (Last, First, MI):	**Metz, Heather, A., Environmental Services Manager**
Years & Type of Experience:	**22**
Years of AML Related Design Experience:	
Years of Domestic Waterline Design Experience:	

Brief Explanation of Responsibilities

Triad SW Environmental Services Manager & Senior Environmental Scientist; has assisted WVDEP & USEPA at numerous WV SEMS sites; has performed regulatory file reviews, negotiated ROE agreements, field operations management, multi-media sampling, data analysis, HRS site scoring, and report generation; as LRS, has performed a variety of tasks for sites in the WV UECA, VRP and Brownfields programs (including preparation of VRP applications, agreements, sampling and analysis plans, extensive site characterization activities, risk evaluation, remedial actions, and report preparation).

EDUCATION (Degree, Year, Specialization)

B.S., 2001 - Environmental Science

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

Air and Waste Management Association (AWMA)-Board Member and Treasurer
Society of American Military Engineers (SAME)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

WV Licensed Remedation Specialist (LRS), WV Monitoring Well Driller, HAZWOPER, OSHA 8 Supervisor

14. Provide a list of software and equipment available in the primary office which will be used to complete AML Design Services.
Each office maintains robust network infrastructure to support a wide range of technical functions, including CADD operations, hydrogeologic evaluations, water balance modeling, roadway design, stormwater management and surface water drainage. Triad also provides engineering design, stability analyses, risk assessment, survey data reduction, and mapping. These comprehensive, in-house, capabilities provide Triad with greater control over project schedules, quality, and costs—minimizing potential issues throughout all phases of a contract. Over the course of 50 years in business, Triad has evolved with equipment/technology and has managed to keep up to date with the latest equipment and software that is available to meet the needs of clients in every line of service. It is Triad's vision to meet the clients needs on every targeted project and to ensure prompt service, open communication, and high quality work.

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED FIRM OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
WV Board of Risk Management Charleston, WV	WV BRIM	To conduct surface and subsurface investigations for the purpose of determining if structures have been damaged by mine subsidence.	NA	NA
Artistic Cleaners Huntingon, WV	City of Huntington Huntinton, WV	Waste disposal, water quality evaluation and mitigation headings	NA	90%
U.S. Route 58 Vesta Design Build Project	VDOT Koerner Lane Purcellville, VA	Geotechnical drilling, boring inspection, logging, infiltration testing, and laboratory testing.	NA	80%
Flint Pigments-MU WV VRP Huntinton, WV	Marshall University Huntington, WV	Environmental Services - WV VRP-site characterization & remediation activities.	NA	95%
NOAA Area B Data Center, Fairmont, WV (Technology)	West Virginia High Technology Foundation, 1000 Galliher Dr., Fairmont, WV 26554	Civil Design	NA	10%

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
South Fence Stormwater Repairs, Morgantown, WV (Technology)	SI Group, 1000 Industrial Park Rd., Morgantown, WV 26501	Civil Design	NA	20%
Sheetz Remodel #182, Bridgeport, WV (Commercial)	Sheetz, Inc., 5700 6th Ave., Altoona, PA 16602	Civil Design	NA	30%
Exxon Bulk Terminal Hungtinton, WV	Intersection 215, LLC Huntington, WV	Waste disposal, water quality evaluation, mitigation	NA	5%
WVDOH District 1 Shopping Area Nitro, WV	WVDOH Charleston, WV	Waste Disposal, water quality evaluation	NA	75%
Service Wire Project Culloden, WV	ARCO Construction	Civil site design, including hydrological calculations, stormwater design, permitting, surveying, geotechnical investigation, drilling, construction layout, construction quality testing	NA	75%
TOTAL NUMBER OF PROJECTS: 10			NA	

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

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				Entire Project	Your Firm's Responsibility
Clifftop Strip Complex Winona, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 14 borings, installation of 3 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Clifftop (Road Fork) Drainage Clifftop, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 2 borings, installation of 2 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Crosier Road Portals Rainelle, Greenbrier County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 5 borings, installation of 5 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Lookout (Moore) Subsidence Clifftop, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included boring, installation of 1 standpipe piezometer, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Fayette Station Slide & Drainage Kaymoore, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 4 borings, installation of 4 standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Keeney Creek Mines Winona, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included 5 borings, installation of 5 standpipe piezometer, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA

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

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				Entire Project	Your Firm's Responsibility
Royal Coal #5 Loadout Fayetteville, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included two (2) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Nuttallburg, South Bench Edmond, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included seven (7) borings, installation of seven (7) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Floyd Creek Highwalls & Drainage Clifftop, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included three (3) borings, installation of three (3) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
County Route 82 Portals Winona, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included four (4) borings, installation of two (2) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Winona Complex Winona, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included twenty-two (22) borings, installation of five (5) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Winona East Highwall & Drainage Winona, Fayette County, WV	Geotechnical and drilling exploration, and topographical survey in support of project design. The geotechnical and drilling exploration included eight (8) borings, installation of eight (8) standpipe piezometers, and a geotechnical report summarizing the findings. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA

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

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				Entire Project	Your Firm's Responsibility
Buffalo Creek Complex Thayer, Fayette County, WV	Topographical survey in support of project design. The topographic survey included the collection of field data: elevations, location of natural and man-made features, spot elevations, and providing CAD drawings.	WVDEP 601 57th Street SE Charleston, WV 25304	NA	NA	NA
Marion 10 South 1 Airshaft, Metz, WV	Construction Materials Testing & Inspection Services	Marion County Coal 3Q 2025 Resources, Inc., Jonny Cake Rd., Metz, WV 26585	2025	NA	NA
Westerman Bridge Replacement Thornton, WV	Geotechnical Investigation	Core Natural Resources, Inc., 275 Technology Drive Suite 101, Canonsburg, PA 15317	2025	NA	NA
2025 Quarterly Survey Services Philippi, WV	Survey Services	21550 Barbour County Hwy., Philippi, WV 26416	2025	NA	NA
Bovard Refuse Design, Bovard, PA	Environmental Services	Westmoreland Conservation District, 216 Donohoe Rd., Greensburg, PA 15601	2025	NA	NA

17. COMPLETED WORK WITHIN THE LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEERI OF RECORD?

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED? (YES OR NO?
East Beckley Bypass Beckley, WV	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA		NA
Crawley Creek Road County Road Slide 3 Logan County, WV	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA		NA
US 52-Maher Slide Mingo County, WV	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA		NA
US 52-Stonecoal Slide Wayne County, WV	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA		NA
WV 37-Twelve Pole Creek Slide Wayne County, WV	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA		NA
8-acre Parcel Property Wood County, WV (Land Development)	Resource Consultants and Developers, Inc. 100 Star Ave., Parkersburg, WV 26101	NA	2022	Yes

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED? (YES OR NO?
WVU Parking Lots - Parking Area 1, Monongalia County, WV (Higher Ed)	West Virginia University Facilities Management 975 Rawley Ln., Morgantown, WV 26506	NA	2022	Yes
ADA Ramps, Holland Ave., Monongalia County, WV (Road, Highway, Bridge)	WVDOH Building 5 1900 Kanawha Blvd. E. Charleston, WV 25305	NA	2022	Yes
WVU Coliseum Addition, Monongalia County, WV (Higher Ed, Athletics)	WVU Department of Intercollegiate Athletics PO Box 0877, Morgantown, WV 26507	NA	2024	Yes
Flint Pigments-Tract A Huntington, WV (Waste disposal, Mitigation)	Huntington WV 0422, LLC Huntington, WV	NA	2025	NA
Poplar Fork Multifamily (Civil site design, stormwater/hydrology, permitting, surveying)	Meeks Realty Hurricane, WV	NA	2024	NA
South Bend Telecom Building (Civil site design, stormwater/hydrology)	American Electric Power (Indiana - Michigan Power) South Bend, IN	NA	2024	NA

18. COMPLETED WITH WITHIN THE LAST 5 YEARS ON WHICH YOUR FIRM HAS CONTSRUCTION OVERSIGHT ON PROJECTS

PROJECT NAME, TYPE AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	ESTIMATED CONSTRUCTION COST	YEAR COMPLETED	CONSTRUCTED? (YES OR NO?
Galloway Shaft Taylor County, WV	Arhc Coal, Inc. Mark Spencer 304.457.1895	NA		Yes
Marion County Coal Resources Marion County, WV	Marion County Coul Resources Keith Vilsec 304.534.4735	NA		Yes
Meigs Mine Ponds Pomeroy, OH	Derek Chapman Meigs County, OH MCIWV	NA		Yes
Morgantown Municipal Airport Runway 18-36 Extension, Morgantown, WV (Airport)	Morgantown Municipal Airport, 100 Hart Field Rd., Morgantown, WV 26505	NA	2020	Yes
SLH Well Pad & AST PAD, Bridgeport, WV (Energy)	Arsenal Resources, 6031 Wallace Rd Extension Suite 200, Wexford, PA 15090	NA	2025	Yes

PROJECT NAME, TYPE AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	ESTIMATED CONSTRUCTION COST	YEAR COMPLETED	CONSTRUCTED? (YES OR NO?
WDTN-28 (Energy)	CNX Resources, 1000 Consol Energy Drive, Canonsburg, PA 15317	NA	2025	Yes
Southern Alleghenies Biogas, Davidsville, WV (Energy)	Southern Alleghenies Biogas, LLC, 251 Valley View Dr, Davidsville, PA 15928	NA	2025	Yes

19. COMPLETED WORK WITHIN THE 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 COMPLETED	CONSTRUCTED? (YES OR NO?	FIRM ASSOCIATED WITH
Campbell's Creek Piezometer Installation	WVDEP 601 57th Street Charlesotn, WV 25304	NA	2025	NA	Alliance Consulting, Inc.
Lorgan Airport Underground Mine Fire Logan, WV	WVDEP 601 57th Street Charlesotn, WV 25304	NA	2024	NA	Alliance Consulting ,Inc.
AML Contract 6 Drilling Project	WVDEP 601 57th Street Charlesotn, WV 25304	NA	2024	NA	Civil Tech
Camden Wilson AML Drilling Project, Lewis County, WV (AML)	WVDEP Office of AML and Reclamation, 601 57th St. SE, Charleston, WV 25304	$20K (Drilling Services)	2020	Yes	E.L. Robinson Engineering, Inc.
FBI Clarksburg Office Building, Clarksburg, WV (Government)	Federal Bureau of Investigations, 1000 Custer Hollow Rd., Clarksburg, WV 26306	$40 K (Survey Services)	2020	Yes	Desbuild, Inc.
National Oceanic and Atmospheric Assn., AWHIPS Antennae, Fairmont, WV (Tech)	WV High Technology Foundation, 1000 Galliher Dr., Fairmont, WV 26554	$25K (Geotechnical Services)	2022	YES	March-Westin Co., Inc.

Signature:

Title: Controller/Treasurer

Printed Name: Tom Chandler

Date: 8/14/2025

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE **Attachment "A"**

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
AML – EOI Pre-Qualification	15, August, 2025	88-2733237

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
BioSurvey Group, LLC	PO Box 593 Morgantown, WV 26507	

3. HOME OFFICE TELEPHONE	4. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
(304)-810-8099	2022	Individual Corporation (Partnership) Joint-Venture	(YES) NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Sarah Veselka (CEO), Ryan Schwegman (COO)	

9. PERSONNEL BY DISCIPLINE

↓ ADMINISTRATIVE - 2	↓ ECOLOGISTS	↓ LANDSCAPE ARCHITECTS	↓ STRUCTURAL ENGINEERS
↓ ARCHITECTS	↓ ECONOMISTS	↓ MECHANICAL ENGINEERS	↓ **SURVEYORS**
↓ **BIOLOGIST** - 10	↓ ELECTRICAL ENGINEERS	↓ **MINING ENGINEERS**	↓ TRAFFIC ENGINEERS
↓ **CADD OPERATORS**	↓ ENVIRONMENTALISTS	↓ PHOTOGRAMMETRISTS	↓ OTHER
↓ CHEMICAL ENGINEERS	↓ ESTIMATORS	↓ PLANNERS: URBAN/REGIONAL	
↓ **CIVIL ENGINEERS**	↓ **GEOLOGISTS**	↓ SANITARY ENGINEERS	
↓ CONSTRUCTION INSPECTORS	↓ HISTORIANS	↓ SOILS ENGINEERS	
↓ DESIGNERS	↓ HYDROLOGISTS	↓ SPECIFICATION WRITERS	↓ TOTAL PERSONNELL - 12
↓ DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: N/A
***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? Ξ YES □ NO

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".		
NAME AND ADDRESS: BioSurvey Group will be a sub-contractor to Atlas.	SPECIALTY: Biological surveys, rare, threatened, and endangered species consultations.	WORKED WITH BEFORE _x____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 Description and Number of Projects: _____

_____

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: _____

_____

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: _____

_____

NO

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

YES Description and Number of Projects: _____

_____

NO

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 Description and Number of Projects: _____

_____

NO

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

YES Description and Number of Projects:

(NO)

G. Is your firm experienced in construction oversight?

YES Description and Number of Projects:

(NO)

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:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

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

TOTAL NUMBER OF PROJECTS:	TOTAL ESTIMATED CONSTRUCTION COSTS: $

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

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)

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS CONSTRUCTION OVERSIGHT ON PROJECTS				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)

19. 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

20. 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.

21. The foregoing is a statement of facts.

Signature:  Title: CEO|Senior Scientist Date: 8/15/25

Printed Name: Sarah Veselka

Appendix C:

AML and Related Project Experience Matrix

Atlas

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/Nitigation/ Replacement	Construction Inspection/Managem ent	Water Treatment	Active/Passive Water Treatment Systems	Eq;uipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Benjamin Staud, PE	Clayton Kirk Roderick	Dominic N. Mandarino, PE	James Giligan	Zachary A. Twist, EIT	Caitlin M. Cochran
WVDEP S3 Buffalo Creek	C	Fayette Co., WV	X			X				X	X		X			X		X	M/P	M/P	P	P		
WVDEP S3 County Road 82	C	Fayette Co., WV	X	X	X	X	X		X	X	X		X	X		X		X	M/P	M/P	P	P		
WVDEP S3 - Crozier Portals	C	Greenbrier Co., WV	X	X	X	X	X		X		X		X			X		X	M/P	M/P		P	P	
WVDEP S3 Fayette Station	C	Fayette Co., WV	X	X	X	X	X				X	X	X	X				X	M/P	M/P	P	P		P
WVDEP S3 Winona Complex	C	Fayette Co., WV	X	X	X	X	X		X	X	X	X	X			X	X	X	M/P	M/P		P		P
WVDEP S3 Winona East	C	Fayette Co., WV	X	X	X	X	X		X	X	X	X	X	X		X	X	X	M/P	M/P		P	P	
PADEP Conifers Coupon East AML Site	C	Blair Co., PA	X	X		X	X		X	X	X	X		X	X		X	X	M/P	M/P	P	P	P	
PADEP Blue Ball East AML Site	C	Clearfield Co., PA	X			X	X		X	X	X							X	M/P	M/P		P	P	
PADEP Eagle Eye AML Site	C	Clearfield Co., PA	X			X	X		X	X	X	X				X		X	M/P	M/P	P	P		
PADEP Fishing Creek AML Site	C	Schuylkill Co., PA	X	X	X	X	X		X		X	X		X				X	M/P	M/P	P	P		
PA CVC AMLER Johnstown Incline	C	Cambria Co., PA	X	X	X	X			X	X	X					X		X	P	M/P		P	P	
ODNR Rohr Highwall	C	Carroll Co., OH	X	X	X	X	X	X	X	X	X	X		X		X	X	X	p	M/P	P	P		P
ODNR Mulga Run	C	Jackson Co., OH	X	X	X	X	X		X	X	X	X		X	X		X	X						
ODNR Lyons AMD Reclamation	C	Tuscarawas Co., OH	X	X	X	X				X	X	X	X	X	X		X	X						
ODNR Misco Mine	C	Perry Co., OH	X	X	X	X				X	X	X	X	X	X		X	X						
ODNR Belden AMD Reclamation	C	Carroll Co., OH	X			X					X	X	X	X		X								

*** 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 "B"

AML and RELATED PROEJCT 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.	Remaining Evaluation	Mine/Rufuse Fire Abatement	Subsidence Investigatio Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation / Replacement	Construction Inspection / Management	Water Treatment	Active / Passive Water Treatment Systems	Equipment/ Structure Removal	Stream Restoration	Geotechnical/Stability	John Haynes, PE	Jeremi Stawovy	Lloyd Kirk, PS	Tyler Spiewak	James "Bo" Criniti, PE	John "JoBe" Hope	Heather Metz, LRS
Clifftop Strip Complex	C	See Project Profile	X		X	X				X							X	X	P	P	P	P			
Clifftop (Road Fork) Drainage	C	See Project Profile	X		X	X				X							X	X	P	P	P	P			
Crosier Road Portals	C	See Project Profile	X		X	X				X								X	P	P	P	P			
Lookout (Moore) Subsidence	C	See Project Profile	X		X	X												X	P	P	P	P			
Fayette Station Slide and Drainage	C	See Project Profile	X		X	X												X	P	P	P	P			
Keeney Creek Mines	C	See Project Profile	X		X	X				X								X	P	P	P	P			
Royal Coal #5 Loadout	C	See Project Profile	X			X												X	P	P	P	P			
Nuttalllburg South Bench	C	See Project Profile	X		X	X												X	P	P	P	P			
Floyd Creek Highwalls & Drainage	C	See Project Profile	X		X	X			X									X	P	P	P	P			
County Route 82 Portals	C	See Project Profile	X		X	X				X								X	P	P	P	P			
Winona Complex	C	See Project Profile	X		X	X				X						X		X	P	P	P	P			
Winona East Highwall & Drainage	C	See Project Profile	X		X	X			X	X						X		X	P	P	P	P			
Buffalo Creek Complex	C	See Project Profile	X			X				X						X			P	P	P	P			
Artistic Cleaners	C	See Project Profile								X		X													P
Flint Pigments	C	See Project Profile								X		X													P
WVDEP Drilling for Northern Counties	C		X	X	X			X	X		X						X		P						
WVDEP Drilling for Southern Counties	C		X	X	X			X	X		X						X		P						
Service Wire Facility Expansion	C					X												X	P		P		P	P	
Poplar Fork Mutlfamily (aka Cottage Cout)	C					X															P		P		
South Bend Telecom Building	C					X																	P		
Winter Portals AML Suveying	C				X																P				
Meigs County Mine Closure	C				X																			P	
Quinwood Coal Refuse	C							X											P						

* 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.

Appendix D:

Key Personnel Qualifications and Resumes

Benjamin Staud, PE

SENIOR PROJECT MANAGER

EDUCATION
M.S., Civil Engineering, 2000, West Virginia University

B.S., Civil and Environmental Engineering, 1997, West Virginia University

REGISTRATIONS
Professional Engineer:
- WV 020372
- PA PE071430
- MA 50126
- NY 086812

SPECIALIZED TRAINING
- ASCE Natural Stream Restoration
- OSHA 1910.120 40-Hour Safety Training
- OSHA 1910.120 8-Hour Refresher Training

AREAS OF EXPERTISE
Project management; design; investigation; permitting

Mr. Staud is the Engineering Division Manager for Atlas in the Environmental Services Division. Mr. Staud is a licensed Professional Engineer with over 24 years of project management and design experience. Mr. Staud's experience centers around investigating, designing, permitting, and managing a diverse array of environmental, geotechnical, and civil projects. He has completed projects in West Virginia, Pennsylvania, Virginia, Ohio, New York, Massachusetts, Maryland, Michigan, and Oklahoma.

PROJECT EXPERIENCE

AML S3 Contract, WV
Certifying Engineer for 14 Abandoned Mine Lands (AML) reclamation projects located in West Virginia. Projects involved grading design, stormwater management, wet and dry mine seals, and stream restoration/ reconstruction for areas impacted by historical mining activities.

Fishing Creek AML, PA
Senior Project Manager and Certifying Engineer for AML reclamation project located in central Pennsylvania. Project involved design of regrading plans and drainage facilities for an approximately 43-acre site. Project included backfilling against the existing highwall with adjacent mining spoils while addressing vertical openings, collapsed mine openings, water problem areas and surface drainage. Project also includes design of Allegheny Woodrat and native bat habitat structures.

Eagle Eye AML, PA
Senior Project Manager and Certifying Engineer for AML reclamation project located in central Pennsylvania. Project involved design of regrading plans and drainage facilities for an approximately 44-acre site. Project included backfilling approximately 5,000-lf of highwall with adjacent mining spoils and surface drainage channels.

Johnstown Inclined Hill AML Project, Conemaugh Valley Conservancy, Johnstown, PA
Certifying Engineer for AML reclamation project located in Johnstown Pennsylvania. Project involved the design of grading plan and drainage facilities for 1,500-lf of recreational trail along an existing AML highwall overlooking the city of Johnstown. Project also included design of a protective capping system for an existing vertical mine shaft, design of new bat gates for two open portals, and design of rock fall mitigation measures along the trail.

Conifers Coupon AML, PA
Senior Project Manager and Certifying Engineer for AML reclamation project located in central Pennsylvania. Project involved design of regrading plans and drainage facilities for an approximately 6-acre site. Project included backfilling approximately 8,000-lf of highwall with adjacent mining spoils, a temporary sedimentation basin, subsurface drainage piping and surface runoff channels.

AML Blue Ball East, PA
Certifying Engineer for AML reclamation project located in central Pennsylvania. Project involved design of a regrading plan and drainage facilities for backfilling approximately 6,000-lf of highwall with adjacent mining spoils.

Vienna Superfund Site, Vienna WV
Senior Project Manager for operations, maintenance, sampling and reporting for an AS/SVE system located in the city of Vienna.

Painesville, OH
Senior Project Manager for operations, maintenance, sampling and reporting for a closed industrial landfill and chromium impacted groundwater pumping/disposal system.

Benjamin Staud, PE

SENIOR PROJECT MANAGER

MD Treatment System Design, WV
Manager and Design Engineer for active AMD treatment system in Greenbrier County West Virginia. Project involved the grading and channelization of existing seeps to a 5,700-sf flushable limestone bed and 5,000-sf polishing pond.

Sanitary & Wash Bay Sewer Design, WV
Managed, designed and permitted treatment systems for a 1,000 gallon/day sanitary sewer system and a 1,000 gallon/day wash bay water treatment system in West Virginia.

Groundwater Treatment System Treatment Design, OH
Managed, designed and permitted ~4,000 gpd treatment systems for the removal of iron and manganese from drinking water utilizing manganese greensand treatment media continuously regenerated by chlorine injection.

Post Construction Stormwater BMPs
Provided real time verification of Post Construction Stormwater BMP construction with the assistance of survey equipment for Notice of Termination documentation.

Aluminum Dross Landfill Capping, AL
Completed procurement and oversight of geotechnical and environmental drilling programs, historical records review, slope stability analyses, grading plans, cap system design, and construction oversight for a capping and leachate treatment project for a 40-acre industrial landfill.

Facility Response Plan, OK
Managed and prepared a Facility Response Plan for a 70 thousand barrel per day oil refinery.

Environmental Compliance, Asphalt Emulsions Manufacturing Facility, PA, MD, OH, & NC
Managed compliance for multiple asphalt emulsions production facilities across four states.

MGP Permitting & Remediation – Phase II, Greenfield, MA
Provided a detailed design of the stream bank and bed restoration utilizing a combination of hard armoring and natural stream restoration techniques; obtained all required permits from local, state, and federal regulators (Section 404/401 permits); prepared remedial and restoration design documents; assisted with contractor selection; attained E&S permits, supervision of field oversight activities; and submitted completion documentation. This MGP impacted sediment removal and stream/bank restoration project required the complete gravity diversion of a medium-sized stream to facilitate the removal and replacement of 12,000 tons of sediment. The restoration portion of the project was designed to mitigate for stream and bank impacts due to the extensive remediation work. Remediation, stream, bank and wetland restoration goals addressed water quality, eroded stream banks and restoration of bordering vegetated wetlands.

GP Remedial Design, Danville, NY
Evaluated remedial design investigation results, attained regulatory approval, prepared remedial design documents, and secured an E&S control permit for an impacted soil removal project at a former manufactured gas plant located in an urban area under complete containment.

MGP Permitting & Remediation Phase I, Greenfield, MA
Completed a detailed design of the stream bank and bed restoration utilizing natural stream restoration techniques; obtained all required permits from local, state, and federal regulators (Section 404/401 permits); prepared remedial and restoration design documents; assisted with contractor selection; attained E&S permits, supervised field oversight activities; and submitted completion documentation for the initial phase of an MGP impacted sediment removal and stream/bank restoration project. This required the installation of a structural soil mix barrier wall and complete gravity diversion of a medium-sized stream to facilitate the removal and replacement of approximately 12,000 tons of sediment. The restoration portion of the project was designed to mitigate for stream and bank impacts due to the extensive remediation work. Remediation, stream, bank and wetland restoration goals addressed water quality, eroded stream banks and restoration of bordering vegetated wetlands.

Civil Design and Permitting Management, PA & WV
Managed the design and permitting of Marcellus natural gas well sites in Pennsylvania and West Virginia. Responsibilities included bidding and managing contract engineering services, identifying and tracking of permits required for location construction, extensive technical reviews of draft drawings and permit applications, inspections of completed projects to evaluate design and/or as-built performance, and identification and incorporation of lessons learned from past and present construction projects. Management of these projects required rigorous coordination with all divisions within the company to ensure proposed locations facilitated the development process while simultaneously minimizing construction costs, addressing slope instability concerns and avoiding unnecessary permitting delays.

Clayton Kirk Roderick

AML PROGRAM MANAGER & ENVIRONMENTAL TEAM LEAD

EDUCATION
B.S., Earth Sciences; Geology, California University of Pennsylvania, 1997

CERTIFICATIONS
OSHA 30-Hour Construction Safety Training

Safeland USA Training

HAZWOPER 40-Hour Training

MSHA Training

Mr. Roderick is a Senior Project Manager in our Engineering and Environmental divisions with 26 years of project management and regulatory/environmental experience within the energy sector. Kirk's experience centers around geologic and hydrologic investigations, designing, permitting, and managing a diverse array of environmental, geological, environmental, reclamation/ remediation, and civil projects within the coal and aggregate mining and oil and gas industries.

PROJECT EXPERIENCE

S3 AML Sites; WV
Senior Project Manager for 14 abandoned mine land reclamation projects located in Fayette and Greenbrier Counties, West Virginia. The design consisted of developing plans to reclaim sites containing abandoned highwalls, abandoned coal refuse material / spoil areas, stream restoration, opened mine portals, subsidence features, landslides and acid mine drainages.

Conifers Coupon East AML Site; Blair County, PA
Senior Project Manager for an AML site, approximately 6-acres in size. The design plans consisted of reclaiming an 85-foor vertical highwall, develop a pit drain for the conveyance of an aluminum-laden discharge, and produce a grading plan for the backfilling of abandoned mine spoil material while establishing positive drainage to the receiving streams.

Blue Ball East AML Site; Clearfield County, PA
Senior Project Manager for an AML site, located in Clearfield County, Pennsylvania. The project involved a design plan to properly reclaim two separate highwalls, totaling 6,000 linear feet, in an area approximately 38-acres in size. The design plans consisted of reclaiming the highwalls while using the spoil as backfill material while establishing positive drainage to the receiving streams.

Eagle Eye School East AML Site; Clearfield County, PA
Senior Project Manager for an AML site, located in Clearfield County, Pennsylvania. The project involved developing a design plan to reclaim approximately 5,000' of abandoned highwall and reclaim three separate coal refuse piles.

Fishing Creek AML Site; Schuylkill County, PA
Senior Project Manager responsible for the reclamation of an AML site, located in Schuylkill County, Pennsylvania. The project involved the design of regrading plans and drainage facilities for an approximately 43-acre site. The design plans included backfilling against the existing highwall with adjacent mining spoils while addressing vertical openings, collapsed mine openings, water problem areas and surface drainage. The project also includes design of Allegheny Woodrat and native bat habitat structures.

Johnstown Incline AMLER Project; City of Johnstown, PA
Senior Project Manager responsible for an AMLER project located in Johnstown Pennsylvania. The project involved the design of grading plan and drainage facilities for 1,500-lf of recreational trail along an existing AML highwall overlooking the city of Johnstown. The project also included design of a protective capping system for an existing vertical mine shaft, design of new bat gates for two open portals, and design of rock fall mitigation measures along the trail. Once completed, this newly-developed trail will become part of the September 11th National Memorial Trail.

Hydrologic Investigations, PA and WV
Assisted in the monitoring program designed to determine flow loss of undermined streams in the permitted areas above several separate long wall mining operations. Field mapping and visual observations of geologic outcrops and mining-related anomalies were conducted throughout the length of the monitored streams. Field data was entered and organized into a client-accessible web-based GIS data system to access impacts.

Clayton Kirk Roderick

AML PROGRAM MANAGER & ENVIRONMENTAL TEAM LEAD

Coal and Aggregate Mining Projects; PA and WV

Managed and completed all geologic, hydrologic and environmental sections of mining projects throughout western Pennsylvania and northern West Virginia. Responsibilities included exploratory and overburden drilling, field reconnaissance to collect groundwater and surface water samples, conduct joint readings and obtain any additional environmental information that would be needed for the completion of surface mine permit and underground mine permit applications for the mining of coal and non-coal (aggregate) units. Other responsibilities included completing acid base accounting (ABA) of the overburden, assisting with the proposed mining and reclamation plans, designing erosion and sedimentation (E&S) control systems and all requisite notifications for the review, compilation and submittal of the application to the regulatory agency.

Remediation and Reclamation Projects, PA and WV

Collected acid mine discharges at abandoned surface and underground mine sites and reviewed the analyses for the design of passive treatment systems. Quantity and quality data were used to design the system to improve the overall water quality. This was achieved by adding net alkaline material at the source point, constructing a series of waterfalls and ripples within the limestone channel for aeration purposes to raise the pH, promote settling of dissolved metals and improve the overall water quality before discharging into the receiving streams.

Completed Government Financed Construction Contract (GFCC) over thirty (30) applications for the reclamation of abandoned mine sites throughout western Pennsylvania. Field reconnaissance, consisting of drilling operations, water sampling and completing environmental assessments, was conducted for the gathering of information used to re-mine and reclaim the proposed sites that were scarred with remnants of previous surface and underground mining activities, consisting of abandoned highwalls, numerous spoil areas, subsidence features, impounded waters and abandoned entry ways.

Compiled reclamation plans for Title IV sites located throughout the State of West Virginia. Several sites were comprised of abandoned highwalls, spoil areas and impounded waters; the features were eliminated by developing a grading plan by using all spoil material as backfill, tying into the surrounding contours while achieving approximate original contour. Other sites included the treatment of acid mine drainage (AMD), eliminating abandoned deep mine entries and partial daylighting of the deep mine complex to eliminate subsidence features.

Fracture Trace Analysis, PA

Geologist tasked with completing a fracture trace study to determine several drilling sites for replacement water wells. The client was required by the Pennsylvania Department of Environmental Protection to located, drill and develop a replacement water well needed to satisfy the requirements of obtaining a Large Non-Coal (LNC) permit in Fayette County, PA. Responsibilities included utilizing local topographic relief mapping and LiDAR mapping to analyze the study area to identify features that are result of underlying zones of fractured bedrock. Areas with a high concentration of fracture traces were suggested for preliminary drilling of the proposed replacement sites, and these replacement water well sites yielded the volume of potable water required by the Department.

Aggregate Reserve Study, PA

Completed an aggregate reserve study to determine the approximate tonnage of non-coal material within western Pennsylvania. Responsibilities included drafting regional structure lines on USGS topographic mapping and plotting all mineable sandstone and limestone units in areas south of the city of Pittsburgh that included Allegheny, Washington, Greene, Fayette and Westmoreland Counties. The report of findings revealed the stratigraphic unit, the approximate tonnage of each unit, the feasibility of obtaining leases and requisite permits, and identifying any associated environmental and/or socioeconomic impacts the proposed mining sites could potentially encounter.

Oil & Gas Projects, PA and WV

Managed the design and permitting of Marcellus natural gas well pad sites and gas pipeline sites in Pennsylvania and West Virginia. Responsibilities included bidding and managing contract engineering services, identifying and tracking of permits required for location construction, extensive technical reviews of draft drawings and permit applications, inspections of completed projects to evaluate design and/or as-built performance. Management of these projects required rigorous coordination with all divisions within the company to ensure proposed locations facilitated the development process while simultaneously minimizing construction costs, addressing slope instability concerns and avoiding unnecessary permitting delays.

Pipeline Replacement Project and Compressor Station Rebuild Project, PA

Completed all daily and weekly reporting for gas line construction activities while maintaining a digital and hard copy filing system, as required by the Department of Transportation – Pipeline and Hazardous Materials Safety Administration (PHMSA). Procured data for materials reconciliation during the pipeline replacement project and completed hydrostatic test packets.

Robert P. Campana, PE

QUALITY ASSURANCE/QUALITY CONTROL

EDUCATION
M.S.E., Chemical Engineering, University of Michigan, 2014

B.S., Chemical Engineering, Rutgers University, 2012

REGISTRATION
Professional Engineer:

- WV 26902
- PA PE095853
- FL 91999
- NJ 24GE06090300
- MI 6201313878
- OH 91262

CERTIFICATIONS
OSHA 1910.120 40-Hour Safety Training.

OSHA 1910.120 8-Hour Refresher Training

Mr. Campana is a Remediation Systems Engineer for Atlas in the Engineering & Environmental Services Division. Mr. Campana is a licensed Professional Engineer with over 6 years of experience in the environmental field. Mr. Campana's experience centers around managing a diverse array of environmental projects, in particular remediation design projects.

PROJECT EXPERIENCE

Operations & Maintenance, System at Retail Gas Station, Fort Littleton, PA

Operations and maintenance technician for existing multiphase extraction remediation system at a retail gas station. Responsibilities included regular visits to the site to obtain static and operational data for the system, as well as propose changes to the operation of the system to ensure that soil and groundwater contamination were being targeted to the maximum extent possible. Other duties included reporting of remedial action status and progress to regulators.

Remedial Design, Car Dealership, Hayward, CA

Design engineer for the cleanup of petroleum-contaminated groundwater and soil at a car dealership. Responsibilities included developing a full-scale multiphase extraction remedial system design using key parameters derived from prior pilot test data. Cost estimates for the proposed system were also obtained.

Remedial Design & Implementation, Retail Gas Station, Apopka, FL

Lead engineer for the cleanup of petroleum-contaminated groundwater at a gas station from the implementation of the air sparge/soil vapor extraction pilot test through remedial system design, construction, and startup. Responsibilities included collecting and analyzing pilot test data, as well as developing a full-scale remedial action plan using key parameters derived from that data. Implementation and startup of the state-approved design, as well as operations and maintenance visits, were also undertaken. Other duties included reporting, managing subcontractors, and supervising field work.

Remedial Design & Implementation Former Retail Gas Station, St. Petersburg, FL

Lead engineer for the cleanup of a former retail gas station with residual groundwater and soil petroleum contamination. Supervised chemical injection pilot test and used pressure and radius of influence data to develop a full remedial action plan. Responsibilities also included supervising the full-scale injection event, reporting and analysis of data, and coordinating with subcontractors and regulators to ensure project completion and proper funding. Active remediation was completed successfully.

Remedial Design, Former Retail Gas Station, Ocala, FL

Lead design engineer for the cleanup of a former retail gas station with residual groundwater and soil petroleum contamination. Completed air sparge/soil vapor extraction system design to remediate groundwater plume covering two properties. The design involved angled treatment wells to reach under utility lines and a city street. The design was approved by the state, with implementation to proceed at a future date.

Updates to SPCC Plan & Facility Response Plan, Fragrance Production Facility, Lakeland, FL

Lead engineer for the update of Spill Prevention, Control, and Countermeasure (SPCC) and Facility Response plans at a fragrance production facility. Many of the tanks at the facility contain various oils, necessitating a Facility Response Plan. Duties included visiting the site to confirm the locations and volumes of tanks and secondary containment, as well as the sufficiency of cleanup procedures in the event of a discharge.

George Pellegrino

CONSTRUCTION TEAM LEAD & LEGAL/PROPERTY ROE

EDUCATION
B.S. in Geology, 2018, West Virginia University

SPECIALIZED TRAINING
- gINT
- Confined Space Entry Training
- OSHA 1910.120 40-Hour Safety Training

AREAS OF EXPERTISE
Geotechnical Investigations; Water and Soil Sampling; Legal Right-of-Entry Agreements / Realty; Construction Oversight

Mr. Pellegrino is an Environmental Geologist for Atlas in the Engineering & Environmental Services Division. Mr. Pellegrino has four years of experience covering geotechnical investigation, water and soil sampling, and oversight of project construction phases.

PROJECT EXPERIENCE

Stream and Wetland Delineations; WV, PA
Assisted stream and wetland delineation team with field activities including determining wetland limits, profiling of streams, groundwater sampling, identification of plant species, description of soils within wetland areas, and assessing potential bat habitats. Compiled photo logs and parcel data of adjacent properties to be presented to the WVDEP and PADEP for AML sites located on projects throughout WV & PA.

Exploratory Rights-of-Entry (EROE) and National Park Service Special Permits; WV
Negotiated with private landowners to obtain EROE's required to gain access to parcels of land within designated work area limits. Managed Special Permits for the National Park Service (NPS) for AML sites within Fayette County, WV. Arranged meetings between the WVDEP and several timbering companies to address scheduling and proposed reclamation design plans, while submitting the proposed plans for review and approval. Met with utility companies to discuss the proposed reclamation design plans concerning their infrastructure located within proposed areas of work.

Piezometer Installation Oversight and Monitoring; WV
Conducted field inspections and completed oversight of the installation of approximately fifteen piezometers. Monitoring of the piezometers was used to determine karst-related subsidence for private landowners.

Water and Soil Sampling; DE, MD
Gathered water and soil samples for testing to determine the presence of perfluoroalkyl substances (PFAS) within military installations. Installations included Fort Meade, Maryland and Dover Air Force Base, Delaware.

Construction Inspection & Drilling Oversight; DE, MD
Conducted field inspection and oversight of well pad construction with military installations at Fort Meade, Maryland and Dover Air Force Base, Delaware.

Geotech Investigation; D.C. Metro Area
Performed rock-coring operations to determine appropriate engineering protocols for the reconstruction of roads for the District of Columbia Department of Transportation.

Geotechnical Investigations; MD
Performed rock-coring operations to determine appropriate engineering protocols for the construction of additions being made to a Section 8 Housing complex in Cumberland, MD.

Project Budget Analysis; DE, MD, WV
Identified bloat and problematic expenditures within project budgets and submitted reviews with suggestions on best practices to avoid wasteful spending throughout the life of the project.

Preliminary Site Investigation; VA
Led site reconnaissance teams to identify areas-of-interest and difficult terrains; designated ideal borehole locations for additions to an Amazon data center located in Manassas, VA.

Rock-Core Logging & gINT Processing; MD
Reviewed and processed information on two miles of rock-core stored within a company warehouse unit after transfer of data from old software to gINT software.

Dominic Mandarino, PE

ENGINEERING TEAM LEAD

EDUCATION
B.S. Civil Engineering and
B.S. Mining Engineering,
West Virginia University

REGISTRATIONS
Professional Engineer:
- WV 26885
- OH 90629
- PA PE096128
- VA 069458

SPECIALIZED TRAINING
OSHA 40 Hour HAZWOPER (Current)

Mr. Mandarino is a senior project engineer for Atlas' Engineering Division. He comes from an experienced background in public water design, wastewater design, and stormwater design, Stormwater Pollution Prevention Plans (SWPPP), Spill Prevention Control and Countermeasure (SPCC) plans, Notice-of-Intent (NOI), stream crossing permitting, and NPDES permit requirements.

PROJECT EXPERIENCE

West Virginia AML Experience

Currently performing reclamation designs on several AML sites part of the West Virginia S3 AML program. Lead designer for County Route 82 Portals, Buffalo Creek Complex, Floyd Creek Highwalls and Drainage, Keeney Creek Mines, Nuttallburg South Bench, and Lookout (Moore) Subsidence.

County Route 82 Portals requires the design of a grading plan, stormwater channels, wet seals for two draining portals, a NPDES General Construction Stormwater Permit, and a stream crossing permit. Buffalo Creek Complex requires a stream crossing permit and coordination with CSX Railway for an access agreement to perform demolition of abandoned mine structures such as silos and concrete walls. Keeney Creek requires the design of a grading plan and NPDES General Construction Stormwater Permit to eliminate dangerous highwalls. Nuttallburg South Bench requires the design of a grading plan while also handling stormwater channel design, NPDES General Construction Stormwater Permit, demolition of mine structures, rail trail remediation, and the design of wet seals for thirty draining mine portals. Lookout (Moore) Subsidence involves design of wet seals for two draining portals and the channel design to convey those waters to the wetland below.

Pennsylvania Abandoned Mine Land Reclamation (AML)

Worked d on Pennsylvania and West Virgina AML Projects. Designed reclamation plans for the Conifers Coupon East OSM 07(4337)101.1, Blue Ball East OSM 17(7086)101.1, Eagle Eye School East OSM 17(7088)102.1, and CVC Inclined Plane Hillside AML Remediation project sites in Pennsylvania. Conifers Coupon East, Blue ball East, and Eagle Eye School East required the design of a grading plan to eliminate dangerous highwalls.

These designs included stormwater channel calculations, the design of a temporary sediment basin, an engineer's construction cost estimate, and the submittal of NPDES General Construction Stormwater Permits. The Eagle Eye School East project also included submitting a Highway Occupancy Permit and designing around an existing pond and a private property owner who no longer wanted to be a part of the reclamation efforts. His CVC Inclined Plane Hillside AML Remediation site design efforts focused on stormwater diversion causing problems for the walking trail and designing a walking trail that meets ADA requirements.

Project Management, Construction Oversight, SWPPP, SPCC, NPDES Compliance, Environmental Remediation Efforts, Pittsburgh, PA

As part of performing his project engineer responsibilities for the Atlas Pittsburgh office, Mr. Mandarino has also been a part of many environmental compliance operations, including groundwater sampling, NPDES discharge confirmation and various remediation efforts. Mr. Mandarino help conduct designing and recommending remediation efforts on sites with various conditions, including varying contaminants and concentrations, on active sites. Mr. Mandarino also has experience with Atlas preparing SWPPP and/or SPCC plans, creating potentiometric and analyte distribution maps in AutoCAD, and drafting Remedial Action Plans. He has experience with soil and groundwater contamination remediation.

Kenneth J. Pasterak, PG, LRS

SENIOR GEOLOGIST/HYDROGEOLOGIST

EDUCATION

M.B.A., University of Pittsburgh, Katz Graduate School of Business

M.S., Earth Science (Hydrology), Adelphi University

B.S, Geology, West Virginia University

REGISTRATIONS

Licensed Remediation Specialist
- WV #243

Professional Geologist
- PA #3733E
- NY #1342

With over 30 years of industry experience, Mr. Pasterak is an industry site characterization, surface geophysical investigation and remediation leader. He has achieved regulatory closure for 100s of releases of hazardous substances and petroleum constituents to the environment at properties throughout the mid-Atlantic, Midwest, and northeast states.

He served as Senior Hydrogeologist for 2014 spill response, site characterization, human health risk assessment, and remediation activities associated with the Freedom Industries MCHM chemical release to the Elk River in Kanawha County under contract to WVDEP. The aboveground tank failure which resulted in the release of MCHM to the Elk River left over 200,000 residents in multiple counties without potable water.

He has performed surface geophysical investigations to map DNAPL, groundwater plumes, buried tanks and drums, waste disposal pits, archaeological structures, and bedrock fracture lineaments.

PROJECT EXPERIENCE

Spill Response, Soil Removal, and Subsurface Characterization, Freedom Industries Elk River Chemical Spill, Charleston, WV

In response to a nationally publicized AST failure and 10,000-gallon release of a coal processing chemical (MCHM) to surface water which contaminated the Charleston WV water supply, Mr. Pasterak served as Senior Scientist/Hydrogeologist to support spill response and assessment activities for WVDEP to replace ineffective strategies deployed by previous consultants.

Surface Geophysical Investigation to Map Bedrock Fracture Zones, Elk County, PA

Senior Geologist responsible for field investigation, data evaluation and interpretation for Wadi VLF induction (EM) and mag survey of potential preferential pathways for landfill constituents migrating from a 250 acre pond.

Surface Geophysical Investigation to Map Archaeological Structures, Santorini, Greece

Geologist responsible assisting in GPR pilot feasibility testing including data collection, analysis and interpretation to identify buried structures in volcanic ash in Greece.

Surface Geophysical Investigation to Map Buried Tanks, Allegheny County PA

Senior Geologist supporting field investigation, data evaluation and interpretation for GPR and EM study to identify buried tanks.

Surface Geophysical Investigation to Identify Waste Disposal Pits, Wichita, KS

Senior Geologist responsible for field investigation, data evaluation and interpretation for VLF induction (EM) survey to identify waste disposal pits and high conductivity groundwater plume.

Surface Geophysical Investigation to Identify Waste Disposal Pits, Gloversville, NY

Senior Geologist responsible for field investigation, data evaluation and interpretation for VLF induction (EM) survey to identify waste disposal pits.

Kenneth J. Pasterak, PG, LRS

SENIOR GEOLOGIST/HYDROGEOLOGIST

Soil and Groundwater Assessment, Remedial Alternatives Analysis, Ozone Sparge In Situ Chemical Oxidation Remedial Design/Installation/O&M/Optimization, Rebound Evaluation, Risk-Based Clean-up, Comingled Plume Responsible Party Negotiation, and Regulatory Closure, Gasoline Release; Snyder Brothers; Allegheny County, PA

PG responsible for 25 lb/day, five-zone, ozone sparge system design to remediate soil and groundwater contamination, O&M, optimization, rebound monitoring, RAPR/RACR preparation, EC preparation and site close-out at a gasoline release site with off-property impact. System was operated for 3 years, followed by rebound evaluation, and regulatory closure. Remedial progress reporting, and RACR/EC preparation. Performed human health risk assessment. Negotiated AULs with adjacent landowner on behalf of Client. Obtained an EC waiver for soil and groundwater contamination in public right-of-way, based on acceptable risk receptor demonstration. PADEP approved the Site Specific Standard attainment demonstration and RACR, and conferred liability relief to responsible party.

Soil and Groundwater Assessment, Remedial Alternatives Analysis, Feasibility Study, Dual-Phase Extraction System Design /Installation/ O&M/Optimization, Rebound Evaluation, Risk-Based Clean-up and Regulatory Closure; Retail Petroleum Distribution Facility, Prima Marketing, Indiana, Pennsylvania

As Senior Hydrogeologist, implemented a dual-phase extraction pilot test and prepared a Remedial Action Plan in response to petroleum hydrocarbons in soil and groundwater in accordance with 25 Pa Code Chapter 245. Conducted site characterization activities and identified the presence of a comingled dissolved phase petroleum hydrocarbon plume in groundwater associated with multiple on-site releases. Assisted in negotiating a Remediation Agreement to define roles and responsibilities in response to multiple site releases and multiple responsible parties. Designed and operated a dual phase extraction system. Provided technical negotiation support for three-party remediation agreement execution on behalf of Client. Negotiated an acceptable cost-sharing agreement with Shell Oil Products of US, in response to comingled plume due to historical gasoline release by other responsible party. Conducted quarterly groundwater monitoring and reporting, performed rebound and soil and groundwater attainment monitoring, prepared a Remedial Action Completion Report, and an Environmental Covenant. PADEP approved the report and granted liability relief to the UST owner/operator.

Soil and Groundwater Assessment, Soil Vapor Extraction System O&M/Optimization, Bulk Petroleum Storage Facility; Chevron Environmental Management; Allegheny County, Pennsylvania

PG responsible for operation and maintenance of a soil vapor extraction system to address chlorinated solvents in the subsurface. Conducted quarterly groundwater monitoring and reporting.

Soil and Groundwater Assessment, Source Removal Remediation, and Quarterly Groundwater Attainment Monitoring; Former Dry-Cleaning Property; Pittsburgh, Pennsylvania

As Project Manager, entered retail plaza property into the PA Land Recycling and Environmental Remediation Standards Act (Act 2) voluntary clean-up program on behalf of Client in response to the discovery of dry cleaning solvent and degradation products in soil and groundwater associated with an historical dry cleaning operation on the property and an off-property, up-gradient source. Executed access agreements with down-gradient property owners, and performed on-property and off-property delineation of chlorinated contaminants of concern in soil and groundwater, fate and transport analysis, vapor intrusion to indoor air evaluation, and human health risk assessment. Delineated a contaminant plume in groundwater extending over 1/8 mile from the property. Performed remedial alternatives analysis, and provided technical support to negotiate a path to closure and regulatory approval acceptable to stakeholders. Submitted a Notice of Intent to Remediate, performed public notice, and prepared a Remedial Investigation Report and Clean-up Plan for regulatory agency review. Performed hotspot soil remediation to address the contaminant source, and initiated soil and groundwater attainment monitoring to satisfy remedial goals.

Multiple Petroleum Releases, Spill/ Emergency Response, Regulatory Closure, Multiple Sites PA & WV

PG and LRS responsible for managing emergency spill response, spill reporting, soil and groundwater characterization, receptor evaluation, soil remediation, fuel recovery, surface water and groundwater impact evaluation, and regulatory agency reporting and communication activities in response to fuel releases from USTs, tank trucks, a tank trailer, and bulk storage facilities at multiple sites. The releases included overturned fuel tankers, breached secondary containment walls, poor integrity secondary containment, damaged saddle tanks, among others. Served as regulatory liaison, and directed and coordinated clean-up activities.

Lisa Weimer, PG

GEOLOGY/HYDROGEOLOGY

EDUCATION
BS, Geology
Clarion University of Pennsylvania, Clarion, Pennsylvania

Hydrogeology and Groundwater Modeling Courses
Wright State University
Dayton, Ohio

REGISTRATION
Professional Geologist
PG PA #PG00491

CERTIFICATIONS
OSHA Hazardous Waste Operations and Emergency Response (40-Hour 29 CFR 1910.120e)

OSHA 8-Hour Refresher Training
(Current)

Ms. Weimer has a diverse background in hydrogeology and environmental sciences spanning 30 years. She provides environmental assessment, remediation, compliance and due diligence services to both private and public sector clients. Ms. Weimer has experience conducting geological and hydrogeological investigations for contaminated project sites as well as for municipal water supply projects. Her experience includes analytical and numerical groundwater modeling, as well as fate and transport modeling of simple to complex geological settings for a variety of clients including industrial, municipal water suppliers and environmental litigation expert witnesses.

PROJECT EXPERIENCE

Numerous Real Estate Companies and Financial Institutions throughout Pennsylvania, Ohio, New York and West Virginia

Phase I and II Environmental Site Assessments. Conducted and supervised due diligence investigations of multi-unit residential, commercial and industrial properties.

Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) Claims, Various Sites, Western Pennsylvania

Project Manager for projects that involved the completion of cost-to-close work plans to be implemented as fixed-priced contracts. Duties included review of historical data and development of strategies to bring the USTIF claims to closure under the Pennsylvania Act 2 Program; interfacing with USTIF claimants and claim managers, third-party reviewers, and Pennsylvania Department of Environmental Protection (PADEP) case managers.

Numerous Client Confidential throughout New Jersey, Pennsylvania, Maryland and Delaware

Project Scientist providing litigation support to environmental expert witnesses. Activities included completion of historical reviews and summarizing the case specifics including the environmental impacts to the site, contaminants of concern, source areas, applicable regulations, extent of contamination and the remedial efforts conducted; review of environmental consultants' site investigation reports in order to determine whether correct procedures were utilized to address and mitigate environmental impacts and to determine if work was conducted in accordance with the applicable local, state and federal regulations; conduct fate and transport modeling of contaminants in the subsurface to determine the time of a release, calculate the future extent of the contaminant plume and determine the duration of remediation to achieve attainment of the applicable standards.

Numerous Municipalities throughout South-central Pennsylvania

Project Scientist – Development of new groundwater resources. Activities included siting test wells based on review of lithology, fracture trace analyses and logistics; supervision of the installation of the test wells, logging geology and water bearing zones; supervision of the conversion of the test well to production wells; supervision of aquifer testing, analysis of aquifer test data, completion of new source report as part of the New Source Permit application to the state.

Energy Company-Client Confidential

Project Hydrogeologist assisted in completing a site conceptual model and numerical groundwater model of a complex geological system.

Beazer East, Pennsylvania

Project Scientist leading the reporting group completing RCRA quarterly, semiannual and annual reports for 29 sites located in 22 states. Duties included oversight of the reporting group; completion of deliverables to the state and federal agencies in accordance with site specific permits and other regulatory requirements; review and interpretation of field and analytical data; interfacing with client and regulators.

Mark Breting, PG

GEOLOGY/HYDROGEOLOGY

EDUCATION
M.S., Geology, University of Missouri – Columbia, 1996

B.S., Geology, University of Missouri – Columbia, 1992

REGISTRATIONS
Licensed Professional Geologist
- IN #2092, 1996

CERTIFICATIONS
Slug Test Short Course, The Ohio State University Office of Continuing Education and The Midwest Geosciences Group, Madison, WI, 1999

ARC/INFO software applications Short Course, IDEM, Indianapolis, IN, 1998

Groundwater Modelling System (GMS) Short Course, IDEM, Indianapolis, IN, 1998

Global Positioning System (GPS) Short Course, IDEM, Indianapolis, IN, 1997

OSHA Hazardous Waste Site Operations 40-hour training, 29 CFR 1910.120; 1997, with current refreshers

Mr. Breting is a senior project geologist and an experienced field geologist. He has 27 years of professional work experience as a geologist, project manager, and team leader. Mr. Breting has completed project management duties at coal combustion and landfill sites as well as hydrocarbon, drycleaner, and other chemical-contaminated sites. He has written corrective action plans (CAPs) for various remedial projects. He has served as a field and staff geologist on various hydrocarbon contaminated sites, including retail gasoline facilities and bulk terminals. He has been involved with reviewing reimbursement claims to ensure compliance with the requirements of to the Excess Liability Trust Fund (ELTF) policies. He has operation and maintenance experience with soil vapor extraction and dual phase vacuum extraction systems. He has experience in field sampling and analysis, and with field instrumentation equipment, such as multi-parameter water quality meters, photo-ionization detectors, multi-gas monitors, and oil/water interface probes. In addition to petroleum experience, Mr. Breting has completed project management duties for open and closed Indiana landfills. He has completed various field tasks such as groundwater sampling, soil sampling, borehole logging, monitoring well installation, and slug tests. He has completed the field geology and hydrogeological site investigation report for a landfill horizontal expansion, and has completed statistical analysis reports for landfill sites.

PROJECT EXPERIENCE

Remediation Services, Various Clients, IN

Served as project manager for nine retail gasoline stations that required engineered remediation systems. Responsibilities include proposal and report preparation, project planning, assessment and remediation design, UST closure, client and regulatory agency communication, invoicing, and staff, budget, schedule management, and daily interaction with client site environmental tracking website.

- Manage remedial activities at a site in Indianapolis affected by historic release of dry cleaning wastes into a sanitary sewer. CAP18 ME injections utilized at site to reduce chlorinated compound concentrations.
- Oversaw remedial excavation for a former manufactured gas plant located in a residential area of Franklin, Indiana.
- Project manager for various generating stations in Indiana that are currently addressing monitoring and closure requirements in accordance with 40 CFR Part 257 (Federal CCR Rule).
- Project manager for a site in Indianapolis impacted by historic release of drycleaner fluids into aging sanitary sewer system. Remediation activities complicated by co-mingled plume from adjacent property. Utilized CAP18/bacteria injections for groundwater remediation. Monitor geochemical changes and associated changes to cVOC levels. Also monitor methane levels in soil gas associated with remedial progress, and complete venting events as needed to reduce potentially elevated levels.
- Hydrogeological Remediation, Various Clients, Indiana Served as field geologist for the permitting of a landfill horizontal expansion. Completed hydrogeological site investigation report following fieldwork in accordance with 329 IAC 10 (Indiana Solid Waste Regulations).
- Generated groundwater flow maps, pre-mining cross-section maps, and underclay maps for two former surface-mined areas that were to be used for landfilling coal-combustion by-products.
- Prepared ground water model using MODFLOW and FEMWATER utilizing regional DNR well records and facility monitoring well records to evaluate contaminant transport pathways for a recycling facility suspected of causing off-site groundwater contamination.
- Served as a field geologist for the completion of a pilot study at a U.S. government facility in suburban St. Louis utilizing in situ injection of oxidant into aquifer impacted with chlorinated solvents.

Mark Breting, PG

GEOLOGY/HYDROGEOLOGY

- Peer review of aquifer performance test for a proposed hospital chiller system in South Bend, Indiana. Reviewed aquifer demands and how they might influence nearby well field operations.
- Project involved a hydrogeological investigation of a site for a proposed landfill expansion. Served as the field geologist for this project. Main tasks involved oversight of drilling operations, description of core using USDA classification system, and communications with facility manager and ATC project geologist.
- Completed statistical analyses of ground water quality data for Subtitle C and D facilities in Indiana.

Phase II Site Assessment, St. Louis, Missouri

Oversaw the completion of a Phase II site assessment at a proposed residential development adjacent to a Superfund site in suburban St. Louis, Missouri, which required multiple meetings with city council personnel to ensure stringent city goals for study were maintained during project completion. Results of study and associated report spurred U.S. EPA and State of Missouri regulatory agency to become re-engaged in area due to unresolved contamination concerns in vicinity of residential areas. U.S. EPA has subsequently developed plans to remove elevated levels of dioxin-impacted soil that had previously been left in place.

Provided oversight of the collection of GPR and EM61 geophysical data, and reviewed data as part of an assessment needed to identify potential geophysical anomalies (buried drums, metal, miscellaneous debris) that may have been dumped as part of historic activities at adjacent property (large scale drum burial activities).

Remediation Services, Confidential Client, Franklin, IN

On-site manager for site - remediation activities in residential neighborhood in Franklin, IN. Project involving temporary move of a two-story house, temporary bypass of a sanitary sewer, excavation of impacted soil below house and adjacent lands, and repositioning of house on newly constructed foundation. Over 9,000 tons of soil and over 1,000,000 gallons of groundwater required treatment/disposal during project. Anticipate re-sale of properties without deed restrictions following eight quarters of groundwater monitoring and final site closure application.

Remediation Services, Confidential Client, Indiana

Assisted with development and implementation of a subsurface boring investigation below the White River via a drill rig stationed on a barge to determine the extent of impacts related to Coal Combusiton Residuals (CCR) materials at an adjacent power generation facility.

Caitlin M. Cochran

ABANDONED MINE LANDS ENGINEER

EDUCATION
B.S., Mechanical Engineering, 2009, Southern Methodist University

SPECIALIZED TRAINING
- SafeLand USA – Basic Orientation, PEC Safety
- 10-Hour OSHA Construction Safety (Occupational Safety & Health Administration), OSHA
- Heartsaver CPR AED, American Heart Association

AREAS OF EXPERTISE
Project management; design; investigation; permitting

Ms. Cochran is a civil/site engineer for Atlas in the Abandoned Mine Lands Department. Caitlin has 13 years of project management and design experience. Her experience centers around investigating, designing, permitting, and managing a diverse array of environmental, industrial, natural gas, roadway reconstruction, site development, and civil projects. She has completed projects in West Virginia, Pennsylvania, Ohio, and Maryland.

PROJECT EXPERIENCE

Winona East Highwall and Drainage, Fayette County, WV
Project Manager and Designer for the Highwall Reclamation, Portal Closure, and removal of AML hazards, coal refuse and debris from the site. Re-grading and re-routing of a clogged stream on the northern end of the site. Design of channels to promote positive site drainage.

Lookout (Moore) Subsidence, Fayette County, WV
Project Manager and Designer for the Lookout (Moore) Subsidence Site. Portal Closure and channel design to promote positive site drainage.

Royal Coal #5 Loadout, Fayette County, WV
Project Manager and Designer for the Royal Coal #5 Loadout Site. Designing and grading berms and drainage channels to collect the runoff from the three portals on site. The designed drainage will collect, channelize, and discharge the site runoff directly to the New River.

Dallas Pike Facility, Belmont Solids Control, Triadelphia, WV
Project Manager and Designer for the construction stormwater management plan. Obtained Construction Stormwater General Permit and industrial Permit for the facility. Tank Registration with the WVDEP and oversaw tank closure projects.

Aquatic Center at Grand Vue Park, Grand Vue Park, Moundsville, WV
Assistant Project Manager and Designer for the layout of the pool decking and sidewalks at the Park. Ensured the existing facility was updated to be ADA compliant. Completed the proposed grading to ensure adequate drainage and designed the stormwater collection system to tie into the existing system. Designed the retaining wall for the site.

Silica Lateral Project, Mountaineer Gas, WV
Designed and permitted railroad crossings for multiple gas line projects using the conventional bore methos. Set up the plan and profile of each crossing.

Silica Lateral Project, Mountaineer Gas, WV
Designed and permitted railroad crossings for multiple gas line projects using the conventional bore methos. Set up the plan and profile of each crossing.

Rio Grande Valley Border Wall, Southern Border Construction, Rio Grande Valley, TX
Completed the stormwater design for an eight-mile segment of the bollard wall and maintenance roads along the southern border of the United States. This included the design of several drainage features including culverts, headwalls and mitered end sections.

WFN3HS Well Site Major Modification, HG Energy Appalachia, LLC, West Finley Township, PA
Regrading a slide and re-establishing an infiltration berm. Preparing the plan set and paperwork for an ESCGP-3 major modification permit.

Caitlin M. Cochran

ABANDONED MINE LANDS ENGINEER

Fresh Water Intake and Waterline, Century Mining LLC, Barbour County, WV

Design and layout of the freshwater intake, waterline and buried power line to assist Century Mining in their current mining efforts. Completed the layout of erosion and sediment controls, design of a road crossing using the conventional bore method and completing the Construction Stormwater Prevention and Protection Plan and the Groundwater Protection Plan.

Kanawha County Railroad Crossing, Mountaineer Gas, Kanawha County, WV

Design of the HDD Bore crossing the Kanawha River and the CSX Railroad along with several additional crossings of the CSX Railroad and Norfolk Southern Railroad using the conventional bore method.

Cedar Well Pad, Antero, WV

Completed the design for the well pad, the access road, retaining wall, and erosion and sediment controls. Completed the drainage design and sizing of the roadside ditches, diversion ditches, collection ditches, and culverts. Completed the Construction Plan Set. Obtained the necessary MM-109 plans and permit applications.

Brownton AML, Taylor/Harrison County, WV

Completed the details and construction specifications for the Brownton AML project.

Jared Anthony

FIELD SAMPLING SERVICES

EDUCATION
B.S., Earth Science, Pennsylvania State University, 2003

CERTIFICATIONS

- Certified Asbestos Building Inspector in Pennsylvania (License# 043025)
- Certified Asbestos Building Management Planner in Pennsylvania (License# 043025)
- Certified Asbestos Inspector in West Virginia (License# AI009033)
- OSHA 1910.120 40-Hour Safety Training.
- OSHA 1910.120 8-Hour Refresher Training (Current)

Mr. Anthony is responsible for managing the operations of the Building Sciences Division at Atlas. Mr. Anthony has over 22 years of environmental consulting experience and has managed and conducted numerous surveys in multiple states for commercial, industrial, and residential clients. Mr. Anthony has experience managing and conducting asbestos surveys, lead-based paint surveys, hazardous materials surveys, mold assessments, indoor air quality assessments, monitoring small- and large-scale asbestos abatement projects, and providing oversight on asbestos abatement/demolition projects.

PROJECT EXPERIENCE

Multiple Commercial and Industrial Sites/Nationwide

Project Role: Senior Project Manager responsible for managing hazardous material surveys for over 50 various sites. Responsible for scope of work development, project budgets, and scheduling. Senior Project Manager responsible for managing a team of industrial hygienists, client interactions, and all deliverable submittals..

Multiple Petroleum Retail Sites/PA, NJ, and NY

Project Role: Project Manager responsible for managing asbestos and lead-based paint surveys for over 100 various sites. Responsible for scope of work development, project budgets, and scheduling. Project Manager responsible for managing a team of industrial hygienists, reviewing all project reports, and submitting deliverables to the client.

Project Scientist, Various Sites

Project Role: Hazardous materials surveys of suspect asbestos-containing materials (ACMs), polychlorinated biphenyls (PCBs), mercury, lead-paint chip sampling, and other potentially hazardous materials at multiple Government Facilities.

James Sturm, PG

OPERATIONS & MAINTENANCE LEAD

EDUCATION
B.S., Petroleum Geology, 1985, Mercyhurst University

REGISTRATIONS
Professional Geologist:
- PA 000148G

SPECIALIZED TRAINING
- OSHA Hazardous Waste Operations and Emergency Response (40-Hour 29 CFR 1910.120e)
- OSHA 8-Hour Refresher Training (Current)

AREAS OF EXPERTISE
Regulatory and environmental consulting

Mr. Sturm is a Senior Project Manager and Professional Geologist for the Atlas Erie and Pittsburgh offices and was previously employed by the Pennsylvania Department of Environmental Protection (PADEP) in the Storage Tank Group. Mr. Sturm has over 40 years of experience in the regulatory and environmental consulting industry, is recognized as a storage tank compliance subject matter expert in the region and has been a licensed professional geologist for over 25 years. Mr. Sturm provides compliance, spill response, first responder, UST closure oversight, assessment and remediation services for UST and other sites, as well as real estate development and other consulting services.

PROJECT EXPERIENCE

Assessment, Remediation and Regulatory Compliance at Over 400 Regulated UST Sites, PA and NY

Directed UST closure, site assessment, soil and groundwater remediation, and spill response for over 500 petroleum releases at retail petroleum distribution and bulk petroleum sites. Manages subcontractors, works with regulators to assure compliance, and conducts field data collection, spill response, and environmental media sampling. Prepared UST Closure Reports, Site Characterization Reports (SCR's), Remedial Action Plans (RAP's), Remedial Action Progress Reports (RAPR's), and Remedial Action Completion Reports (RACR's). Adept at pursuing and securing PAUSTIF reimbursement for assessment and corrective action costs.

Spill Response and Regulatory Compliance at Multiple Industrial Sites, PA, OH, & NY

Senior Consultant and/or Project Manager responsible for compliance, assessment, mitigation and remediation for dozens of industrial sites in PA, New York and Ohio. Directed subsurface investigations and remediation including sites with releases to multiple environmental media including surface water, soil, and groundwater.

Emergency Response, PA

Managed various emergency responses in Western Pennsylvania. Incidents included surface chemical and petroleum spills of various different types. Remediations ranged from quick excavations to installation/operation of long-term continuous remediation systems. Served as client liaison with regulators to facilitate compliance and close out sites at minimal cost.

Real Estate Development and Landfill Compliance, PA

Managed compliance for landfill and real estate development/acquisition projects. Conducted environmental due diligence for over 200 sites, including Phase I and II ESAs.

UST Compliance, PA

Managed storage tank regulatory compliance services for multiple PA and NY sites. Known to storage tank regulators and a storage tank compliance subject matter expert.

Potable Water Supply Development, PA

Assisted in directing and conducting pumping tests, yield evaluation, well construction design, and water quality assessment for potable water supply development at multiple sites.

Retail Petroleum Client Service Manager, PA

Directed over 20 project staff in the delivery of UST compliance and assessment /remediation services for a large retail petroleum client operating in multiple states. On-call spill response manager for client spills and releases. Responsible for Client satisfaction, cost control, and expediting site environmental incident close-out.

Mait Walker, PE

PROJECT MANAGER – O&M

EDUCATION
B.A., Environmental Science, Boston University

REGISTRATIONS
Professional Engineer:
- PA PE096264
- CO PE0049954

SPECIALIZED TRAINING
- Hazardous Waste Operations and Emergency Response - 40 hour, 2025

YEARS OF EXPERIENCE
20

Mr. Walker has been working in the environmental industry for over 20 years and has experience that spans a wide variety of specialties. His early career included design and permitting of on-site stormwater and wastewater treatment systems. The most recent years have expanded this scope to include design and implementation of remediation systems, including water recovery and treatment, air sparging and vapor extraction, and in-situ chemical oxidation injections. Mr. Walker also has experience in Phase I/II Environmental Site Assessments (ESA), environmental emergency response, environmental sampling, and has served as a licensed water treatment plant operator at a 30-MGD recycle plant. At Atlas he works on remediation projects providing engineering guidance and project management.

PROJECT EXPERIENCE

PCE Superfund Site: Operations and Maintenance of Remediation System targeting a DNAPL Plume, Vienna, WV

Lead Engineer responsible for ensuring the continued operations of twin air sparge and soil vapor extraction systems to remove PCE from the groundwater from historical drycleaning operations. He facilitated the maintenance activities that kept the system functional and evaluated operational data for system optimization and remedial effectiveness. He also contributed to regular progress reporting as a senior engineer.

Former Industrial Site: Monitoring, Operations, and Maintenance of a Landfill Containment System, Painesville, OH

Contributing Engineer to the operations of a system that provides hydraulic control of an industrial landfill, as well as leak-detection monitoring and reporting.

Retail Petroleum Station: Remedial Action Plan Development and Design for LNAPL Removal, Erie, PA

Design Engineer for a proposed multi-phase subsurface LNAPL removal system to gain site closure. Performed design calculations, designed pilot tests, and evaluated pilot test data to determine the most effective remedial strategy, including development of metrics for measuring the removal of LNAPL to the maximum extent practical (MEP).

Retail Petroleum Station: Leaking UST Remediation - Fort Littleton, PA

Project Manager and Design Engineer for the dual-phase extraction system used to remediate groundwater at the site impacted with dissolved and free phase gasoline. Remedial activities were developed in accordance with the state DEP approved Remedial Action Plan and state underground storage tank (UST) indemnity fund requirements for projections on cost to close.

Large-Scale Solar Array: Stormwater SWPPP Updates and Inspections, Circleville, OH

Performed stormwater inspections at a construction project of a large, centralized installation of a 274-MW solar panel array that experienced stormwater violations. Provided engineering recommendations to implement new best management practices (BMP) and revisions to the SWPPP that resulted in avoiding compliance fines.

County Airport Operations: Oil/Water Separator Survey, Pittsburgh, PA

Lead Engineer responsible for the inspection and inventory of over a dozen oil/water separators across two airport locations. Inspections required establishing current conditions and providing recommendations of maintenance activities or possible replacement of the units. Where replacement was warranted, he developed draft designs and associated replacement costs.

Various Phase I/II ESAs, Multiple Locations

Performed nearly all tasks and functions in the development of multiple ESAs for projects in Colorado, Ohio, and Pennsylvania.

Mait Walker, PE

PROJECT MANAGER – O&M

Innovative Wastewater Treatment Design

Developed designs for wastewater treatment systems based on recirculating wetland principals, including a multi-stage and multi-phase system for a resort on the island of St. Kitts. He was also a consulting engineer for the construction and operations of 20,000-GPD Solar Aquatics System.

Low-Level Mercury Flux & Mixing Zone Sample Program, Petoskey, MI

Team Lead of the sampling program responsible for collection of quarterly samples from 155 monitoring wells at a site managing leachate from cement kiln dust leachate. Sampling activities conformed to low-level mercury protocols for EPA 1631E (aka Clean Hands/Dirty Hands) to measure mercury in parts per trillion. Also developed the sampling reports, including QA/QC compliant with Superfund Environmental Data Collection Activities.

Large-Scale Water Treatment Plant Operator, Denver, CO

As an operator, Mr. Walker performed operation and maintenance duties at a 30-MGD water treatment plant that reclaims treated wastewater and creates non-potable service water for use in irrigation and industrial operations. His duties included wet lab analysis, hazardous chemical operations, emergency response, and machinery maintenance and repairs.

LEED/Living Building Challenge: Stormwater & Wastewater Guidance Documents

Authored numerous guidance documents for achievement of stormwater and wastewater credits under the Living Building Challenge version 2.0 program. These documents were also compliant with LEED.

Wind Farm: Stormwater SWPPP Updates and Inspections, Forestville, NY

Performed stormwater inspections at a large construction project involving the remote installation of wind turbines that struggled with stormwater compliance during winter and spring conditions. His efforts led to the revision of the SWPPP and implementation of new BMPs to regain compliance and avoid State DEP action.

James Kooser

SENIOR ECOLOGIST – NEPA/PUBLIC PARTICIPATION

EDUCATION

Undergraduate Studies in Biology, Kent State University

Undergraduate and Graduate Studies in Plant Ecology, The Ohio State University

SPECIALIZED TRAINING

- Ohio EPA Headwater Habitat Evaluation Index (HHEI) and Qualitative Habitat Evaluation Index (QHEI)
- Ohio EPA Ohio Rapid Assessment Method for Wetlands (ORAM)
- Wetland Construction Series, Wetland Training Institute Inc. (WTI)
- Wetland Delineation Training, Regional Manuals, WTI
- Winter Botany, WTI

PROFESSIONAL ORGANIZATIONS

Society of Wetland Scientists
Natural Areas Association

Mr. Kooser has been a practicing ecologist since 1986, with experience in both the private and public sectors. His responsibilities at Atlas include leading wetland and natural resource investigations, permitting, business development, mentoring staff, and project management. Mr. Kooser has performed and managed natural resource evaluations, wetland delineations, permitting and mitigation, endangered species assessments, NEPA and FERC documentation, park and nature preserve planning and management, ecosystem restoration and ecological risk assessment, and surveys for invasive and state and federally listed species. His clients include state, local, and federal governments and agencies; electric and gas utilities; oil and natural gas pipeline companies; not-for-profit groups; and developers. Mr. Kooser has completed projects in Arkansas, Illinois, Indiana, Kentucky, Maine, Maryland, Michigan, New York, Ohio, Pennsylvania, Texas, Virginia, and West Virginia.

PROJECT EXPERIENCE

Field Tests of the *Operational Draft Regional Guidebook for the Functional Assessment of High-gradient Ephemeral and Intermittent Headwater Streams in Western West Virginia and Eastern Kentucky*, USACE Huntington District and Environmental Laboratory, Engineers Research and Development Center, KY & WV

Lead Scientist. Led a group of aquatic and wetland ecologists who performed field tests to validate the draft HGM models for high-gradient and intermittent headwater streams. The crews collected data on stream morphology, bed materials, flow, riparian vegetation, bank conditions, and stream biology, using both the HGM methods and other established assessment methods. Samples were taken in a range of sites from undisturbed streams to streams affected by mountaintop removal and acid mine drainage. Results were compared across methods. Analyzed data and authored the final report.

Monday Creek Acid Mine Drainage Treatment Program, USACE, Huntington District, Hocking County, OH

Lead Scientist and Project Manager. Led a Biological Assessment of potential effects of proposed acid mine drainage treatments in the Monday Creek watershed in southeast Ohio. The team assessed potential effects on Indiana Bat (Myotis sodalis), American Burying Beetle (Nicrophorus americanus), Running Buffalo Clover (Trifolium stoloniferum), Small Whorled Pogonia (Isotria medeoloides), and Northern Monkshood (Aconitum noveboracense). Prepared the final document for USACE.

Wetland and Stream Delineations, Fink-Kennedy Pipeline Replacement, Dominion Energy, Lewis and Harrison Counties, WV

Senior Ecologist. Delineated wetlands and 100-foot stream buffers for this project designed to replace the aging lines in Dominion's Fink-Kennedy gas storage field. Led field teams that completed the delineation studies and estimated permitting requirements for expansion of this existing gas field.

Greenbrier Pipeline Wetland Delineation and Plant Community Mapping, Dominion Energy, WV, VA, & NC

Senior Ecologist. Helped develop electronic mapping tools and standards to identify and delineate wetlands, plant communities, listed species sites, and archaeological resources along a proposed new pipeline route. The proposed line began in central West Virginia and stretched over 400 miles into North Carolina. The team used a portable GIS driven by pentop computers, and sub-meter accuracy GPS receivers to map sensitive features along the proposed route. Served as a technical advisor to the group and helped perform field delineations.

James Kooser

SENIOR ECOLOGIST – NEPA/PUBLIC PARTICIPATION

Mountaineer Power Plant, Wetland Delineation and Plant Community Mapping, American Electric Power, WV

Lead scientist for studies to delineate wetlands and map plant communities for a project intended to support the proposed conversion of the Mountaineer Power Plant to clean coal. The delineation and vegetation mapping were used to support permitting for the conversion and expansion of the facility.

Hydrogeomorphic Functional Assessment Model Development, USACE Waterways Experiment Station and Penn State University, Pennsylvania, Ridge and Valley Province

Consultant Representative. Assisted the Pennsylvania A-Team in developing models for the Hydrogeomorphic Method for wetland functional assessment. The team included scientists from the USEPA, USACE Baltimore District, and Pennsylvania State University. Gathered data on wetlands throughout the Ridge and Valley physiographic province. The team sampled a range of sites from pristine, undisturbed areas to sites affected by acid mine drainage. Helped evaluate and test new functional assessment models. Models and data were presented to a peer review team. Funding was provided by EPA Region 3, USACE Baltimore District, and the Pennsylvania Department of Environmental Protection.

Water Quality Monitoring*, Marathon Oil, Canton, OH

Senior Ecologist. Led a team of scientists who collected fish and macroinvertebrate data in order to calculate an Index of Biotic Integrity and Index of Community Integrity. Fish data were collected using a boat-mounted electrofishing unit. Macroinvertebrates were collected using Hester-Dendy multiplate samplers supplemented with kick-net samples. Analyzed data using Ohio EPA procedures and prepared a monitoring report.

Kyle Helal

ECOLOGICAL RESOURCES PROJECT MANAGER – NEPA/PUBLIC PARTICIPATION

EDUCATION
B.A., Environmental Sciences, 2007, University of Pittsburgh

SPECIALIZED TRAINING
- PA DCNR Wild Plant Management Permit (#24-589), PA DCNR, 2024
- USACE 40-hour Wetland Delineation Certification, Richard Chinn Environmental, 2008
- First-Aid/CPR/AED Training, Emergency Care & Safety Institute, 2023
- Rabies 3-dose pre-exposure vaccination, ACHD, 2015
- OSHA 10-Hour Construction, Safety, & Health Training. 2013
- SafeLand USA Training, PEC, 2012

Mr. Helal brings 17 years of environmental and regulatory compliance experience in the natural resources sector, His areas of focus include aquatic resources permitting and compliance; wetland delineation, reporting, and mitigation; NEPA and FERC compliance and reporting; biological assessments; listed species consultation, survey, and mitigation; environmental health and safety compliance; due diligence assessments [Phase I & II Environmental Site Assessments (ESA)] and portfolio management; and GIS services. He is also the National Program Manager for Kiavi Funding, one of the Pittsburgh office's main due diligence clients. Mr. Helal has completed projects in West Virginia, Pennsylvania, Ohio, New York, New Jersey, Virginia, Kentucky, Indiana, Illinois, Tennessee, Louisiana, Texas, Colorado, South Dakota, Florida, and Georgia.

PROJECT EXPERIENCE

Clifftop Drainage AML Reclamation, Fayette County, WV

Ecological Resources Lead for 15-acre abandoned mine lands (AML) reclamation site. Responsible for field data collection, resource report production, permitting authorship, Environmental Assessment, WV Wetlands Rapid Assessment Method surveys, threatened and endangered species consultation, cultural resources consultation, design assistance, budgeting, scheduling, agency consultation, and QA/QC.

Fishing Creek AML, PA

Ecological Resources Lead for 147-acre AML reclamation site on property owned by the Pennsylvania Game Commission. Responsible for field data collection, resource report production, permitting authorship, Environmental Assessment, Level 2 Rapid Assessments of streams and wetlands, threatened and endangered species consultation, cultural resources consultation, design assistance, budgeting, scheduling, agency consultation, Game Lands coordination, and QA/QC.

USACE and State Clean Water Act Permitting, Natural Gas Well Pad Developments; WV, PA, & OH

Managed the environmental compliance and permitting of Marcellus and Utica natural gas well sites and impoundments. Responsibilities included permit identification and tracking related to new site development; proposal authorship; contracting; budgeting; biological and cultural resources survey management with associated agency consultation; wetland delineation and rapid assessment method/rapid assessment protocol surveys; habitat assessments; listed species presence/absence surveys; client communications; preparation and submittal of all federal, state, and municipal environmental permit packages; technical report authorship and senior review; subcontractor communications and management; process improvement identification; and implementation of lessons learned. Due to the time-sensitive nature of most natural gas projects, management of these projects required constant, stringent coordination with all agencies and client representatives involved to avoid unnecessary permitting delays, with regular status check-ins with the client manager and agency permitting manager.

Wetland Mitigation Bank Development, Tyler and Harrison Counties, WV

Field Technical Lead for wetland mitigation bank development. Project involved wetland delineation, WV Wetland Rapid Assessment Method field analyses, habitat assessment; listed species presence/absence surveys; wetland credits analysis; and agency consultation.

Kyle Helal

ECOLOGICAL RESOURCES PROJECT MANAGER – NEPA/PUBLIC PARTICIPATION

USACE and State Clean Water Act Permitting Management, Linear Natural Gas Projects, WV, PA & OH

Managed the environmental compliance and permitting of linear projects associated with Marcellus and Utica natural gas developments, including underground pipelines, underground and aboveground water lines, and road improvements. Responsibilities included permit identification and tracking related to new site development; proposal authorship; contracting; budgeting; biological and cultural resources survey management and associated agency consultation; wetland delineation and rapid assessment method/rapid assessment protocol surveys; habitat assessments; listed species presence/absence surveys; client and agency communications; preparation and submittal of all federal, state, and municipal environmental permit packages; technical report authorship and senior review; subcontractor communications and management; process improvement identification; and implementation of lessons learned. Due to the time-sensitive nature of most natural gas projects, management of these projects required constant, stringent coordination with all agencies and client representatives involved to avoid unnecessary permitting delays, with regular status check-ins with the client manager and agency permitting manager.

Petroleum Release Response Project, Fayette County, WV

Field Lead and author of delineation report and NWP permit application for a 3.8-acre site. Project was in response to previous release and clean-up efforts for 400 gallons of off-road diesel fuel that spilled from an off-site AST into a wetland as a result of tank overfill. Client was seeking additional emergency response NWP to restore the site to pre-spill conditions. Responsibilities included field data management and correction, reporting, NWP application and submittal to USACE Huntington District, GIS data and mapping coordination, figure production, and client coordination.

Phase I & II Environmental Site Assessments, Multiple Sites, Multiple States

Project Manager, Senior Reviewer, and Environmental Professional for Phase I and II ESA reports completed by the Atlas Pittsburgh office from 2021 to 2023, with continued support provided to date. Responsibilities have included budgeting, scheduling, fieldwork, subcontractor coordination, report writing, client communications/follow-up, supplemental file reviews (on-site and electronic), and QA/QC.

Utopia Pipeline, Multiple Counties, OH

Ecological field lead, lead delineator, mist-net technician, cultural resources technician, report and permit authorship, data management, and project management assistance for 215-mile natural gas pipeline in northeast Ohio. Coordinated with USACE Buffalo and Huntington Districts, OEPA, USFWS Columbus Field Office, multiple state and municipal regulating agencies, landowners, and coalitions. Led multiple teams of delineators and botanists, and coordinated and managed their data as well as assisted with management of multiple bat mist net crews from three different consultants and their data.

Petroleum Release Response; Luzerne County, PA

Field lead, report author, agency correspondent, construction oversight for emergency response to a 1,391-gallon diesel fuel release into a roadside ditch and down-gradient wetland system. Responsible for field data collection, product migration mapping, erosion and sediment control plan (ESCP) authorship, wetland delineation report authorship, agency correspondence, and QA/QC.

Monitoring Well Installations; Bergen County, NJ

Ecological resources lead for 2-acre monitoring well installation project. Responsible for field data collection, resource report production, QA/QC, and Letter of Intent to USACE. Project impacted the adjacent Harbor Estuary wetland complex, under the jurisdiction of the USACE Meadowlands District.

Gas Station Development Projects, Multiple Counties, FL & GA

Field lead for wetland delineations and Phase I ESA of multiple gas station development projects throughout southern Georgia and central Florida. Responsible for field data collection, delineation report and figure production, Phase I ESA report co-authorship, USACE coordination and preliminary jurisdictional determination assistance, and permit co-authorship.

Release Response Wetland Delineation Project, Fulton County, PA

Field lead and author for delineation and report of 0.5-acre site. Delineation was a proposed NPDES outfall site adjacent to an intermittent stream. Responsibilities included field data management and correction, reporting, GIS data and mapping coordination, figure production, and client coordination.

Richard Kresge, Jr., PE

HYDROLOGIC ENGINEER

EDUCATION
B.S., Civil Engineering, Penn State University, 1992

REGISTRATION
Professional Engineer:
- PA PE0053031E
- NJ 24GE052639
- ME 12038
- MS 26131
- MD 52083

CERTIFICATIONS
Rope & Rescue Operations Level thru NFPA 1670 Lowering Systems One Person Rescue

PROFESSIONAL AFFILIATIONS
PA Society of Professional Engineers

National Society of Professional Engineers

MEMBERSHIPS
Bear Creek Township Planning Commission – Board Member

White Haven Poconos Owners Association – Board Member

Mr. Kresge has over 30 years of experience in the study, planning, regulatory compliance and design of various land development and water / wastewater projects. Land development projects include a wide variety ranging from small-scale curbing and sidewalk replacement to large-scale development, involving thousands of building square footage. The water / wastewater projects range in size from small-scale water distribution and sewage collection systems to complex water and sewage treatment facilities for both public and private clients.

PROJECT EXPERIENCE

Land Development Design; PA

Provide site development services involving infrastructure improvements for various mixed use development projects (water and wastewater treatment facility upgrades, emergency water repair, heliport improvements and curb, sidewalk and parking lot improvements); engineering for multiple local municipalities and counties located in Pennsylvania; Dept. of Defence (DoD) facility design and land development (Portsmouth Naval Shipyard, Sub Base New London, Joint Base McGuire/Fort Dix, and Tobyhanna Army Depot). Responsible for managing projects from inception to completion, including budget management.

Water and Wastewater Treatment Plant Design; PA

Engineer for both public and private clients including several Boroughs and Municipalities throughout Pennsylvania. Responsible for the design, development, and modifications of plant upgrades and expansions, systems designs, and station rehabilitation work. Additional responsibilities include designs of new and replacement water lines and sanitary lines within rights-of-way. Associated civil designs for new and replacement roadways for rehabilitation and improvements. Responsible for team management and project management duties from inception to completion, including budget management.

Stormwater Designs; PA

Engineer for several municipalities located in Pennsylvania. Project management for site grading and drainage design in compliance with local, county and state agencies for stormwater regulatory compliance. The services also provide for erosion and sediment control plan preparation for approval by the affiliated County Conservation Districts.

Construction Management; PA

Direct oversight of construction projects. Responsible for construction management throughout the project duration - from initial contract negotiations through construction close out. Budget management and client management services throughout the project life cycle. Coordinated all meeting and management of project schedules, quality assurance/control, costs, and inspections.

Permitting; PA

Provided permitting services for all applications associated with design work with numerous municipal, State, and Federal agencies. Familiarity with several government processes and regulations.

Lake Winola Municipal Authority – Wastewater Treatment Plant Upgrade – Overfield Township; PA

Project Manager for a 0.087 MGD wastewater treatment facility. Improvements included: new submerged attached growth reactors (SAGR) to address ammonia nitrogen limits, copper removal system, new ultraviolet (UV) disinfection system, new process pumping station, new Blower and Soda Ash building, new Copper Filter and UV building, lagoon aeration system and liner replacement, new control valves, new flow meter, etc. Permits included: PADEP NPDES for post construction stormwater management, Wyoming County Conservation District approval of Erosion and Sediment Control, and PADEP Water Quality Management (WQM) Permit for plant upgrades. Project to be funded by PennVest. Project cost: $7,000,000.00

Richard Kresge, Jr., PE

HYDROLOGIC ENGINEER

Dalton Sewer Authority – Wastewater Treatment Plant Upgrade – LaPlume Township; PA

Project Manager for a 0.140 MGD wastewater treatment facility. Improvements include: Phase 1: New influent pump station, rerouting of pump station force main, new 100,000 gal. surge tank, surge tank pump station, and surge tank support building. Phase 2: New process treatment units and new metering chamber, new blowers inside existing blower building, new emergency generator building and new emergency generator. Phase 3: Demolish existing process tanks, new tertiary treatment building (with disc filter copper treatment system, ultraviolet disinfection, and filter feed chemical system. Scope of services provided include planning, design, permitting, bidding, and construction phase services. Permits included: Lackawanna County Conservation District approval of Erosion and Sediment Control and PADEP Water Quality Management (WQM) Permit for plant upgrades. Project to be funded by PennVest.. Estimated Project Cost: $6,000,000.00.

Roamingwood Sewer and Water Association – Wastewater Treatment Plant Upgrade – Lake Ariel; PA

Project Manager for a 1.84 MGD wastewater treatment facility. Improvements included: Converting 1.0 MGD equalization tanks to backwash and overflow storage; new submersible triplex influent pumping station; replacement of treatment carousel surface aerators and mixers; new copper removal system; new screw press for sludge dewatering; new ultraviolet (UV) disinfection for primary effluent disinfection process; new sodium hypochlorite disinfection with sodium bisulfate de-chlorination backup disinfection system; replacement of two constant speed blowers with two new variable speed blowers; replacement of filter media and underdrain system for all four existing filter cells; replace existing aerated sludge holding tanks with new aerated sludge holding tanks; new post aeration blowers; new 7-bay vehicle storage and maintenance garage; new solids handling building to replace the existing enclosure; renovate the existing control building to include training room, monitoring room, locker room, break room, laboratory, etc.; convert the existing forward flow pump station to a backwash and overflow storage pump station with new building enclosure, and overall facility upgrades to replace fatigued process equipment. Scope of services included planning, design, permitting, bidding, and construction phase services. Permits included: PADEP NPDES for post construction stormwater management, Wayne County Conservation District approval of Erosion and Sediment Control, PADEP Water Quality Management (WQM) Permit for plant upgrades, DRBC approval, and Township building approval. Project funded by USDA Rural Agriculture Program. Project cost: $12,000,000.00.

Pennsylvania-American Water – Prescott CSO #30 – Scranton; PA

Project Manager for a 1.43 MGD offline combined sewer overflow storage facility. Improvements included: 148' x 117' precast post tension below grade storage tank with interior race ways and flushing gates to store combined sewer overflow during extreme wet weather events. Following the storm, the stored sewer is released back into the collection and conveyance piping where it is properly treated at the Scranton Wastewater Treatment plant. Scope of services provided include planning, design, permitting, bidding, and construction phase services. Grouting of abandoned deep mines located immediately below the structure were also provided to ensure structural integrity. Permits included: PADEP NPDES for post construction stormwater management, Lackawanna County Conservation District approval of Erosion and Sediment Control plan, and PADEP Water Quality Management (WQM) Permit for plant upgrades. Project privately funded by PA-American Water. Project Cost: $8,700,000.00.

Pennsylvania-American Water – Washburn CSO #22 – Scranton; PA

Project Manager for a 0.75 MGD combined sewer overflow facility. Improvements included: Drilling and grouting of subsurface abandoned mine below CSO structure, cast in place concrete below grade storage tank with interior race ways and flushing gates to store combined sewer overflow during extreme wet weather events. Following the storm, the stored sewer is released back into the collection and conveyance piping where it is properly treated at the Scranton Wastewater Treatment plant. Scope of services provided include planning, design, permitting, bidding, and construction phase services. Permits included: PADEP NPDES for post construction stormwater management, Lackawanna County Conservation District approval of Erosion and Sediment Control plan, PADEP Water Quality Management (WQM) Permit for plant upgrades, and easement acquisition from Norfolk-Southern Railroad. Project privately funded by PA-American Water. Project Cost: $6,500,000.00.

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Zachary Twist

ENGINEER LEVEL III

EDUCATION
B.S., Earth Sciences; Mining Engineering,
Colorado School of Mines, 2007

CERTIFICATIONS
EIT Certified

MSHA 24- & 40-Hour Training

Mr. Twist is a mining engineer with over 18 years of project management and regulatory environmental experience within the minerals sector. Zach's experience centers around mineral orebody investigations and development, production, permitting & regulations, and overseeing a diverse array of mining, geologic, environmental reclamation, remediation, and mining projects within the coal, potash, uranium, gold, limestone, industrial, and aggregate industries.

PROJECT EXPERIENCE

Coal Mining Projects: Pennsylvania and West Virginia

Managed and participated in several coal mining projects throughout eastern and western Pennsylvania and southern West Virginia. Responsibilities included resource development and production, designing concurrent reclamation activities and EOL final grading planning, assist clients with obtaining any additional environmental information that would be needed for the completion of surface mine permit applications for the mining of coal units. Other responsibilities included assisting with the proposed mining and reclamation capital and yearly costs and all requisite notifications for the review, exploratory and testing well designs, compilation and submittal of the application to the regulatory agency. Utilized past mining operations to tie into future mining operations and delineate remaining mineral reserves. During his time with ATC, he has created reclamation grading profiles for the AMLER Projects Conifer Coupon and Blue Ball East and assigned Project Manager role for the Johnstown Incline, analyzed water and coal structure maps, communicated with clients and assisted with structure and rock mitigation reports. Similarly, he has been assigned Project Manager role for the following WV DEP S3 projects, Winona Complex, Winona East and Highwall, Crosier Road Portals, Clifftop Strip and Royal Loadout.

Mining Projects

Project manager for several mining commodities across the United States. Placer gold operations in California that involved reviewing JORC for legal compliance cost analysis and project valuation. Assisting with high level reviews for a M&A deal for Bentonite clay in Wyoming and Montana. Included in this project were current and future sales, mineral reserves, gross and net revenue, environmental liabilities and reclamation techniques. Project Manager for greenfield projects for Eagle County, Colorado to review the development for county owned aggregate resources vs third party purchases. Acting as expert witness for lawsuits in subject matter my background covers.

Asphalt and Aggregate Development and Production, Washington State

Managed active and mothballed surface mine sites and reviewed the analyses for the design of passive treatment systems. Quantity and quality data were used to design the system to improve the overall water quality. This was achieved by adding sediment ponds, check dams, ditch armouring, constructing solid waste storage areas to prevent water contamination and removing VOC's source points. Simultaneous reclamation and production activities included regrading and vegetation planting to remove bond liabilities as well. Updated site SWPP and Title V programs to ensure compliance with federal and state regulators. Assisted in the design of maintenance programs to comply with water and air quality standards regarding subject matter such as VE, pH, turbidity and hydrocarbons levels.

Performed costs analysis for capital and yearly budgets, surveyed product/waste/material storage on a biannual basis for short- and long-term planning.

Zachary Twist

ENGINEERING LEVEL III

Asphalt and Aggregate Development and Production, Oregon State

Managed aggregate quarries for industrial and construction. Developed and maintained SWPP and FRP for turbidity and pH monitoring. Created short- and long-term mineral development to meet future market demand while adhering to federal and state regulations as well as local population requirements. Engaged with corporate landowners for future development of aggregate resources and eventual lease agreements, including all development planning and eventual reclamation activities.

Chemical Limestone Projects; Alaska, Washington State and Vancouver Island, B.C.

Mine Manager and Engineer that was tasked with restarting operations of a mothballed mine located in SE Alaska. Oversaw the drafting and implementation of all necessary permits including SWPP's, FRP, Solid Waste Storage, hydrocarbon transfer operation plans between land and water, VE testing plans and reclamation schedules and plans. Created exploratory drilling programs, quality assurance designs, long and short-term mining plans to meet market demands, analyzed and selected contractors for the mining, processing, transportation and delivery of products.

Company Mining Engineer for long term active limestone mines and additionally acquired properties during tenure. Oversaw the design, financial analysis and reclamation activities of properties. Duties included sampling, contractor selection for reclamation activities such as grading, seeding, water quality design.

Chemical Limestone Projects; Nevada

Created and upkept all short-term mining planning for dolomitic and limestone operations for plant demands. Participated in VE and water sampling programs. Surveyed all active stockpiles, highwalls and material movement on monthly and yearly basis for reclamation and reconciliation purposes.

Uranium and Potash Projects; Colorado, New Mexico, Utah and Arizona

Investigated and evaluated uranium deposits located in Utah and Colorado for reactivation. Performed economic valuations and provided recommendations regarding operational costs vs asset divestiture. Created LOF plans for attractive properties and toll milling schedules with local processing plants.

Chief engineer for potash properties located in New Mexico, Utah and Arizona. Developed exploratory drilling programs with special provisions to nearby oil and gas operations. Drafted and submitted drilling pad reclamation timeline and operations as to minimize disturbance of local endangered animals and plants.

Coal Mine Development and Surveying; Texas

Completed all daily and weekly surveying for production and reclamation activities on lignite to plant operations. Updated all relative models for material movements. Assisted in water and soil sampling for federal and state agencies.

Justin T. Petricko

RECLAMATION/AMD TREATMENT DESIGNER

EDUCATION
B.S Geology-Energy and Natural Resource, Indiana University of Pennsylvania, 2019

SPECIALIZED TRAINING
- OSHA 1910.120 40-Hour Safety Training
- OSHA 1910.120 8-Hour Refresher Training

AREAS OF EXPERTISE
Environmental Investigation & Remediation; Geotechnical Geology; Environmental Science; Project Management

Mr. Petricko is a Project Geologist II/Environmental Scientist for Atlas in the Environmental Investigation and Remediation Division in Pittsburgh, Pennsylvania. Mr. Petricko is a young and motivated individual eager to hone and evolve his professional skills & experience in the environmental and geological sciences.

PROJECT EXPERIENCE

PADEP AML: Conifer Coupon, Blueball East, Eagle Eye and Fishing Creek, PA

Mr. Petricko provided geological and hydrogeological characterization of the site assisting project engineers and AutoCad designers with erosion sedimentation control, grading, drainage & channel, and collapsed vertical mine opening design. Site specific project experience includes backfilling existing highwalls with associated mining spoils to approximate original contour, subsurface drainage facilities, and run-off channels with temporary BMP sediment basins. Additionally, Mr. Petricko provides support for project ecologists and biologists with Pennsylvania Natural Diversity Inventory reviews on AML sites with determined Allegheny Woodrat and native bat habitat, and with seeding and revegetation plans in accordance with Appalachian Regional Reforestation Initiative and Forestry Reclamation Approach standards. Other associated responsibilities include providing historic mine map research and operations associated with each site, working in collaboration with PADEP district mining offices to provide historic operator and mining permit information.

Conemaugh Valley Conservancy AMLER (Johnstown Inclined Plane AML Remediation, Pennsylvania)

Mr. Petricko has provided project assistance and coordination with the Johnstown Inclined Plane AMLER project. Specifically, Mr. Petricko provided geological assistance with project engineers for rockfall mitigation along a 1,500 linear foot highwall and associated walking trail to the Johnstown Inclined Plane. Other project experience includes rehabilitation design of a vertical mine shaft concrete cap, grading and drainage plans, and native bat gate design for two open mine portals.

Environmental Scientist; WV & PA

included geotechnical erosion and sedimentation control design plans verifying the construction and completion of project site best management practices (BMP's) in accordance with the Pennsylvania Erosion and Sedimentation pollution control manual. Other environmental scientist experience includes groundwater sample collection per PADEP and WVDEP low flow sampling requirements and air vapor sampling for a tetrachloroethene (PCE) superfund site in Vienna, West Virginia per WVDEP summa can leak test standards. Additional technical field experience has included assisting professional land surveyors to conduct water source purveyor mapping in reference to natural gas well pad construction and natural gas line right of way construction, involving stream crossing and site stakeouts of project specific BMPs for proposed contractor excavation limits utilizing GeoXT units and Total Stations.

Operations and Maintenance; Vienna, West Virginia

Performed weekly operation and maintenance (O&M) responsibilities at the WVDEP Vienna, West Virginia PCE superfund site Multiphase Extraction Carbon Vessel Remediation System. Weekly O&M responsibilities included review of system SCADA data to identify operation issues and component failures and assisting with on-site repairs to the remediation system. Weekly O&M reports were submitted to WVDEP indicating all site activity, remediation system repairs & replacements, and PCE isoconcentration plume updates per received groundwater sampling and soil vapor sampling PCE concentrations.

Justin T. Petricko

RECLAMATION/AMD TREATMENT DESIGNER

Project Geologist; Pennsylvania & Ohio

Mr. Petricko is the field lead for all geotechnical engineering division soil boring, rock coring, and infiltration testing project requirements. Various geological project work including geotechnical drilling investigation and geotechnical laboratory testing analysis per ASTM D 2216, ASTM D 698, ASTM D 4318 standards. Additional geological work includes aquifer pumping and pilot tests to derive hydrological and potentiometric data for multiphase extraction remediation system design utilizing fate and transport modeling for petroleum release sites in Pennsylvania. Soil compaction field work has included utilizing nuclear density and moisture gauges to assure target compaction percentages are obtained for aggregate backfill excavation projects, as well as compaction testing of asphalt per PennDOT CS-6 and TR-4276 report requirements. Other geologic work includes site characterization and reconnaissance for Pennsylvania's Department of Environmental Protection (PADEP) Abandoned Mine Land Reclamation Design project sites for engineering design and permitting. Mr. Petricko also performed phase II environmental site assessment research of the former Mason Sand and Gravel Company property parcel in Obetz, Ohio for real estate sale to Speedway, LLC for gas station and convenience store development.

AutoCAD Civil & Environmental Design; Pennsylvania

Environmental AutoCAD technician for projects involving potentiometric and isometric mapping and design of environmental remediation sites analyzing ground water, soil, and air vapor contamination data from field received data and measurements. Other environmental design experience includes remedial site geological cross section design, spill prevention, control, and counter measures (SPCC) spill containment and emergency response design of storage tank facilities, and due diligence ACM and Lead sample site plan contamination mapping. Project involvement includes natural gas and waterline utility abandonment and renewal design projects for upstream and midstream natural gas clients. Other civil design projects include natural gas well pad lateral drilling design projects of proposed well head and boring dimensioning, and project erosion and sedimentation control design plans per the Pennsylvania Erosion and Sedimentation Pollution Control Manual. Similar erosion and sedimentation control designs include stream embankment and stabilization design plans.

Geophysical Geology Research Assistant; Tanoma, Pennsylvania & Cleveland Lloyd Dinosaur Quarry, Utah

Geophysical geology educational experience utilizing ground penetrating radar (GPR) and electrical resistivity tomography (ERT). GPR experience includes using a wheel mounted GPR unit to map prehistoric lacustrine depositional environments associated with a Jurassic period aged limestone lakebed to assist with Indiana University of Pennsylvania Paleontological Research initiatives. Additional geophysical experience included research assistance at the Tanoma Environmental Education center in Indiana, Pennsylvania using ERT to delineate and characterize the wetland area and correlate different electrical resistivities to the distribution and concentration of acid mine drainage.

Additional Experiences and Involvement

Other notable experience includes being a volunteer geological field research assistant for Indiana University of Pennsylvania, conducting a sedimentological analysis of the Cleveland Lloyd Dinosaur in southeast Utah, utilizing x-ray fluorescence to record elemental composition of prehistoric biologically influenced sediment compositions in reference to Jurassic period paleontological excavation sites. Additional involvement includes being an active member of Pittsburgh Geological Society.

James Romano, PE

GEOTECHNICAL ENGINEERING

EDUCATION

M.S., Civil Engineering, Geotechnical Engineering Concentration, 2019, Villanova University

B.S., Civil Engineering, 2012, Widener University

REGISTRATIONS

Professional Engineer:

- PA PE086261

SPECIALIZED TRAINING

- Nuclear Gage Training, Humboldt Scientific
- 30-Hour Construction Health & Safety, OSHA
- eRail Safe Certification - CSX, NS and SEPTA regional railway construction access

AREAS OF EXPERTISE

Geotechnical Foundation Reports
Geotechnical Design
Site Investigations

Mr. Romano is a licensed Professional Engineer with 13 years of site investigation and design experience. He has managed all aspects of geotechnical subsurface exploration including proposal writing, site reconnaissance and logging of boreholes, field, and laboratory coordination. He also has experience with engineering analyses to determine the types of a foundation, provide the parameters for foundation design, and report generation.

PROJECT EXPERIENCE

J&L Ambridge Station, Aliquippa, PA

Prepared geotechnical report, including soil parameters, retaining wall design, earth pressure parameters, and recommendations. Reviewed subsurface geotechnical exploration of two deep test borings on slope for retaining wall at J&L Ambridge Station, type boring logs, and assisted in laboratory test selection of representative soil samples. Determined slope and wall geometry, reviewed slope stability analysis and external stability design of different wall types.

Geotechnical Engineering, Pennsylvania and Delaware Departments of Transportation, PA & DE

Designed and prepared reports of bridge foundations, retaining walls, culverts on PennDOT and DelDOT foundation submissions including:

- I-95 Girard Avenue Interchange, PennDOT District 6-0, Philadelphia, PA.
- I-80 Reconstruction and Widening Final Design Services, PennDOT District 5-0, Monroe County, PA
- I-78 Mainline (Sect 12M) & Krumsville Interchange (Sect 13M) Reconstruction, PennDOT District 5-0, Berks County, PA

Falcon Pipeline Construction Oversight, Geohazard and Landslide Assessment, PA

Designed over ten PennDOT foundation submissions involving bridge replacements throughout Eastern PA. Highly familiar with PennDOT bridge and highway design practices and guidelines. Experience with full in-depth flexible pavement design and reinforced slopes. Oversaw and performed geotechnical design from site reconnaissance to final geotechnical engineering reports. Experience logging continuous soil sampling and NX/NQ rock coring on PennDOT and PTC Projects. Performed geotechnical site investigations and prepared preliminary subsurface exploration programs, type logs, profiles, and tracings. Administered subsurface boring soils and testing contracts, identified interested drilling contractors, hosted on-site pre-bid meetings, issued meeting minutes, and attended bid openings. Developed soil and rock lab testing schedules and cost. Oversaw and reviewed in-house boring logs and field documents. Reviewed various foundation reports submitted to PennDOT by other companies to ensure safe and efficient design.

LSG Sky Chefs Grease Interceptor Basin, Philadelphia, PA

Prepared proposal and manage geotechnical work including performance of boring locating, inspecting, installation of monitoring wells, and reporting. Provided geotechnical design for construction of a 9,000-gallon passive grease interceptor triple-basin underneath the parking lot area of the site. Prepared geotechnical report, including recommendations on groundwater and soil strata that could affect the proposed construction, control of groundwater in design and during construction, subgrade preparation, rock and soil excavation, filling operations, and reuse of the on-site soils.

Commercial Vehicle Entry Control Point, Joint Base McGuire-Dix-Lakehurst, Lakehurst, NJ

Provided comprehensive geotechnical engineering consulting services for the replacement of the existing approximately 1,500-linear-foot, 15-inch diameter sanitary sewer line with a new 15-inch-diameter sanitary sewer line.

James Romano, PE

GEOTECHNICAL ENGINEERING

Geotechnical Site Investigations at Multiple Sites, PA & DE

Performed geotechnical site investigations and prepared preliminary subsurface exploration programs. Completed geotechnical design, report preparation, and geotechnical oversight for bridges, culverts, retaining walls, sign structures and ground improvement projects.

Used design software and engineering judgment to investigate the most economical foundation type. Highly familiar with state DOT and AASHTO bridge and highway design practices and guidelines. Administered subsurface boring soils and testing contracts, identified interested drilling contractors, hosted on-site pre-bid meetings, issue meeting minutes, and attended bid openings. Developed soil and rock lab testing schedules and cost. Used results to determine engineering properties. Analyzed internal, external, global stability and settlement of shallow and deep foundations. Reviewed outside firms' foundation submissions and other deliverables on behalf of PennDOT. LRFD Spreadsheet creation. Micropile design and preparation of foundation submissions for I-95 Construction Section GR4, PennDOT District 6-0, Philadelphia County, PA..

SAFStor Self-Storage Facility, Philadelphia, PA

Provided comprehensive geotechnical engineering consulting for a new self-storage structure with asphaltic parking/drives, and stormwater management facilities. Prepared geotechnical engineering report, geotechnical services consisted of consultation, geotechnical borings and stormwater/septic test pits with permeability/infiltration testing, ground improvement underneath foundations by flowable fill, soil compaction testing, laboratory testing of soils for engineering design parameters, and preparation of the geotechnical engineering report, retaining wall design. Provided site supervision of foundation construction and ground improvement. Performed nuclear compaction density testing on structural fill soils.

Store Space Self Storage Property, West York, PA

Provided comprehensive geotechnical engineering consulting services for the new 2-story 62,500 s.f. self-storage facility with associated paved parking and drives and the demolition of the existing 4-story commercial structure. Investigative geotechnical exploration in karst, karst rock drilling. Drafting field and typed logs. Preparing Geotechnical Summary of Findings Report. Atlas' geotechnical services consisted of 11 geotechnical borings, geophysics to identify Karst features underlying the site, laboratory testing of soils for engineering design parameters, and preparation of draft and final geotechnical engineering reports.

Ballantine Greens Apartments, Parsippany, NJ

Provided comprehensive geotechnical engineering consulting for construction of three residential, four-story buildings with ground floor parking and two-story fitness center, retaining walls, paved parking and drives, and stormwater facilities. Inspected the drilling of 45 borings to depths as great as 35 feet. Prepared typed boring logs and laboratory testing assignment. Performed bearing capacity analyses and settlement analyses. Prepared geotechnical engineering report, including recommendations for soil design parameters for below-grade structures, site earthwork, floor slabs, pavement subgrade preparation, identification of unsuitable site soils, seismic site classification, and groundwater control.

Stonhard Manufacturing Warehouse, Maple Shade, NJ

Oversaw and coordinated geotechnical investigation for proposed warehouse addition with associated foundations. Inspected drilling of two borings to greater than 40 feet below ground surface. Drafting field and typed logs and select laboratory testing of soils for engineering design parameters. Prepared geotechnical engineering report, including summary of findings, bearing capacity and settlement calculations, seismic site classification, suitability of on-site soils as general fill, construction monitoring, and earth pressure design parameters for below-grade structures.

Airgas Maintenance Shop, Enfield, CT

Managed field personnel to complete comprehensive utility mark out, boring locating, and drilling of four test borings. Selected representative locations for borings to meet needs of the proposed foundation construction. Prepared geotechnical report, including recommendations on groundwater and soil strata that could affect the proposed construction, control of groundwater in design and during construction, subgrade preparation, rock and soil excavation, filling operations, and reuse of the on-site soils.

Ryan Ortiz, PE

GEOTECHNICAL ENGINEERING

EDUCATION
M.S., Civil Engineering, 2015, University of Kentucky

B.S., Civil Engineering, 2013, University of Kentucky

REGISTRATIONS
Professional Engineer:
- IN 11900205
- KY 33219
- TN 130005

AFFILIATIONS
American Society of Civil Engineers

Mr. Ortiz oversees and manages geotechnical services, including proposal preparation, fieldwork management, engineering, reporting, and collaboration with the engineering project team for design and construction. He performs the pre-task planning for geotechnical projects, oversees subsurface explorations, assigns soil mechanics lab testing, and is responsible for creating geotechnical reports and collaborating with clients on recommendations. These responsibilities include ensuring field operations are executed safely and effectively, that all data is accurate, and client expectations are exceeded.

PROJECT EXPERIENCE

Charlestown Landslide, Charlestown, WV

Project Manager. Project included a pile and lagging wall that was designed for a slope stability failure on the downhill side of the residence. Performed a site visit to characterize the surficial nature of the slope failure and review the conditions for drill accessibility. Performed drilling operations to characterize the materials for construction considerations and to confirm the foundation design. Delivered the geotechnical results and collaborated with the design engineer.

Hobet Mine Highway, Department of Highways, Madison, WV

Field Engineer on an approximate 4-mile-long segment of Hobet Mine Highway. Coordinated drilling, sampling, and collaborated with professional engineers. Field exploration included standard penetration testing, Shelby tube sampling, and rock coring. The project included difficult drilling in mine spoils over 100 feet deep, rock cores over 300 feet deep, and creating miles of dozer paths to access boring locations.

Transmission Pipelines, Various Clients, WV, KY, IN, & TN

Field Engineer for numerous transmission pipeline projects. Collaborated with pipeline engineers, construction representatives, the design team, and construction representatives from other utility companies to ensure the project was planned efficiently and safely in an electrical transmission line right-of-way. Provided environmental field monitoring services to ensure the safety of field crews. Documented and analyzed field and laboratory data to ensure data quality and accuracy. Performed calculations and compiled into geotechnical engineering reports for the projects.

Landslide Projects, Various Clients, WV, KY, & IN

Field Engineer for a multitude of landslide and slope stability projects involving transmission gas pipelines, existing and new buildings, along with other project types. Responsibilities included site reconnaissance to characterize the geotechnical conditions within the property, developing a geotechnical study for remedial considerations (if needed), and spearheading the execution of the geotechnical characterization. Involvement included identification and characterization of geo-hazards, collaboration with the design team, brainstorming for geotechnical characterization studies, and executing the geotechnical field investigations. Additionally, made site visits during construction and remediation of geohazards to ensure the geohazards were handled properly and construction was performed according to project specifications.

James Gilligan

CAD/GIS SERVICES

EDUCATION
Associate in Specialized Technology, Computer Aided Drafting and Design, 1988, Triangle Tech

SOFTWARE SKILLS
AutoCAD
AutoCAD Civil 3D
Carlson Civil Suite
Microsoft Office 365

Mr. Gilligan is a Senior Civil Designer for Atlas in our Engineering and Environmental divisions. He is a seasoned design professional with a 30-year focus in the civil and environmental consulting industry. Mr. Gilligan's experience centers around a diverse array of layout and designs for environmental, geologic, reclamation/remediation, and civil projects within the coal and aggregate mining, sanitary and residual waste, and oil and gas industries.

PROJECT EXPERIENCE

AML S3 Contract, WV

Conceptual Design, layout, and permitting for 13 AML sites for the West Virginia Department of Environmental Protection Office of Abandoned Mine Lands and Reclamation. Design work included erosion and sedimentation control, site grading for dangerous highwall reclamation, dangerous impoundments, open mine portals, and earthwork quantity calculations for overburden and required fill placement to restore site to pre-mining conditions using AutoCAD Civil 3D software.

Conifers Coupon AML, PA

Conceptual and final design, layout, and permitting for AML site located in Logan Township for the Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Abandoned Mine Reclamation. Design work included erosion and sedimentation control, site grading for dangerous highwall, and earthwork quantity calculations for overburden and required fill placement to restore site to pre-mining conditions using AutoCAD Civil 3D software.

Johnstown Inclined Hill AML Project, Conemaugh Valley Conservancy, Johnstown, PA

Conceptual and final design layout for hiking trail under the Bureau of Abandoned Mine Reclamation. Design work included erosion and sedimentation control, site grading for trail redesign, rockfall mitigation, capping vertical mine shaft, and installation of bat gates using AutoCAD Civil 3D software.

Coal and Aggregate Mining Projects, PA

Design, layout, and permitting for surface and underground coal and aggregate mining facilities, including layout and design of coal refuse disposal facilities, active surface mining operations, and underground mine workings. Design work included erosion and sedimentation control, site grading, and earthwork quantity calculations for overburden and required fill placement using AutoCAD Civil 3D software.

Remediation & Reclamation Projects, PA

Design and layout for remediation of AML sites to include restoring sites to post-mining topographic conditions with required erosion and sedimentation controls. Design work included earthwork quantity calculations, proposed grading layout, and geologic cross-sections using AutoCAD Civil 3D software.

Coal-Fired Power Plant Coal Stockpile Inventory Projects, PA

Calculate quarterly coal stockpile volume using AutoCAD Civil 3D, and Carlson Civil Suite software by creating 3D topographic models derived from UAV (unmanned aerial vehicle). Volume quantities were calculated by comparing the most recent model to the pile base to determine the amount in tons of coal in current inventory.

Oil and Gas Industry Projects, PA

Design and layout of well drilling pads using AutoCAD Civil 3D software to create grading and balance earthwork volumes to reduce overburden and required fill material. Layout of pipeline alignment sheet sets, including all grading, erosion and sedimentation controls, and details.

Joseph Chiusano

CAD / GIS SERVICES

EDUCATION
A.S. in Applied Science, 2004, ITT Technical Institue

SPECIALIZED TRAINING
- Computer Drafting & Design
- Grading
- Stormwater Management

AREAS OF EXPERTISE
- Civil & Environmental Site Design
- Computer Drafting & Design
- Grading & Earthwork Planning
- Erosion & Sedimentation Controls
- Geotechnical Investigations
- Project Management & Coordination

Mr. Chiusano is a Project Manager for Atlas in the Engineering & Environmental Services Division. Mr. Chiusano has 20 years of experience, specializing in infrastructure planning, sustainable design solutions, and multidisciplinary project coordination across public and private sectors.

PROJECT EXPERIENCE

High Voltage Transmission Line; NY
Assisted in leading the civil and environmental design for a 150-mile high-voltage transmission line project, overseeing route selection, grading plans, access road design, erosion and sediment control measures, and environmental permitting support to ensure regulatory compliance, constructability, and minimal ecological impact across diverse and challenging terrain.

Commercial Buildings; MS, OH, PA, TN, MO, NY, WV
Lead designer for the civil and environmental components of several commercial building projects, including site grading, utility layout, and a comprehensive stormwater management system with detention basins, bio-retention areas, underground stormwater detention systems, and low-impact development features to ensure compliance with local regulations and sustainable site performance.

Cross Country Pipeline; WV, PA, OH
Responsible for the civil and environmental design of a cross-country pipeline spanning West Virginia, Pennsylvania, and Ohio, which involved route alignment optimization, access road and workspace layout, erosion and sediment control planning, stormwater management, and coordination with multiple regulatory agencies to ensure environmental compliance and constructability across varied terrain and sensitive ecosystems.

Well Pads; WV, PA, OH, NY, TX
Serving as the senior designer for multiple well pad locations, managing site layout, grading, access roads, stormwater and erosion control systems, and environmental impact mitigation strategies to support efficient drilling operations while ensuring compliance with state and federal regulations across diverse topographies.

Stormwater Containment System; PA
Working on a project for a railroad company, I designed a stormwater containment system to manage runoff from rail operations, which included sizing and siting a large-capacity stormwater container, integrating it with railroad pits, existing drainage infrastructure, and ensuring compliance with environmental regulations to prevent discharge into nearby waterways and minimize impacts to adjacent land use.

Township Sanitary Sewer System; PA
Lead designer for a comprehensive sanitary sewer system for an entire township, which involved planning and aligning gravity mains and force mains, locating pump stations, coordinating with municipal agencies and utility providers, and ensuring the system met current and future capacity demands while complying with local, state, and federal wastewater regulations.

Townhome Development; PA
Lead Designer of the civil and environmental components of a 50-acre townhome development, including site grading, roadway layout, utility infrastructure, stormwater management systems, and erosion control measures, while coordinating with local agencies and stakeholders to ensure regulatory compliance, community integration, and sustainable long-term performance.

Steven Kreeley, BSCE, MS, PE

HYDRAULIC/STRUCTURAL ENGINEERING DESIGNER

EDUCATION
B.S., Civil Engineering, Drexel University Philadelphia, PA, 2016

M.S., Structural Engineering, Drexel University Philadelphia, PA

REGISTRATIONS
Professional Engineer:
- PA PE093654
- MD 63069

SPECIALIZED TRAINING
Drafting, scheduling, field visitation, quality assurance auditing, AutoCAD, HILTI Profis, RISA, Salmons Technologies (STI), LECWALL, Katapult, MathCAD, tnxTower, Site Tracker, ENERCALC

Mr. Kreeley is an expert at designing and analyzing cellular towers, rooftop mounts, water towers, smokestacks, precast concrete structures and connections, bridges, and retaining walls.

PROJECT EXPERIENCE

Engineer III

Designed and performed calculations of water/wastewater treatment and other structures:

- Ensured internal/external engineering drawing and calculations submittals met project specifications for Baxter Treatment Plant
- Designed and performed calculations for retaining wall structures for Cumru Township Fire Department property
- Confirmed structural adequacy of architectural drawings for reinforced concrete driveway for Cumru Township Fire Department
- Designed and performed calculations for reinforced concrete pads and foundations, retaining wall structures, anchor blocks, piping equipment chambers, piping support frames and columns for Quakertown WWTP
- Saved thousands on a retaining wall design with Quakertown WWTP, prevented costly change order
- Designed and performed calculations for reinforced concrete manhole structures for City of Easton
- Designed and performed calculations for shelter at Northeast Plant
- Created templates in Excel and MathCAD to aid project production.

Performed field site visits, structural investigations and inspections:

- Investigated failing structure and provided shoring solution for Vail Resort
- Examined Baxter Treatment Plant concrete pads to recommend and design crack repairs
- Investigated Cumru Township rowhomes subjected to severe fire damage, submitted draft report in favor of demolition
- Obtained relevant photos and/or measurements to ensure accurate designs and solutions

Engineer II

Designed and analyzed cellular towers, rooftop mounts, and water towers for major cell carriers:

- Utilize RISA, tnxTower Software, and MathCAD to confirm structural compliance
- Confirm structural foundation and connection compliance with ASCE, ANSI/TIA, IBC
- Structural analysis evaluations with Excel templates

Designed structural modifications for existing telecommunications structures:

- Created modification procedures to mitigate structural failure saving expense of new mounts/equipment

Performed field site visits, structural investigations and inspections:

- Mapped out cell tower compound sites with field measurements and pictures
- Investigated rooftop structures to aid in structural analysis
- Coordinate site visits, direct others to obtain pictures, measurements uniformly organized, aiding drafting and analysis
- Inspect tower foundations, coordinate concrete tests ensuring structural adequacy
- Performed concrete tests for slump, air content, obtained cylinder samples

Created Interdepartmental Training Guide for Fiber based field surveys with Katapult software.

Steven Kreeley, BSCE, MS, PE

HYDRAULIC/STRUCTURAL ENGINEERING DESIGNER

Design Engineer

Designed and analyzed precast concrete facades and related connections to buildings for: Bloomsburg University, Lafayette University, New Jersey Transit Authority: Whitehorse and Moorestown, Dulles Metrorail, PSE&G Facilities, Westin Element Hotel, Shell Chemical, Bechtel Facilities, and Morgan State University. Responsibilities included:

- Created engineering design procedure for HILTI Profis software, became company standard
- Performed quality assurance audits on production, drafting, and engineering departments
- Utilized LECWALL software to supplement hand calculations for successful submittal packages
- Performed plant and field remediations, ensuring proper erection onto structures
- Designed lifting brackets for custom panels on 1601 Vine Street eliminating shipping damage
- Designed adjustable transportation frames to accommodate shipping of various sized panels, reducing setup and loading time
- Trained engineering staff on HILTI Profis software
- Directed drafting staff on design of building connections and panel reinforcement

Patrick Dammier

CONSTRUCTION SERVICES

EDUCATION
Associates Degree, Computer Aided Drafting and Design, ITT, 2000

CERTIFICATIONS
40HR HAZWOPER
Portable Nuclear Density/Moisture Use and Training

Mr. Dammier is a senior project manager in Atlas' Environmental Engineering Division. Mr. Dammier currently serves as Project Manager in the Landfill Design Group and provides proposal and budget preparation, project coordination and management, certification report preparation and supervision of field personnel. Mr. Dammier has provided construction quality assurance services for over 1,200 acres of soil and composite base liner and final cover systems in the state of Indiana. Services have also included assistance in permitting, expansions and modifications of new and existing municipal and restricted waste facilities. During his tenure at Atlas, he has provided assistance in several areas of civil and environmental construction engineering projects including subsurface investigations, storm water sampling projects and Abandoned Mined Land (AML) reclamation projects. Mr. Dammier's accomplishments also include soil classification and performing laboratory testing in the Geotechnical Soils Laboratory.

PROJECT EXPERIENCE

Mine Reclamation, Indiana Division of Reclamation

Provided Construction Quality Assurance including certification reporting for soil and geosynthetics liner for approximately 392,040 square feet of coal refuse at an abandoned coal mine site in Terre Haute, Indiana. Services also included assistance in borrow area subsurface investigations.

Landfill Design and Construction Quality Assurance, Duke Energy Indiana, Gibson County, Indiana

Provided Construction Quality Assurance services including assistance with certification reporting for soil and composite base liner and final cover projects for approximately 35,083,224 square feet at Gibson Generating Station – Restricted Waste Type I landfill. Services also include assistance in borrow area subsurface investigations.

Landfill Design and Construction Quality Assurance, Duke Energy Indiana, Cayuga County, Indiana

Provided Construction Quality Assurance services including assistance with certification reporting for composite base liner projects for approximately 5,719,428 square feet at Cayuga Generating Station – Restricted Waste Type I landfill. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Duke Energy Indiana, New Albany, Indiana

Provided Construction Quality Assurance services including assistance with certification reporting for composite base liner projects for approximately 3,354,120 square feet at Gallagher Generating Station – Restricted Waste Type I landfill. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Duke Energy Indiana, Noblesville, Indiana

Provided Construction Quality Assurance services including assistance with certification reporting a final cover project for approximately 696,960 square feet at Noblesville Generating Station. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Duke Energy Indiana, Dresser, Indiana

Provided Construction Quality Assurance services including assistance with certification reporting for approximately 718,740 square feet at Dresser Generating Station. Services also include assistance in borrow area subsurface investigation.

Patrick Dammier

CONSTRUCTION SERVICES

Landfill Design and Construction Quality Assurance, Hoosier Energy Indiana, Sullivan County, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for soil and composite base liner and final cover projects for approximately 1,655,280 square feet at the Merom Generating Station Coal Combustion By-Products Landfill. Services included assistance with test pad construction, monitoring and Boutwell testing on constructed test pad at this landfill site.

Landfill Design and Construction Quality Assurance, Vectren Power Supply, Mount Vernon, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for soil and composite base liner and final cover projects for approximately 43,561 square feet of landfill cell and final cover system construction at the A.B. Brown Generating Station – Restricted Waste Type III landfill. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Waste Management, Buffalo, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for composite base liner and final cover projects for approximately 3,689,532 square feet at Liberty Landfill. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Waste Management, Danville, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for composite base liner and final cover projects for approximately 2,241,162 square feet at Twin Bridges RDF. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, Waste Management, Portland, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for composite base liner projects for approximately 923,472 square feet at Jay County Landfill. Services also include assistance in borrow area subsurface investigation.

Landfill Design and Construction Quality Assurance, New Paris Pike Landfill, Richmond, Indiana
Provided Construction Quality Assurance services including assistance with certification reporting for soil and composite base liner projects for approximately 1,424,412 square feet at the City of Richmond landfill. Services also include assistance in borrow area subsurface investigation.

Geotechnical Lab
Performed soil classification and laboratory soil testing including standard and modified Proctor, moisture content, atterberg limits, and sieve preparation.

JAMES "BO" CRINITI, PE

SENIOR ENGINEER

HIGHLIGHTS OF EXPERIENCE

Mr. Criniti is currently a Senior 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 coordinating 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

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.

US 52 – Maher Slide, Mingo County, WV
This project consisted of the repair of 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.

EDUCATION
West Virginia University, WV, BS, Civil Engineering

PROFESSIONAL EXPERIENCE
17 Years

REGISTRATIONS & LICENSES
- Professional Engineer, WV

SKILLS
- Civil Engineering
- Hydrologic and Hydraulic Analysis and Design
- Erosion and Sediment Control Plans
- Stormwater Management
- Permitting

WV 37 – Twelve Pole Creek Slide, Wayne County, WV
This project consisted of the repair of 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.

WV BRIM Engineering Services, Various locations, WV
As a Senior Engineer, Mr. Criniti conducted surface and subsurface investgations 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

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 for this sewer and storm sewer replacement proejct. Triad also providing surveying, permitting, funding assistance and construction observation services.

Brenntag Mid-South New Sanitary Sewer and Potable Water Connections, Nitro, WV
Triad provided civil design services for the replacement of the aging Brenntag Md-South septic tank system with a connection to the public sewer. In addition, Triad provided civil design services to reroute the Brenntag Mid-South water system from an area on their property that contains toxic waste material. As Senior Engineer, Mr. Crinit worked with a team to prepare plans, specifications, and bid/contract documents, and to provide construction management.

Service Wire Management & Distribution Center Expansion, Culloden, WV
This project consisted of the expansion of the exiting Service Wire Culloden facility. As a Senior Engineer, Mr. Criniti oversaw the Triad team that provided site and storm water design, survey/mapping, and permitting. In addition, Mr. Criniti was responsible for answering contractors' questions during construction, as well as oversaw the Triad field staff providing construction quality control and layout.

Poplar Fork Multifamily Development, Scott Depot, WV
The owner wanted to develop a property into a multifamily development including stormwater, parking, and other site amenities. Mr. Criniti, as a senior engineer, oversaw the Triad team that provided site design, boundary and topographic surveying, permitting assistance, and construction layout. The design included hydrologic calculations for a stormwater detention system.

AEP South Bend (Indiana – Michigan Power), South Bend, IN
As a Senior Engineer, Mr. Criniti provided engineering services for this substation project for AEP. Triad performed civil/site design services including demolition, site layout, grading and drainage design as well as temporary erosion and sediment control. This project also included hydrologic design for a stormwater detention system. Triad provided required documents and submittals for permitting from appropriate agencies.

JOHN HAYNES, PE

GEOTECHNICAL & DRILLING SERVICES MANAGER

HIGHLIGHTS OF EXPERIENCE

Mr. Haynes serves as the Senior Drilling Manager for Triad's drilling operations when 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

Clifftop Strip Complex, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 14 borings and the installation of 3 standpipe piezometers.

Clifftop Drainage Projects, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 2 borings and the installation of 2 standpipe piezometers.

Crosier Road Portals, Greenbrier County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 5 borings and the installation of 5 standpipe piezometers.

Lookout (Moore) Subsidence, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 1 boring and the installation of 1 standpipe piezometer.

Fayette Station Slide & Drainage, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 1 boring and the installation of 1 standpipe piezometer.

Keeney Creek Mines, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 5 borings and the installation of 5 standpipe piezometers.

Technology
BS, Mechanical Engineering
BS Civil Engineering

PROFESSIONAL EXPERIENCE
34 Years

REGISTRATIONS & LICENSES

- Professional Engineer, West Virginia #016856
- Professional Engineer, Maryland, #50585 Professional Engineer, North Carolina, #058393
- Professional Engineer, Kentucky #39910
- Professional Engineer, Ohio #E-89127
- Professional Engineer, Indiana #12300894
- Professional Engineering, Tennessee #130597

SKILLS

- Managing Multiple Drill Crews
- Design of Subsurface Explorations
- Approval of Design Drawings
- Proposals
- Drilling Inspection
- Geotechnical Analysis and reporting
- Geotechnical Engineering and Drill Cost Estimating and Bid Preparation

Nuttallburg South Bench, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included (7) borings and the installation of seven (7) standpipe piezometers.

Royal Coal #5 Loadout, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 2 borings and the installation of 2 standpipe piezometers.

Floyd Creek Highwalls and Drainage, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 3 borings and the installation of 3 standpipe piezometers.

County Route 82 Portals, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 4 borings and the installation of 2 standpipe piezometers.

Buffalo Creek Complex, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration.

Winona East Highwall and Drainage, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration include 22 borings and the installation of 5 standpipe piezometers.

Winona East Highwall and Drainage, Fayette County, WV
As the drilling manager, Mr. Haynes was responsible for overseeing the drilling team for the subsurface exploration. The subsurface exploration included 8 borings and the installation of 8 standpipe piezometers.

U.S. Route 58 Vesta Design Build Project, Patrick County, VA
This project consisted of 367 test borings for a total footage of nearly 12,000 linear feet. Triad utilized 4 drill rigs to complete this project in approximately 4 months. Also included in the scope of work was boring inspection, bore hole logging, infiltration testing, in-place vane sheer testing. Triad utilized the constant head Aardvarck Permeameter for the infiltration testing. Samples were brought to the lab, and an extensive amount of laboratory testing was performed. Mr. Haynes supervised all aspects of the project from start to finish.

Statewide Geotechnical Drilling IDIQ, Various Locations, WV
This project consisted 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 (off shore drilling) for the I-64 Nitro, St. Albans, Bridge and borings for several bridge replacements in various locations in Berkeley and Hampshire Counties, WV.

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. in an attempt to balance borrow and waste. Mr. Haynes then developed a recall boring list in order to continue the project.

TRIAD ENGINEERING, INC.

JEREMY STAWOVY
SENIOR ENGINEER

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, WV
WVDEP AML. Geotechnical Project Manager for the design of three sites, including 15 mine portals, three highwalls totaling approximately 1400 lineal feet, and mine subsidence features. Project design included regrading 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, WV
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.

WVDEP AML S3 Contract, Fayette and Greenbrier Counties, WV
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 the National Park Service, and prepared geotechnical scope of work and contracts.

Frostburg Freeze, Allegany County, MD
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.

B.S., Civil Engineering, West Virginia University

M.S., Civil Engineering (with emphasis on Geotechnical studies), West Virginia University

PROFESSIONAL EXPERIENCE
13 Years Experience

REGISTRATIONS & LICENSES
- WV EIT-9068

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

PUBLICATIONS
"Study On Mine Tailings Classification Effected by Co-Disposal of Drilling Wastes with Geochemical Cations" (Mining, Metallurgy & Exploration Journal, July 5, 2022)

Mill Run Doser, Allegany County, MD
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, Tucker County, WV
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, Monongalia County, WV
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. The 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.

LLOYD KIRK, PS, CFS

SURVEY PRACTICE LEADER

West Institute of Technology, WV
AS, Mining

PROFESSIONAL EXPERIENCE
23 Years

REGISTRATIONS & LICENSES
- Licensed Professional Surveyor-WV #2247 & NC #L-3941
- N.S.P.S. Certified Flood Plain Surveyor-NC #139
- 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 road work 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

Clifftop Strip Complex, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Clifftop Drainage Projects, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Crosier Road Portals, Greenbrier County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Lookout (Moore) Subsidence, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Fayette Station Slide & Drainage, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Keeney Creek Mines, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Nuttallburg South Bench, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Royal Coal #5 Loadout, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Buffalo Creek Complex, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Floyd Creek Highwalls and Drainage, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

County Route 82 Portals, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Winona East Highwall and Drainage, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Winona Complex, Fayette County, WV
As Survey Practice Leader, Lloyd Kirk was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site

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.

TRIAD ENGINEERING, INC.

DOUGLAS A. BELL, P.S., P.L.S.

SURVEY PRACTICE LEADER

Glenville State College, WV
AS, Forestry and Land Surveying Technology

PROFESSIONAL EXPERIENCE

8 Years

REGISTRATIONS & LICENSES

- Licensed Professional Surveyor - WV #2379
- Registered Professional Land Surveyor – PA #SU075564

SKILLS

- Construction Layout
- Boundary Subdivision
- Right of Way Plans
- Photogrammetric Control
- Mine Surveying
- Topographic Location
- GPS/GNSS Surveys

PROFESSIONAL AFFILIATIONS

- WV Society of Professional Surveyors
- PA Society of Professional Land Surveyors
- National Society of Professional Surveyors

HIGHLIGHTS OF EXPERIENCE

Mr. Bell is the Survey Practice Leader for Triad's Morgantown office. 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. Bell is experienced in construction layout, boundary and road work surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of projects, including surface and underground mine surveying for coal mine facilities, construction layout for residential and commercial projects, boundary surveys for residential, commercial, and public entities. 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

PFAS Temporary Monitoring Well Location Surveys – WV National Guard Installations
Performed high-accuracy control and location surveys for temporary groundwater monitoring wells at multiple military facilities. Deliverables included certified coordinates for environmental compliance reporting.

Suncrest Village Building Monitoring – Suncrest Village POA, Monongalia County, WV
Installed and surveyed 24 monitoring targets in each of 13 townhouse buildings, tied to WV State Plane coordinates for baseline movement monitoring.

Consol Energy – Mine Operations Support, Greene/Washington Counties, PA
Provided ongoing surface surveys for mining operations, including location of gas wells, boreholes, shafts, and other infrastructure tied to underground mine mapping. Utilized mine coordinate systems and conducted layout for critical surface-to-subsurface alignment.

Preston County Parks and Recreation, Preston County, WV
Surveyed existing rail bed, collected elevation profiles, and marked property boundaries along the rail-trail corridor. Provided as-built mapping for development and improvement planning.

Residential Subdivision – Tarr Group, Upshur County, WV
Completed ALTA/NSPS Land Title Survey and topographic mapping for subdivision design. Set monuments, and laid out waterlines, electric, and drainage systems.

Dorinzi Lakehouse, Monongalia County, WV
Performed boundary and topographic surveys on lakefront property, including historical boundary research based on 1920s–1930s pool elevations.

Mountain View Dental, Monongalia County, WV
Performed boundary, topographic, and utility surveys for a major addition/remodel. Included detailed mapping of landscaping, parking, and structural features.

Bass Pro Shops Addition, Monongalia County, WV
Conducted boundary and as-built surveys, established control, and researched interstate right-of-way for major addition.

Ultimate Shine Car Wash (Mileground & University Town Center) – Monongalia County, WV
Completed ALTA/NSPS Land Title Surveys and gathered extensive existing conditions data for two commercial sites. This data was in turn used for commercial design.

Town of Reedsville – Town Hall Expansion, Preston County, WV
Provided boundary surveying services and topography for use in the design of an expansion of the existing Town Hall.

Habitat for Humanity – Boundary and Topographic Survey, Marion/Monongalia Counties, WV
Provided boundary, topographic, and utility surveys with construction layout services for three residential sites to support the design of affordable multi-unit housing and to develop site plans.

PennDOT Projects, Somerset/Butler/Allegheny Counties, PA, 01-25-0085
Performed construction layout services

OTHER RECENT PROJECTS

- Chaplin 2 5 Cell Survey Services, Monongalia County, WV (0087)
- Morgantown Rapid Response Stakeout, Monongalia County, WV (0090)
- 6S3 Shaft Surveying, Greene County, PA (0094)
- Walnut St. Streetscape, Monongalia County, WV (0095)
- WV DOH Property Acquisition – Cheat Lake, Monongalia County, WV (0096)
- Chelsea Building Products Acquisition, Westmoreland County, PA (0101)
- Holland Avenue Sidewalk & Sewer Layout, Monongalia County, WV (0117)
- Salt Shed As-Built – Star City, Monongalia County, WV (0138)
- Chick-Fil-A Drive-Thru Improvement Survey, Monongalia County, WV (0144)
- Castle Shannon PRT, Allegheny County, PA (0145)
- Bailey Mine Pond 14, Greene County, PA (0156)
- 2025 Quarterly Survey Services, Barbour County, WV (0158)
- Big Sandy Boundary Survey, Preston County, WV (0164)
- Panel 9 Dewatering & D2-D5 Bleeder Survey, Barbour County, WV (0181)
- Enlow Fork 2S2 Shaft Surveying, Greene County, PA (0183)
- Mon Health Harrison, Harrison County, WV (0185)
- Frostburg University Turf Field Layout, Allegany County, MD (0192)
- First Energy Tower Monitoring Survey, Barbour County, PA (0223)
- Kingsford Beryl Quarterly Volume Surveys, Mineral County, WV (0227)
- Rystan Point ALTA Update, Monongalia County, WV (0236)
- Monroe County Technical Center Upgrades, Monroe County, WV (0241)
- The Learning Experience (Moon), Alleghany County, PA (0245)
- Sawmill Site Layout Services, Upshur County, WV (0249)
- Full Hollow Fill Survey Layout, Taylor County, WV (0282)
- The Crossings ALTA Update, Monongalia County, WV (0299)
- WV Land Trust Boundary Survey, Hardy County, WV (0347)
- South Plant Stormwater Treatment Layout, Monongalia County, WV (0357)

TYLER SPIEWAK

SURVEY SUPERVISOR

HIGHLIGHTS OF EXPERIENCE

Mr. Spiewak is a Survey Crew Chief for the Scott Depot office of Triad. In this capacity, he is responsible for field coordination of construction projects, quality assurance of survey practices in the field, collection and drafting of survey data, project and client coordination, revision of construction plans, and drafting completed field work. He works with all levels of engineering, construction staff and project owners. Mr. Spiewak is experienced in construction layout, boundary; both metes and bounds and PLSS (public land survey system), road work surveying, photogrammetric control and topographic surveying. He has supervised and/or performed survey work on various types of projects to include military construction projects with NATO partner nations, hydrographic impact surveys at iron ore mines, state sponsored large scale solar farms, site surveys and construction layout for hospitals and airports, construction layout for MNDOT highway projects, and site surveys and construction layout for land development projects. Mr. Spiewak has been involved in projects in several states including West Virginia, Ohio, Kentucky, Georgia, Tennessee, California, Minnesota, Wisconsin, Illinois and Indiana.

RELEVANT PROJECT EXPERIENCE

Clifftop Strip Complex, Fayette County, WV
As Survey Supervisor, Tyler Spiewak was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Clifftop Drainage Projects, Fayette County, WV
As Survey Supervisor, Tyler Spiewak was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Croiser Road Portals, Greenbrier County, WV
As Survey Supervisor, Tyler Spiewak was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

Lookout (Moore) Subsidence, Fayette County, WV
As Survey Supervisor, Tyler Spiewak was on the surveying team that conducted field and office surveying operations to collect and compile data to provide base mapping of the proposed project site. The base mapping included location of topographic and planimetric features, including natural and manmade features of the AML site.

EDUCATION

Bowling Green State University, OH
B.S., Science

PROFESSIONAL EXPERIENCE
6 Years

SKILLS

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

TRIAD ENGINEERING, INC.

JOHN B. HOPE

FIELD SERVICES MANAGER

HIGHLIGHTS OF EXPERIENCE

Mr. Hope is currently the Field Services Manager for the Scott Depot office of Triad. In this capacity he oversees the field staff, by handling calls from technicians on technical matters, staffing and scheduling and serving as the branch Radiation Safety Officer. Mr. Hope also keeps all records of inspections and calibrations. He assigns new jobs and lab work and writes Quality Control (QC) plans. Mr. Hope's duties include the completion and/or review and submission of required field reports for clients and owners.

RELEVANT PROJECT EXPERIENCE

Meigs Mine Ponds, Meigs County, OH
As field services manager, Mr. Hope's duties included overseeing construction observation and materials testing of this project which included inspection and lap teting on clap cap to verify testing requirements.

Coalfields Expressway QAM, Wyoming County, WV
This project consisted of the quality assurance management of a portion of WV Rt. 10 from the Mullens to County Rt. 12/1 in Wyoming County, WV. Mr. Hope provided overall project oversight and management for this project.

Marshall University Football Stadium, Huntington, WV
Duties included the Testing and Sampling of site concrete. Testing of utility line backfill for compaction. The testing of structural steel and light foundation connections for proper bolt torque.

Route 10 Overpass Overlay, Chapmanville, West Virginia
Duties included the sampling and testing of the latex modified concrete for the overlay. Including the making of chloride perm samples.

Sixth Street Bridge, Huntington, WV
Duties included Testing and Sampling of all West Virginia Department of Highways (WVDOH) classes of concrete. The monitoring thickness and testing of both fills and backfills for compaction. The sampling and testing of the river water for clarity during construction. Maintaining Quality Control Charts.

Multiple Slip Repairs, Various, WV
These projects consist of the repairs of slips in various locations throughout WV consisting of drilled pile and concrete lagging retaining walls. Mr. Hope provided overall project oversight and management as well as QC testing and inspection on these projects.

Kanawha Boulevard Bike Path, Charleston, WV
This project consisted of the addition of a bike path and new ADA sidewalks and Ramps. Mr. Hope provided overall project oversight and management as well as QC testing and inspection on these projects.

I-64 Widening Cross Lanes to Dunbar, WV

EDUCATION
West Virginia State College, WV

PROFESSIONAL EXPERIENCE
35 Years

REGISTRATIONS & LICENSES

- WVDOH Certified Tech Training Classes: Compaction, Aggregate, Portland Cement and Bituminous Concrete
- Troxler 8 Hour Nuke Safety and Operation
- Troxler Radiation Safety Officer Training
- 40 OSHA Training
- MSHA Impoundment Inspector Training ACI Training and Classes
- USACOE-Contractor QC Training
- WVDOT/DOH Compaction Inspector
- WVDOT/DOH Portland Cement Inspector
- WVDOT/DOH Bituminous Inspector
- ACI-Grade I Field & Lab Tech

This project consisted of the widening of I-64 to accommodate 3 lanes on each side. Mr. Hope provided overall project oversight and management as well as QC testing and inspection on these projects.

I-64 Widening Mud River to 29th Street, Barboursville WV
This project consisted of the widening of I-64 to accommodate 3 lanes on each side. Mr. Hope provided overall project oversight and management as well as QC testing and inspection on these projects.

Shadle Bridge, Pt. Pleasant, WV
This project consisted of the construction of a bridge replacement in Mason County, WV. Mr. Hope provided overall project oversight and management as well as QC testing and inspection on these projects.

Moisture Intrusion Project-WV State Capitol Complex Dome, Charleston, WV
This project consists the replacement of the inside materials of the Dome due to moisture intrusion. Mr. Hope provided overall management and oversight of this high-profile WV project.

Marshall University Pharmacy School and Student Housing Project, Huntington, WV
This project consisted of the new construction of a Pharmacy School and Student Housing for Marshall University. This project was performed under the P3 delivery method. Mr. Hope provided overall quality control project management and hands on testing for this project.

Hawks Nest Hydro Dam Improvements, Fayette County, WV
This project consists of the installation of rock anchors to improve the overall stability of the dam structure. Mr. Hope provided overall project management and hands on QC testing for this project.

Georgia Pacific Plant, Mount Hope, West Virginia
Duties included Testing and Sampling of all concrete. Testing and monitoring lift thickness of tills. Collection of new proctor samples when material changes occurred. Utilization of an onsite lab to cure and break the test cylinders at proper intervals. Reporting of all information.

King's Daughter Medical Center Addition, Ashland, Kentucky
Duties included the Testing and Inspection of auger cast pile foundation instillation. Testing and Sampling of site concrete.

RCB Locks and Dam, Apple Grove, West Virginia
Duties included site concrete Testing and Sampling. The testing of fill placement by sandcone method. Collection and determination of usability of site fill materials. Utilized onsite lab for gradation/sieve analysis.

Endocrine Disruptor Study, Potomac, Ohio, Monongahela and Kanawha Rivers
Duties included the Sampling and Collection of raw river water to be tested by EPA and WV DEP for Endocrine Disruptors. The labeling and shipping of the samples to the testing labs. Photographic locations for the report and document river levels and clarity.

Commerce Park and West Pea Ridge Bridges, Huntington, West Virginia
Duties included the sampling and testing of all classes of WVDOH concrete. Testing and monitoring of lift thicknesses of fills and backfills. The collection of aggregate samples.

Wood County Airport Runway Repairs, Parkersburg, West Virginia
Duties included Testing, Sampling and Inspection of soils, aggregates, and concrete. Reporting results to owner, RPR, and contractor. Verifying materials were to site plans.

HEATHER METZ, LRS

ENVIRONMENTAL SERVICES MANAGER & SENIOR ENVIRONMENTAL SCIENTIST

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 Uniform Environmental Covenant Act/Leaking Underground Storage Tank (UECA/LUST) and West Virginia Voluntary Remediation Programs (VRP). Ms. Metz also provides grant management and environmental support for EPA Brownfield Grantees.

RELEVANT PROJECT EXPERIENCE

Artistic Cleaners, Huntington, WV
As Senior Scientist and LRS, responsible for the assessment and remediation of the former Artistic Cleaners site under the WV VRP. Tasks included characterization, oversight of UST removal, human health risk assessment and remedy evaluation and implementation.

Flint Pigments-Tract A, Huntington, WV
As Senior Scientist and LRS, responsible for the characterization and remediation of the former pigment manufacturing facility under the WV VRP. Additionally, characterized and remediated polychlorinated biphenyls (PCB) under the direction of the Toxic Substances and Control Act (TSCA).

Cabinet Supply, Inc., Huntington, WV
As Senior Scientist and LRS, responsible for performing characterization and remediation activities at the former industrial facility under the WV VRP. Tasks included report preparation, data evaluation and product recovery.

City of Huntington, Huntington, WV
As Project Manager, implemented the City of Huntington Hazardous Brownfields Assessment Grant program (2008). Tasks include completing an inventory of candidate sites, preparing site assessment work plans, acting as liaison between City and USEPA, conducting Phase I ESAs, conducting Phase II ESAs, preparing reports, reporting status to City and USEPA, monitoring budgets, managing field activities, and managing community outreach efforts.

Fayette County Commission, Fayetteville, WV
As Project Manager, implemented the County-Wide Hazardous Brownfields Assessment Grant program. Performed oversight for Phase I ESAs and asbestos inspections at 50 properties located throughout the County. Negotiated right of access agreements, monitored budgets and managed field activities.

EDUCATION

Marshall University, WV
BS, Environmental Science, 2001

PROFESSIONAL EXPERIENCE

24 Years

REGISTRATIONS & LICENSES

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

SKILLS

- Due Diligence
- USEPA SEMS Sites
- Hazard Ranking System (HRS)
- Environmental Assessments
- VRP

Huntington East Practice Field, Huntington, WV
As a Senior Scientist and LRS, responsible for performing characterization and remediation activities at the former rail yard property under the WV VRP. Additionally, performed grant management support for the EPA Cleanup Grant recipient.

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.

McGinnis Investment Corp, Huntington, WV
As Senior Scientist and LRS, responsible for performing characterization and remediation activities at the former industrial facility under the WV VRP. Contaminant characterization and remedial efforts have also included polychlorinated biphenyls (PCB) as ruled under the Toxic Substances Control Act (TSCA).

Rahall Transportation Property, Huntington, WV
As Project Manager and Environmental Scientist, performed various site characterization and remediation tasks utilizing WVDEP Brownfield grant funding. The site was historically operated as a railroad right of way maintenance facility and was the location of a 22,000-gallon coal tar light oil spill. Responsibilities included regulatory file reviews, sampling and analysis plan preparation, multi-media sampling, excavation oversight, and report preparation.

Region 2 Planning and Development Council, Various Locations, WV
As Senior Scientist and Program Manager, implemented the Hazardous Brownfields Coalition Assessment Grant program. Performed oversight for Phase I ESAs and asbestos inspections, QAPP preparation, SAWP preparation, Phase II ESAs remedial planning and VRP services at various Sites located within the project area. In addition, provided ACRES and financial management reporting assistance, monitored budgets and managed field activities.

Wayne County Economic Development Authority, Various Locations, WV
As Senior Scientist and Program Manager, implemented the County-Wide Hazardous Brownfields Assessment Grant program. Performed oversight for Phase I ESAs and asbestos inspections, QAPP preparation, SAWP preparation, Phase II ESAs and remedial planning at various Sites located throughout the County. Assisted with right of entry negotiations, monitored budgets and managed field activities.

West Virginia Brownfields Assistance Center, Huntington, WV
As Program Manager, implemented the WVDEP Statewide Petroleum Brownfields Assessment Grant program. Tasks include acting as liaison between the Brownfields Assistance Center, WVDEP and the USEPA, conducting Phase I ESAs, preparing site assessment work plans, conducting Phase II ESAs, preparing reports, monitoring budgets, and managing field activities.

West Virginia Department of Environmental Protection, Various 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 tanks have been performed at over 50 Superfund sites throughout West Virginia.

SARAH VESELKA

CEO |SENIOR BIOLOGIST

Sarah Veselka has over 20 years of experience conducting aquatic bioassessments and reporting. She has a successful track record of managing large complex projects with rare, threatened, and endangered species concerns for a wide range of clients including energy, transportation, utilities, government agencies, and non-profits. Sarah is an USFWS approved malacologist and PADI Master Diver.

KEY PROJECT EXPERIENCE

Substrate Remediation Project(s) Mussel and Fish Surveys, Kanawha River, Charleston, WV: 2018 – Present

- Project Manager I Senior Biologist I Diver
- Two large-scale river sediment remediation projects
- Safe completion of all field work including diving
- Section 7 Consultation: USACE, USFWS, & WVDNR
- Survey plan development, coordination, and reporting

Threatened and Endangered Coalfields Crayfish Surveys, Kentucky and West Virginia : 2016 – Present

- Project Manager I Senior Biologist
- Guyandotte River and Big Sandy Crayfish surveys
- Clients include: WVDOH, KYTC, and private industry
- Section 7 Consultation including authoring BA's
- Management of multiple field crews

Big River Freshwater Mussel Surveys, Mid-Atlantic, Midwest, Northeast, and Southeast: 2014 - Present

- Project Manager I Senior Biologist I Diver
- Over 50 surveys safely led in large navigable waterways
- ClientsIProjects include: DOT's, petrochemical, barge loading, water withdrawals, diffusers, dredging, etc.
- Low visibility diving with underwater communications
- Management of multiple field crews

Threatened and Endangered Freshwater Mussel Surveys, Consultations, and Relocations: 2014 - Present

- Project Manager I Senior Biologist I Diver
- Effective state and federal agency coordination
- Collection, tagging, relocation, and multi-year monitoring of T&E freshwater mussels
- Pre-, Project-, and Post-Construction Monitoring
- Clients: DOT's, O&G, commercial developers, utilities, government agencies, etc.

Dam Renovation and Removal Projects Freshwater Mussel Services: 2015 - Present

- Project Manager I Senior Biologist I Diver
- Safe diving practices around dam infrastructure
- Effective state and federal agency coordination
- Mussel salvage during drawdowns
- Pre-, Project-, and Post-Construction Monitoring
- Clients: Hydroelectric and USFWS

EDUCATION

M.S. Wildlife & Fisheries Resources, West Virginia University, 2004
B.S. Biology, University of Georgia, 2000

CERTIFICATIONS

- USFWS Approved Malacologist (KY, MD, NY, OH, PA, WV, +14 States)
- T&E Coalfields Crayfish Approved Surveyor (KY, VA, WV)
- PADI Master Diver – Drysuit Specialty
- 40 HR HAZWOPER I PEC Safeland Basic
- SFS Family Level Taxonomist
- CPR I AED I First Aid I Oxygen Administration

YEARS OF EXPERIENCE

Environmental Consulting: 18
University Labs / Research: 5
Non-profit Watershed Group: 5

PROFESSIONAL AFFILIATIONS

- Freshwater Mollusk Conservation Society - Secretary
- West Virginia Women's Energy Network – Secretary
- Association of Mid-Atlantic Aquatic Biologists

SKILLS

Freshwater Mussel Surveys, Relocations, & Monitoring
Large River, Low Visibility Diving
Biological Assessments I Section 7 Consultation
T&E Coalfields Crayfish Surveys
Macroinvertebrate Surveys, Sorting, and ID
Water Withdrawal, Chemistry, and Flow Monitoring
Fish Community Assessments
GIS Mapping and Spatial Analysis
Habitat Assessments

BENJAMIN SMITH

LEAD BAT BIOLOGIST

Ben Smith is a federally permitted Bat Biologist with over 10 years of experience conducting bat surveys for Endangered Species Act compliance. He is adept at mist netting and tracking bats using radio-transmitters as well as acoustic monitoring including manual vetting of echolocation calls for threatened and endangered species. Mr. Smith is also experienced with bird and small and large mammal surveys and is a PADI certified diver.

KEY PROJECT EXPERIENCE

Bat Mist Netting: 2013 – Present

- Bat Biologist - Field Crew Lead
- Site selection, installation, and monitoring of mist-nets and harp traps in agricultural, urban, and mountainous environments
- Removal of captured bats and other by-catch such as birds and flying squirrels
- Biometric measurements
- Attachment of radio-transmitters to threatened and endangered bats
- Tracking of bats with radio-transmitters to colony roosts
- Maintaining and repairing netting equipment
- Land owner coordination
- Reporting

Bat Acoustic Monitoring: 2013 – Present

- Bat Biologist - Field Crew Lead
- Establishment of acoustic monitoring sites
- Species analysis via echolocation calls
- Maintenance of echolocation database
- Vetting threatened and endangered bat echolocation calls to species

Other Bat Services: 2012 - Present

- Bat Biologist - Field Crew Lead
- Surveys of karst topography for potential cave roosts
- Emergence surveys of trees and other structures
- Installation and use of infrared cameras to conduct known hibernacula exit counts
- Biological sample collection including fecal samples and wing punches
- Section 7 Consultations
- Attachment of temperature dataloggers
- Laboratory care
- Coordination with state and federal agencies

Wildlife Services: 2011 - Present

- Biologist
- Large mammal tagging
- Capture and removal of feral ungulates
- Use of radio telemetry to track tagged animals
- Placement of game camera grids for population estimates
- Statistical analyses
- Collection of biometric and biological samples
- Reporting

EDUCATION

M.S. Biology, Missouri State University, 2020
B.S. Biology, Missouri State University, 2013

CERTIFICATIONS

- USFWS Recovery Permit for: Indiana Bat, Gray Bat, and Northern Long-Eared Bat
- Pending USFWS Recovery Permit for: Ozark Big-Eared Bat and Tricolored Bat
- Certified Associate Wildlife Biologist
- PADI Diver
- CPR | AED | First Aid

YEARS OF EXPERIENCE

Environmental Consulting: 6
University Labs / Research: 4
Government: 3

PROFESSIONAL AFFILIATIONS

- The Wildlife Society
- Mid-West Bat Working Group
- Southeast Bat Diversity Network
- American Society of Mammalogists

SKILLS

Mist Netting
Radiotelemetry
Acoustic Monitoring
Emergence Surveys
Manual Vetting for Echolocation Calls of T&E Species
Habitat Assessments
Large and Small Mammal Trapping
Bird Surveys
Section 7 Consultations
Biological Sampling

RYAN SCHWEGMAN

CO-FOUNDER |SENIOR BIOLOGIST

Ryan Schwegman has 18 years of experience in the natural resources field. He is an approved USFWS malacologist and has completed freshwater mussel surveys in 12 states throughout the United States. He consistently and successfully navigates clients in private, state, federal and non-profit organizations through complex multi-agency and rare, threatened, and endangered species issues.

KEY PROJECT EXPERIENCE

Transportation Mussel Surveys: 2009 – Present

- Project Manager I Senior Biologist I Diver
- Projects in PA, OH, WV, MI, NY, IL and KY
- Over 100 different freshwater mussel surveys completed for transportation related projects
- Field Leader for the largest endangered species salvage and reintroduction effort completed to date
- Safe completion of all field work
- Assisted in the development of Programmatic Agreements with USFWS

Hellbender Surveys, Ohio and New York : 2013 – Present

- Diver I Biologist
- Assisted in habitat suitability, mark re-captures and hellbender relocations
- Located and identified over 50 different wild individuals

Energy Industry Mussel Surveys: 2009 - Present

- Project Manager I Senior Biologist I Diver
- Field Leader for multiple projects that included three or more dive crews working the same project
- Over 25 surveys safely led in large navigable waterways
- Exceeded industry safety standards
- Projects include: oil and gas pipelines, remediation, power plant intakes and discharges, and FERC licensing

Watershed Mussel Fauna Status Assessments, Ohio, New York and Pennsylvania: 2015- Present

- Project Manager I Senior Biologist I Diver
- State, Tribal and Federally funded projects
- Included various sampling techniques to meet the management goals of the respective agency
- Provided and presented data to help develop future agency management decisions and classification designations

Threatened and Endangered Surveys, Consultations, and Relocations: 2009- Present

- Project Manager I Senior Biologist I Diver
- Successfully completed and/ or assisted in developing over 15 different Biological Assessments during Section 7 consultations
- Collected, tagged, relocated, and completed multi-year monitoring evets of T&E species in concurrence with Biological Opinions

EDUCATION

B.A. Zoology, Miami University, 2010

CERTIFICATIONS

- USFWS Approved Malacologist (OH, MI, NY, IN, PA, WV, +13 States)
- 40 Hour HAZWOPER
- 10 Hour OSHA
- Dive Emergency Medical Tech
- PADI Open Water Diver
- Wilderness First Responder
- CPR I AED I First Aid I Oxygen Administration

YEARS OF EXPERIENCE

Environmental Consulting: 14
Ohio Dept. Natural Resources: 4

PROFESSIONAL AFFILIATIONS

- Freshwater Mollusk Conservation Society
- Ohio River Valley Ecosystem Mollusk Group
- Ohio Wildlife Management Association
- Three Valley Conservation Trust Board Member

SKILLS

Freshwater Mussel Surveys, Relocations, & Monitoring
Large River, Low Visibility Diving
Biological Assessments I Section 7 Consultation
Hellbender Surveys
Macroinvertebrate Surveys
Water Withdrawal, Chemistry, and Flow Monitoring
Habitat Assessments

Appendix E:

Applicable Certifications

Search: Details

Legal Name:	ATC GROUP SERVICES, LLC
WV Company COA:	**COA Number:** C01371
	COA Status: Active
	COA Issue Date: 02/13/2003
	COA Expiration Date: 12/31/2025
Primary Address of Record:	5750 JOHNSTON STREET SUITE 400 LAFAYETTE, LA 70503
Engineer In Responsible Charge:	DOMINIC NUNZIO MANDARINO
	PE License Number: 026885
	PE License Status: Active
	PE License Expiration: 12/31/2026

This data was retrieved on 8/6/2025.

Search: Details

Name:	BENJAMIN T. STAUD
WV Professional Engineer:	**PE License Number:** 020372
	PE License Status: Active
	PE Issue Date: 08/05/2013
	PE Expiration Date: 12/31/2026
Continuing Education Claim:	**Qualifying Hours from Last Renewal or Reinstatement:** 31.75
	Carryover Hours for Next Renewal: 1.75
	Last Renewal or Reinstatement Date*: 12/27/2024
WV Engineer Intern:	**EI Certification Number:** 7096
	EI Issue Date: 06/25/1997
Primary Address of Record:	270 WILLIAM PITT WAY BUILDING A3 3RD FLOOR PITTSBURGH, PA 15238
Primary Employer of Record:	ATLAS
	* 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.

This data was retrieved on 8/6/2025.

Search: Details

Name:	DOMINIC NUNZIO MANDARINO
WV Professional Engineer:	**PE License Number:** 026885
	PE License Status: Active
	PE Issue Date: 10/07/2024
	PE Expiration Date: 12/31/2026
Continuing Education Claim:	**Qualifying Hours from Last Renewal or Reinstatement:**
	Carryover Hours for Next Renewal:
	Last Renewal or Reinstatement Date*:
WV Engineer Intern:	**EI Certification Number:**
	EI Issue Date:
Primary Address of Record:	181 PINE ROAD PITTSBURGH, PA 15237
Primary Employer of Record:	ATLAS TECHNICAL CONSULTANTS
	* 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.

This data was retrieved on 8/6/2025.

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

May 7, 2025

Kenneth Pasterak
Atlas Technical Consultants, LLC
6825 Reynolds Street
Pittsburgh, PA 15208

Renewal - Licensed Remediation Specialist Certification

Dear Mr. Pasterak:

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,

Casey E. Korbini

Digitally signed by Casey E. Korbini
DN: cn=Casey E. Korbini, o=WVDEP, ou=DLR, email=Casey.E.Korbini@wv.gov, c=US
Date: 2025.05.06 23:17:35 -04'00'

Casey Korbini
Deputy Director

Enclosure: LRS License Renewal Certificate
ec: LRS file: Registration Number 243

Renewal

West Virginia

Department of

Environmental Protection

PASTERAK, KENNETH

Licensed Remediation Specialist

Registration Number: 243

Casey E. Korbini

Digitally signed by Casey E. Korbini
DN: cn=Casey E. Korbini, o=WVDEP, ou=DLR, email=Casey.E.Korbini@wv.gov, c=US
Date: 2025.05.06 23:17:56 -04'00'

Deputy Director, Division of Land Restoration

04/01/2025 - 03/31/2027

Date Issued - Date Expires

Search: Details

Name:	ROBERT PAUL CAMPANA
WV Professional Engineer:	**PE License Number:** 026902
	PE License Status: Active
	PE Issue Date: 09/26/2024
	PE Expiration Date: 12/31/2026
Continuing Education Claim:	**Qualifying Hours from Last Renewal or Reinstatement:** 0.00
	Carryover Hours for Next Renewal: 0.00
	Last Renewal or Reinstatement Date*: 12/16/2024
WV Engineer Intern:	**EI Certification Number:**
	EI Issue Date:
Primary Address of Record:	300 RIVERFRONT ST APT 306 OAKMONT, PA 15139
Primary Employer of Record:	ATLAS TECHNICAL CONSULTANTS
	* 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.

This data was retrieved on 8/6/2025.

WEST VIRGINIA BOARD OF PROFESSIONAL SURVEYORS

Certificate of Authorization

Triad Engineering, Inc.

Scott Depot, WV

CERTIFICATE OF AUTHORIZATION # 25-5438

This certificate is issued by the West Virginia Board of Professional Surveyors in accordance with W.Va. Code §30-13A-20
The person or organization identified on this certificate is licensed to conduct professional surveying and mapping services in the State of West Virginia for the period

January 1, 2025 through December 31, 2025

This certificate is not transferable and must be displayed at the office location for which issued.

In witness whereof, I have put my hand, this 05 day of March 25

2025

Sefton R. Stewart, P.S., Chairman
Lantz G. Rankin, P.S., Member

James T. Rayburn, P.S., Secretary
Gary Facemyer, P.E, P.S., Member

Douglas C. McElwee, Esq. — Public Member

CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

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

TRIAD ENGINEERING, INC.
C00516-00

Engineer in Responsible Charge: BRADLEY A. REYNOLDS - WV PE 014842

has complied with section §30-13-17 of the West Virginia Code governing the issuance of a Certificate of Authorization. The Board hereby notifies you of its certification with issuance of this Certification of Authorization for the period of:

January 1, 2024 - December 31, 2025

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

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

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

Scott E. Thomas Jr.

BOARD PRESIDENT

Search: Details

Name:	JOHN J. HAYNES
WV Professional Engineer:	**PE License Number:** 016856
	PE License Status: Active
	PE Issue Date: 06/16/2006
	PE Expiration Date: 12/31/2026
Continuing Education Claim:	**Qualifying Hours from Last Renewal or Reinstatement:** 37.00
	Carryover Hours for Next Renewal: 7.00
	Last Renewal or Reinstatement Date*: 12/19/2024
WV Engineer Intern:	**EI Certification Number:** 8508
	EI Issue Date: 01/11/2006
Primary Address of Record:	770 SUPPER CLUB ROAD LETART, WV 25253
Primary Employer of Record:	TRIAD ENGINEERING INC

*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.

This data was retrieved on 8/15/2025.

Print Search Again

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: 12/31/2026
Continuing Education Claim:	**Qualifying Hours from Last Renewal or Reinstatement:** 42.00
	Carryover Hours for Next Renewal: 12.00
	Last Renewal or Reinstatement Date*: 12/12/2024
WV Engineer Intern:	**EI Certification Number:** 9007
	EI Issue Date: 07/06/2009
Primary Address of Record:	1545 LOUDEN HEIGHTS ROAD CHARLESTON, WV 25314
Primary Employer of Record:	TRIAD ENGINEERING INC

* 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.

This data was retrieved on 8/15/2025.

WEST VIRGINIA Board of Professional Surveyors

Search this site

SURVEYOR SEARCH RESULTS

Lloyd Allen Kirk
License Number: 2247
Current Status: Active
Scott Depot, WV 25560

WEST VIRGINIA Board of Professional Surveyors

Search this site

SURVEYOR SEARCH RESULTS

Douglas Alan Bell
License Number: 2379
Current Status: Active
Morgantown, WV 26505

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,

Robert Rice
Director

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

Renewal

West Virginia

Department of

Environmental Protection

METZ, HEATHER

Licensed Remediation Specialist

Registration Number: 269

Director, Division of Land Restoration

10/01/2023 - 09/30/2025

Date Issued - Date Expires

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room A-430
Charleston, West Virginia 25305-0430 • (304) 414-6877

Alanna J. Keller, P.E.
Deputy Secretary of Transportation
Deputy Commissioner of Highways

Jimmy Wriston, P. E
Secretary of Transportation
Commissioner of Highways

August 30, 2023

Ms. Sarah Veselka
BioSurvey Group LLC
Post Office Box 61
Oxford, Ohio 45056

Dear Ms. Veselka:

We are pleased to inform you that your firm's application for certification as a Disadvantaged Business Enterprise (DBE) with the West Virginia Department of Transportation has been approved under the provision of 49 CFR Part 26. This certification is for business activities covered under the following North American Industry Classification System (NAICS) code(s):

541620: Environmental Consulting Services
541690: Other Scientific and Technical Consulting Services
561990: All Other Support Services

This certification shall be valid until it is determined that your firm is no longer eligible to participate in the program. As a part of maintaining your certification, you must submit an annual affirmation to this office stating that there have been no changes in circumstances affecting your ability to meet size, disadvantaged status, ownership, or control requirements nor any material change in the information you have submitted. If there is a change in any of these listed items, you must notify this office within 30 days of the change. Both the annual affirmation and timely notifications of change must be in the form of sworn affidavits; these must be signed before a person who is authorized by State law to administer oaths. Alternatively, you may submit an unsworn declaration executed under the penalty of perjury of the laws of the United States.

Should you require additional information, please contact this office at (304) 414-6877.

Sincerely,

Shamieka Johnson, Attorney
Civil Rights Compliance Division

SJ:T

Appendix F:

Required Forms

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI DEP26*01

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

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

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

- ☑ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5
- ☐ Addendum No. 6
- ☐ Addendum No. 7
- ☐ Addendum No. 8
- ☐ Addendum No. 9
- ☐ Addendum No. 10

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

ATC Group Services LLC
_____
Company

_____
Authorized Signature

08/20/2025
_____
Date

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

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

State of West Virginia
Centralized Expression of Interest

Proc Folder:	1717189
Doc Description:	AML - EOI Pre-Qualification for Consultants
Proc Type:	Central Purchase Order

Reason for Modification:
Addendum #1 issued to publish agency responses to vendor submitted questions.

Date Issued	Solicitation Closes	Solicitation No	Version
2025-08-13	2025-08-20 13:30	CEOI 0313 DEP2600000001	2

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code: 000000189555

Vendor Name : ATC Group Services LLC

Address : Dept 2630 PO Box 11407

Street : Dept 2630 PO Box 11407

City : Birmingham

State : Alabama **Country :** United States **Zip :** 35246-2630

Principal Contact : Clayton K. Roderick

Vendor Contact Phone: 304-533-0367 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X  **FEIN#** 46-0399408 **DATE** 08/20/2025

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

ADDITIONAL INFORMATION

The Acquisitions and Contract Administration Section of the Purchasing Division is soliciting vendors to prequalify to provide proposals on Expression(s) of Interest(s) ("EOI") for the West Virginia Department of Environmental Protection, Division of Land Restoration, Office of Abandoned Mine Lands and Reclamation (WVDEP-DLR-AML) from qualified firms to provide architectural/ engineering services pursuant to HB 3429.

The purpose of the project is to solicit pre-qualifications for the purpose of making available a list of pre-qualified Consultants.

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US	ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US

Line	Comm Ln Desc	Qty	Unit Issue
1	EOI Engineering Design Services		

Comm Code	Manufacturer	Specification	Model #
81100000			

Extended Description:
EOI Engineering Design Services

SCHEDULE OF EVENTS

Line	Event	Event Date

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

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

(Printed Name and Title) Clayton K. Roderick, AML Program Manager

(Address) 125 Granville Square, Morgantown, West Virginia 26501

(Phone Number) / (Fax Number) (p) 304-533-0367

(email address) clayton.roderick@oneatlas.com

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

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

ATC Group Services LLC
(Company)

(Signature of Authorized Representative)

Clayton K. Roderick, AML Program Manager 08/11/2025
(Printed Name and Title of Authorized Representative) (Date)

(p) 304-533-0367 (f)
(Phone Number) (Fax Number)

clayton.roderick@oneatlas.com
(Email Address)

Entity Evaluation

There were no violations retrieved by the system

Entity Number:	262240
Entity Name:	ATC Group Services LLC dba Atlas Technical
Date of Request:	8/13/2025 1:43:16 PM
Requestor:	benjamin.campbell

CAUTION: The Applicant/Violator System (AVS) is an informational database. Permit eligibility determinations are made by the regulatory authority with jurisdiction over the permit application not by the AVS. Results which display outstanding violations may not include critical information about settlements or other conditions that affect permit eligibility. Consult the AVS Office at 800-643-9748 for verification of information prior to making decisions on these results.

Violation Type	Violation Number	Violation Entities	Permit Number	Permitted State	Violation Status	Violation Date

Evaluation OFT

Entities: 33

262239 ATC Group Holdings LLC - ()
---247650 Donald W Beck - (Senior Vice President)
---247651 Alan C Agadoni - (Senior Vice President)
---247653 Paul J Grilio - (Treasurer)
---247654 Robert C Toups - (Manager)
---247654 Robert C Toups - (President)
---250245 Stephanie R Jenkins - (Assistant Treasurer)
---254788 David M Paholak - (Senior Vice President)
---254789 Ashley L Foti - (Secretary)
---254790 Alexis E Paniagua - (Assistant Secretary)
---254792 Heidi A Piotrowicz - (Assistant Treasurer)
---255470 Scott L Hanson - (Assistant Secretary)
---255472 Jeanne Homsey - (Assistant Secretary)
---262240 ATC Group Services LLC dba Atlas Technical - (Subsidiary Company)
------247650 Donald W Beck - (Senior Vice President)
------250245 Stephanie R Jenkins - (Assistant Treasurer)
------254790 Alexis E Paniagua - (Assistant Secretary)
------254792 Heidi A Piotrowicz - (Assistant Treasurer)
------255470 Scott L Hanson - (Assistant Secretary)
------255472 Jeanne Homsey - (Assistant Secretary)
------262243 Darren Moore - (Senior Vice President)
------262246 John Mollere - (Corporate Officer)

------262246 John Mollere - (Manager)
------262248 L Todd Anderson - (Assistant Secretary)
------265317 Walter Powell - (Treasurer)
------265322 Vickie Moreland - (Assistant Treasurer)
------267178 Jacqueline Hinman - (Chief Executive Officer)
------267734 Jeanne Dibella - (Chief Financial Officer)
------267735 Britni Aucoin - (Corporate Officer)
------267736 Harshal Desai - (Corporate Officer)
------267737 David Smolen - (Assistant Secretary)
------268614 Sarah Hilty - (Corporate Officer)
------268614 Sarah Hilty - (Secretary)
------268615 Shannon Rowley - (Corporate Officer)
------268616 Lyman Todd Anderson - (Assistant Secretary)
------268617 Michael McMahon - (Vice President)
---262241 Kevin Sommers - (Senior Vice President)
---262242 Chris Phillips - (Senior Vice President)
---262243 Darren Moore - (Senior Vice President)
---262244 Madhu Karri - (Assistant Secretary)
---262245 Jeffrey Koonce - (Assistant Secretary)
---262246 John Mollere - (Assistant Secretary)
---262247 Richard Sullivan - (Assistant Secretary)
---262248 L Todd Anderson - (Assistant Secretary)
---262249 Tanya B Smith - (Assistant Treasurer)

Narrative

OMB # 1029-0119
Expiration Date:
01/31/2028

ABANDONED MINE LANDS (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:	ATC Group Services LLC
Tax ID #:	46-0399408
Address:	5750 Johnston Street, Suite 400
City, State, & Zip:	Lafayette, LA 70503
Phone Number:	(512) 575-3637
Email Address:	jeff.rossi@oneatlas.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, Jeff Rossi , 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.

8/12/2025		Branch Manager
Date	Signature	Title

OMB # 1029-0119
Expiration Date:
01/31/2028

Part D: OFT Information

Contractor's Business Name: ATC Group Services LLC

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:	Ashley Foti
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	10/12/2010
End Date:	4/1/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	General Counsel
Phone Number:	(512)575-3637

Name:	Joe Boyer
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	10/23/2017
End Date:	3/8/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	CEO
Phone Number:	(512)575-3637

Name:	Kevin Hamilton
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	8/22/2016
End Date:	5/2/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	SVP
Phone Number:	(512)575-3637

Name:	Chad Harrison
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/12/2015
End Date:	2/12/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Secretary
Phone Number:	(512)575-3637

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.

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OMB # 1029-0119
Expiration Date:
01/31/2028

Part D: OFT Information

Contractor's Business Name: ATC Group Services LLC

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:	Ken Burns
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	6/1/2021
End Date:	5/31/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Operating Officer
Phone Number:	(512)575-3637

Name:	John Mollere
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2015
End Date:	12/31/2024
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637

Name:	Walter Powell
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2017
End Date:	4/12/2024
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Financial Officer
Phone Number:	(512)575-3637

Name:	Bradford Twombly
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	1/11/2016
End Date:	5/13/2024
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637

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Name:	Chris Phillips
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2015
End Date:	1/6/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Senior Vice President
Phone Number:	(512)575-3637

Name:	Randy Morton
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2015
End Date:	8/26/2022
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Manager
Phone Number:	(512)575-3637

Name:	Paul Grillo
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	7/1/1998
End Date:	11/1/2019
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637

Name:	David Paholak
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2015
End Date:	03/21/2025
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Senior Vice President
Phone Number:	(512)575-3637

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Name:	Donald Beck	Name:	David Smolen
Address:	5050 S. Syracuse, Suite 1150	Address:	Four Embarcadero Center, Suite 3200
City, State, Zip:	Denver, CO 80237	City, State, Zip:	San Francisco, CA 94117
Begin Date:	11/13/2015	Begin Date:	4/19/2023
End Date:		End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC	% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Senior Vice President	Position/Title:	
Phone Number:	(512)575-3637	Phone Number:	(512)575-3637
Name:	Jeanne Dibella	Name:	Scott Hanson
Address:	5050 S. Syracuse, Suite 1150	Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237	City, State, Zip:	Denver, CO 80237
Begin Date:	6/6/2024	Begin Date:	11/13/2015
End Date:		End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC	% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Financial Officer/Treasurer	Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637	Phone Number:	(512)575-3637

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- **Please list an end date for any person who is no longer with your business.**

Name:	Jacqueline Hinman
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	1/8/2024
End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Executive Officer
Phone Number:	(512)575-3637

Name:	Jeanne Homsey
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	11/13/2015
End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637

Name:	Sarah Hilty
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	5/13/2024
End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Legal Officer/Secretary
Phone Number:	(512)575-3637

Name:	Darren Moore
Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237
Begin Date:	10/14/2016
End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Senior Vice President
Phone Number:	(512)575-3637

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Name:	Shannon Rowley	Name:	Lyman Todd Anderson
Address:	5050 S. Syracuse, Suite 1150	Address:	5050 S. Syracuse, Suite 1150
City, State, Zip:	Denver, CO 80237	City, State, Zip:	Denver, CO 80237
Begin Date:	9/9/2024	Begin Date:	11/4/2002
End Date:		End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC	% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC
Position/Title:	Chief Human Resources Officer	Position/Title:	Assistant Secretary
Phone Number:	(512)575-3637	Phone Number:	(512)575-3637
Name:	Michael McMahon	Name:	
Address:	Four Embarcadero Center, Suite 3200	Address:	
City, State, Zip:	Denver, CO 80237	City, State, Zip:	
Begin Date:	4/19/2023	Begin Date:	
End Date:		End Date:	
% Ownership:	ATC Group Holdings LLC owns 100% of ATC Group Services LLC	% Ownership:	
Position/Title:	Vice President	Position/Title:	
Phone Number:	(512)575-3637	Phone Number:	

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