



west virginia

EXPRESSION OF INTEREST
ENGINEERING SERVICES REQUIRED
FOR THE SHABBYROOM HOLLOW COMPLEX PROJECT
RFQ NUMBER DEP15005

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ABANDONED MINE LANDS AND RECLAMATION
CHARLESTON, WEST VIRGINIA

TRIAD ENGINEERING, INC.
ST. ALBANS & MORGANTOWN
WEST VIRGINIA



TRIAD
TRIAD ENGINEERING, Inc.

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2010 APR 14 PM 4:04

WV PURCHASING
DIVISION

April 15, 2010

Purchasing Division
2019 Washington Street, East
Post Office Box 50130
Charleston, West Virginia 25305-0130

Subject: WVDEP Expression of Interest – DEP15005
Shabbyroom Hollow Complex
Professional Engineering Design Services
McDowell County, West Virginia
Triad Proposal No. 04-10-8069

Dear Evaluation Committee:

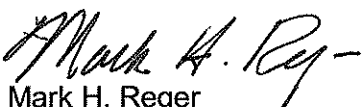
Triad Engineering, Inc., (TRIAD) is pleased to submit the attached "Consultant Qualification Questionnaire (CQQ)" and "Related Project Experience Matrix (RPEM)" in response to the Office of Abandoned Lands & Reclamation's Expression of Interest for professional engineering design services for the referenced project located in McDowell County. We understand "full-service" design services are to be performed and will include civil, structural, geological and hydrological services. The services required will result in the development of engineering drawings, contract specifications and other contract documents required for the letting of construction.

TRIAD has provided engineering and related services required for the successful completion of AML projects since the WVDEP gained primacy of the Program from the Office of Surface Mining. As of this date, TRIAD has completed over 400 AML projects. These projects have involved all problem types encountered on abandoned mine lands projects.

As always, TRIAD will commit the necessary resources to meet the needs of the project. TRIAD continues to maintain and invest in staff and equipment necessary to provide comprehensive services for the successful completion of this project. We firmly believe the in-house resources available provide the State with the most favorable terms from a technical and cost standpoint.

We highly value our working relationship with AML personnel, and will continue to strive for excellence in all we do. We look forward to the next phase of the evaluation.

Sincerely,
Triad Engineering, Inc.


Mark H. Reger
Vice President



L. Lee McCoy, P.E.
Department Manager, Civil Engineering

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RELATED SERVICES

PAST ABANDONED MINE LAND PROJECTS



10-8069



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

Request for Quotation

RFQ NUMBER
DEP15005

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
**CHUCK BOWMAN
304-558-2157**

RFQ COPY
TYPE NAME/ADDRESS HERE

Triad Engineering, Inc.
4980 Teays Valley Road
Scott Depot, WV 25560

ENVIRONMENTAL PROTECTION
DEPARTMENT OF
OFFICE OF AML&R
601 57TH STREET SE
CHARLESTON, WV
25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
03/17/2010				
BID OPENING DATE: 04/15/2010		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
SHABBYROOM HOLLOW COMPLEX DESIGN						
EXPRESSION OF INTEREST						
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE SHABBYROOM HOLLOW COMPLEX PROJECT IN MCDOWELL CO., WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THIS CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

FURE <i>Mark A. Kay</i>	TELEPHONE (304) 755-0721	DATE 04/15/2010
TITLE Vice President	FEIN 550592364	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

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

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

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

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Triad Engineering, Inc.

Authorized Signature: *Mark H. Regan* Date: 04/15/2010

State of West Virginia

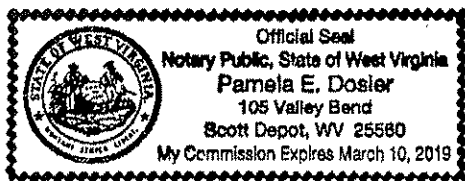
County of Putnam, to-wit:

Taken, subscribed, and sworn to before me this 15th day of April, 2010.

My Commission expires 3/10, 2019.

AFFIX SEAL HERE

NOTARY PUBLIC *Pamela E. Dosier*



**WEST VIRGINIA DEPT. OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE**

PROJECT NAME Shabbyroom Hollow Complex - DEP15005	DATE (DAY, MONTH, YEAR) April 15, 2010	FEIN 550592364
1. FIRM NAME Triad Engineering, Inc.	2. HOME OFFICE BUSINESS ADDRESS 4980 Teays Valley Road Scott Depot, WV 25560	3. FORMER FIRM NAME N/A
4. HOME OFFICE TELEPHONE 304.755.0721	5. ESTABLISHED (YEAR) 1975	6. TYPE OWNERSHIP Individual Corporation Partnership Joint-Venture 6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 4980 Teays Valley Road, Scott Depot, WV 25560 / (304) 755-0721 / John Meeks, P.G., L.R.S. - Branch Manager / 20 219 Hartman Run Road, Morgantown, WV 26505 / (304) 296-2562 / Lydia Work, L.R.S. - Branch Manager / 15		
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Randy L. Moulton, P.E. - President 540.667.9300 John M. Meeks, RPG, LRS - Vice President 304.755.0721		
9. PERSONNEL BY DISCIPLINE		
<u>22</u> ADMINISTRATIVE	<u>3</u> LANDSCAPE ARCHITECTS	<u>34</u> SURVEYORS
<u> </u> ARCHITECTS	<u> </u> MECHANICAL ENGINEERS	<u>18</u> DRILLERS & HELPERS
<u>18</u> BIOLOGIST	<u>1</u> MINING ENGINEERS	<u>10</u> LABORATORY TECHS.
<u>1</u> CADD OPERATORS	<u>18</u> PHOTOGRAMMETRISTS	<u>7</u> LIC. REMEDIATION SPECS
<u>20</u> CHEMICAL ENGINEERS	<u> </u> PLANNERS: URBAN/REGIONAL	
<u>55</u> CIVIL ENGINEERS	<u>1</u> SANITARY ENGINEERS	
<u>7</u> CONSTRUCTION INSPECTORS	<u>15</u> SOILS ENGINEERS	
<u> </u> DESIGNERS	<u> </u> SPECIFICATION WRITERS	<u>242</u> TOTAL PERSONNEL
<u> </u> DRAFTSMEN		
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 7 Scott Depot / 2 Morgantown / 17 Triad		
*RPES other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.		
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		

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

NAME AND ADDRESS: N/A	SPECIALTY: N/A	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE Yes _____ No _____

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

YES Description and Number of Projects: Triad has provided engineering and related services required for the successful completion of over 400 AML projects since the WVDEP gained primacy of the Program from the Office of Surface Mining. These projects have involved all problem types encountered on abandoned mine lands projects.

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: Thousands of projects involving soil analysis have been performed since our inception in 1975. Our geotechnical materials testing labs are certified by the WVDOT/ DOH.

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: Triad has completed hundreds of projects in the areas of hydrology and hydraulics since our inception. Clients include the U.S. Army Corps of Engineers, WVDEP, and WVDNR.

NO

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

YES Description and Number of Projects: Triad typically subcontracts the aerial photography. However, Triad lays out the targets in the field and conducts the survey for establishment of horizontal and vertical control used to develop the final contour mapping. It is estimated that we have completed several hundred of these types of mapping projects since the inception of the firm in 1975.

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: Our firm has completed a total of 10 waterline design projects including: Norton Harding Jimtown, Alkol Phase 1 and 2, 14 Mile, 10 Mile, 9 Mile, 6 Mile, Gatlin Coal Waterline Extension, Mason Phase 1 and 2, and Moorefield. Numerous Phase I and Phase II water feasibility studies have also been conducted.

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.) McCoy, Larry L., Jr., P.E. Civil Department Manager/ Senior Engineer	YEARS OF AML DESIGN EXPERIENCE: 2	YEARS OF AML RELATED DESIGN EXPERIENCE: 11	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 3
Brief Explanation of Responsibilities Mr. McCoy is the responsible engineer for numerous projects including civil site, utilities, roadways, and AML remediation. Mr. McCoy has performed design tasks related to these projects which have included: stream restoration, portal/shaft closure, hydraulic/hydrologic analysis, grading, project specifications, project plans, and other related tasks. Mr. McCoy also served as project manager on these and several related projects			
EDUCATION (Degree, Year, Specialization) BS/ 1996/ Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS ASCE, SAME			
REGISTRATION (Type, Year, State) Registered Professional Engineer/2001/ WV			
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.) Hare, Robert M., P.E. Civil Department Manager/ Senior Engineer	YEARS OF AML DESIGN EXPERIENCE: 2	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 10
Brief Explanation of Responsibilities Mr. Hare has extensive and diversified experience in project management, permitting, marketing, land development/infrastructure development, utility relocation, waterline design, sewer line design, stormwater management design, storm drain design, erosion and sedimentation control, field survey coordination, right of way plan preparation, and highway design. Mr. Hare has over 27 years of diversified civil engineering experience.			
EDUCATION (Degree, Year, Specialization) BS/ 1979/ Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS ASHE			
REGISTRATION (Type, Year, State) Registered Professional Engineer/ 1984/ WV Registered Professional Engineer/ 1984/ PA Registered Professional Engineer/ 1984/ MD Registered Professional Engineer/ 1984/ VA			

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.) Jalali, Parviz J., P.E. Geotechnical Services Manager/ Senior Engineer	YEARS OF AML DESIGN EXPERIENCE: 16 YEARS OF AML RELATED DESIGN EXPERIENCE: 29 YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities Mr. Jalali is responsible for geotechnical engineering analysis and design, preparation of geotechnical engineering reports, and is responsible for oversight of field geotechnical engineers and geologists. He has been the lead geotechnical engineer on projects involving hundreds of boreholes and thousands of feet of drilling. Mr. Jalali operates our in-house computers for slope stability analysis, quantity determinations, and computer aided design drafting (CADD).	
EDUCATION (Degree, Year, Specialization) BSCE/ 1973/ Civil Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS WVACE WVSPE NSPE ASPE	
REGISTRATION (Type, Year, State) Registered Professional Engineer/ 1987/ WV	
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.) Spradling, Steven R., P.E. Senior Engineer	YEARS OF AML DESIGN EXPERIENCE: 17 YEARS OF AML RELATED DESIGN EXPERIENCE: 29 YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities Mr. Spradling has formulated and implemented subsurface investigations on landfills, roadway/bridges, and structures for coal mining facilities. Mr. Spradling's responsibilities include design and preparation of drawings and specifications. Mr. Spradling's strong background in the construction industry provides Triad with a reliable source in preparing bid documents and evaluating construction bids.	
EDUCATION (Degree, Year, Specialization) BSCE/ 1974/ Civil Engineering MSCE/ 1992/ Civil Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS WVSPE ASCE	
REGISTRATION (Type, Year, State) Registered Professional Engineer/ 1993/ WV	

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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Krabill, Karen L., P.E. Geotechnical Services Manager/ Senior Engineer	15	15	0
Brief Explanation of Responsibilities			
Ms. Krabill is responsible for the set-up and supervision of all aspects of geotechnical projects. Her specialties include design of safe and stable fill and excavated slopes. She is proficient in performing stability evaluations, hydraulic and hydrologic analysis and design, and coordination of subsurface explorations. Ms. Krabill's responsibilities on this project will include coordination of geotechnical team and final review of all stability related aspects of the project.			
EDUCATION (Degree, Year, Specialization) BS/ 1984/ Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS ASDA NSPE WVSPE			
REGISTRATION (Type, Year, State) Registered Professional Engineer/ 1984/ WV MSHA Annual Certification, Surface Coal Mine Operations			
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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Clutter, Mark A. Staff Engineer / Senior Designer	4	7	2
Brief Explanation of Responsibilities			
Mr. Clutter provides engineering support, design, and management for numerous disciplines including: civil, environmental, structural, transportation, site development, planning, and surveying. These projects have included retail/commercial site preparation, municipal and industrial landfills, correctional facilities, airports, streets/highways, water/sewer, as well as boundary, topographic, and photogrammetric surveys. WVDEP AML&R duties have included reclamation, impoundment closure, portal closure, water quality evaluation/mitigation, water treatment, stream relocation/restoration, dewatering of deep mine works, erosion and sediment control, grading and drainage, field surveying, drawings and specification preparation, design, design drafting, construction inspection, project management, contract administration, permitting and report preparation.			
EDUCATION (Degree, Year, Specialization) ASET, 1998, Drafting & Design ASCET, 1996, Civil Engineering Technology BSCET, 1998, Civil Engineering Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS ASCE			
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.) Ryan, Dane H. Senior Designer	YEARS OF AML DESIGN EXPERIENCE: 10	YEARS OF AML RELATED DESIGN EXPERIENCE: 17	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 3
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Brief Explanation of Responsibilities

Mr. Ryan works under the supervision of a registered professional engineer in performing all facets of civil design and specification preparation including site development design, parking lot layouts, grading and drainage design and drainage studies. Other duties include subsurface investigation, retaining wall design, and project management of civil, geotechnical, and quality control projects. Mr. Ryan served on the design team for the Norton-Harding-Jimtown PSD Waterline Extension, Chief Logan State Park AMD, and Kilsyth Water Plant Design.

EDUCATION (Degree, Year, Specialization)
Pre-Engineering/ 1984/ Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

CAWV
AIA Associate
NICET

REGISTRATION (Type, Year, State)

Numerous construction quality control testing certifications / registrations

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.) McCarty, Earnest M., PS Surveying Project Manager	YEARS OF AML DESIGN EXPERIENCE: 10	YEARS OF AML RELATED DESIGN EXPERIENCE: 20	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 13
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Brief Explanation of Responsibilities

Mr. McCarty is currently the Project Manager of the Surveying Department for the St. Albans office of Triad. Having managed and completed a wide variety of projects including cadastral boundary surveys, boundary records research, conventional horizontal and vertical control networks, geodetic control surveys, topographic surveys, hydrographic surveys and photogrammetry control surveys.

EDUCATION (Degree, Year, Specialization)
BS/ 1992/ Civil Engineering Technology
AS/ 1991/ Surveying Technology
AS/ 1991/ Drafting and Design

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
Society of American Military Engineers
WVALS

REGISTRATION (Type, Year, State)

Professional Surveyor/ 1995/ West Virginia
Professional Surveyor/ 1998/ Tennessee
Professional Surveyor/ 1999/ Kentucky
Professional Surveyor/ 2001/ Pennsylvania

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.) Reger, Mark H. Drilling Services Manager	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
	YEARS OF AML DESIGN EXPERIENCE: 20	YEARS OF AML RELATED DESIGN EXPERIENCE: 20	

Brief Explanation of Responsibilities
 Mark manages the drilling department in the St. Albans, WV office. He has over 20 years of experience relating to AML and related projects. Provides input to the civil design department regarding subsurface investigations for reclamation design. Provides administrative and management support for all AML projects. Mark has also managed the drilling contract for providing subsurface investigation for the AML in-house design team.

EDUCATION (Degree, Year, Specialization)
 BA / 1974 / Education

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 AIA-WV Associate Member
 SAME
 CAWV

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.) Gardner, William M. Drilling Services Manager/ Geologist	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 12
	YEARS OF AML DESIGN EXPERIENCE: 19	YEARS OF AML RELATED DESIGN EXPERIENCE: 27	

Brief Explanation of Responsibilities
 Mr. Gardner has over 29 years of experience as a geologist and has managed Triad's Morgantown drilling operations since 1982. His career has included drilling at numerous mining sites, many of them AML. His experience has included horizontal drilling and sampling in coal seams; deep mine mineral reserve projects; installation of monitoring wells and piezometers; core borings in sensitive environmental conditions such as streams and wetlands; mine floor evaluations; deep mine grout evaluations; along with geotechnical, environmental, and construction related projects.

EDUCATION (Degree, Year, Specialization)
 BS/ 1975/ Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 NDCA
 REGISTRATION (Type, Year, State)
 Certified Monitoring Well Driller, 2000, WV MSHA
 Annual certification, surface Coal Mine Operations

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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Meeks, John M., P.G., L.R.S. Senior Geologist/Branch Manager Vice President	10	10	6
Mr. Meeks involvement with AML projects primarily has to do with AMD abatement and wetland design. He has provided environmental expertise on all water study feasibility projects. He has supervised field crews and assigned and evaluated analytical analysis. Mr. Meeks served as environmental geologist on the Chief Logan Park AMD project.			
EDUCATION (Degree, Year, Specialization) BS/ 1980/ Geology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS West Virginia Chamber of Commerce Environmental Committee			
REGISTRATION (Type, Year, State) Registered Professional Geologist/ 1992/ KY Registered Professional Geologist/ 1999/ WV			
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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Hicks, Linda J. (Jane) Project Engineer	6	6	0
Brief Explanation of Responsibilities			
Ms. Hicks has provided geotechnical/environmental engineering services with a focus on mining related consequences. Her work has included soil and foundation engineering, subsidence evaluations, environmental testing and assessments, geological analysis, as well as construction testing and inspection.			
EDUCATION (Degree, Year, Specialization) BSEM/ 1981/ Engineer of Mines MA/ 1989/ Mathematics			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) MSHA Annual Certification, Surface Coal Mine Operations, Humboldt Certified for Nuclear Density Gage Operations			

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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Work, Lydia M., LRS Branch Manager/ Environmental Department Manager	0	5	0
Brief Explanation of Responsibilities			
<p>Brief Explanation of Responsibilities Ms. Work is currently Branch Manager of the Morgantown Office of Triad Engineering, Inc. In this capacity Ms. Work is responsible for managing staff and contract administration of projects undertaken by the office. She will also direct environmental work on this project, and use her significant background in water chemistry and environmental assessment to provide senior management and oversight.</p>			
EDUCATION (Degree, Year, Specialization)			
BS (Honors)/ 1989/ Chemistry			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
Management Association West Virginia Manufacturers Association			
REGISTRATION (Type, Year, State) Licensed Remediation Specialist, No. 148, WV OSHA 40 hour Certification MSHA Certified, Surface Coal Mine Operations			
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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Phillips, Carol L. Staff Environmental Scientist	0	3	0
Brief Explanation of Responsibilities			
<p>Brief Explanation of Responsibilities Ms. Phillips is currently a Staff Environmental Scientist at the Morgantown office of Triad. In this capacity she conducts field work and report writing for environmental projects. She has extensive experience in stream & wetland mitigation construction monitoring, CWA permitting, stream & wetland delineation using US Corps of Engineers Wetland Delineation Manual, hydric soil characterization, wetland vegetation, and field indicators for wetland hydrology. She has also conducted threatened and endangered species habitat surveys and will bring this plus her extensive ESA experience to the project environmental work.</p>			
EDUCATION (Degree, Year, Specialization)			
AS/ 2003/ Environmental Technology BA/ on-going/ Regents Degree Natural Stream Channel Design Construction, Canaan Valley Institute, 2007			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
Air & Waste Management Association Society of Wetland Managers Association of State Wetland Managers Virginia Association of Wetland Professionals			
REGISTRATION (Type, Year, State) Certified Responsible Land Disturber, VA Wetland Plant Identification Training MSHA Certified, Surface Coal Mine Operations			

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:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
<p>Chambers, Harold W. (Chip) Survey Department Manager/Project</p> <p>Brief Explanation of Responsibilities Mr. Chambers has performed engineering, surveying and management services for numerous civil design, mine development, commercial, industrial, transportation and mine reclamation projects. Mr. Chambers office duties associated with AML reclamation projects involve mine map review and the planning, coordination, supervision, survey data processing and cost estimation for surveying services on design and mapping projects.</p> <p>EDUCATION (Degree, Year, Specialization) BS/ 1981/ Mining Engineering</p> <p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS WVWALS</p>	<p>16</p> <p>29</p> <p>16</p> <p>REGISTRATION (Type, Year, State) MSHA Annual Certification, Surface Coal Mine Operations</p>
<p>13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)</p>	<p>REGISTRATION (Type, Year, State) MSHA Annual Certification, Surface Coal Mine Operations</p>
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:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
<p>Hilgar, Gary M., PG Senior Environmental Geologist</p> <p>Brief Explanation of Responsibilities Brief Explanation of Responsibilities Mr. Hilgar has over 29 years of geologic and hydrogeologic experience. He has extensive background in the bituminous coal fields of the area with respect to mining and related effects. He has performed a number of revegetation monitoring studies as well as: groundwater assessment, hydrologic consequences of mining, soil and groundwater assessments, and environmental impact evaluations. He also has AML experience primarily doing field problem area descriptions (PADS) and prioritizations in Monongalia/Preston Counties for the WV AML Inventory that was submitted to OSM in the late 1980's. He will provide senior environmental evaluations and field assessments as needed for environmental and hydrogeologic aspects of this project.</p> <p>EDUCATION (Degree, Year, Specialization) MS/ 1979/ Geology BS/ 1976/ Geology</p> <p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS National Groundwater Association; Air & Waste Management Association Pennsylvania Council of Professional Geologists AIPG</p>	<p>2</p> <p>5</p> <p>0</p> <p>REGISTRATION (Type, Year, State) Professional Geologist: WV(6712), TN(1129), KY(111), PA(1453); LRS (WV 121); Licensed Well Driller (WV); MSHA Certified, Surface Coal Mine Operations</p>

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.) Sutphin, Amanda M., P.E. Project Engineer	YEARS OF AML DESIGN EXPERIENCE: 1	YEARS OF AML RELATED DESIGN EXPERIENCE: 3	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 3
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Brief Explanation of Responsibilities
 Ms. Sutphin assists the Project Manager on wastewater and potable water projects, as well as general civil engineering projects. In this capacity, Ms. Sutphin facilitates planning, design and construction of civil and sanitary engineering projects in coordination with the client's expectations. Her duties have included design calculations and infrastructure modeling, estimating, pipeline design and permitting activities.

EDUCATION (Degree, Year, Specialization)
 BS / 2004 / Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 REGISTRATION (Type, Year, State)
 Registered Professional Engineer / 2009 / WV

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.) Talkington, Ronald A. Survey Supervisor	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 26	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
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Brief Explanation of Responsibilities
 Mr. Talkington's field responsibilities associated with abandoned mine lands and reclamation mapping and design projects include construction and property surveys. He has experience in a wide range of survey-related project/client applications, including construction layout, pay item quantity calculation / verification, record research, property surveys and preparation of property plats and legal descriptions.

EDUCATION (Degree, Year, Specialization)
 Various Surveying Courses

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 N/A
 REGISTRATION (Type, Year, State)
 Professional Surveyor / ??? / West Virginia
 MSHA Certified, Surface Coal Mine Operations

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
Mullens Portals Project Wyoming County, WV	WVDEP - AML&R 601 57 th Street Charleston, WV 25304	Engineering Design	N/A	0% (Awaiting Contract Approval from WV Purchasing)
Elk Creek Portals Mingo County, WV	WVDEP - AML&R 601 57 th Street Charleston, WV 25304	Engineering Design & Mapping - Deep Mine Reclamation, Portal Closure, Project Specifications, Water Quality/Treatment, Construction Monitoring	N/A	90%

Rumble (Stevens) Refuse & Portals Boone County, WV	WVDEP - AML&R 601 57th Street Charleston, WV 25304	Engineering Design - Surface/Deep Mine Reclamation, Portal Closures, Project Specifications, Geotechnical Evaluations, Construction Monitoring	N/A	90%
Belington Portals & Drainage Logan County, WV	WVDEP - AML&R 601 57th Street Charleston, WV 25304	Engineering Design - Surface/Deep Mine Reclamation, Portal Closure, Project Specifications, Water Quality/Treatment, Geotechnical Evaluations, Construction Monitoring	N/A	50%
Mine Subsidence Investigations, Engineering Throughout WV	WV Board of Risk & Insurance Management 4501 MacCorkle Avenue South Charleston, WV 25309	Mine Subsidence Investigations, Engineering Consulting Services	N/A	Ongoing Contract
Asbestos Inspections, Throughout WV	WVDOE / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	Asbestos Inspections	N/A	10%
WVDOE / DOH Testing & Inspection, Throughout WV	WVDOE / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	Testing and inspection services for WVDOE/DOH projects	N/A	Ongoing Contract
WVDOE / DOH Geotechnical & Drilling Services, Throughout WV	WVDOE / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	Geotechnical engineering and drilling services for WVDOE/DOH projects	N/A	Ongoing Contract
WVDOE / DOH Environmental & Drilling Services, Throughout WV	WVDOE / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	Environmental consulting services and/or related drilling services for WVDOE/DOH projects	N/A	Ongoing Contract
Indefinite Delivery / Indefinite Quantity Contract - Surveying & Mapping, Various Locations	US Army Corps of Engineers Huntington District 502 Eighth Street Huntington, WV 25701	On-call surveying and mapping services for USACE - Huntington District projects	N/A	Ongoing Contract

Probable Hydrologic Consequences of Mining, Various Sites in WV and PA.	Various Mining Clients in WV and PA	Determine the potential impacts of mining-related activities on the hydrologic balance. Evaluate hydrologic and geochemical data; determination of potential for adverse hydrologic consequences; and recommendations for avoidance of adverse impacts.	N/A	Ongoing
America Church Bridge Replacement, Mingo County, WV	WVDOF / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	Highway / Bridge Design	N/A	10%
FAA Improvement Projects (Various), Charleston, WV	Central WV Regional Airport Authority 100 Airport Road Charleston, WV 25311	Civil Engineering / Surveying	\$3-5M	80%
New Haven Water / Sewer Line Extension, New Haven, WV	Town of New Haven PO Box 217 New Haven, WV 25265	Water / Sewer Line Extension Design	\$1-3M	60%
Roaring River Development, Fayette County, WV	Land Resources Co. 2000 River Edge Pkwy. Atlanta, GA 30328	Civil Engineering, Site Design, Geotechnical Engineering, Drilling	N/A	20%
Mammoth Coal Handling Facility, Kanawha County, WV	Mammoth Coal Company PO Box 150 Cannelton, WV 25036	Geotechnical Engineering, Drilling, QA/QC, Laboratory Testing Services	N/A	70%
Justice Mine Exploration, Boone County, WV	Independence Coal HC78, Box 1800 Madison, WV 25130	Drilling & Geological services	N/A	90%

Marion County Landfill Marion County, WV	WVDEP / DLR / LCAP 601 57 th Street, SE Charleston, WV 25304	Landfill Closure Design - Site Characterization study, leachate management, closure cap design and QA/QC. Environmental / Geological services, Drilling, Surveying & Mapping, Geotechnical & Civil Engineering & Design, QA/QC, Laboratory Testing	N/A	30%
Morgan County Landfill, Morgan County, WV	WVDEP / DLR / LCAP 601 57 th Street, SE Charleston, WV 25304	Landfill Closure Design - Site Characterization study, leachate management, closure cap design and QA/QC. Environmental / Geological services, Drilling, Surveying & Mapping, Geotechnical & Civil Engineering & Design, QA/QC, Laboratory Testing	N/A	30%
ALCON Site Sampling Huntington, WV	Alcon Manufacturing 6065 Kyle Lane Huntington, WV 25702	NPDES Environmental Sampling Services	N/A	Ongoing Contract
Heartland Facility Additions Kingwood, Keyser & Rainelle, WV	Healthcare & Retirement Corporation of America, Inc. 7361 Calhoun Place, Suite 300 Rockville, MD 20855	Civil Engineering Site Design, Geotechnical / Subsurface Drilling & Exploration, Environmental assessment, Surveying & Mapping, QA/QC/Testing for additions to healthcare facilities	N/A	95%
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
502 Junction Substation, Mt. Morris, PA & PREXY Substation, Cannonsburg, PA	Preparation of an ALTA/ACSM Land Title Survey for Kenny Construction Co.	Allegheny Energy Service Co. 800 Cabin Hill Dr., Greensburg, PA 15601	2011	N/A	On-going project
Longview Power Plant Monongalia County, WV	Geotechnical / Subsurface Investigations, Drilling & Sampling, Surveying & Mapping, QA/QC, Laboratory Testing for Siemens Power Generation and Aker Construction	GenPower Holdings, L.P. 1040 Great Plain Ave., Needham, MA 02492	2010	\$1,820,000,000	Ongoing; \$750,000+
Raleigh Street Extension Berkeley County, WV	Geotechnical Engineering, Drilling & Sampling, Surveying & Mapping Services for PB Americas, Inc.	WVDOT / DOH 1900 Kanawha Blvd., East Charleston, WV 25305	2009 - 2010	N/A	Ongoing project
Nuttallburg Mine Complex, New River Gorge, WV	Geotechnical Engineering, Drilling, Lab Testing, Surveying & Construction Management	National Park Service PO Box 246 Glen Jean, WV 25846	2010	N/A	Ongoing Project
Sawmill Village Snowshoe, WV	Drilling & Sampling, Geological Services	Snowshoe Mountain Resort 10 Snowshoe Drive Snowshoe, WV 26209	2009	N/A	\$12,000

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)
Tibbs Run (Perine) Landslide Remediation Project (Drilling, remedial design package, relocation of utilities, erosion control, construction documentation, revegetation)	WVDEP - AML&R 105 South Railroad St. Philippi, WV 26416	N/A	2008	Yes
Fairmont (Smith) Subsidence (Mining assessment, site reconnaissance, field & subsurface investigations, drilling, field surveying & mapping, remedial design package, construction documentation, pre/post construction meetings, construction monitoring)	WVDEP - AML&R 105 South Railroad St. Philippi, WV 26416 WV Board of Risk & Insurance Management 4501 MacCorkle Avenue South Charleston, WV 25309	N/A	2009	Yes
Jessop Portals Jessop, WV	Friends of the Cheat 109 South Price Street Kingwood, WV 26537	N/A	2007	Yes
Federal No. 2 Mine Refuse Area Refuse Sampling & Vegetation Analysis Bula, WV	Peabody Energy Miracle Run Road Bula, WV	N/A	2008	Yes
Grafton Coal Company Mt. Storm, WV	NedPower II, LLC Chantilly, VA 20151	N/A	2008	Yes
HIGHLANDS AT BLACKWATER LAND DEVELOPMENT PROJECT TUCKER COUNTY, WV	BLACKWATER INVESTMENT GROUP 2615 WINDRIDGE DRIVE DOYLESTOWN, PA 18902	N/A	2007	Yes
Jimtown Tipple Lumberport, WV Geotechnical Evaluation	WVDEP AML & R 105 S. Railroad St. Suite 201 Philippi, WV	N/A	2004	Yes

Vens Run Landslide #2 Jane Lew, WV Geotech/Drilling/Surveying	WVDEP AML & R 105 S. Railroad St. Suite 201 Philippi, WV	N/A	2004	Yes
Mettiki Coal, Test Drilling for Monitoring Well Development over a Proposed Deep Mine, Garrett County, MD	Mettiki Coal Company 293 Table Rock Road Oakland, MD 21550	N/A	2004	Yes
Coastal Coal, Environmental Assessment of Brooks Run Mining Properties, Braxton County, WV	Coastal Coal Company 25 Little Birch Road Sutton, WV 26601	N/A	2003	Yes
Mettiki Coal, Rock Coring & Piezometer Installation Over Longwall Mine in Grant Co, WV	Mettiki Coal Company 293 Table Rock Road Oakland, MD 21550	N/A	2005	Yes
Fairmont General Hospital Wellness Center Marion County, WV Geotech./Mining Assessment	Fairmont General Hospital Locust Avenue Fairmont, WV	N/A	2006	Yes
WVU Alumni Center Monongalia County, WV Geotechnical Evaluation	West Virginia Alumni Assoc. Erickson Alumni Center Morgantown, WV	N/A	2004	Yes
Rosemont Highway & Portals Barbour County, WV Design Regrading & Drainage	WVDEP AML & R 105 S. Railroad Street Suite 201 Philippi, WV	N/A	2002	Yes
Duffy St./Van Rufus Drive Subsidence Project Shinnston, WV Reclamation Design	WVDEP AML & R 105 S. Railroad Street Suite 201 Philippi, WV	N/A	2003	Yes
Suncrest Towne Centre Monongalia County, WV Geotechnical Eval./QA/QC	705 Development Group Suncrest Village Morgantown, WV	N/A	2004	On-Going

<p>Westwood & Cass Elementary Schools, Morgantown High, Clay Batelle High, Mason- Dixon Elementary Monongalia County, WV Geotechnical/Surveying</p>	<p>Monongalia County Board of Education 13 S. High Street Morgantown, WV</p>	<p>N/A</p>	<p>2004</p>	<p>Yes</p>
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18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Lincoln Hall Dormitory, WVU Evansdale Campus Civil, ESA, testing	West Virginia University, Planning Design & Construction Morgantown, WV 26506	Project cost \$14,500,000	2006	Yes	American Campus Communities, 805 Las Cimas Parkway Ste 400 Austin TX 78746
West Virginia Univ. Admin Bldg & Parking Bldg, Morgantown WV; geotech/drilling/foundation design	West Virginia University, Planning Design & Construction Morgantown, WV 26506	100,000	2004	Yes	March Westin Co., 360 Frontier St., Morgantown WV 26505
Waterfront Hotel & Conf Center, Morgantown WV Geotech/drilling/testing	Platinum Properties, 990 Elmer Prince Dr Morgantown, WV 26505	Project cost \$32,000,000	2004	Yes	March Westin Co., 360 Frontier St., Morgantown WV 26505
University Towne Centre, Retail Shopping Complex, Granville WV; testing, surveying, geotech, drilling	Ideal Co. (Cracker Barrel) 8313 N. Kimmel Rd, Clayton OH 45315; Complete Const. (Olive Garden), 11700 Commonwealth, Louisville KY 40299	Unknown	2007	Various retail stores built; development on-going	CONSOL Energy/CNX Land Resources, 4000 Brownesville Rd., South Park PA 15129
Monongalia General Hospital Addition Surveying Services	Monongalia Health Systems, Inc., 1200 J.D. Anderson Drive, Morgantown, WV 26505	Project Cost: \$92,000,000	2008	Yes	Turner Construction Co. Two PNC Place 620 Liberty Avenue, 27 th Floor Pittsburgh, PA 15222
Engineering Sciences Building, East Wing Addition Surveying Services	West Virginia University, One Waterfront Place, Morgantown, WV 26506	N/A	2008	Yes	TEDCO Construction Co. TEDCO Place Carnegie, PA 15106
Mon-Fayette Expressway Surveying, QC / Testing Services	WV Dept. of Transportation Building 5, 1900 Kanawha Blvd., East Charleston, WV 25305	N/A	Ongoing	Yes - ongoing	Mosites Construction Co. 4839 Campbells Run Road Pittsburgh, PA 15205

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

Triad Engineering, Incorporated (TRIAD) is a full service engineering firm specializing in the areas of geotechnical, civil and mining engineering and design, environmental assessment, surveying and mapping, construction monitoring, subsurface exploration, and laboratory testing, among other earth science disciplines. Our current work force includes civil, geotechnical and mining engineers, environmental scientists, geologists, hydrologists, chemists, surveyors, trained Computer Aided Design Drafting (CADD) draftsmen, field and laboratory technicians, drillers and support personnel.

TRIAD was founded in Morgantown, West Virginia (WV) in 1975 by three principals who molded the firm based on their belief that if the highest standards were maintained throughout all aspects of the company, they would earn their clients' respect, therefore ensuring the firm's continued growth. Today, TRIAD has a staff of over 200 full-time employees and six office locations in WV, Pennsylvania, Maryland and Virginia. By providing an array of competent services, using modern equipment, and maintaining a well-trained professional staff, TRIAD has maintained the founders' philosophies and proven that customer satisfaction results in good relationships and repeat business.

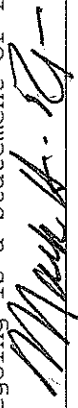
Furthermore, TRIAD is an employee-owned company with an active Board of Directors. Current Officers and Board Members are:

- Chief Executive Officer (CEO) – Randy Moulton, PE
- Senior Vice President – John Meeks, PG, LRS
- Chief Financial Officer (CFO) – Tina McPhail
- William Gardner
- Dan Hamric, PE
- Robert Holstead, PE
- Parviz Jalali, PE
- John Kent, PE
- David Moore
- Brad Reynolds, PE

TRIAD has successfully performed thousands of projects utilizing its professional expertise. TRIAD employees pride themselves on their ability to provide the firm's clients with top-quality work that is on schedule and within budget. Our company is small enough to be responsive to the needs of our customers and large enough to remain at the forefront of scientific solutions.

We are extremely proud of our performance under past contracts, including those we have held with the WVDEP. As of this date, more than 400 AML&R projects have been undertaken by TRIAD. The vast majority of these projects have been successfully completed on time and within the proposed cost estimate. As always, TRIAD will commit the necessary resources to meet the needs of this project.

20. The foregoing is a statement of facts.

Signature: 

Title: Vice President

Date: 15 April 2010

Printed Name: Mark H. Reger

I. INTRODUCTION

TRIAD ENGINEERING, INC., (TRIAD) proposes to perform surveying, geotechnical and other engineering services in order to develop engineering drawings, contract specifications and other contract documents as may be required for the letting of construction for the Shabbyroom Hollow Complex Project. Factors that make TRIAD a strong candidate for consideration include:

- Past experience & complete familiarity with AML&R projects
- In-house capabilities
- Experienced professional and support personnel
- Totally employee owned and operated West Virginia firm
- Strong geotechnical background
- Outstanding laboratory facilities
- Expeditious & economical mobilization of drilling rigs, equipment and personnel
- Experience in major design projects

TRIAD has completed over 400 projects for the DEP under various contracts. Each project has involved various areas of expertise and problem types. In addition to DEP related projects, TRIAD has successfully completed major design projects for other government agencies, large coal mining concerns, chemical manufacturers, developers, and various other clients. TRIAD'S direct responsibilities in these projects have included, but were not limited to:

- Permit Applications
- Surveying and Mapping
- Geotechnical Investigations and Analyses
- Hydrology and Hydraulics
- Design Development and Drawings
- Construction Specifications
- Construction Bid Packages
- Construction Observation and Monitoring
- Construction Management

II. GENERAL EXPERIENCE AND CAPABILITIES

General Information

TRIAD is an engineering firm providing professional services in the areas of civil, environmental, mining, geotechnical and chemical engineering; site assessment; planning and landscape architecture; geology and hydrogeology; surveying and mapping; construction inspection, and materials testing; and, related earth-science disciplines. Our firm has provided services on many thousands of projects of varying size and complexity since beginning operations in 1975. Clients include mining and industrial companies, governmental agencies, contractors, architects, engineers, developers, owners and commercial organizations.

TRIAD was founded in 1975 in Morgantown, West Virginia by three civil engineers from West Virginia University. A second office was opened in Charleston, West Virginia in 1979 and later relocated to our present St. Albans, West Virginia location. TRIAD expanded into the northern Virginia area beginning in 1989 with offices in Winchester and Harrisonburg, Virginia, and began operations in Pennsylvania in 1990 with a full-service office in Greensburg. Most recently, TRIAD has opened offices in Hagerstown, Maryland and Purcellville, Virginia.

Facilities and equipment available to support our staff have grown substantially during the past 28 years. Each of our offices contains computer facilities that are utilized for hydrogeologic evaluations, risk assessment, stability analyses, survey data reduction, mapping and site design. Our computer based drafting and reproduction facilities are used to develop detailed site plans (monochrome or color), construction details, and other graphic documentation as required for our projects. Our fleet of drilling rigs and support vehicles are based at our West Virginia and Virginia offices and are maintained in-house to meet the needs of our engineering and site assessment projects. Well equipped, modern state-of-the-art materials testing laboratories are also maintained at our offices to support our engineering and construction related projects. Our offices also utilize both standard 35-mm photography and digital cameras to photo-document our projects.

TRIAD currently includes a staff of more than 250 personnel located in seven offices. Our personnel include chemical, civil, environmental, geotechnical and mining engineers, as well as geologists and hydrogeologists, biologists, chemists, environmental scientists, planners, landscape architects, natural resource specialists, regulatory compliance specialists, permitting engineers, risk assessors and health and safety specialists. Our technical support and administrative staff includes designers, draftsmen, surveyors, technicians, drillers, construction inspectors and clerical personnel. Most of our professional and technical staff have been with the company for many years. We pride ourselves on a very low turnover rate, which adds to continuity and enhances the level of productivity and experience afforded by TRIAD.

Surveying and Mapping

TRIAD has completed numerous mapping projects since our inception in 1975. These projects have included performing ground control for aerial mapping, field mapping of specific sites and/or obscured areas, and field mapping of in-stream topography. TRIAD has performed topographic surveying and mapping and construction layout for large retail shopping outlets, as well as construction layout for major bridge/roadway projects under construction for the West Virginia Department of Transportation. TRIAD utilizes state of the art tools and equipment including Global Positioning system base station and portable GPS HF radio receivers, as well as total station theodolites with electronic data collectors. Maps and plats are developed in either AutoCADD or Microstation format.

TRIAD maintains quality control by adherence to our standard Operating Procedures Manual for Surveying. This document is continuously updated to stay abreast of new survey innovations and accuracy standards. All topographic map development is completed to the standards set forth by the National Map Accuracy Standards or other appropriate quality standards. MSHA and OSHA Hazwoper trained survey crews are available for hazardous work environments.

TRIAD currently can field up to 15 experienced 2 and 3 man survey parties. Personnel making up these parties consist of licensed land surveyors, experienced instrument persons and rodmen. As can be seen on Block 14 of the WVDEP/AML Consultant

Confidential Qualification Questionnaire (CCQQ), TRIAD possesses the most modern equipment available to perform surveying services to support the engineering design required for this project.

Subsurface Investigation

TRIAD currently maintains fifteen rotary drill rigs outfitted for geotechnical and environmental investigation work. All rigs and support trucks are outfitted for services which may be required on any project. Drilling equipment includes samplers, casing, drill rods, coring bits, piping, pumps and various drilling tools. Most of our rigs are mounted on ATV, tracked and 4WD carriers. Skid mounted rigs are also available to permit gaining access to difficult locations without the need for dozer assistance. Air purifying and supplied air respirators are maintained in-house for drilling programs involving burning refuse where concentrated levels of carbon monoxide may be encountered. Our drill crews, field geologists and support personnel have received OSHA and MSHA safety training for work on hazardous sites, and are certified monitoring well drillers. TRIAD employs a full time corporate safety officer responsible for ensuring the safety of our employees. TRIAD has performed drilling activities on an AML&R project where levels of CO were in excess of 1900 parts per million. Our drilling personnel are experienced in all phases of exploration work which may be required on this project.

Typical types of project for which we have provided drilling services include:

- Highways, bridges and haulroads
- Railways and sidings
- Refuse piles
- Burning refuse investigations
- Dams and impoundments
- Valley fills
- Landslides
- Subsidence investigations
- Mine relatedness investigations
- Coal preparation plants
- Commercial structures
- Residential structures

- Pavement design and evaluations
- Instrumentation installation
- Groundwater monitoring wells & piezometers
- Leaking underground storage tanks
- Landfills
- Hazardous waste investigations
- Special sampling and testing

Laboratory Services

Geotechnical testing and analysis has been a major discipline of TRIAD since our inception. In addition, we have facilities and equipment to perform various chemical and analytical testing. Fully equipped geotechnical testing laboratories are maintained in both our Morgantown and St. Albans offices. An outline of our in-house laboratory and field testing capabilities is as follows:

Geotechnical and Materials Testing

- Moisture content determinations
- Grain size analysis
- Plastic limit determinations
- Liquid limit determinations
- Shrinkage limit
- Slake durability testing
- Shear strength determinations
- Consolidation characteristics
- Permeability testing
- Compaction testing
- Soundness testing
- Specific gravity determinations
- CBR determinations
- Unit weight determinations

Chemical and Analytical Testing

Soil Analysis

- ph (field)
- ph (lab)

Water Analysis

- Temperature
- ph
- Specific Conductance
- Flow
- Iron Content

Design Engineering and Contract Document Preparation

TRIAD has extensive experience in design engineering and preparation of construction contract drawing on projects for the WVDEP/AML&R, OSMRE as well as similar projects for private concerns.

III. QUALIFICATIONS OF PERSONNEL

TRIAD now maintains a staff of over 250. The professional staff includes over 60 individuals with college degrees in the scientific and technical area of civil/geotechnical engineering, mining engineering, environmental engineering, geology, hydrogeology, and soil science/agronomy. Many of the professional staff have advanced degrees and are registered professional engineers, geologists or surveyors. The technical support and administrative staff includes engineering technicians, draftsman, surveyors, drillers, construction inspectors and clerical personnel. Most of our professional and technical staff have been with the company for many years. We pride ourselves in a very low turnover rate which adds to continuity and enhances the level of productivity and experience afforded by our company.

Since the company was founded in 1975, our personnel have successfully completed increasingly complex and difficult projects. Services include geotechnical engineering and general civil engineering design projects related to abandoned mine lands, mining and environmental engineering.

IV. CORPORATE SPECIALIZED EXPERIENCE

TRIAD has provided a wide range of services on coal related projects since the firm began operations more than thirty years ago. With this extensive experience in geotechnical, design engineering, surveying and mapping, and contract document preparation, we are expertly qualified to provide these services for the abatement of problems arising from abandoned mine lands. We maintain in-house expertise and capabilities for all phases of the abandoned mine lands program which require services in surveying and mapping, subsurface investigation, drilling, testing and geotechnical engineering, design engineering, construction drawings and specifications, contract document preparation and other related technical and administrative duties associated with the successful completion of a design/construction project.

V. MANAGEMENT PLAN, LOCATION OF FACILITIES & WORK APPROACH

MANAGEMENT PLAN

Resource Allocation & Location of Facilities: As indicated in other sections of this response, TRIAD has the staff, equipment and other resources to complete most AML&R projects totally in-house. The location of our offices and laboratories in St. Albans and Morgantown gives us ready access to both the northern and southern coalfields of West Virginia. TRIAD's staff of more than 250 individuals, our support equipment and facilities have been assembled to provide geotechnical, design, and other engineering related services to our clients. Our professional staff has extensive experience on AML&R, or similar design projects, and is well qualified to perform the work. If awarded this project, we are committed to allocating the personnel and resources required to complete the work in a timely, competent, and cost effective manner.

Management and Project Team Organization:

TRIAD will assign a project manager who will be responsible for the overall management of the project. The project manager will schedule a site visit with the AML&R Project Manager to familiarize himself with the work requirements and prepare a work plan for review. Our project manager will meet with AML&R personnel, as required, to develop a complete understanding of the work directive and to answer any questions concerning

the proposed work approach. The project manager will review the project requirements and assign team members and allocate resources needed for timely completion of the project.

Upon receipt of authorization to proceed with a project, the project manager will be responsible for daily execution and coordination of all phases of the project. He will supervise other staff members working on a project, and coordinate all field and laboratory activities. The project manager will also be responsible for maintaining liaison with AML&R personnel and, when required, issuing periodic progress reports.

As the project progresses, the project manager will periodically meet with AML&R personnel to review progress, discuss problems, and evaluate various corrective alternatives. Input from AML&R personnel will be actively solicited on each project.

Schedule and Budget Control:

The project manager will be responsible for monitoring and controlling project schedules and budget. As the work progresses, the project manager will evaluate progress on a weekly basis and compare the progress to the established work schedule. If these reviews indicate that a schedule problem is developing, the project manager will meet to discuss the problem and explore options for correcting the situation. If circumstances develop that will make it impossible to maintain the original schedule, AML&R personnel will be immediately informed of the situation and a mutually satisfactory schedule adjustment will be made.

Personnel time and expense charges are maintained and allocated to projects on a weekly basis. Using this data, together with his knowledge of exploration, testing and subcontractor costs, the project manager will review project budget status on a weekly basis. The percent of work completed will be compared to the percent of costs incurred in order to quickly identify any budget problems which may develop. If potential budget problems are identified, they will be evaluated by the project manager. If measures to eliminate potential cost overruns cannot be eliminated, AML&R personnel will be immediately informed of the problems and causes. A mutually agreeable budget will be prepared or the scope of work will be revised to conform to the original budget, based on the nature of the problem.

WORK APPROACH

Work Directive and Initial Planning:

Upon notice to proceed, our project manager will review the work directive, discuss the project with AML&R personnel and visit the site to become familiar with the project and work requirements. Available site information and data, such as results of previous borings, geologic reports, or old mine maps will be reviewed. Based on this information, the project manager will plan the scope of work required including: surveying and mapping, subsurface investigation and laboratory analysis.

Surveying and Mapping:

Prior to undertaking any surveying, our project manager will meet with our surveying staff to determine the extent and required accuracy of the work involved. We will then determine if existing mapping such as U.S.G.S., or Corps of Engineers, Highway Department or other utility mapping is available for the area. Should satisfactory existing mapping be available, we will utilize this (along with such location or "fill-in" surveys as are necessary) in order to minimize the project cost.

Subsurface Investigation:

The project manager will determine the best suited equipment, personnel, and access routes for drilling equipment, such that drilling work can begin as quickly as possible. The results and progress of the drilling work will be monitored on a continuing basis by the project manager to determine that the needed information is being obtained. When necessary, the drilling program will be revised as it progresses to account for unanticipated conditions. The need for special drilling procedures, observation wells, piezometers, slope inclinometers, angle borings, and hand sampling techniques, etc. will be evaluated by the project manager.

Laboratory Testing:

Testing requirements for the project will be developed by our project manager or a designated member of the project team. Since practically all of the testing will be performed in-house, the results can and will be evaluated on an on-going basis. This will permit us to eliminate unneeded tests before they are performed and to revise the

testing program to better provide data which will be useful for project evaluation and design.

Design Development Report:

After the field and laboratory investigations are complete, an engineering report will be prepared and submitted to the DEP for review and comment. The report will contain:

1. Project description
2. Boring location plan and topographic mapping
3. Boring logs
4. Description of subsurface conditions including soil, bedrock and groundwater
5. Laboratory test results
6. Recommended alternative(s)
7. Special recommendations such as potential environmental effects of the design, damage to adjacent property, loss of use, and future effects.

After review and approval, TRIAD will proceed with preparation of construction documents including Drawings, Specifications, and a Detailed Cost Estimate.

Design Drawing and Specifications:

Design drawings and specifications will be prepared to meet the site specific criteria for the project. The drawings will accurately reflect the site conditions and depict the proposed work in a clear and understandable manner. The drawing packages will as a minimum include a site plan, cross sections, and details as necessary to define the scope of work. Detailed technical specifications will be prepared for general working conditions as well as each work item. The specifications will be the contractor's guide to the work and will set the guidelines for quality and materials to be used in the construction. All work will be reviewed and certified by one of our registered professional engineers.

Construction Cost Estimate:

Upon completion of the final plans and specifications, the expected cost of the work will again be evaluated. This cost evaluation will be made using unit cost data from various sources (i.e. previous bids on similar projects, information solicited from contractors,

Departments of Highways, construction cost data, Means unit cost, etc.) The final cost estimate will be discussed with AML&R personnel and, whenever necessary, revisions to the plans and specifications will be made to bring the estimated costs in line with the project budget. We expect to coordinate our efforts with the DEP throughout the project so that the need for final revision will be minimal.

Project Meetings:

Our engineers will meet with AML&R representatives on an as-needed basis during the planning and design phases of the project to assure an understanding of the work scope for that project and to keep the DEP informed of our progress and results. Upon completion of the design phase, our personnel will be available to attend pre-bid and pre-construction meetings to answer questions concerning the design and clarify the intent of the drawings and specifications.

Project team personnel will also be available to make periodic inspections during construction and do make a final inspection upon completion of construction. Summary reports of our inspections will be prepared and submitted to the DEP. These reports will summarize our observations of construction activities and progress and will indicate any problems which are observed. If construction problems or deficiencies are observed, recommended solutions will be presented in the inspection reports.



RELATED SERVICES

QA/QC, CONSTRUCTION MONITORING, HIGHWAY INSPECTION

Construction monitoring services provided by Triad Engineering include soil, concrete, aggregate, asphalt, steel, welding, and paint. Triad maintains a staff of engineering technicians who are certified by state-specific highway and materials departments, ACI, FAA, and others. Triad's engineering technicians work under the close supervision of registered professional engineers.

Senior level technicians are skilled in interpreting design drawings, as well as typical construction inspection and testing. Services provided on these projects have included: testing of compacted fill with a nuclear moisture density gauge, documentation of construction personnel hours and equipment utilized, quantity determinations, submittal of daily and weekly reports, interpretation of technical specifications, inspection of liner installation, and construction recommendations. Triad routinely provides technicians with OSHA and/or MSHA certification.

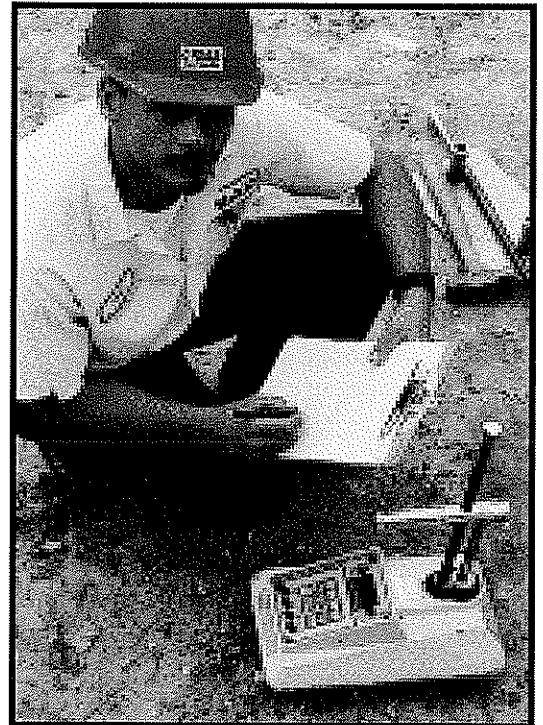
Services Include:

- Field Quantity Estimates and Verification
- Inspection of Deep Foundations, including Driven Piles, Caissons, and Auger Cast Piles
- Footing Inspection and Bearing Capacity Evaluation
- Field Concrete Testing and Sampling, including Coring, Windsor Probe, and Rebound Hammer Testing

QA/QC, CONSTRUCTION MONITORING, HIGHWAY
INSPECTION

Services continued:

- Batch Plant Inspection
- Steel Inspection, including Bolt Torque,
- Visual Weld Inspection, and Dye Testing
- Penetrant Testing
- Paint Thickness (Wet and Dry Film)
- Water Testing, including pH, Iron, and Turbidity
- Fireproofing Inspection
- Floor Flatness Testing
- In-place Density Testing
- Grade Checking
- Nuclear Moisture Density Gauge Testing



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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 2	Jim's Branch Refuse Piles	Wyoming Co.	Surveying, Mapping, CADD
	Newsome Branch Refuse	McDowell Co.	Surveying, Mapping, CADD
	Red Hollow Burning Refuse	Mercer Co.	Surveying, Mapping, CADD
	Turnhole Branch	McDowell Co.	Surveying, Mapping, CADD
	Newett (Crum) Burning Refuse	Logan Co.	Drilling & Sampling, Temperature Probes
	Campbell's Creek (Hodge) Landslide	Kanawha Co.	Drilling, Geotechnical Analyses
	Decota (Persinger) Landslide	Kanawha Co.	Drilling, Geotechnical Analyses
	Beckley (Long) Subsidence	Raleigh Co.	Drilling, Geotechnical Analyses
	Tuppers Creek (Turley) Drainage	Kanawha Co.	Drilling, Geotechnical Engineering
	Kelly's Creek Portals, Burning Refuse	Kanawha Co.	Surveying, Mapping, CADD
	Welch (Moore) Vertical Opening	McDowell Co.	Drilling, Engineering, Temperature Probes
	Milburn Burning Refuse	Kanawha Co.	Drilling, Surveying, Engineering
	Whitesville (Averson) AML	Boone Co.	Drilling & Sampling
	Kelly's Creek Road Burning Refuse	Kanawha Co.	Drilling, Surveying, Engineering
	Manila Creek (Bryant) Landslide	Putnam Co.	Drilling, Surveying, Engineering
	Hilltop (Logan) Subsidence	Fayette Co.	Drilling, Subsidence Investigation
	Taylorville (Garten) Drainage	Mingo Co.	Drilling & Sampling
	MacArthur Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Carbon (Williams) Burning Refuse	Kanawha Co.	Drilling & Sampling, Temperature Probes
	Davis Creek (Larabee) Subsidence	Kanawha Co.	Drilling, Subsidence Investigation
Chapmanville AML	Logan Co.	Drilling & Sampling	
Dry Branch Burning Refuse	Kanawha Co.	Drilling, Geologic Investigation	
Henline Subsidence	Harrison Co.	Drilling, Subsidence Investigation	
Pauley Burning Coal Seam	Kanawha Co.	Drilling, Subsidence Investigation	

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1992	Stevenski Subsidence	Marion Co.	Subsidence Investigation
	Albert Highway	Tucker Co.	Investigation, Design, Re-grade, Drainage, Portals
	A.S.&K. Bond Forfeiture	Monongalia Co.	Surface & Deep Mine Drainage Investigation
	F & M Coal	Preston Co.	Surveying, Mapping, CADD
	Moran Subsidence	Marion Co.	Subsidence Investigation
	Monongah (Mayo) subsidence	Marion Co.	Subsidence Investigation
	Mount Claire Refuse	Harrison Co.	Investigation and design, Refuse, Drainage, Re-grade
	Fairmont (Shipco) Subsidence	Marion Co.	Subsidence Investigation
	Farmington (Gum) Subsidence	Marion Co.	Subsidence Investigation
	Rivesville (Straight) Subsidence	Marion Co.	Subsidence Investigation
1993	Morgantown (Fox) Subsidence	Monongalia Co.	Subsidence Investigation
	Fairmont (Parks) Subsidence	Marion Co.	Subsidence Investigation
	Moundsville (Oliver) Subsidence	Marshall Co.	Subsidence Investigation
	Fairmont (Hines) Subsidence	Marion Co.	Subsidence Investigation
	Morgantown (McCabe) Subsidence	Monongalia Co.	Subsidence Investigation
	Ashland (Poca Land) Complex	McDowell Co.	Surveying, Mapping, CADD
	Helen (Lewis) Refuse	Raleigh Co.	Surveying, Mapping, CADD
	Minden Mine Dump	Fayette Co.	Surveying, Mapping, CADD
	Pageton Refuse Pile	McDowell Co.	Surveying, Mapping, CADD
	Eckman Refuse Pile	McDowell Co.	Surveying, Mapping, CADD
3	Micco (Elledge) Drainage	Mingo Co.	Drilling, Geotechnical Analyses, Surveying
	Big Creek "C"	Logan Co.	Drilling, Geotechnical Analyses
	MacArthur (Brush) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Davis Creek (Snodgrass) Subsidence	Kanawha Co.	Drilling, Subsidence Investigation

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 3	MacArthur (Kinsley) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Taylorville Drainage II	McDowell Co.	Drilling & Sampling, Engineering
	Eibert (Lane)	Mingo Co.	Drilling & Sampling
	Glen Morgan (Lilly) Subsidence	Boone Co.	Drilling, Subsidence Investigation
	Marrowbone Creek (Dingess) Landslide	Mingo Co.	Drilling & Sampling, Engineering
	Black Betsy (Adkins) Landslide	Putnam Co.	Drilling, Surveying, Engineering
	Chief Logan State Park Dam	Logan Co.	Drilling, Surveying & Mapping, Engineering CADD
	Apple Grove (Smith) Subsidence	Mason Co.	Drilling, Subsidence Investigation
	Logan Landslide	Logan Co.	Drilling & Sampling
	Midway (McVey) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Williamson Branch (Warren) Landslide	Mingo Co.	Drilling & Sampling
	Peter Street (McNeely) Drainage	Mingo Co.	Drilling & Sampling
	Hanover (Alley)	McDowell Co.	Drilling, Geologic Investigation
	Kilsyth (Burdeite) Drainage	Raleigh Co.	Drilling & Sampling
	Crane Creek Drainage	Logan Co.	Surveying, Mapping, CADD
	Logan (Marcum) Drainage	Logan Co.	Drilling & Sampling
	Chapmanville Landslide	Logan Co.	Drilling & Sampling
	Davis Creek (Oxley) Subsidence II	Kanawha Co.	Drilling & Sampling
	Follansbee (Martino) Subsidence	Brooke Co.	Subsidence Investigation
	Collier (Valero) Subsidence	Collier	Subsidence Investigation
Philli Lane Subsidence	Harrison Co.	Subsidence Investigation and Stabilization Design	
Wheeling (Naegele) Subsidence	Wheeling	Subsidence Investigation	
Clarksburg (Siebert) Subsidence	Clarksburg	Subsidence Investigation	
Fairmont (Lawson) Subsidence	Fairmont	Subsidence Investigation	
Monongah Filtration Plant	Monongah	Emergency Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 3	Estes Landslide II	Harrison Co.	Geotechnical Investigation & Design, Slopes, Drainage
	Warswich Subsidence	Morgantown	Subsidence Investigation
	Fairmont (Harmon) Subsidence	Fairmont	Subsidence Investigation
	Fairview (Toothman) Subsidence	Fairview	Subsidence Investigation
	Fairmont (Robinson) Subsidence	Fairmont	Subsidence Investigation
	Fairmont (Pizatella) Subsidence	Fairmont	Subsidence Investigation and Emergency Design
	Follansbee (Banfi) Subsidence	Follansbee	Subsidence Investigation
	Shinnston (Vincent) Subsidence	Shinnston	Subsidence Investigation
	Shinnston (Ours) Subsidence	Shinnston	Subsidence Investigation
	Brookhaven (Hearn) Subsidence	Brookhaven	Subsidence Investigation
	Fairmont (Cannon) Subsidence	Fairmont	Subsidence Investigation
	Canyon Road Refuse	Morgantown	Burning Refuse Remediation Design
	West Milford (Deverick) Landslide	Clarksburg	Investigation & Design, Geotechnical, Slopes, Drainage
	Fairview (Abel) Subsidence	Fairview	Subsidence Investigation
	Mannington (Hwakinberry) Subsidence	Fairview	Subsidence Investigation
	Shinnston (Vincent) Subsidence	Shinnston	Subsidence Investigation
	Fairmont (Knoll) Subsidence	Fairmont	Subsidence Investigation
	Clarksburg (Thompson) Subsidence	Clarksburg	Subsidence Investigation
	Shinnston (Hall) Subsidence	Shinnston	Subsidence Investigation
	Clarksburg (Weekly) Subsidence	Clarksburg	Subsidence Investigation
Colliers (Kiger) Subsidence	Colliers	Subsidence Investigation	
Philippi (Hansford) Subsidence	Philippi	Subsidence Investigation	
Whitman Flats	Randolph Co.	Investigation, Design, Drainage, Refuse Re-grade, Surface Mine	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 4	Marmet (Pauley) Landslide	Kanawha Co.	Drilling & Sampling, Engineering
	Rawl (Russel) Drainage	Mingo Co.	Surveying, Mapping, CADD
	Lefthand Fork (See)	Logan Co.	Surveying, Mapping, CADD
	Algoma Refuse Piles	McDowell Co.	Surveying, Mapping, CADD
	Lorado (Grimmett) Mine Drainage	Logan Co.	Surveying, Mapping, CADD
	Amherstdale (Carter) Landslide	Logan Co.	Surveying, Mapping, CADD
	Chauncey (Sammons) Drainage	Logan Co.	Drilling & Sampling
	Sophia (McKinney) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Beckley (Johnson) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Beckley (Wood) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Pratt (Crookshank) Landslide	Raleigh Co.	Drilling & Sampling
	Kirk (Caperton) Landslide	Mingo Co.	Drilling & Sampling, Engineering
	Crooked Creek Refuse	Logan Co.	Surveying & Mapping
	Branchland Landslide	Lincoln Co.	Drilling & Sampling
	Hanshew Subsidence	Kanawha Co.	Drilling, Subsidence Investigation
	Belle (Turner) Landslide	Kanawha Co.	Drilling, Surveying, Engineering, CADD
	Hugheston Monitoring Well	Kanawha Co.	Drilling, Well Installation
	Delbarton (Spence) Subsidence	Mingo Co.	Drilling, Subsidence Investigation
	Haynes Landslide	Kanawha Co.	Drilling & Sampling
	Campbell's Creek Landslide	Kanawha Co.	Drilling & Sampling
Shrewsbury Landslide	Kanawha Co.	Drilling & Sampling	
Thurmond Landslide	Fayette Co.	Drilling & Sampling	
Crab Orchard Subsidence	Raleigh Co.	Drilling, Subsidence Investigation	
Crooked Creek Coal Refuse	Logan Co.	Drilling, Engineering	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 4	Campbell's Creek Subsidence	Kanawha Co.	Drilling & Sampling
	Latrobe (Gibson) Landslide	Logan Co.	Drilling & Sampling
	North Charleston (Toon) Landslide	Kanawha Co.	Surveying, Mapping, Drilling, Design
	Wilkinson Landslide	Kanawha Co.	Drilling, Surveying, Mapping, Design
	Sophia (Lucas) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Sophia (Lawrence) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Zickefoose Subsidence	Raleigh Co.	Drilling Subsidence Investigation
	Oak Hill (Huddleston) Subsidence	Oak Hill	Drilling, Subsidence Investigation
	Lumberport (Peterson) Subsidence	Lumberport	Subsidence Investigation
	Farmington (Hefner) Subsidence	Farmington	Subsidence Investigation
	Clarksburg (LeFevre) Subsidence	Clarksburg	Subsidence Investigation
	Fairmont (Hanne) Subsidence	Fairmont	Subsidence Investigation
	AML Surveying & Mapping	Various	Surveying & Mapping
	Moundsville (Frame) Subsidence	Moundsville	Subsidence Investigation
	Wheeling (Roshak) Subsidence	Wheeling	Subsidence Investigation
	Ida May (Heidreth) Subsidence	Ida May	Subsidence Investigation
	Mannington (Brinegar) Subsidence	Mannington	Subsidence Investigation
	Moundsville (Wolfe) Subsidence	Moundsville	Subsidence Investigation
	Follansbee (Turkaly) Subsidence	Follansbee	Subsidence Investigation and Stabilization Design
	Garrett Drainage	Preston Co.	Geotechnical Investigation for In-house Design
	Fairmont (Tims) Subsidence	Fairmont	Subsidence Investigation
	Clarksburg (Walker) Subsidence	Clarksburg	Subsidence Investigation
	Clarksburg (Hall) Subsidence	Clarksburg	Subsidence Investigation
Kanes Creek Refuse Pile	Preston Co.	Investigation & Design, Refuse, Drainage, Re-grade	
Windsor (Dawson) Subsidence	Windsor	Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 4	Wheeling (Scott) Subsidence	Wheeling	Subsidence Investigation
	Fairmont (Skaggs) Subsidence	Fairmont	Subsidence Investigation
	Harris Drainage	Clarksburg	Subsurface Investigation for In-house Design
	Weston Hospital AML	Weston	Deep Mine (Portal) Drainage Design
	Fairmont (Twyman) Subsidence	Fairmont	Subsidence Investigation
	Wheeling (Innocenti) Subsidence	Wheeling	Subsidence Investigation
	Fairmont (Brown) Subsidence	Fairmont	Subsidence Investigation
	Fairmont (Vincent) Subsidence	Fairmont	Subsidence Investigation
	Moundsville (Parento) Subsidence	Moundsville	Subsidence Investigation
	Follansbee (Mossor) Subsidence	Follansbee	Subsidence Investigation
	Wheeling (Shultz) Subsidence	Wheeling	Subsidence Investigation
	Wellsburg (Hubbard) Subsidence	Wellsburg	Subsidence Investigation
	Moundsville (Oelshalger) Subsidence	Moundsville	Subsidence Investigation
	Fairmont (Sterratt) Subsidence	Fairmont	Subsidence Investigation
	Wheeling (Sprawls) Subsidence	Wheeling	Subsidence Investigation
	Morgantown (Fox) Subsidence	Morgantown	Subsidence Investigation
	Farmington (Goodnight) Subsidence	Farmington	Subsidence Investigation
	Fairmont (Tichenor) Subsidence	Fairmont	Subsidence Investigation
	Fairmont (Ferrise) Subsidence	Fairmont	Subsidence Investigation
	Barrackville (Garlow) Subsidence	Barrackville	Subsidence Investigation
Kittle Flats	Randolph Co.	Investigation & Design, Re-grade, Surface Mine, Drainage, AMD	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 5	Crab Orchard (Mullins) Subsidence	Raleigh Co.	Subsidence Investigation, Drilling
	Welch (Frezier) Subsidence	Welch	Subsidence Investigation, Drilling
	Logan (Browning) Landslide	Logan	Drilling, Surveying & Mapping, Engineering
	Holly Grove "A" Landslide	Kanawha Co.	Surveying, Mapping, CADD
	Big Cub Creek Refuse Pile	Wyoming Co.	Surveying, Mapping, CADD
	Blue Pennant Complex	Boone Co.	Surveying, Mapping, CADD
	Toler Hollow Portals	Wyoming Co.	Surveying, Mapping, CADD
	Rocklick (Beckett) Landslide	Boone Co.	Surveying, Mapping, CADD
	Indian Ridge Refuse Pile	Wyoming Co.	Surveying, Mapping, CADD
	New Haven (Collier) Subsidence	New Haven	Subsidence Investigation, Drilling
	Aracoma (Napier) Drainage	Logan	Drilling & Sampling
	Hansford Landslide	Crown Hill	Drilling & Sampling
	Padgett Subsidence	Whitman	Subsidence Investigation, Drilling
	Dry Branch Drainage	Kanawha Co.	Drilling & Sampling
	Lockhart Subsidence	War	Subsidence Investigation, Drilling
	Burning Refuse	Williamson	Drilling & Sampling
	Cannelton (Miller) Drainage	Fayette Co.	Drilling & Sampling
	Logan (Robinson) Drainage	Logan	Drilling, Engineering, Geologic Investigation
	Beckley (Colacino) Subsidence	Beckley	Subsidence Investigation, Drilling, Surveying
	Holly Grove "A" Landslide	Kanawha Co.	Drilling, Surveying & Mapping, Design
Campbell's Creek (Stone) Drainage	Kanawha Co.	Surveying & Mapping, Drilling	
Eccles (McGinnis) Subsidence	Eccles	Subsidence Investigation, Drilling	
Whitewater Branch Drainage	Nicholas Co.	Drilling & Sampling, Geologic Investigation	
Jim Branch (Tyree) Landslide	Boone Co.	Drilling & Sampling, Geologic Investigation	
Upper Decker's Creek	Preston Co.	Subsurface Investigation for In-house Design	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 5	Childs Highwall & Portals	Preston Co.	Investigation & Design, Re-grade, Surface Mine, Drainage, AMD
	Martin Creek	Preston Co.	Investigation & Design, Drainage, AMD, Re-grade, Surface & Deep Mine, Hazardous Materials
	AML Surveying & Mapping	Various	Surveying & Mapping, CADD
	Grant Town (Domico) Subsidence	Grant Town	Subsidence Investigation, Drilling
	Fairview (Toothman) Subsidence	Fairview	Subsidence Investigation, Drilling
	Wheeling (Stazenski) Subsidence	Wheeling	Subsidence Investigation, Drilling
	Moundsville (Feiszh) Subsidence	Moundsville	Subsidence Investigation, Drilling
	Weirton (Tingler) Subsidence	Weirton	Subsidence Investigation, Drilling
	Monongah (Eller) Subsidence	Monongah	Subsidence Investigation, Drilling
	Steadman AMD	Monongalia Co.	Investigation & Design, Deep Mine, Drainage, AMD
	Morgantown (Cryster) Subsidence	Morgantown	Subsidence Investigation, Drilling
	Fairmont (Long) Subsidence	Fairmont	Subsidence Investigation, Drilling
	Kiser Subsidence Design	Marion Co.	Investigation & Design of Deep Mine Stabilization
	Fairmont (Kropog) Subsidence	Fairmont	Subsidence Investigation, Drilling
	Glen Dale (Goddard) Subsidence	Glen Dale	Subsidence Investigation, Drilling
	Buckhannon (Swecke) Subsidence	Buckhannon	Subsidence Investigation, Drilling
	Fairmont (King) Subsidence	Fairmont	Subsidence Investigation, Drilling
	Bolyard Well Bond Forfeiture Site	Preston Co.	Well Abandonment, Design & Performance
	Colliers (Stevens) Subsidence	Colliers	Subsidence Investigation, Drilling
	Wheeling (Hanna) Subsidence	Wheeling	Subsidence Investigation, Drilling
	Wheeling (Witsberger) Subsidence	Wheeling	Subsidence Investigation, Drilling
Fairmont (JHEK) Subsidence	Fairmont	Subsidence Investigation, Drilling	
Fairmont (Greene) Subsidence	Fairmont	Subsidence Investigation, Drilling	
Fairmont (Mercer) Subsidence	Fairmont	Subsidence Investigation, Drilling	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 6	Fairmont (Bionti) Subsidence	Fairmont	Subsidence Investigation, Drilling
	Thomas (Bible) Subsidence	Thomas	Subsidence Investigation, Drilling
	Thomas (Simmons) Subsidence	Thomas	Subsidence Investigation, Drilling
	Thomas (Rhodes) Subsidence	Thomas	Subsidence Investigation, Drilling
	Fairmont (Crowe) Subsidence	Fairmont	Subsidence Investigation, Drilling
	Bland (AML)	Monongalia Co.	Subsurface Investigation, Geotechnical, Drainage, Deep Mine
	Commodore (AML)	Monongalia Co.	Subsurface Investigation, Geotechnical, Drainage, Deep Mine
	Stephenson (Mills) Subsidence	Wyoming Co.	Subsidence Investigation, Drilling
	Cedar Grove (Ramsey) Landslide	Kanawha Co.	Subsurface Investigation, Drilling, Geologic Investigation
	Logan (Ross) Landslide	Logan	Engineering, Drilling
	Beckley (Davis) Subsidence	Raleigh Co.	Subsidence Investigation, Drilling
	Oak Hill (Slates) Subsidence II	Oak Hill	Subsidence Investigation, Drilling
	Welch (Coleman) Subsidence	Welch	Subsidence Investigation, Drilling
	Black Wolfe Refuse Pile	McDowell Co.	Surveying & Mapping, CADD
	Shannon Branch Refuse Pile	McDowell Co.	Surveying & Mapping, CADD
	Lower Burning Creek Complex	Mingo Co.	Surveying & Mapping, CADD
	Duo Refuse Piles	Greenbrier Co.	Surveying & Mapping, CADD
	Mullins Landslide	Wyoming Co.	Drilling, Surveying, Engineering
	Crab Orchard (Mullins) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
Williamson (Brown) Landslide	Williamson	Drilling & Sampling	
Thaxton Landslide II	Kanawha Co.	Drilling, Engineering, Geologic Investigation	
Dingess Street (Jemerison) Landslide	Logan	Drilling & Sampling	
Cedar Grove (Bass) Landslide	Kanawha Co.	Drilling, Surveying, Engineering	
Campbell's Creek (Stone) Drainage	Kanawha Co.	Surveying & Mapping	
Crab Orchard (Zickafoose II)	Raleigh Co.	Drilling & Sampling	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 6	Glen Jean Subsidence	Glen Jean	Drilling, Subsidence Investigation
	MacArthur (Green) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	East Oak Hill (Tincher) Subsidence	Oak Hill	Drilling, Subsidence Investigation, Engineering
	Football Stadium Subsidence	Mt. Hope	Drilling, Surveying, Engineering
	Shrewsbury (Burgess) Landslide	Kanawha Co.	Drilling, Surveying, Engineering
	Clarksburg (McGinnis) Subsidence	Clarksburg	Drilling, Subsidence Investigation
	Fairmont (Retton) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Fairmont (Golden) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Wheeling (Zambito) Subsidence	Wheeling	Drilling, Subsidence Investigation
	Wellsburg (Fillinger) Subsidence	Wellsburg	Drilling, Subsidence Investigation
	MeMechen (Schmitt) Subsidence	Moundsville	Drilling, Subsidence Investigation
	Stillhouse Run Refuse	Galloway	Investigation, Design, Refuse Re-grade, Drainage
	Wellsburg (Ohler) Subsidence	Wellsburg	Drilling, Subsidence Investigation
	Gypsy (Abruzzino) Drilling	Gypsy	Subsurface Investigation for In-house Design
	Fairmont (Levine) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Wayne Shreve Portals	Harrison Co.	Investigation, Design, Drainage, Portals, Deep Mine, AMD
	Pumpkintown, Kingsville, & Mabie Waterline Feasibility Study	Randolph Co.	Feasibility Study, Deep Mine, Surface Mines, Water Lines, AMD Contamination
	AML Surveying & Mapping	Various	Surveying & Mapping, CADD
	Fairmont (Cross) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Fairmont (Delovich) Subsidence	Fairmont	Drilling, Subsidence Investigation
Fairmont (Orsini) Subsidence	Fairmont	Drilling, Subsidence Investigation	
Morgantown (Amos) Subsidence	Morgantown	Drilling, Subsidence Investigation	
Karickhoff Mine Drainage	Monongalia Co.	Subsurface Investigation for In-house Design	
Fairmont (Danko) Subsidence	Fairmont	Drilling, Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1996	Fairmont (Bosley) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Fairmont (Neely) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Thomas (Hearley) Subsidence	Thomas	Drilling, Subsidence Investigation
	Thomas (Paugh) Subsidence	Thomas	Drilling, Subsidence Investigation
	Fairmont (Pitsy) Landslide	Fairmont	Drilling, Subsidence Investigation
	Turkey Run Slide & Drainage	Upshur Co.	Subsurface Investigation for In-house Design
	Tunnelton (Myers) Subsidence	Tunnelton	Drilling, Subsidence Investigation
	Fairview (Weaver) Subsidence	Fairview	Drilling, Subsidence Investigation
	Monongah (Longfellow) Subsidence	Monongah	Drilling, Subsidence Investigation
	Fairmont (Kiser) Confirmation Drilling	Fairmont	Confirmation of Deep Mine Stabilization
1997	Pine Bluff Tipple and Portal	Harrison Co.	Subsurface Investigation for In-house Design
	Thomas (Uchic) Subsidence	Thomas	Drilling, Subsidence Investigation
	Rivesville (Miller) Subsidence	Rivesville	Drilling, Subsidence Investigation
	Fairmont (Christ Temple) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Fairmont (Dukich) Subsidence	Fairmont	Drilling, Subsidence Investigation
	AML Surveying and Mapping	Various	Surveying & Mapping, CADD
	Fairmont (Renner) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Hiawatha Mine Dump	Hiawatha	Surveying & Mapping, CADD
	Booths Hollow Highwall	Bramwell	Surveying & Mapping, CADD
	Turkey Wallow Refuse Pile	Wolf Pen	Surveying & Mapping, CADD
Sophia (Hayworth) Subsidence	Sophia	Drilling, Subsidence Investigation	
Dan's Branch (Cline) Landslide	Williamson	Drilling, Engineering, Geologic Investigation	
Spring Branch Burning Refuse	Milburn	Surveying & Mapping, CADD	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 7	Whitby (Lilly) Clogged Stream/Portals	Whitby	Surveying & Mapping, CADD
	Ennis Complex	Maybeury	Surveying & Mapping, CADD
	Carswell Hollow (Smith) Refuse	Kimball	Surveying & Mapping, CADD
	MacArthur (Kinsley) Vertical Opening	MacArthur	Drilling, Subsidence Investigation
	Stanaford (Vira) Subsidence	Beckley	Drilling, Subsidence Investigation
	Logan AML	Logan	Drilling & Sampling
	Norton Waterline	Randolph Co.	Surveying, Mapping, Subsurface Investigation, Design
	Kelly's Creek (Jones) Landslide	Kanawha Co.	Drilling, Surveying & Mapping, Engineering
	Crab Orchard (Rye) Subsidence	Raleigh Co.	Drilling, Subsidence Investigation
	Marmet (Willis Drive) Landslide	Marmet	Drilling & Sampling
	Peter Street (Bragg) Landslide	Williamson	Drilling, Engineering, Geologic Investigation
	Pinnacle Creek Refuse Pile	Wyoming Co.	Drilling, Surveying, Engineering
	Clarksburg (Felts) Subsidence	Clarksburg	Drilling, Subsidence Investigation
	Fairmont (Tibbs) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Farmington (Tassone) Subsidence	Farmington	Drilling, Subsidence Investigation
	Fairmont (Morgan) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Farmington (Knable) Subsidence	Farmington	Drilling, Subsidence Investigation
	Shinnston (Bell) Subsidence	Shinnston	Drilling, Subsidence Investigation
	Zickefoose Burning Refuse	Marion Co.	Subsurface Investigation for In-house Design
	Thomas (D. Bacco) Subsidence	Thomas	Drilling, Subsidence Investigation
Thomas (Nelson) Subsidence	Thomas	Drilling, Subsidence Investigation	
Thomas (Shoemaker) Subsidence	Thomas	Drilling, Subsidence Investigation	
Thomas (Nelson) Subsidence	Thomas	Drilling, Subsidence Investigation	
Fairmont (St. Joseph) Subsidence	Fairmont	Emergency, Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 7	Thomas (Lambert) Subsidence	Thomas	Drilling, Subsidence Investigation
	Left Fork of Little Sandy Reclamation	Preston Co.	Investigation, Design, Portals, Drainage, AMD, Re-grade
	Demarco Mine Drainage	Monongalia Co.	Subsurface Investigation for In-house Design
	Summit Park (Seftick) Slide	Clarksburg	Investigation and Design, Slopes, Drainage, Deep Mine
	Thomas (Stanley) Subsidence	Thomas	Drilling, Subsidence Investigation
	Morgantown (Horrell) Subsidence	Morgantown	Drilling, Subsidence Investigation
	Morgantown (Malone) Subsidence	Morgantown	Drilling, Subsidence Investigation
	Core (Swiger) Subsidence	Core	Drilling, Subsidence Investigation
	Shinnston (Brown) Landslide	Shinnston	Subsurface Investigation for In-house Design
	Delmar Complex	Monongalia Co	Subsurface Investigation for In-house Design
	Morgantown (McVickers) Subsidence	Morgantown	Drilling, Subsidence Investigation
	Moundsville (Marling) Subsidence	Moundsville	Drilling, Subsidence Investigation
	Wheeling (Tridigo) Subsidence	Wheeling	Drilling, Subsidence Investigation
	Barrickville (Vennis) Subsidence	Barrickville	Drilling, Subsidence Investigation
	Clarksburg (Ray) Subsidence	Clarksburg	Drilling, Subsidence Investigation
	Fairmont (Toothman) Subsidence	Fairmont	Drilling, Subsidence Investigation
	Grant Town (Haller) Subsidence	Grant Town	Drilling, Subsidence Investigation
Monongah (Dumas) Subsidence	Monongah	Drilling, Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 8	Chauncey (Vance) Drainage	Logan Co.	Drilling, Surveying, Engineering
	Skin Creek Refuse Pile	Wyoming Co.	Surveying & Mapping, CADD
	Riffe Branch Impoundment	Raleigh Co.	Surveying & Mapping, CADD
	Holden (Paggett) Landslide	Holden	Drilling, Surveying, Engineering
	Sycamore Camp Subsidence	Holden	Drilling, Engineering
	Gerath Landslide	Weston	Surveying & Mapping, CADD
	Carswell Hollow Design	McDowell Co.	Drilling, Engineering, CADD
	Spruce Laurel Fork	Clothier	Drilling, Surveying, Engineering
	Red Jacket Refuse	Mingo Co.	Subsurface Investigation
	Nitro (Taylor) Landslide	Nitro	Drilling, Engineering
	Georges Creek (Holmes) Landslide	Rand	Drilling, Engineering
	Dog Hollow AML	Boone Co.	Drilling & Sampling
	Adkins Drainage	Boone Co.	Drilling & Sampling, Geologic Investigation
	Rumble (Smith) Drainage	Rumble	Drilling, Engineering, Geologic Investigation
	MacArthur AML	Raleigh Co.	Drilling & Sampling
	Chief Logan AMD	Logan Co.	Drilling, Surveying, Design, Engineering
	Davis Creek Emergency AML	Kanawha Co.	Drilling, Surveying, Design, Engineering
	Holden Drainage	Holden	Drilling, Engineering
	Bloomingrose (Milam) Drainage	Bloomingrose	Drilling, Surveying, Engineering
	Webster (Jerryville) AML	Webster Co.	Drilling & Sampling
Thompson Gas Complaint	Williamson	Drilling & Sampling	
Glasgow Subsidence	Glasgow	Drilling, Subsidence Investigation	
AML Surveying & Mapping	Various	Surveying & Mapping, CADD	
Wheeling (Upper Stroch) Subsidence	Wheeling	Drilling, Subsidence Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
1 9 9 9	Clarksburg (Post) Subsidence	Clarksburg	Drilling, Subsidence Investigation
	Thomas United Methodist Church	Thomas	Drilling, Subsidence Investigation
	Bridge Run Refuse	Upshur Co.	Geotechnical Investigation & Evaluation
	Kanes Creek South	Preston Co.	Reclamation Design
	Riffe Refuse Pile	Raleigh Co.	Drilling & Sampling, Temperature Probes
	Turkey Gap Burning Refuse	Oak Hill	Surveying & Mapping, CADD
	Hotcoal Mine Dump	Raleigh Co.	Surveying & Mapping, CADD
	Laurel Creek Subdivision Subsidence	Raleigh Co.	Surveying & Mapping, CADD
	Kelly's Creek Burning Refuse	Kanawha Co.	Drilling & Sampling
	WV Tech Tennis Courts	Montgomery	Drilling, Surveying, Engineering
	Holden (Aishire) AML Slide	Holden	Drilling, Surveying, Engineering
	Ragland (Kirk) Subsidence	Ragland	Drilling, Subsidence Investigation
	Beckley Exhibition Coal Mine	Beckley	Surveying & Mapping, CADD
	Kilsyth Drainage	Kilsyth	Drilling, Surveying, Engineering, Design
	Borderland Portals	Mingo Co.	Drilling & Sampling, Piezometer Installation
	Dille-Widen Feasibility Study	Clay Co.	Engineering, Geology, Hydrology
	Mullens Water Feasibility Study	Mullens	Engineering, Geology, Hydrology
	Mileground Stabilization	Morgantown	Stabilization Investigation & Design
	Tunnelton Mine Drainage	Tunnelton	AMD Drainage Investigation
	AML Surveying and Mapping	Various	Surveying & Mapping, CADD
Brown Street Drainage	Marshall Co.	AMD Drainage Design	
Davis (Warren) Subsidence	Davis	Drilling, Subsidence Investigation	
Turkey Run III	Upshur Co.	Drainage/Landslide Investigation	
Benwood Refuse	Marshall Co.	Refuse Investigation	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
2000	Shinnston (Wentz) Subsidence	Shinnston	Drilling, Subsidence Investigation
	Kingwood 52/6 Project	Kingwood	Water Line Feasibility Study
	Van Burning Refuse	Van	Drilling & Sampling, Temperature Probes
	Witcher Creek (Evans) Portals	Kanawha Co.	Surveying & Mapping, CADD
	Newton (Hatfield) Landslide	Mingo Co.	Surveying & Mapping, CADD
	Northfork Refuse Pile	McDowell Co.	Surveying & Mapping, CADD
	Red Jacket Portal	Mingo Co.	Surveying & Mapping, CADD
	Matoka (WV Rt. 10) Subsidence	Matoka	Drilling & Sampling, Geologic Investigation
	Montgomery (Grey) Landslide	Montgomery	Drilling & Sampling, Geologic Investigation
	Davis Water Tanks	Davis	Subsidence Investigation, Drilling
2001	Kingsville Water Line	Kingsville	Water Line Feasibility Study
	AML Surveying & Mapping	Various	Surveying & Mapping, CADD
	Homer Run Portal, Highway & Landslide	Harrison Co.	Portal, Highway & Landslide Investigation, Remediation Design
	Clarksburg Landslide	Clarksburg	Landslide Investigation and Evaluation
	North 8 th Street Refuse & Portals	Warwood	Design, Re-grade & Drainage
	Livengood Highway & AMD	Preston Co.	Design, Re-grade & Drainage
	Layton Mine Drainage	Harrison Co.	Drainage, Slope Investigation
	Rocklick (Blethem) Drainage	Minden	Drilling & Sampling, Geologic Investigation
	Leslie (Nelson) Drainage	Greenbrier Co.	Surveying & Mapping, CADD
	Mullins Mine Drainage	Mingo Co.	Drilling & Sampling
North Matewan (Gooslin) Landslide	Matewan	Drilling, Surveying, Engineering	
Helen Mine Drainage	Raleigh Co.	Drilling, Surveying, Engineering	
Newton (Hatfield) Landslide	Mingo Co.	Drilling, Surveying, Engineering	
Prong Fork (Hughart) Landslide	Kanawha Co.	Drilling, Surveying, Engineering	

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
2001	Mullens (McNeely) Landslide	Mullens	Drilling, Surveying, Engineering
	Mullens (Dixon) Landslide	Mullens	Drilling, Surveying, Engineering
	Early Refuse Pile	Boone Co.	Drilling, Surveying, Engineering
	AML Surveying & Mapping	Various	Surveying & Mapping, CADD
	Philip Thorn Highway	Preston Co.	Design, Re-grade, & Drainage
	Sandy Creek Waterline	Taylor Co.	Waterline Feasibility Study
	Davis Waterline Extension	Davis	Waterline Feasibility Study
	Dayton Park AML	Philippi	Drainage/Portal Investigation
	Stillhouse Run Refuse	Barbour Co.	Design, Drainage & Refuse Re-grade
	Bethlehem (Sinclair) Subsidence	Wheeling	Drilling, Subsidence Investigation
	Blaser Highway	Preston Co.	Design, AMD, Re-grade & Drainage
	Cross Street	Warwood	Drainage Investigation
	Lundale (Dickerson) Drainage	Logan Co.	Surveying & Mapping, CADD
	Ned's Branch Refuse	Mingo Co.	Surveying & Mapping, CADD
2002	Wheatley Branch (Gooden) Landslide	Logan Co.	Drilling & Sampling, Engineering
	Squire Landslide	McDowell Co.	Drilling & Sampling, Piezometer Installation, Engineering
	County Route 27 Landslide	Mt. Hope	Drilling & Sampling, Engineering
	Delbarton (Curry) Landslide	Delbarton	Drilling & Sampling, Engineering
	Sugar Branch Burning Refuse	Logan Co.	Drilling & Sampling, Geologic Investigation
	Thacker Subsidence	Crab Orchard	Drilling & Sampling, Subsidence Investigation
	AML Surveying & Mapping	Various	Surveying & Mapping, CADD
	Rosemont Highway & Portals 2	Barbour Co.	Design, Re-grade & Drainage
	Clarksburg (Bailey) Mine Drainage	Clarksburg	Drainage Investigation
	Morgantown Airport Subsidence II	Morgantown	Drilling & Sampling, Subsidence Investigation

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
2003	Thomas (Wolfe Welding) Subsidence	Tucker Co.	Drilling & Sampling, Subsidence Investigation
	Duffy Street/Van Rufus Subsidence	Shinnston	Reclamation Design
	Brownston Landslide	Barbour Co.	Reclamation Design
	Clarksburg (A. Davis) Subsidence	Clarksburg	Drilling & Sampling, Subsidence Investigation
	Mt. Clare (Strader) Landslide	Harrison Co.	Drilling & Sampling, Subsidence Investigation
	White Park Bus Garage PCB Site	Monongalia Co.	Environmental Investigation
	White Park	Monongalia Co.	Environmental Investigation
	Collins Ferry Road B.P. Station	Monongalia Co.	Drilling & Sampling
	Bull Run Emergency Drilling	Preston Co.	Drilling & Sampling
	Enterprise (Swiger) Subsidence	Harrison Co.	Drilling & Sampling, Subsidence Investigation
	Saul's Run Strip and Slide	Lewis Co.	Landslide Investigation, Drilling & Sampling, Engineering
	Whitehair Landslide	Monongalia Co.	Landslide Investigation, Drilling & Sampling, Engineering
	Ragland (Caudill) Subsidence	Mingo Co.	Drilling & Sampling, Subsidence Investigation
	WVU Tech Drainage	Montgomery	Design, Drilling & Sampling, Piezometer Installation, Surveying & Mapping, Portals, Re-grade, Dewatering
2004	Ring Hollow (Meadows) Portals	Hernshaw	Drilling & Sampling, Piezometer Installation
	Coal Hollow Refuse "A"	Putnam Co.	Design, Refuse, Re-grade, Portals
	DNR Office Subsidence	Beckley	Drilling & Sampling, Subsidence Investigation
	Alsbaugh Landslide	Mount Hope	Drilling & Sampling, Geologic Investigation
	Mon County (Rockley Road)	Monongalia Co.	Drilling & Sampling, Geotechnical Investigation
	Long Run (Adkins) Landslide	Taylor Co.	Landslide & Subsidence Investigation, Drilling & Sampling
	Hawkins AMD	Lambert Run	AMD/Reclamation
	Jimtown Tipple	Harrison Co.	Subsurface Investigation, Slide Repair
	Ven Runs Landslide Maintenance	Lewis Co.	Subsurface Investigation, Slide Repair

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
2 0 0 5 THRU 2 0 0 9	Blankenship Subsidence	Beckley	Drilling & Sampling, Subsidence Investigation
	Mabscott (Houck) Subsidence	Mabscott	Drilling & Sampling, Subsidence Investigation
	Spicer Subsidence	Maidsville	Drilling & Sampling, Subsidence Investigation
	Everettsville Burning Refuse	Monongalia Co.	Drilling, Geotechnical Investigation
	Union Prong (Carpenter) LS Project	Kanawha Co.	Drilling & Sampling, Piezometer Installation, Well Abandonment
	Rawl (Pigman) Portals	Mingo Co.	Drilling & Sampling, Piezometer Installation
	Whitman (Williams) Drainage	Logan Co.	Drilling & Sampling, Piezometer Installation
	Varney (Justice) Drainage	Mingo Co.	Drilling & Sampling, Piezometer Installation
	Brounland (Holstein) Drainage	Kanawha Co.	Drilling & Sampling, Piezometer Installation
	Musick (Brewer) Subsidence	Mingo Co.	Drilling & Sampling, Subsidence Investigation
	Eik Creek Portals	Mingo Co.	Design, Surveying & Mapping, Portals, Re-grade, Section 404 Permit, Demolition of Structures
	Chapmanville (Henry) Portals/Lake (Winkler) LS/Stone Branch (Adkins) LS 1/Mud Fork (Baisden)	Logan Co.	Drilling & Sampling, Piezometer Installation
	Rumble (Stevens) Refuse & Portals	Boone Co.	Design, Surveying & Mapping, Portals, Re-grade, Section 404 Permit, Demolition of Structures
	Campbells Creek (Miller) Drainage	Kanawha Co.	Drilling & Sampling, Piezometer Installation
	Rich Fork (Spells) Portals	Kanawha Co.	Drilling & Sampling, Piezometer Installation
	Mullens Portals	Wyoming Co.	Design, Drilling & Sampling, Piezometer Installation, Surveying & Mapping, Portals, Re-grade, Dewatering
	Belington Portals & Drainage	Barbour Co.	Design, Drilling & Sampling, Piezometer Installation, Surveying & Mapping, Portals, Re-grade, Dewatering
	Beckley (St. John's) Subsidence	Raleigh Co.	Drilling & Sampling, Mining Determination

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YEAR	PROJECT NAME	LOCATION	SERVICES PROVIDED
2010	Chauncey (Miller) Drainage	Logan Co.	Drilling & Sampling, Mining Determination
	Morris Creek (Jackson) Drainage	Fayette Co.	Drilling & Sampling, Mining Determination