March 5, 2013

tatement of Qualifications

ORIGINAL

LITTLE WHITESTICK CREEK REFUSE PILE DESIGN DEP16031

RALEIGH COUNTY, WEST VIRGINIA



E.L. Robinson Engineering Co.
5088 Washington Street West
Charleston, West Virginia 25313
Phone: (304) 776-7473
www.elrobinsonengineering.com
03/05/13 12:54:17 PM
West Virginia Purchasing Division



RFQ COPY

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

Solicitation

NUMBER DEP16031 PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF:

FRANK WHITTAKER 304-558-2316

25304

TYPE NAME/ADDRESS HERE

ENVIRONMENTAL PROTECTION DEPARTMENT OF OFFICE OF AML&R 601 57TH STREET SE CHARLESTON, WV

304-926-0499

DATE PRINTED

LINE	03/05/ QUANTITY	YOP	CAT. No.	ITEM NUMBER	OPENING TIME 1: UNIT PRICE	3-0-PM AMOUNT
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TELEPHONE 3-5-13 ファム・フィフヌ FEIN 550594633 ADDRESS CHANGES TO BE NOTED ABOVE





5088 Washington St. West Charleston, WV 25313

elrobinsonengineering.com

March 5, 2013

West Virginia Department of Environmental Protection Office of AML & R 601 57th Street Charleston, WV 25304

Attn: Joe Reppy, P.E., Acting Chief

Re: Little Whitestick Creek Refuse Pile Design

DEP16031

Expression of Interest

Dear Mr. Reppy:

E. L. Robinson Engineering Co. (ELR) is pleased to submit this proposal in response to your request to perform professional engineering design services, and construction monitoring services associated with the design of the Little Whitestick Creek Refuse Pile design project located in Raleigh County.

We have completed plans and specifications for numerous reclamation and waterline projects for WVDEP/AML over fourteen years. In addition, we have completed numerous projects with ODNR. We have descriptions of these projects in the attached proposal. Please note that the majority of staff that worked on these projects are still with ELR.

The ELR staff has combined experience in the design of more than 226 AML projects.

We are able to assemble multiple design teams with our current staff. The Charleston office has:

- A. Fourteen (14) registered professional engineers (civil or mining), two (2) geologists, two (2) Landscape architects, four (4) engineers in training as well as several CADD technicians that may be used on these teams.
- B. ELR Corporate experience in designing nearly sixty-eight (68) abandoned mine land remediation projects. Personal experience on approximately two hundred twenty-six (226) AML projects. This number does not include surveying/mapping/drilling projects.
- E. L. Robinson Engineering Co. has grown from 13 employees in 1996 to over 110 employees today. Throughout this growth period we have continued to meet project deadlines while providing a high quality engineering product.

In 2012, ELR was named to the Engineering News Record (ENR) 500 at number 485. This prestigious honor is reserved for the top performing civil engineering companies throughout the country. ELR is one of the few West Virginia based firms ever to be included on this list.

We have also recently opened offices in Bridgeport, WV and Cleveland, OH.

Our office location in Charleston is centrally and conveniently located in respect to the WVDEP offices and the referenced project.

We at E.L. Robinson Engineering Co. look forward to serving your agency under this contract. If you have any questions or need clarification, please feel free to contact me at (304) 776-7473.

Sincerely,

E. L. Robinson Engineering Co.

By:

Richard W. Watts, P.G.

Richmy W. Was

Acting Project Manager



Indula di Conceria

Executive SummaryPage 1
Project ApproachPage 2
Our Project TeamPages 3-4
Our CapabilitiesPage 5
Previous Experience
CCQQAttachment B
Abandoned Mine Lands Reclamation Experience
Soil Analysis
Hydrology and Hydraulics
Aerial Photography and Contour Mapping
Key Personnel
AML & RPEMAttachment C
Certification and Signature Page



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For more than 14 years, E.L. Robinson Engineering Company has been a prime and preferred engineering and surveying consultant to the WV Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML) program. We have provided this Executive Summary to directly respond to the Expression of Interest and provide ease for the evaluators to score this proposal.

Understanding of Project Requirements

E.L. Robinson Engineering Co. fully understands the requirements for this project and is committed to giving the WVDEP/Office of Abandoned Mine Lands and Reclamation the time and attention that is necessary for the reclamation project. Professional services may include: civil; structural; geological; surveying and mapping; preparation of all necessary permit applications; construction monitoring and other services that may be required.

Firm's Capacity

E.L. Robinson Engineering Co. approaches all engineering projects with the same attention to detail and fiscal responsibility to ensure the client receives the most cost effective plan, design and operationally functional project possible. Our approach truly makes the WVDEP/AML engineering staff an integral part in the design of the project. We want to make sure that the review staff is comfortable with the design concept before the project is submitted for review. During this process, we evaluate all technical alternatives to determine the most cost effective plan and technically acceptable project for the WVDEP/AML staff.

E.L. Robinson Engineering Co. has more than 50 professionals on staff and individuals experienced in mine reclamation. This capacity allows for the development of innovative and alternative methods to address complex issues involved in reclamation projects of this nature. Our QA/QC process also allows for a different perspective to be brought to the project before submission to the client and for review. E.L. Robinson Engineering Co. has the capacity to take this project from conception to completion with a wide variety of experienced professionals with in-house staff for planning, design, permitting, bidding and construction monitoring.

E.L. Robinson Engineering Co. will work diligently to deliver the highest quality, cost effective solution that the WVDEP/AML deserves. We have extensive knowledge in mine reclamation and are currently working with WVDEP/AML on similar projects. We have an excellent understanding of the requirements for this type of project and a good working relationship with NEPA, permitting and regulatory issues.





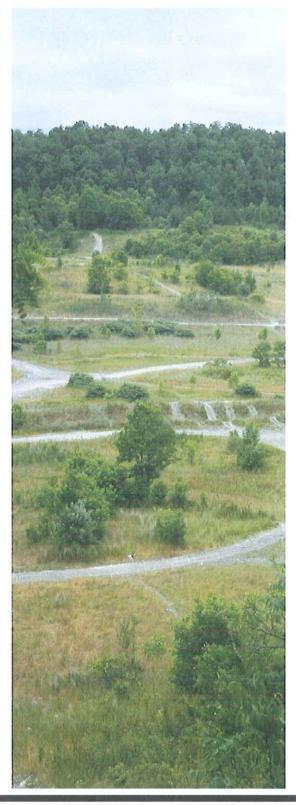
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

We are anxious to become an extension of your staff by providing prompt planning, design and construction monitoring services as needed. We interact with the various review and permitting agencies. As you will see from our resumes, we are uniquely diversified to provide quality engineering services to your agency.

E.L. Robinson will work closely with the WVDEP/AML and all regulatory and permitting agencies to complete this project. We feel that our extensive knowledge and experience in the planning and design of similar projects are significant assets in developing a cost-effective solution to your reclamation project.

The scope of services will include but are not limited to:

- Conceptual engineering and identification of permitting requirements
- Surveying and contour mapping
- Geotechnical services
- Design
- Preparation of plans and specifications
- Participation in the pre-bid meeting
- Participation in the pre-construction meeting
- Preparation of all necessary permit applications
- Construction monitoring
- Other services that may be required by the WVDEP/AML





Our Project Team

Our firm has put together a project team that is experienced in the design and construction of mine reclamation projects and has the capacity to perform the project's scope in a timely and efficient manner.

Mr. Eric Coberly, P.E. will be assigned as the Project Manager.

Mr. Rich Watts, P.G. will be assigned as the Project Geologist, and will assist in design and quality control.

Mr. John Kelly, II, E.I. will be assigned the CADD designer and principal production person for the project. He has performed this role for numerous mine reclamation projects.

Mr. Timothy Cart, P.E., Mr. Randall Lackey, P.E. and Mr. Mark McGettigan, P.E. will be assigned as the Project Engineers.

Mr. James Rayburn, P.S. will be assigned to oversee all surveying and mapping activities.

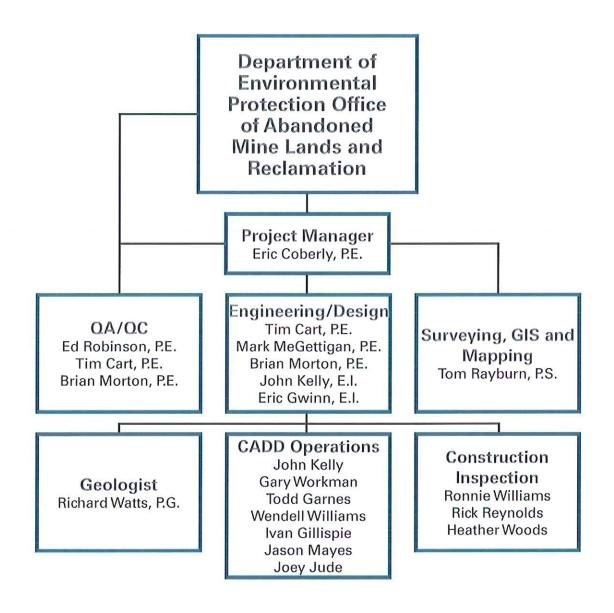
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their expertise and assistance to ensure this important project is completed on time and on budget.

Our team of construction inspectors, led by Ronnie Williams, offers years of experience with construction monitoring.

Also, our team of surveyors, managed by James Rayburn, P.S., provides the WVDEP/AML with the latest in technology and experience in surveying and mapping. By using GIS-based mapping and high-tech instrumentation, E.L. Robinson's survey team can evaluate any type of surface. Other services pertaining to surveying that our company specializes in are aerial photogrammetric consulting, hydrographic surveying, land surveying and GPS surveying.



Our Project Team







Over the past 30 years, E.L. Robinson Engineering Co. has focused its efforts on delivering quality projects to our clients and building strong relationships based on trust and partnership. We believe building lasting relationships with our clients is key to delivering exceptional service for many years to come.

E.L. Robinson provides WVDEP/AML with the capabilities, expertise and resources of one of the top-notched civil engineering firms in the region. Our offices are staffed with professionals experienced in AML reclamation mapping, permitting, design and construction monitoring projects with more than 50 employees, including 13 registered professional engineers, degreed design engineers, construction inspectors and a support team of administrative and technical personnel to assist the WVDEP/AML.

We are very familiar with the requirements of the permitting and regulatory agencies. This experience expedites the completion of projects.

As part of our commitment to quality, E.L. Robinson realizes that every project, client and location is very different. As a result, we look at each project independently to determine the most cost-effective solution. Specifically, we look at ways we can maximize the project benefit and minimize the construction cost while at the same time completing projects on time and within budget.





E.L. Robinson is well-qualified and experienced in mine reclamation projects. We are very familiar with the requirements of the project. We have demonstrated abilities in developing practical and cost-effective reclamation and improvement projects and are dedicated to meeting project schedules and budgets.

Such demonstrations can be seen in our recent and past work on reclamation projects, including:

- Thorpe Refuse Pile –2011
- Abney Refuse Piles 2011
- Shinnston-Lumberport Subsidence 2011
- Keaton Branch Complex— 2010
- Gordon "C" Refuse 2010
- Newtown-Kinder Portals 2010
- Island Creek #18 Mine Complex –2010
- Keystone (Avery) Landslide and Portal –2010
- Jacob's Fork Complex –2008
- Rhodell Refuse and Portals –October 2008
- Gilmer B Sites 3-8 –2008
- Ohio DNR Emergency Reclamation 19 sites completed
- Toney Fork Landslide Emergency –2006



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PROJECT NAME Little Whitestick Creek Refus DEP16031		DATE (DAY, MONTH March 5, 2013				FEIN 55-059463		
1. FIRM NAME E.L. Robinson Engineering Co.		2. HOME OFFICE F 5088 Washington Charleston, WV 2	Street			3. FORMER	FIRM NAME	
4. HOME OFFICE TELEPHONE 304-776-7473	5. ESTABLE 1978	ISHED (YEAR)	Indi	E OWNERSHIP vidual x nership J	Corpora		6a. WV REGIST (Disadvantage Enterprise) YES	
7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313								E
8. NAMES OF PRINCIPAL OFFICER Ed Robinson, P.E. 304 776-747		RS OF FIRM	8a. NA	ME, TITLE,	& TELEF	PHONE NUMB	ER - OTHER PRI	NCIPALS
ARCHITECTS BIOLOGIST	- ENVIROR - ESTIMA' 2 GEOLOG: - HISTOR: - HYDROLO	ISTS ICAL ENGINEERS NMENTALISTS IORS ISTS IANS OGISTS	1 1	LANDSCAPE MECHANICAL MINING ENGIPHOTOGRAMM PLANNERS: VANITARY ENGIPHORES ENGIPHORES ENGIPHORES WRITERS	ENGINE INEERS ETRISTS URBAN/R INGINEER NEERS	ERS EGIONAL S	6 STRUCTURAL 7 SURVEYORS — TRAFFIC EN — OTHER 57 TOTAL PER	GINEERS
*RPEs other than Civil supervise and perform t			portin	g documenta	tion th	at qualif	ies them to	
10. HAS THIS JOINT-VENTURE WO	RKED TOGET	HER BEFORE?	YES	NO X	This i	s not app	licable	

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULT Que onnaire" for each if copy is	TANTS ANTICIPATED TO BE USED. Attach "AML not on file with AM"	Consultant Confidential Qualification
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
	Drilling	
Novel Geo – Environmental (NGE)		<u>X</u> YES
806 B Street, St. Albans, WV		NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
		NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
		NO
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		YES
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		YES
		NO
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		YES
		NO
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		YES
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		YES
		NO

12.	Α	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?
		YES Description and Number of Projects: Eighty-nine (89) Projects - See Attached Sheet
	_	NO
	В.	Is your firm experienced in Soil Analysis?
	X	YES Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet
	_	NO
	C.	Is your firm experienced in hydrology and hydraulics?
	X	YES Description and Number of Projects: Ten (10) Projects Listed - See attached sheet
	-	NO
	D.	Does your firm produce its own Aerial Photography and Develop Contour Mapping?
	<u>X</u>	YES Description and Number of Projects: > 200 - in Firm History - 65 Recent Projects Listed
		All ELR WV & OH AML Projects since 2003 have been surveyed with ELR Surveying Staff
	-	NO
	Ε.	Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)
	X	YES Description and Number of Projects: Sixty-eight (68) Total Eleven (11) Domestic Waterline Experience (AML Related) Thirty-two (32) Evaluation of Aquifer Degradation Twenty Five (25) Non-AML Domestic Water Lines
	_	NO
	F.	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
	X	YES Description and Number of Projects: Seven (7) Projects
	_	NO

TEACH OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC WATER DESIGN EXPERIENCE: 34 Brief Explanation of Responsibilities Mr. Robinson worked in the Right of Way Division of the WV Department of Highways for ten years where he review major utility plans. He has provided quality control on all projects designed by this firm for the past 25 years. Provide and coordinate Quality Control on all projects designed by this firm for the past 25 years. Provide and coordinate Quality Control on all design projects. EDUCATION (Degree, Year, Specialization) Bachelor of Science 1969 Civil Engineering Memerican Society of Civil Engineering Memerican Society of Civil Engineering Companies Memerican Society of Professional Engineers National Society of Professional Engineers Name & TITLE (Lest, First, Middle Int.) PRICHARD OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN (Furnish complete but keep to essentials) NAME & TITLE (Lest, First, Middle Int.) PRICHARD OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN (Furnish complete but keep to essentials) PROFESSIONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete but keep to essentials) PROFESSIONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML RELATED DESIGN EXPERIENCE: YEARS OF AML RELATED D				
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NAME & TITLE (Last, First, Middle Int.) Richard W. Watts, P.G. Brief Explanation of Responsibilities Mr. Watts has served as project geologist on more than ninety (90) abandoned mine land projects. Responsibiliti include project management, field reconnaissance, drilling coordination, laboratory testing and analysis, stabi analysis, specification writing, quantity determinations, cost estimates, pre-bid and pre-construction meetings Projects included surface and deep mine reclamation, subsidence, AMD treatment and waterline feasibility studie EDUCATION (Degree, Year, Specialization) B.S./1977/Geology M.S./1994/Geography MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia		OF PRINCIPALS AND ASSOCIATES		
Int.) Richard W. Watts, P.G. 29 EXPERIENCE: YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC WATER DESIGN EXPERIENCE: 34 Projects Responsibilities Mr. Watts has served as project geologist on more than ninety (90) abandoned mine land projects. Responsibilities include project management, field reconnaissance, drilling coordination, laboratory testing and analysis, stabi analysis, specification writing, quantity determinations, cost estimates, pre-bid and pre-construction meetings Projects included surface and deep mine reclamation, subsidence, AMD treatment and waterline feasibility studie EDUCATION (Degree, Year, Specialization) B.S./1977/Geology M.S./1994/Geography MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Geological Society of America REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia			The state of the s	
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Mr. Watts has served as project geologist on more than ninety (90) abandoned mine land projects. Responsibiliti include project management, field reconnaissance, drilling coordination, laboratory testing and analysis, stabi analysis, specification writing, quantity determinations, cost estimates, pre-bid and pre-construction meetings Projects included surface and deep mine reclamation, subsidence, AMD treatment and waterline feasibility studies EDUCATION (Degree, Year, Specialization) B.S./1977/Geology M.S./1994/Geography MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia	Richard W. Watts, P.G.	00000	EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Geological Society of America Professional Geologist/1992/Virginia	Mr. Watts has served as project include project management, fie analysis, specification writing	geologist on more than ninet the reconnaissance, drilling c quantity determinations, co	oordination, laboratory test st estimates, pre-bid and pr	ing and analysis, stability e-construction meetings.
Geological Society of America Professional Geologist/1992/Virginia	B.S./1977/Geology	lization)		
	Geological Society of America		Professional Geologist/1992	/Virginia

	OF PRINCIPALS AND ASSOCIATES	DIONDIDLE FOR MELL PRODUCT D	ESIGN (Furnish comple
data ut keep to essentials		The property of the second sec	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
27 CON 1 10 CON	YEARS OF AML DESIGN EXPERIENCE:	(2)(1)(1)(2)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)	YEARS OF DOMESTIC WATERLINE
John Kelly II, E.I.	1.4	EXPERIENCE:	DESIGN EXPERIENCE:
	14	14	14
Brief Explanation of Responsibi Mr. Kelly has worked on many AM sampling of coal refuse materia plans. Estimation of quantitie Mr. Kelly has performed layout addition, he has designed cut s County, WV and Meadowbrook Road EDUCATION (Degree, Year, Specia B.S. Civil Engineering/1998/WVU MEMBERSHIP IN PROFESSIONAL ORGA	L projects since joining ELR. ls, hydrology, hydraulics des: s developed estimated cost. I and inspection of core drillinglopes for large-scale roadway in Harrison County, WV.	ign of drainage structures, a Mr. Kelly is proficient with mg operations for bridge and projects such as the US Rout REGISTRATION (Type, Year, St.	nd development of regrading Auto Cadd. roadway projects. In e 52 Kermit Bypass in Mingo
		Engineer Intern, WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES 1		ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Timothy B. Cart, P.E.	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 22
Brief Explanation of Responsibi	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Mr. Cart has completed numerous materials, re-establishment of extinguishing burning materials Conducted Phase I and Phase II Mr. Cart has extensive experien has recently completed water pr Mr. Cart has performed geotechn embankments.	mine reclamation projects und vegetation cover, disposal of and disposal of old mining st Studies to determine if ground ce in the design and construc- ojects in Mingo; Kanawha; Puta	acid producing materials, and tructures. Designed passive dwater had been affected by pution management of waterline nam; and Cabell counties.	d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart
materials, re-establishment of extinguishing burning materials Conducted Phase I and Phase II Mr. Cart has extensive experien has recently completed water promatable of the property of the p	mine reclamation projects und vegetation cover, disposal of and disposal of old mining structures to determine if ground ce in the design and constructions in Mingo; Kanawha; Putrical engineering calculations	acid producing materials, and tructures. Designed passive dwater had been affected by pution management of waterline nam; and Cabell counties.	d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart
materials, re-establishment of extinguishing burning materials Conducted Phase I and Phase II Mr. Cart has extensive experien has recently completed water pr Mr. Cart has performed geotechn embankments.	mine reclamation projects und vegetation cover, disposal of and disposal of old mining structures to determine if ground ce in the design and constructions in Mingo; Kanawha; Putrical engineering calculations	acid producing materials, and tructures. Designed passive dwater had been affected by pution management of waterline nam; and Cabell counties.	d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart

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data ut keep to essentials	OF PRINCIPALS AND ASSOCIATES)	SPONSIBLE F	OR AML PROJECT D	ESIGN (Furnish comple
NAME & TITLE (Last, First, Middle Int.)		YEARS OF	FEXPERIENCE	
Mark McGettigan, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML PEXPERIENCE:	RELATED DESIGN	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi	lities			
Mr. McGettigan has worked on se sections, estimated and checked Projects designed by E. L. Robi years. Mr. McGettigan also has experie He has also performed various c	quantity calculations. He has nson Engineering Co. He has nce with surveying and equipm	as also serve been the lead ent including	<pre>d as a field ins designer on wat ; theodolites, 1</pre>	pector for several waterline erlines over the past five evels, and total stations.
EDUCATION (Degree, Year, Specia	lization)			
B.S. Civil Engineering Technici	an/Fairmont State/1999			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION	(Type, Year, St	ate)
		Professional	Engineer WV	
13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE F	OR AML PROJECT D	ESIGN (Furnish complete data
but keep to essentials)				
NAME & TITLE (Last, First, Middle Int.)			FEXPERIENCE	
NAME & TITLE (Last, First, Middle	YEARS OF AML DESIGN EXPERIENCE:			YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
NAME & TITLE (Last, First, Middle Int.)	1 lities lics and scour for Ripley Tow	YEARS OF AML FEXPERIENCE:	RELATED DESIGN 8 lman Bridge; Mea	DESIGN EXPERIENCE: 1
NAME & TITLE (Last, First, Middle Int.) Randall L. Lackey, P.E. Brief Explanation of Responsibi Mr. Lackey has performed hydrau	lities lics and scour for Ripley Tow dge; Left Hand Fork Bridge; a alculations for deck drainage	YEARS OF AML F EXPERIENCE: n Bridge; Tal nd Blennerhas ; performed g	RELATED DESIGN 8 lman Bridge; Meassett Bridge. irder design and	DESIGN EXPERIENCE: 1 dowbrook Road Bridge; Simpson analysis; pier design and
NAME & TITLE (Last, First, Middle Int.) Randall L. Lackey, P.E. Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri Mr. Lackey has also performed canalysis; prepared design study	lities lics and scour for Ripley Tow dge; Left Hand Fork Bridge; a alculations for deck drainage reports; type, size and loca	YEARS OF AML F EXPERIENCE: n Bridge; Tal nd Blennerhas ; performed g	RELATED DESIGN 8 lman Bridge; Meassett Bridge. irder design and	DESIGN EXPERIENCE: 1 dowbrook Road Bridge; Simpson analysis; pier design and
NAME & TITLE (Last, First, Middle Int.) Randall L. Lackey, P.E. Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri Mr. Lackey has also performed canalysis; prepared design study Highways projects.	lities lics and scour for Ripley Tow dge; Left Hand Fork Bridge; a alculations for deck drainage reports; type, size and loca	YEARS OF AML F EXPERIENCE: n Bridge; Tal nd Blennerhas ; performed g	RELATED DESIGN 8 lman Bridge; Meassett Bridge. irder design and	DESIGN EXPERIENCE: 1 dowbrook Road Bridge; Simpson analysis; pier design and
NAME & TITLE (Last, First, Middle Int.) Randall L. Lackey, P.E. Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri Mr. Lackey has also performed canalysis; prepared design study Highways projects. EDUCATION (Degree, Year, Specia	lities lics and scour for Ripley Tow dge; Left Hand Fork Bridge; a alculations for deck drainage reports; type, size and loca lization)	YEARS OF AML F EXPERIENCE: n Bridge; Tal nd Blennerhas; performed g tion reports	RELATED DESIGN 8 lman Bridge; Meassett Bridge. irder design and	DESIGN EXPERIENCE: 1 dowbrook Road Bridge; Simpson analysis; pier design and on many of our Division of

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13. PERSONAL HISTORY STATEMENT data but keep to essentials		RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
J. Todd Garnes	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 5	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi	lities		
Mr. Garnes experience surveying extrusions. He has provided co Mr. Garnes has performed numero mapping, mine research, and dev	nstruction inspection services us water feasibility studies, elopment of final reports.	s for landsides and subsidence	e projects in Ohio.
EDUCATION (Degree, Year, Specia	lization)		
A.S. Architectural Design/ 1999 A.S. Computer Aided Drafting an			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete data
But Accp to essentiate,			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NAME & TITLE (Last, First, Middle	YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
NAME & TITLE (Last, First, Middle Int.) Thomas Rayburn, P.S.		YEARS OF AML RELATED DESIGN	A SHOPE COME AND THE PROPERTY AND ADDRESS OF THE PROPERTY OF T
NAME & TITLE (Last, First, Middle Int.)	lities ine mapping and surveying, for mine drainage and water supply hich include precision pressur y analysis and hydrology calculated and land management as well as electronic total stations and collects data and develops GI	YEARS OF AML RELATED DESIGN EXPERIENCE: 31 rmulated short term and long: y systems for underground and re quality surveys and compute ulations, provides computer as s reclamation and environment d/or GPS (Satellite) equipment S for utility mapping.	range mining plans for all surface mines, designed mine er simulation of ventilation nalysis for mining al permits.
NAME & TITLE (Last, First, Middle Int.) Thomas Rayburn, P.S. Brief Explanation of Responsibi Mr. Rayburn has experience in m types of coal mining, designed ventilation plans and systems w systems. He has performed slope stabilit applications, work with leases By utilizing "state of the art" surveys for aerial mapping and	lities ine mapping and surveying, for mine drainage and water supply hich include precision pressur y analysis and hydrology calculated and land management as well as electronic total stations and collects data and develops GI surveying and mapping for large	YEARS OF AML RELATED DESIGN EXPERIENCE: 31 rmulated short term and long: y systems for underground and re quality surveys and compute ulations, provides computer as s reclamation and environment d/or GPS (Satellite) equipment S for utility mapping.	range mining plans for all surface mines, designed mine er simulation of ventilation nalysis for mining al permits.
NAME & TITLE (Last, First, Middle Int.) Thomas Rayburn, P.S. Brief Explanation of Responsibi Mr. Rayburn has experience in m types of coal mining, designed ventilation plans and systems w systems. He has performed slope stabilit applications, work with leases By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed	lities ine mapping and surveying, for mine drainage and water supply hich include precision pressur y analysis and hydrology calcu- and land management as well as electronic total stations and collects data and develops GI surveying and mapping for large lization)	YEARS OF AML RELATED DESIGN EXPERIENCE: 31 rmulated short term and long: y systems for underground and re quality surveys and compute ulations, provides computer as s reclamation and environment d/or GPS (Satellite) equipment S for utility mapping.	range mining plans for all surface mines, designed mine er simulation of ventilation nalysis for mining al permits.
NAME & TITLE (Last, First, Middle Int.) Thomas Rayburn, P.S. Brief Explanation of Responsibi Mr. Rayburn has experience in m types of coal mining, designed ventilation plans and systems w systems. He has performed slope stabilit applications, work with leases By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed EDUCATION (Degree, Year, Specia	lities ine mapping and surveying, for mine drainage and water supply hich include precision pressur y analysis and hydrology calcu and land management as well as electronic total stations and collects data and develops GI surveying and mapping for lare lization) IT/1970	YEARS OF AML RELATED DESIGN EXPERIENCE: 31 rmulated short term and long: y systems for underground and re quality surveys and compute ulations, provides computer as s reclamation and environment d/or GPS (Satellite) equipment S for utility mapping.	range mining plans for all surface mines, designed mine er simulation of ventilation nalysis for mining al permits.

13. PERSONAL HISTORY STATEMENT data but keep to essentials		RESPONSIBLE FOR AML PROJECT	DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle	.) T	YEARS OF EXPERIENCE	
Int.)			
Scott LeRose, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi Mr. LeRose is experienced in de Drilling Operations; Groundwate Specific major highway design a of new four lane highway; US 52 interchanges; design of 2 mile Corridor H from Grant/Hardy Cou While working on these projects relocation, MOT, signing and pa seeding, pollution control quan development of ROW plans, inclu EDUCATION (Degree, Year, Special B.S. Civil Engineering/1997	eveloping major highway and rier Sampling/Monitoring; UST Reand right of way plan developm (I-73), a 3.5 mile design and section of Appalachian Corridanty line to Moorefield. If he has gained experience in avement stripping. He has per atities, and other items associating deed plots and legal des	moval/Replacement and Mine I ment projects include: Meado ROW plans for a new four later or H from Davis to Bismark; major drainage design, site formed quantity calculations iated with roadway plans.	Permitting/Reclamation. Subrook Road, a 2 mile design ane highway with two major design of 5.2 mile section of a grading design, utility a for pavement, drainage,
	NIG MET ONG	DEGLEGED MICH. (March 1822)	The start of
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, S	scace)
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT	DESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Ray Tilley, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
		5	31
Brief Explanation of Responsibi Mr. Tilley has over 30 years ex Mr. Tilley is a certified Water projects over his career. His EDUCATION (Degree, Year, Specia B.S. Civil Engineering/WV Tech	sperience in water and wastewa Plant Operator. Mr. Tilley current duties include managi	has successfully completed r ng both water and wastewater	numerous waterline design
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, S	State)
		Professional Engineer WV	

data but keep to essentials	OF PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AML PROJECT	r DESIGN (Furnish comple
AME & TITLE (Last, First, Middle nt.)		YEARS OF EXPERIENCE	
James Eric Gwinn, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 11
rief Explanation of Responsibi	l lities		
Mr. Gwinn has experience in con requirements. He has worked on Plateau Regional Water Project. Mr. Gwinn has designed approach EDUCATION (Degree, Year, Specia	the Cabell County Water Proj He has performed calculation Islabs, decks and extensive d	ect and the raw water intal ns on various AML project.	ke structure for the Fayette
B.S. Civil Engineering/1998/ We	est Virginia Institute of Tech	nology	
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year,	State)
13. PERSONAL HISTORY STATEMENT but keep to essentials) NAME & TITLE (Last, First, Middle	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT YEARS OF EXPERIENCE	r DESIGN (Furnish complete dat
Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brian D. Morton, P.E.	2	2	12
Brian D. Morton, P.E. Brief Explanation of Responsibi		2	12
CONTRACTOR GARACTER CALL SE CONTRACTOR PROPERTIES CONTRACTOR CONTR	lities ine extension projects in Put	nam and Kanawha County. H	
Brief Explanation of Responsibi	lities ine extension projects in Put nvolving the West Virginia Di and pavement marking plans a cuctures and highway construct	nam and Kanawha County. He vision of Highways. nd performed hydrologic and ion. Also prepared site de	e also has completed numerous d hydraulic calculations for evelopment plans,
Brief Explanation of Responsibi Mr. Morton has worked on waterly waterline relocation projects i Mr. Morton has prepared signing culverts and other drainage strespecifications, bid documents,	lities line extension projects in Put linvolving the West Virginia Di g and pavement marking plans a ructures and highway construct and has performed constructio	nam and Kanawha County. He vision of Highways. nd performed hydrologic and ion. Also prepared site de	e also has completed numerous d hydraulic calculations for evelopment plans,
Brief Explanation of Responsibi Mr. Morton has worked on waterl waterline relocation projects i Mr. Morton has prepared signing culverts and other drainage str	lities line extension projects in Put linvolving the West Virginia Di g and pavement marking plans a ructures and highway construct and has performed constructio	nam and Kanawha County. He vision of Highways. nd performed hydrologic and ion. Also prepared site de	e also has completed numerous d hydraulic calculations for evelopment plans,
Brief Explanation of Responsibing. Mr. Morton has worked on waterly vaterline relocation projects in the morton has prepared signing culverts and other drainage strespecifications, bid documents, appecially appears of the more properties.	lities line extension projects in Put nvolving the West Virginia Di g and pavement marking plans a fuctures and highway construct and has performed constructio	nam and Kanawha County. He vision of Highways. nd performed hydrologic and ion. Also prepared site de	e also has completed numerous d hydraulic calculations for evelopment plans, projects.

13. PERS \L HISTORY STATEMENT data ut keep to essentials		SPONSIBLE FO	R AML PROJECT DI	ESIGN (Furnish comp	ole		
NAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE						
Carney, Joseph T. P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML REEXPERIENCE:	ELATED DESIGN	YEARS OF DOMESTIC W. DESIGN EXPERIENCE: 36	ATERLINE		
Brief Explanation of Responsibi	lities						
Mr. Carney has extensive experi and contract administration. H storm sewer, drainage studies, EDUCATION (Degree, Year, Specia	e has worked on a variety of roadway, bridge design, hydro	Civil Engineer	ing projects in	cluding grading, ea	arthwork,		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION	(Type, Year, Sta	ate)			
		Professional	Engineer, 1976,	WV			
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES			ESIGN (Furnish comp	plete data		
NAME & TITLE (Last, First, Middle Int.)		YEARS OF	EXPERIENCE				
Workman, Gary A., CADD Senior Technician	YEARS OF AML DESIGN EXPERIENCE:	EXPERIENCE:	RELATED DESIGN 23	YEARS OF DOMESTIC W DESIGN EXPERIENCE:	ATERLINE		
Brief Explanation of Responsibi Mr. Workman is responsible for WVDEP/AML projects while employ	CADD design on AML projects,	as well as geo ed on 18 AML p	otechnical soil orojects while a	analysis. He Work t E. L. Robinson.	ed on 44		
EDUCATION (Degree, Year, Specia Technical School/1987/CADD	lization)						
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION WVDOH certifi	(Type, Year, St. cations compact	ate) ion, aggregates and	d concrete.		

13. PERS \L HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES SPONSIBLE FOR AML PROJECT DESIGN (Furnish compled data at keep to essentials)						
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE					
Mayes, Jason M.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:			
Brief Explanation of Responsibi	lities					
Provides CADD Design for site d Nearly ten years experience in			AML Projects. Mr. Mayes has			
EDUCATION (Degree, Year, Specia	lization)					
B.S. Industrial Technology 1997 A.S. Drafting and Design 1996 W						
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St	ate)			
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete data			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE				
Scott A. Pratt	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:			
	13	13				
Brief Explanation of Responsibi	lities					
Mr. Pratt has extensive experience as a Field Geologist, performing test boring over-sight, logging soil and core samples, and obtaining water levels. He has also performed many geotechnical soil tests in the laboratory. He is also experienced in mine map research, specification writing, and quantity and cost calculations for AML projects.						
EDUCATION (Degree, Year, Specialization)						
B.S. Geology, 1999, Marshall University						
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St	ate)			

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPL DEST SERVICES	ETE AMI
Various computer hardware and software including: Microstation, InRoads, AutoCAD, ELRSoil, Microsoft Off applications, Haested, Water CADD, Culvert Master, Flow Master	ice
Various surveying equipment:	
Instruments - Topcon Total Station (6), Trimble Robotic DR200+ (2)	
GPS Equipment - Trimble 5700 Receiver (6), Trimble TSCe Controller/Handheld (5) *all equipment lists have various misc. survey equipment to go along (poles, tape measures, data c etc.)	
Riegl LMS - 360 3D Laser Scanner - surface imaging system based upon accurate distance measurement be means of electro-optical range measurement and a two axis scanning mechanism.	У

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE	
Abney Refuse Piles Raleigh County	WVDEP/AML&R	Surveying, Mapping and Design	\$885,575	98	
Milam Ridge Refuse Wyoming County	WVDEP/AML&R	Surveying, Mapping and Design	\$595,000	90	
West Columbia B Mason County	WVDEP/AML&R	Surveying, Mapping and Design	\$1,365,9950	90	
Cartright Branch Logan County	WVDEP/AML&R	Surveying, Mapping and Design	\$242,550		
Marsh Fork Water Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$2.9 M	10	
Big Ugly Creek Waterline Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$11 M	20	
Phase III-A Sanitary Sewer Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$ 9 M	10	

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	\$6.0 M	85
Lower Mud River Waterline Extension	Lincoln County PSD 240 Lower Coal River Rd. Alum Creek, WV 25003	Design and Construction Management	\$ 7.9 M	65
McDowell PSD Jolo Phase II Water McDowell County	McDowell Public Service District	Design and Construction Management	\$4.0 M	85
Dille/Widen Water Extension Clay County	Birch River PSD	Design and Construction Management	\$4.0 M	85
Outch Ridge/Sanderson Water Extension, Kanawha County	Kanawha County RDA	Design and Construction Management	\$2.5 M	85
Lavalette PSD Nestlowe Nater Phase 2	Lavalette PSD 5308 Route 152 Lavalette, WV 25535	Design and Construction Management	\$4.7 M	98%
Taeger Regional Sewer	McDowell County PSD HC 31 Box 436J Welch, WV	Design and Construction Management	\$5 M	40
OTAL NUMBER OF PROJECT	S:14	TOTAL ESTIM	ATED CONSTRUCTION COSTS:	\$ 60 Million

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	

	AST 5 YEARS ON WHICH YOUR FIRM	S THE DESIGNATED ENGINEER OF RECOR		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Thorpe Refuse Pile McDowell County	WVDEP-AML Oak Hill, WV Mark Proctor	\$744,240	2011	Yes
Shinnston-Lumberport Subsidence Harrison County, WV	WVDEP-AML Philippi, WV Timothy LeMasters	\$442,000	2011	Yes
Corridor H Davis-Bismark X347-H-64.85 00 Tucker County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$9.0 M	2008	No
WVDEP-Emergency East Bank (Willis) Mine Blowout	WVDEP-AML 601 57 th Street Charleston, WV 25304	\$0.8 M	2009	Yes
Newtown (Kinder) Portals Mingo County	WVDEP-AML 601 57 th Street Charleston, WV 25304 Roger Earle	\$490,410	2010	Yes
Keaton Branch Complex Raleigh County	WVDEP-AML Oak Hill, WV Mark Proctor	\$527,250	2010	Yes
Gilmer B Sites 3-8 Gilmer County	WVDEP-AML&R 601 57 th Street Charleston, WV 25304	\$675,000	2009	Yes
Upshur County Industrial Park Upshur County	Upshur County EDA	\$4.0 M	2009	Yes

	WITHIN LAST 5 YEARS ON WHI		NSULTANT	TO OTHER FIRMS	(INDICAT: HASE	
	ICH YOUR FIRM WAS RESPONSI	IBLE)		19 N S SCHOOL-Charles Communication	**	
PROJECT NAME, TYPE	NAME AND ADDRESS	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED	FIRM ASSOCIATED	
AND LOCATION	OF OWNER	OF YOUR FIRM'S PORTION		(YES OR NO)	HTIW	
Appalachian Corridor	Sub to Michael Baker,				Michael Baker, Jr.,	
D Blennerhassett	Jr., Inc.	±5, 500, 000			Inc.	
Island Bridge X354-D-0.00	Post Design Services	\$7,500,000	2008	Yes		
X354-D-0.00	1	l.				
	1	(
	Sub to Michael Baker Jr.,		+		Michael Baker, Jr.,	
Section 6	Inc.	1			Inc.	
X316-H-100.40	Surveying, ROW	\$950,000	2008	Yes		
	questionnaires, Hydraulic					
	Studies	1				
Appalachian Corridor H	Sub to Modjeski & Masters		1		Modjeski & Masters	
Section 3	Survey, Geotech & ROW	1			Hodjeski a Hascels	
Davis to Bismark	Plans	\$9,000,000	2008	No		
		45,000,000	2000	140		
1		1				
Robinson Creek	Sub to EDG				EDG	
Bridge	Roadway, Surveying,	1			ELG	
\$303-85-27.81	Structures, Hydraulic	\$1,000,000	2008	Yes		
Boone County	Studies, ROW Plans	1	2000	100		
		1				
Holley Grove Bridge	Sub to Triton		+		Triton	
Kanawha County	Construction	1	1		Construction	
	Plans for Bridge,	\$500,000	2010	Yes		
	Hydraulics, Post Design	(10 Sect 3 1 Sect 3)		70.5.70		
		I				
		l				
]	1				
]	i				
19. Use this space to	provide any additional j	information or description of re	esources	supporting your	firm's	
qualifications to	perform work for the Wes	st Virginia Abandoned Mine Lands	s Program		- Annual Control of the Control of t	
E. L. Robinson En	gineering Co. is committe	ed to the WVDEP/AML program to p	provide p	rofessional des	sign, surveying and	
mapping and construction monitoring services in a timely and cost-efficient manner. Our business plan relies						
heavily on the work offered by the WVDEP/AML program.						
20. The foregoing is	a statement of facts.					
K'	M. W.M.					
Signature:	my " IVAUS)	Title: ACTING PROJECT MANAC	GER	Date:		
Printed Name: Richard	W. Watts, P.G.			March 5, 2013		

NOTE: THIS DOCUMENT WILL BECOME VOID AFTER DECEMBER 31 IN CALENDAR YEAR OF DATE HEREON.



Project: Glen Rogers Emergency

Wyoming County, WV

Year: 2012

Client: WVDEP-AML

Charleston, WV

Description: Performed survey, drilling, and design for shaft seals.

Project: Abney Refuse Pile

Raleigh County, WV

Year: 2011-2013

Client: WVDEP-AML

Oak Hill, WV

Description: Field surveying and mapping, subsurface investigation, design

work for refuse regarding, mine seals, and drainage.

Project: Cartright Branch Refuse Pile

Logan County, WV

Year: 2011-2013 Client: WVDEP-AML

Charleston, WV

Description: Performed survey, drilling, design for refuse regrading and mine

drainage control.

Project: Thorpe Refuse Pile

McDowell County, WV

Year: 2011-2012 Client: WVDEP-AML

Oak Hill, WV

Description: Performed survey, drilling, design for refuse and spoil regrading

and mine drainage control.

Project: Shinnston-Lumberport Subsidence

Harrison County, WV

Year: 2010-2012 Client: WVDEP-AM

Client: WVDEP-AML Philippi, WV

Description: Performed site survey, drilling and prepared subsidence

abatement design.



Project: Newtown (Kinder) Portals Design

Mingo County, WV

Year: 2010-2012 Client: WVDEP-AML

Charleston, WV

Description: Performed site survey, and prepared design for portals

reclamation and drainage abatement design.

Project: Gordon "C" Refuse Pile

Boone County, WV

Year: 2010-2012 Client: WVDEP-AML

Oak Hill, WV

Description: Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and refuse reclamation.

Project: Keaton Branch Complex

Raleigh County, WV

Year: 2010-2011 Client: WVDEP-AML

Oak Hill, WV

Description: Performed survey, drilling, design for refuse regrading and mine

drainage control.

Project: Dunloup Creek Complex

Raleigh County, WV

Year: 2009-2011 Client: WVDEP-AML

Oak Hill, WV

Description: Performed survey, drilling, design for refuse and spoil regrading

and mine drainage control.

Project: Brownton (McCord) Landslide

Barbour County, WV

Year: 2009-2011 Client: WVDEP-AML

Philippi, WV

Description: Performed site survey, drilling and prepared landslide abatement

design.



Project: Keystone (Avery) Landslide and Portal

McDowell County, WV

Year: 2009-2011

Client: WVDEP-AML

Description: Performed site survey and prepared landslide abatement design,

portals reclamation, and drainage control.

Project: Dan's Branch (Pennington) Landslide Emergency

Mingo County, WV

Year: 2011

Client: WVDEP-AML

Charleston, WV

Charleston, WV

Description: Field surveying and mapping, subsurface investigation, design

work for landslide reclamation.

Project: East Bank (Willis) Mine Blowout

Kanawha County, WV

Year: 2009

Client: WVDEP-AML

Charleston, WV

Description: Field surveying and mapping, design work for mine seal and

drainage control.

Project: Island Creek #18 Mine Complex

Logan County, WV

Year: 2009-2011 Client: WVDEP-AML

Oak Hill, WV

Description: Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and refuse reclamation.

Project: Jacob's Fork Complex

Boone County, WV

Year: 2008-2009 Client: WVDEP-AML

Charleston, WV

Description: Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and reclamation.



Project: Rhodell Refuse & Portals

Wyoming County, WV

Year: 2008

Client: WVDEP-AML Charleston, WV

Description: Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gilmer B Site 3.8

Gilmer County, WV

Year: 2008

Client: WVDEP-AML

Charleston, WV

Description: Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gouge Landslide Emergency

Scott Town, OH

Year: September 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site survey, drilling and prepared landslide abatement

design.

Project: Brown Landslide Emergency

Rayland, OH

Year: August 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site survey and prepared landslide abatement design.

Project: Rodgers Subsidence Emergency

Wellston, OH

Year: January 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site survey and prepared subsidence abatement

design.



Project: McAdams Subsidence Emergency

Stark County, OH

Year: April 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed investigation and prepared report of findings.

Project: Athens Rt. 13 Refuse Fire Emergency

Athens County, OH

Year: March 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site survey, prepared abatement design and monitored

on site construction for fire extinguishment.

Project: Toney Fork Landslide Emergency

Boone County, WV

Year: February 2006 Client: WVDEP-AML

Charleston, WV

Description: Performed site survey, drilling and prepared plans and

specifications to stabilize an emergency landslide area.

Project: Cox Refuse Fire Emergency

Gallia County, OH

Year: December 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed abatement design for fire extinguishment.

Project: Lavender Refuse Fire Emergency

Meigs County, OH

Year: November 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed abatement plan and monitored construction.



Project: Goetz Subsidence Emergency

Columbiana County, OH

Year: November 2005
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed investigation and prepared report of findings.

Project: Adkins Landslide Emergency

Gallia County, OH

Year: December 2005
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed surveying, drilling, landslide abatement and

construction monitoring.

Project: North Matewan (Sipple Drainage)

Mingo County, WV

Year: February 2005 Client: WVDEP-AML

Description: Performed surveying, drilling and design for drainage project

abatement.

Project: Phalen Landslide Emergency

Martins Ferry, OH

Year: January 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site surveying and landslide abatement design.

Project: Baisden Subsidence Emergency

Jackson, OH

Year: January 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed drilling to develop subsidence abatement solutions.



Project: Parsons Landslide Emergency

New Philadelphia, OH

Year: December 2004
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site review and report concerning landslides relation

to mining and potential solutions.

Project: Treadway Landslide Emergency

Rayland, OH

Year: October 2004
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed site surveying, drilling and landslide abatement

design.

Project: Big Creek "C" Refuse

Logan County, WV

Year: July 2004 Client: WVDEP-AML

Description: Performed surveying and drilling for design.

Project: Imboden Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed drilling and surveying to develop landslide abatement

solutions and cost estimates.

Project: Titus Road Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.



Project: Jefferson County Road 26 Landslide Emergency

Winterville, OH

Year: May 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.

Project: Charleston Romeo Landslide

Kanawha County, WV

Year: May 2004 Client: WVDEP-AML

Description: Performed surveying, drilling and design of landslide abatement.

Project: Roush Landslide Emergency

Year: Pomeroy, OH March 2004

Client: ODNR-AML

1855 Fountain Square

Description: Prepared plans and specifications to stabilize an emergency

landslide area.

Columbus, OH

Project: Lewis Landslide Emergency

Pomeroy, OH

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Performed surveying, drilling, prepared plans and specifications

to stabilize an emergency landslide area, and provided

construction monitoring.

Project: Moran Subsidence

Clinton, OH

Year: January 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Prepared plans and specifications to stabilize an emergency

subsidence area.



Project:

Ron Bobar Subsidence

Year:

Flushing, OH January 2004

ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Investigation and report of an emergency subsidence area.

Project:

Gooney Otter Refuse

Wyoming County, WV

Year: Client: January 2004 WVDEP-AML

Description:

Performed surveying, drilling and site design for refuse

regarding project.

Project:

Chapmanville (Gorby) Mine Blowout

Logan County, WV

Year:

December 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide regrading

and retaining wall design.

Project:

Tuppers Creek (Layne) Landslide

Kanawha County, WV

Year:

July 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.

Project:

Maidsville (Tennant) Landslide

Monongalia County, WV

Year:

February 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.



Abandoned Mine Land Reclamation Experience

Project:

Whittington Hill (Walker Landslide)

Kanawha County, WV

Year:

June 2002

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design for an emergency

landslide.

Project:

Minden Refuse Pile Reclamation Project

Fayette County, WV

Year:

September 2001

Client:

WVDEP-AML

Description:

Performed surveying and design for emergency project to

upgrade drainage control.

Project:

Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year:

July 2001

Client:

WVDEP-AML

Description:

Performed surveying and design regrading refuse.

Project:

Hot Coal Reclamation Project

Raleign County, WV

Year:

October 2000

Client:

WVDEP-AML

Charleston, WV

Description:

Performed surveying and design for regrading refuse.

Project:

Bull Run #27

Preston County, WV

Year:

October 2000

Client:

WVDEP-AML

Description:

Performed surveying and design for regrading refuse.

Project:

Rich Fork (Thaxton) Landslide

Kanawha County, WV

Year:

July 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.



Abandoned Mine Land Reclamation Experience

Project: Maidsville (Tennant) Landslide

Monongalia County, WV

Year: February 2003 Client: WVDEP-AML

Description: Performed surveying, drilling and design of landslide abatement.

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

Description: Performed surveying, drilling and design for an emergency

landslide.

Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001 Client: WVDEP-AML

Description: Performed surveying and design for emergency project to

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001 Client: WVDEP-AML

Description: Performed surveying and design regrading refuse.

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000 Client: WVDEP-AML

Charleston, WV

Description: Performed surveying and design for regrading refuse.

Project: Bull Run #27

Preston County, WV

Year: October 2000 Client: WVDEP-AML

Description: Performed surveying and design for regrading refuse.



Riffe Branch Impoundment Project:

Fayette County, WV

June 2000 Year: WVDEP-AML Client:

Description: Performed surveying and design for regrading refuse and

drainage control.

Ven's Run Landslide Project:

Harrison County, WV

September 1999 Year: WVDEP-AML Client:

Performed surveying and design for regraded landslide area. **Description:**

Project: **Fickey Run**

Preston County, WV

September 1999 Year: **Client:** WVDEP-AML

Performed surveying and design for refuse and spoil regrading **Description:**

and drainage control.

Project: Bull Run #35 July 1999 Year: WVDEP-AML Client:

Description: Performed surveying and design for refuse and spoil regrading.

Project: Securro Mine Drainage Site 1 & 2

Fairmont, WV July 1998

Year: **Client:** WVDEP-AML

Performed surveying and design for mine drainage system. Description:

Project: Brown's Creek #10 Reclamation Project

1997 Year:

WVDEP-AML Client:

Performed surveying and design for refuse regrading and **Description:**

mine seal installation.



Soil Analysis Geotechnical Experience

US-52 Kermit By-Pass

Solicited Bids from core boring contractors and performed core borings for highway and bridges for a planned four-lane highway in Mingo County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a total of six bridges.

Meadowbrook Road

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Harrison County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

US 60 Coal River Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge, which spans the Coal River in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

US 60 CSX-Overpass Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans mainline tracks of the CSX Railroad in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

Indian Creek Bridge Boone County West Virginia

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans the Coal River in Boone County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

Camp Creek Bridge - Lavalette

Layout and directed core boring operations using WVDOH forces for a replacement bridge on US 152 in Wayne County West Virginia. Prepared Geotechnical report with recommended foundation alternatives.



Soil Analysis

Geotechnical Experience

Jackson Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Middle Island Creek in Tyler County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

Tallman Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Middle Island Creek in Tyler County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

Corridor H-Section 7 (Foreman to Moorefield)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Hardy County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the South Branch of Potomac River.

Corridor H-Section 12 Section 01(Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant Counties West Virginia.

Corridor H-Section 12 Section 03 (Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

I-79 Lodgeville Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.



Soil Analysis

Geotechnical Experience

I-79 Simpson Creek Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

I-79 Meadowbrook Road Over Pass

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

Ripley Town Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Mill Creek in Jackson County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

Ripley Route 21 Road Widening

Performed slope stability analysis of a landslide area and designed a method to stabilize the area so the existing roadway could be widened. Developed Plans and specifications, which were included in the bid, package for the road-widening project.

I-64 Cross Roads Overpass Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

I-79 Left Hand Fork Bridge

Reviewed existing core boring data, and performed slope stability analysis on the existing bridge abutment that had moved. Reviewed data from slope inclinometers and design pile lagging and rock buttress to stabilize the embankment.



Hydrology and Hydraulics

Project:

Blennerhassett Island Bridge Over Ohio River

Year:

1999-2003

Client:

Michael Baker Jr., Inc.

5088 Washington Street, West

Charleston, WV 25313

Contact:

Pi Amin, P.E.

Vice President Michael Baker Jr, Inc. (Southwest Region)

304-769-0821

Description:

Prepared an analysis of the hydraulic impact of the proposed bridge on the Ohio River flow, and prepared an appropriate hydraulic report. The analysis utilized HEC-RAS and as a part of the hydraulic report, a scour analysis was performed. E. L. Robinson Engineering Co. developed a computer model of the Ohio River using hydrographic survey mapping provided by our survey group.

Two – Dimensional Hydraulic was also developed to model complex flows for various bridge configurations and to provide more accurate predictions of hydraulic behavior anticipated in the area. The 2-D and 3-D models allow derivation of design details and design analyses and provide more accurate simulations of scour hole geometry.

Project:

US 52 Mainline Bridge

KY 40 Bridge/Kermit Bypass over Marrowbone Creek

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

James Sothen, P.E., Director, Engineering Division

304-558-0501

Description:

Prepared an analysis of the hydraulic impact of the Kermit Bypass Project over Marrowbone Creek and a partial relocation of the creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared

using the USACE 1-D HEC-RAS program.



Hydrology and Hydraulics

Project: Bridge No. 2922.1 NB & SB

I-79 Over Left Hand Creek & US 119

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the placement of a

retaining wall for slope protection of the Left Hand Fork Bridge over Left Hand Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS

program.

ELR also prepared Section 404 permitting documents outlining the effects a temporary cofferdam, which would be used during the construction phase, would have on the outlying areas upstream of the

projects.

Project: Bridge No. 2448.1 – Simpson Creek Bridge

I-79 Over Simpson Creek

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the widening of the

Simpson Creek Bridge over Simpson Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-RAS program.

ELR also prepared Section 404 permitting documents outlining the effects temporary cofferdams, which would be used during the construction phase, would have on the outlying areas upstream of

the projects.



Hydrology and Hydraulics

Project: Bridge No. 10059 – Ripley Town Bridge

US 33 Over Mill Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the replacement Ripley

Town Bridge over Mill Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS program. ELR also prepared Section 404 permitting documents outlining the effects temporary causeways, which would be used during the construction phase, would have on the outlying areas upstream of the

projects.

Project: Bridge No. 4732 – Jackson Bridge

WV 18 Over Point Pleasant Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

903 3rd Street

Moundsville, WV 26041

Contact: Daniel W. Sikora, P.E., District Engineer

304-843-4008

Description: Prepared an analysis of the hydraulic impact of the replacement Jackson

Bridge over Point Pleasant Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-RAS program.



Hydrology and Hydraulics

Project: Bridge No. 4636 – Indian Creek Bridge

CR 3/25 Over Big Coal River

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 1

1334 Smith Street Charleston, WV 25301

Contact: John W. Dawson, P.E., District Engineer

304-558-3001

Description: Prepared an analysis of the hydraulic impact of the Indian Creek

Replacement Bridge over the Big Coal River and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the

USACE 1-D HEC-2 program and the FHWA WSPRO program.

Project: Bridge No. 4769 – Tallman Bridge

CR 24 Over Middle Island Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

904 3rd Street

Moundsville, WV 26041

Client: Daniel W. Sikora, P.E., District Engineer

304-843-4008

Description: Prepared an analysis of the hydraulic impact of the replacement Tallman

Bridge over Middle Island Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS

program.



Hydrology and Hydraulics

Project: Bridge No. 10058 - Meadowbrook Road Bridge

CR 24 Over West Fork River

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the new Meadowbrook

Road Bridge over the West Fork River and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process and the Harrison County Flood Insurance Study model of the West Fork River was also used. Computer modeling was prepared

using the USACE 1-D HEC-RAS program.

Prepared Section 404 permitting documents outlining the effects temporary sheet piling, which would be used during the construction

phase, would have on the outlying areas upstream of the projects.

Project: Bridge No. 4426 – Lower Gassaway Bridge

WV 4 Over Elk River

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the Lower Gassaway

Replacement Bridge over the Elk River and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-2 program and the FHWA WSPRO program.



Hydrology and Hydraulics

Project:

Bridge No. 4574 - Camp Creek Bridge

WV 52 Over Camp Creek

Year:

1998

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 2

P.O. Box 880

Huntington, WV 25712

Contact:

J. Wilson Braley, P.E., District Engineer

304-528-5625

Description:

Prepared analyses of the hydraulic impact of the Camp Creek Bridge over Camp Creek and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process.

Computer modeling was prepared using the USACE 1-D HEC-2

program and the FHWA WSPRO program.



Aerial Photography and ontour Mapping Experience

E.L. Robinson Engineering Co. has worked with various clients to develop contour mapping of sites and areas that otherwise could not be determined. With the use of aerial photography and state of the art technology, E.L. Robinson Engineering Co. has developed maps from photographs for numerous projects including but not limited to:

- City of Beckley
- City of Charleston
- Corridor D
- Corridor H
- Cross Lanes Connector
- Eldora
- Frazier's Bottom
- Glenwood
- Hatfield Cemetery
- I-70 Washington Avenue (Wheeling, WV)
- I-64 Glade Creek
- Jackson Mill
- King Coal
- KY 40 Connector
- Logan Run
- New River Parkway
- Ohio River Crossing
- Pinegrove
- Parkersburg
- Powell Creek
- Prince
- PSI-Baker/Ft. Henry Bridges
- Racetrack
- White Sulphur Springs
- Veterans Park



Aerial Photography and Contour Mapping Experience

E.L. Robinson Engineering Co. has completed the preliminary mapping for the WVDEP for all of the AML projects located in **Northern West Virginia** since 2012. In addition, ELR has completed either preliminary or final mapping for the following:

2003-Present

All ELR AML Projects WV and OH

2002

Community of Preston Rhodell Refuse Portals Vivian Refuse Maintenance Glen Rogers Waterline Sundial (Hatfield) Refuse Pile Jacob Fork Complex Thomas (NE) Subsidence

2001

Bartley Mine Dump
Beckley Soccer Complex
Holden Portals/Structures
Jeffrey Complex
Minden Refuse Drainage
Roach Branch Refuse
Sauls Run Strip
Stonecoal Creek Complex
Waterline Photography
Weaver Portals/Mine Drain

<u>2000</u>

Micajah Refuse Pile
McAlphin Eroding Dump
Flemington Portals/Drainage
Minden "C" Refuse Pile
National Mine Complex
Linger Clogged Stream
Hotcoal Mine Dump
Layton Mine Drainage
Quintain Development

1999

Bull Run #27
8th Street-Warwood Avenue
Mabie Highwall
Coal Branch
Matoaka Subsidence
Elkins Coal
Springton Refuse
Veins Run

1998

Bull Run #35 Fickey Run

1997

Browns Creek Marrowbone Matewan Pigeon Creek





Edward L. Robinson, P.E., P.S. President

Education

M.S. Civil Engineering University of West Virginia, (COGS), 1981

B.S. Civil Engineering West Virginia Institute of Technology, 1969

Registrations

Registered Professional Engineer in West Virginia, Kentucky, Ohio, Pennsylvania, North Carolina, South Carolina, Virginia, Georgia, Maryland and Colorado.

Registered Professional Surveyor in West Virginia.

Professional Memberships

- · American Society of Civil Engineers
- National Society of Professional Engineers

Professional Experience

Mr. Robinson founded E. L. Robinson Engineering Co. in 1978 with four employees. Initially the firm provided land surveying and land development services.

Under his leadership, E. L. Robinson has entered the new millennium as a multidisciplined professional services firm that



utilizes the latest technology in the design of highways, bridges, structures, environmental, civil, and geotechnical projects as well as global position satellite surveying, right-ofway, construction inspection and architectural services.

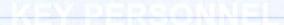
The firm now employs more than 90 engineers, architects, surveyors and support personnel and has been converted to an employee owned company through an Employee Stock Ownership Plan (ESOP).

Representative Projects

Engineering Review of the following projects:

- US Route 52 Kermit Bypass: This project consisted of 2,5 miles of four-lane divided highway, 3,000 LF of four-lane access road design, two 4-ramp intersections, one set of twin structures, one single bridge, and 2,900 LF of stream relocation, all of which resulted in 10 million cubic yards of excavation and an estimated total construction cost of \$88 million.
- Corridor H Davis to Bismark: This project consisted of 1.75 miles of four-lane divided highway, one bridge, two at-







grade intersections, and a $6' \times 6'$ concrete box culvert. This project has an estimated total construction cost of \$9 million.

- Corridor H Foreman to Moorefield:
 This project consisted of 5 miles of four-lane divided highway, almost 3 miles of access road design, a truck escape ramp, one set of twin structures, one single bridge, a box culvert, and naturalized stream design. This project resulted in 10 million cubic yards of excavation and an estimated construction cost of \$75 million.
- CAMC 33rd Street Relocation: Engineering design and construction management for the relocation of 33rd street and site development for a five story clinical teaching facility in Charleston, WV.

Offices Held

- Current Member of West Virginia University Board of Governors
- Current Chairman of WVUIT Advisory Board
- President of West Virginia Council of Engineering Companies
- Chairman Transportation Committee
 WV Association of Consulting Engineers
- State Director of West Virginia Society of Professional Engineers
- President of West Virginia Society of Professional Engineers

- Assistant Treasurer of the American Society of Civil Engineers
- National Director of the ASCI representing WV, NC, SC and VA
- President of West Virginia Section of ASCE

Honors Awarded

- Honorary PhD, Doctor of Science West Virginia Institute of Technology 2002
- Engineering Entrepreneur of the Year Ernst & Young, 2001
- National Entrepreneur of the Year Finalist - Ernst & Young, 2001
- Engineer of the Year American Society of Civil Engineers, 1998
- Engineer of the Year West Virginia Society of Professional Engineers, 1997
- Alumnus of the Year West Virginia University Institute of Technology, 1992







Eric J. Coberly, P.E. Project Manager

Education

M.S. Engineering of Mines

 West Virginia University, 1990

 B.S. Engineering of Mines

 West Virginia University, 1983

Registrations

Registered Professional Engineer in West Virginia and Ohio

Professional Achievements

Instructor for Technical Training Courses, Office of Surface Mining (OSM)

Assisted in development of Coal Seam Fire Extinguishment Course, Jakarta, Indonesia

Professional Experience

Mr. Coberly has been an experienced Engineer for the West Virginia Department of Environmental Protection, Abandoned Mine Lands Division (AML) and the West Virginia Department of Energy, AML Division. With over 22 years of experience in AML, Mr. Coberly has worked throughout the state of West Virginia as a Construction Administrator, Design Administrator and a District Engineer. Mr. Coberly has participated in the design of over 100 AML projects. In addition, he served as Chief of the Office for over four years.



Mr. Coberly has been Project Manager/Engineer on various grant and emergency AML projects including landslide abatements, refuse regrading of mine sites, drainage, drilling, mine seals, highwalls, backfills, flood/erosion repair, subsidence control, water feasibility studies, and water treatment. Duties included project planning and design, managing construction bid and award, construction oversight and inspection, and project closeout.

Mr. Coberly has managed projects with E. L. Robinson which have involved site development, infrastructure planning, water, sewer, geotechnical analysis, abandoned mine reclamation projects, active surface mining projects, insurance investigations, providing expert witness services and various post mining land use projects.

Representative Projects

Lavalette PSD Rt. 52 Waterline Extension – Project Manager responsible for design and construction oversight of \$5 Million waterline extension project.







Mingo Redevelopment Wood and Belo Industrial Parks - Project Manager responsible for design and construction oversight of \$4.5 Million site development project that involved over 2 million cubic yards of earthwork and infrastructure development of over 120 acres.

Williamson DHHR Facility - Project Manager responsible for design and construction oversight of \$2.5 Million Office Facility. Project included the geotechnical analysis, foundation design, site grading, water, sewer and storm water design for the facility.

Mason County 911 Facility - Project Manager responsible for design and construction oversight of \$1.5 Million Office Facility. Project included the geotechnical analysis, foundation design, site grading, water, sewer and storm water design for the facility.







Richard W. Watts Project Manager/Geologist

Education

B.S.in Geology, Marshall University, 1977M.S.in Geography, Marshall University, 1994

Professional Registrations

Registered Professional Geologist, Kentucky, 1993, No.159Certified Professional Geologist, Virginia, 1992, No.856

Professional Memberships

Geological Society of America Association of Engineering Geologists

Teaching Experience

Instructor, 1998 - Marshall University Engineering Geology Program - Soil and Rock Mechanics

Professional Experience

Mr. Watts has more than 31 years of experience in providing consulting services as a senior geologist. He has also served as project manager on numerous projects.

Mr. Watts is primarily an engineering geologist whose range of project experience has encompassed numerous projects concerning geologic investigation, rock and soils engineering, landslides, land reclamation, forensic damage investigations, hydrogeology and the coal industry.



He has performed hundreds of slope stability analyses for landslides and other projects involving the design of stable slopes. In addition, he has performed several studies involving landslide prediction to aid clients in land use and safety planning. Projects involving rock slope stability have included the analysis of the stability of high rock cuts for surface mining operations and highways.

Geotechnical experience has included numerous projects involving soils, foundations, landfills and damage studies. These projects have encompassed such areas as pile driving, caisson installation, earth fill placement, subsurface exploration, site reconnaissance, grout and concrete placement and quality control.

AML and Coal Industry Projects:

Work on more than 100 Abandoned Mine Land Reclamation projects, including:

- Mine subsidence, refuse piles and draining mine portals.
- Coal seam mineability studies.
- Coal refuse embankment and slurry pond design.
- Coal permitting, exploration and drill log correlations.
- Roof and floor studies and pillar strength evaluations.







Timothy B. Cart, P.E., P.S. *Project Engineer*

Education

B.S. Civil Engineering West Virginia University, 1981

Registrations

Registered Professional Engineer in West Virginia and Ohio

Registered Professional Surveyor in West Virginia

Professional Memberships

· American Society of Civil Engineers

Professional Experience

Mr. Cart has over 25 years of experience in providing consulting engineering services. Clients served have included Industrial, Public and Private Institutions and State and Federal Agencies.

Mr. Cart has served as Project Engineer on numerous geotechnical investigations over the years. These projects have included highways, bridges, industrial sites and private development.

He has designed numerous waterline extensions and sewer collection systems. These extensions have included providing service to many residential as well as industrial customers. The sewer collection systems have included design of systems to collect sewage from residential and industrial sites. Mr. Cart served as a project



engineer on several major waste water treatment plant upgrades for industrial clients in the Kanawha Valley. He has designed several plants to serve industrial as well.

Mr. Cart has performed over 100 Abandoned Mine Land Reclamations projects throughout Appalachia. These projects have been mainly in Ohio, West Virginia and Eastern Kentucky. These projects have involved draining flooded mine workings, support of ground experiencing or subject to Mine subsidence and the stabilization of landslides.

Mr. Cart has designed numerous retention and retaining ponds for sites. These designs have involved the determination of storm runoff and design of structures to safely retain and pass the required storm peak flows.

His experience includes permitting activities for projects which have included:

- Railroad Occupancy Permits for Utilities
- NPDES Permits for Industrial and Public Wastewater Facilities
- Highway Permits for Utility Occupancy and Access Road Tie Ins
- Health Department Permits for Water and Sewer Projects





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- US Corps of Engineers Permits -Nationwide and Individual
- West Virginia Public Lands Permits

Mr. Cart has recently been involved in the design of a 100 acre Industrial Site and 8 acre Industrial/Commercial Site in Mingo County. These projects are currently under construction and are located near Appalachian US 119 Corridor G.







John R. Kelly, III

Engineer Intern

Education

B.S. Civil Engineering West Virginia University, 1998

Computer Skills

AutoCAD, Microstation, COM624-P, Inroads, Hec-Ras, and ELRSoil

Professional Memberships

American Society of Civil Engineers

Professional Experience

Mr. Kelly has worked on many AML projects in West Virginia and Ohio since joining ELR in 1998. His responsibilities have included design of AML grading and drainage plans, AML Emergency projects, hydraulic calculations, permitting, design of retaining structures, design of passive AMD treatment systems, methods for extinguishing burning materials, estimation of quantities, and estimation of engineering costs. Mr. Kelly has experience in the design and construction of waterline extension projects, and large scale site development projects involving over 1 million yards of excavation.

Mr. Kelly has performed construction inspections of waste water treatment facilities and has experience with roadway design, design of foundations, and retaining walls.



Representative Projects

Mr. Kelly has designed cut slopes for large scale roadway projects such as:

- Kermit Bypass, Mingo County, WV
- Meadowbrook Road, Harrison County, WV
- US-35, Mason County, WV
- Corridor H, Section 7, Hardy County, WV

Representative Mine Reclamation Projects:

- Dunloup Creek Complex
- Jacobs Fork
- Bull Run # 27
- · Keaton Branch Refuse Pile
- Newtown (Kinder) Portals
- Thorpe Refuse Pile
- Abney Refuse Piles
- Glen Rogers Emergency







James T. Rayburn, P.S. Chief Surveyor

Education

A.S. Mechanical Engineering, West Virginia Institute of Technology, 1970

Registrations

Registered Professional Surveyor in West Virginia

Professional Memberships

American Congress on Surveying and Mapping

The American Association for Geodetic Surveying (AAGS)

Member Organization of ACSM.

Cartography and Geographic Information Society (CaGIS)

Geographic and Land Information Society (GLIS)

National Society of Professional Surveyors (NSPS)

West Virginia Association of Land Surveyors, Inc.



Professional Experience

Mr. Rayburn currently serves as Manager of Surveying for E.L. Robinson Engineering (ELR) and has more than 30 years of Design Surveying and Construction Surveying experience. The responsibilities include management of surveying and control for various design projects, including highways, buildings, and bridges. In addition, Mr. Rayburn manages and performs work consisting of courthouse research for property ownership resolution for the above mentioned project types. This includes preparation of property resolution maps, deed descriptions for property acquisitions required for project plan preparation. Mr. Rayburn has experience in Geodetic Control Surveys, 3D Laser Scanning, Photogrammetric Control, Topographic Surveys, Cemetery Surveys, Boundary Surveys, Construction Stakeout, Subdivision Surveys, along with Hydrographic surveys of river and lake bottoms. A few of the more notable surveying projects performed by ELR under the supervision of Mr. Rayburn, has been the Blennerhassett Bridge Project, 11 continuous miles of Corridor H design surveys, GPS Control for the West Virginia Statewide Mapping and Addressing Board Project, 3D Laser Scan and mapping of the





CAMC Parking Garage partial collapse, and 3D Laser Scanning of I64/I77 Retaining Wall for Monitoring.

Representative Projects

Design Surveys

- Corridor H (WVDOT) Hardy County, WV: Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately 11 miles of Corridor H in Hardy County, WV. This was for Sections 6 & 7 of Corridor H, both Sections of which are now under construction. Estimated construction cost of \$150 million dollars.
- WV Route 10 (WVDOT) Logan to Man WV, Logan County, WV: Lead Surveyor for Design Surveys for a section approximately five miles in length from Man, WV, to Rita, WV, including the Man Bridge. Also provided control surveying for the entire project length of approximately 12 miles. The approximate five miles section of roadway is now under construction at an estimated cost of \$51 million dollars.
- Blennerhassett Bridge, Corridor D (WVDOT), Wood County, WV: Lead Surveyor for Design Surveys for this landmark Bridge Project which is now under construction at an estimated cost of \$120 million dollars.
- James Ramsey Bridge (WVDOT) Potomac River, Shepardstown, WV: Lead Surveyor for Design Surveys for this Bridge Project which is now completed at an estimated cost \$15.5 million dollars. This project involved working in an environmentally historic area, which adjoined a National Park.
- US Route 35 (WVDOT) Mason County, WV: Lead Surveyor for Design Surveys for two Design Sections each approximately 2.5

miles in length from Lower Five Mile Road to Upper Nine Mile Road. Also provided control surveying for the entire US 35 design project length of approximately 22 miles.

- 164/US 35 (WVDOT) 164 to US 34 Crooked Creek, Putnam County, WV: Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately four miles of US 35 including Interstate 64 Ramps and Flyovers in Putnam County, WV. This included the 164 Bridges and Flyovers, which is now under construction.
- ATB-Parrish Road (ODOT) Ashtabula County,
 Ohio: Project Design Surveyor for rail grade
 separation project. Project involved roadway
 realignment, 900' new bridge, new waterline, storm
 and sanitary sewers. Project is currently under
 construction. Estimated construction cost: \$8.6
 million.
- PIC-23-3.21 and Various (ODOT) Pickaway
 County, Ohio: Project Design Surveyor for ODOT
 Project PIC-23-3.21 and Various. Project involves
 deck replacements along 11 miles of US 23 in
 Pickaway County. Project includes large diameter
 culvert liner, interchange upgrade that includes
 mainline profile correction, ramp reconstruction,
 and addition of barrier wall and storm drainage.
 Project is currently under design (90%). Project
 scheduled for construction in 2007. Estimated
 construction cost: \$12 million.
- ATB-90-22.06 (ODOT) Ashtabula County, Ohio:
 Project Design Surveyor for Interstate
 Reconstruction Project. Project includes total
 pavement replacement, bridge widening, and contra

 crossover maintenance of traffic, culvert
 replacements and storm sewer rehabilitation and
 sign replacements. Project is currently under design
 (50%) and scheduled for construction in 2011.
 Estimated construction cost: \$36 million.





Construction Surveys

- Corridor D (WVDOT) Wood County, WV: Lead Surveyor for Highway/Bridge Construction Monitoring surveys for the following segments of Corridor D and related relocation projects:
 - Godbey Athletic Field Relocation Construction
 - Godbey Colt Field and Soccer Field Construction
 - West WV 47-East WV 47 Highway/Bridge Construction
 - East Buckeye-West Little Kanawha River Highway/Bridge Construction
- Interstate I-79 Widening and Median
 Barrier (WVDOT) Harrison County, WV:
 Lead Surveyor for construction layout surveys
 for the widening of I-79 from the
 Meadowbrook Exit, north to the Jerry Dove
 Exit approximately three miles in length, as a
 subcontractor to the prime contractor.
- CAMC 33rd Street Relocation and Building Expansion, Charleston, WV: Lead Surveyor for construction layout surveys for 33rd Street relocation along with ancillary items including sidewalks, drainage and utilities. Also layout surveys for building expansion project.
- Saturn Dealership, Hurricane, WV: Lead Surveyor for Saturn Dealership site development and access roads at Hurricane Interchange of Interstate 64.
- Arch Coal WV Mining Operations: Lead Surveyor as a subcontractor to Arch Coal operations for Valley Fill Construction (Up to 27 million cubic yard fills), mine haul road layout, drill line staking, and dragline pit layout.





Randall L. Lackey, P.E. Project Engineer

Education

B.S. Civil Engineering
West Virginia University Institute of
Technology, 1999

Registrations

Registered Professional Engineer in West Virginia, Ohio and Kentucky

Professional Memberships

- · American Society of Civil Engineers
- · Society of American Military Engineers

Computer Skills

C++, AutoCAD, MathCAD, Microstation, MS Excel, MS Word, MS Project, MSPowerPoint, Windows, MDX, MERLIN, BRASS Systems, SIMON, HEC-RAS, RC Pier, and HY8

Professional Experience

Prior to joining E.L. Robinson Engineering Co., Mr. Lackey worked with the WV Division of Highways as an Engineering Co-op Technician. As part of his co-op experiences, he performed calculations for steel, flowrate and roadway. He performed roadway and guardrail design and construction inspection for bridge and roadway projects.



Representative Projects

Mr. Lackey has been intricately involved in the hydraulic design process of the Blennerhassett Island Bridge Project, which will connect West Virginia to Ohio as well as span the Ohio River and Blennerhassett Island. Included in this project are the following: Preparation of flood plain analysis for existing, temporary, and various post construction conditions, scour analysis using FHWA approved publications, analyzing the affects that debris flow will have on the bridge as well as Blennerhassett Island, and studying the potential for lateral channel migration and understanding the affects the migration would have on the design on the bridge substructure.

Mr. Lackey has also been involved with the hydraulic design process of the Corridor H South Branch of the Potomac River Bridge. Included in this project are the following: Preparation of flood plain analysis for existing, temporary, and various post construction conditions, scour analysis using FHWA approved publications, analyzing the affects that debris flow will have on the bridge, studying the affects the proposed conditions





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will have on the Town of Moorefield, WV flood level, and studying the potential for lateral channel migration and understanding the affects the migration would have on the design on the bridge substructure.

Mr. Lackey has also performed hydraulics and scour computations for Ripley Town Bridge, Jackson Bridge, Beaver Creek Bridge, Walnut Bottom Bridge, Tallman Bridge, Meadowbrook Road Bridge, Simpson Creek Bridge, Kermit Bypass Bridges and culverts, Left Hand Fork Bridge, and Corridor H Bridges over Walnut Bottom Run and an unnamed tributary.

Mr. Lackey has prepared Section 404 permitting analysis and paperwork for Ripley Town Bridge, Simpson Creek Bridge, Meadowbrook Road Bridge, and the Left Hand Fork Bridge. Along with this work, Mr. Lackey has prepared CLOMR analysis and documentation for Horseshoe Village Subdivision and for The Ohio State University Medical Center's two proposed bridges that connect the University with OH SR 314 over the Olentangy River.

Mr. Lackey has performed calculations for deck drainage, performed girder design and analysis, pier design and analysis, prepared design study reports, type, size and location reports and final plans on many of E.L. Robinson's Division of Highways projects.





Mark Allen McGettigan, PE, Project Manager

Education

M.S.E. Engineering Management/Environmental Engineering,

Marshall University December 2007

B.S. Civil Engineering Technology, Fairmont State College, 1999

Registrations

Registered Professional Engineer in West Virginia

Professional Memberships

· American Society of Civil Engineers

Professional Experience

Successfully worked on and managed numerous Phase I and II ground water quality investigations and feasibility studies for the West Virginia Department of Environmental Protection.

Mr. McGettigan has taken several large water and wastewater projects from the initial development phase through the construction phase. This includes writing the preliminary engineering report, developing funding scenarios, designing the system, developing the plans and specifications, developing the bid documents/overseeing the bid process and managing the construction inspection.



Developed specifications and managed construction inspection for land development and utility construction projects.

Representative Projects

Mr. McGettigan has been the design engineer on the following projects:

- Lavalette Public Service District's U.S. Route 52 Waterline Extension Project.
- Lavalette Public Service District's Crockett and Millers Fork Waterline Extension Project.
- Lavalette Public Service District's State Route 37 Waterline Extension Project.
- Crum Public Service District's Mill Creek Waterline Extension Project.



AML and RELATED PRO	JECT EXPERI	ENCE MATE																										
				PROJECT EXPERIENCE													100		Prim		aff Par		ition					
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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberly	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD			
Jacob's Fork Complex	C	YES YES		X	X	X					X					X	X	M		P		P	P					
Rhodell Refuse & Portals Gilmer B Sites 3-8	C	YES	 	X	X	X					X					X	X	M		P		P	P		\dashv			
Momsvale/Cameo/Big Horse Creek Waterline Feasibility	c	YES										х						м		Р		Р	Р		\Box			
Study Camp Creek Waterline Feasibility Study	С	YES										х						М		Р		Р	Р					
Lick Creek Waterline Feasibility Study	С	YES										х						М		Р		Р	Р					
Ragland Waterline Feasibility Study	С	YES										х						М	Р	Р		Р	ρ					
Beech Creek and Ben II Waterline Feasibility Study	С	YES										х						М		Р		Р	Р					
Dingess Waterline Feasibility Study	С	YES										х						М	Р	Р		Р	Р					
Sharon Heights Waterline Feasibility Study	С	YES										Х						М	Р	Р		Р						
Amhestdale Water Feasibility	C	YES YES										X	_					M	P	P		P	P		-			
Mercer County Commission Danese PSD Waterline	C	YES		_							_	X						M	P	P		P	P		=			
New Haven Waterline	Č	YES										X						М	P	P		Р	P					
Nubbin Ridge/Camp Creek Waterline Feasibility Study	С	YES										х						М		Р		Р						
Bramwell Hill Waterline Feasibility Study	С	YES										x						М		Р		Р	Р					
Coaldale and Coaldale Mountain Waterline Feasibility Study	С	YES										x						М		Р		Р	Р					
Jennie Creek Waterline Feasibility Study	С	YES										х						М		Р		Р						
Beech Creek and Ben Areas Waterline Feasibility Study	С	YES										Х						М		Р		Р	Р		\Box			
Blair/Sharples Area Waterline Feasibility Study	С	YES									.,	х						М		P		Р	Р		\square			
Brown's Creek #10 Bull Run #35	C	YES YES	X	X	X	X	X				X	Х		X	X	X	X	M		P			P					
Seccuro Mine Drainage	c	YES		X	X	X	^				X	^		^	^		^	M		P			P		-			
Fickey Run	С	YES	X	X	X	X	Х				Х	Х		X		X		М		Р			Р					
Ven's Run	С	YES	X			X					X						X	M		P			Р					
Bull Run #27 Riffe Branch	C	YES YES	X	X	X	X	X				X	Х		Х		X	X	M		P		Р	p p		$\overline{}$			
Hot Coal	c	YES	<u> </u>	x	×	X	x				x					x	x	M		Р		Р	Р					
Minden Refuse Pile	С	YES		X		Х					X					Х		M		Р		Р	Р					
Jeffrey Mine Complex	С	YES		X	Х	X	Х				X						Х	M		P		Р	P					
Pigeon Creek Waterline Red Jacket, Matewan,	С	YES		-		X					Х	X	Х					M		Р		- 100	_		-			
Newtown Waterline Marrowbone Waterline	C	YES				X					X	X	Х					M		P		P	P		\perp			
Mount Zion Waterline	Ġ.	YES				X					x	x						M		P		Р	Р					

AML and RELATED PRO	JECT EXPERI	ENCE MATE	Attachment "C"												ال ال										
				PROJECT EXPERIENCE														Prima	ary Sta	aff Par	ticipa	tion			
	1000				1613		PROJE	CT EX	PERIEN	ICE											- 4	M-Mngm	it.		
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberly	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Coopers Rock, Pisgah, and Laurel Run Waterline	С	YES				Х					Х	X						М		Р		Р	Р		
Davis Water Tank	С	YES				X					Х	Х						М		Р		Р	Р	=	=
Whittington Hill (Walker)Slide	С	YES		X	Х	Х					Х						Х	М	P/M	Р					
Maidsville Landslide	С	YES	Х								Х						Х	М	Р	Р		Р	Р		=
Rich Fork Landslide	С	YES	X	X							X						X	M	P	P		P	P		-
Tupppers Creek Landslide Glen Rogers Waterline	C	YES YES	Х	Х		X					X	X					Х	M	P	P		P	P	$\overline{}$	\dashv
Gooney Otter Refuse	C	YES	X	X	X	X	X				X	^					Х	M	P	P		P	P		\neg
Chapmanville Mine Blowout	C	YES	<u> </u>															M	Р	Р		Р	Р		\neg
Charleston Romeo Landslide	С	YES		Х	Х	X					X						Х	М	Р	Р		Р	Р		
Big Creek C Refuse	С	YES		X													X	M	P	Р		P	P	\rightarrow	-
North Matewan Sipple Moran Subsidence	C	YES YES	_	X	X	X	_		Х	_	X	-					Х	M	P	P		P	P	\rightarrow	-
Lewis Landslide	Č	YES		X		X					X		X				Х	M	P	P		P	Р	$\overline{}$	\neg
Roush Landslide	С	YES		X		X					X		X				X	M	Р	Р		Р	P		
Jefferson 26 Landslide	С	YES		Х		Х					Х						Х	М	Р	Р		Р	Р		
Titus Road Landslide	С	YES	X	X		X					X						X	М	Р	Р		Р	Р	\rightarrow	$\overline{}$
Imboden Landslide Baisden Subsidence	C	YES YES	X	X		_			×	_		-		-	-		Х	M	P	P		P	P	-	-
Parsons Landslide	c	YES		1 x			-		_^					1			х	M	P	P		P	P	\rightarrow	\neg
Treadway Landslide	č	YES	X	X		X					X						X	М	P	Р		P	P	-	\neg
Phalen Landslide	С	YES		X		Х					X						Х	M	Р	Р		Р	Р		
Adkins Landslide	С	YES	Х	X		X					X						Х	M	P	Р		Р	Р		\blacksquare
Goetz Subsidence Lavender Refuse Fire	C	YES YES		X				X	Х		X		X					M	P				P	\rightarrow	\neg
Cox Refus Fire	C	YES	 	x				x			x		x					M	P				P	\rightarrow	\dashv
Toney Fork Landslide	C	YES		X		Х					X							M	P	Р		Р	P	\neg	\neg
Athens Rt. 13 Refuse Fire	С	YES		X				Х			X		X					М	Р				Р		
McAdams Subsidenc Ermer	С	YES		X					X		X							М	P				P		-
Rodgers Subsidence Brown Landslide	C	YES YES		X		Х			X		X		X					M	P	Р		P	P		-
Town Run	P	NO NO	_	^		^					^	X						IVI	-	-		т.	-	$\overline{}$	\dashv
Witcher Creek	Р	NO							To			X													\neg
Pond Gap, Hitop & Spangler	Р	NO										X					/								
Elk City	Р	NO										X													-
Little Fork Refuse Pile	P			×		X	X	X								×	X			Р					
OSM-Tackett Fork	Р		Х	X	Х	Х											Х			Р	Р			=	
OSM-Ironton	P			X		X							-	-			X			P	0				-
OSM-Williamson LS OSM-Ray Landslide	P			X		Х							Х	—			X	\vdash			P			\rightarrow	\dashv
OSM-Spence Landslide	P			x		×											x				P				\neg
OSM-Ratliff Landslide	Р			X		X											Х			Р		=0.00			
OSM-Pigeon Roost LS	Р			Х		Х											Х				Р				
OSM-Oak Hill Subsidence	P			X	X	X			X		X	_					Х	<u> </u>			P				-
OSM-Little Prater Creek OSM-Hamilton II Landslide	P		_	X		X											Х				P			\rightarrow	\dashv
Tuppers Creek B	P		×	x	х	x											x				P				\dashv
						_ ^																		$\overline{}$	

AML and RELATED PRO	JECT EXPERI	ENCE MATE	XIX				1975		41.7	Attach	ment "	C"								*	FILE DESCRIPTION OF THE PERSON OF THE PE				455
			PROJECT EXPERIENCE												1616		1	Prima		aff Par	\$10000 HB	tion			
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Big Sandy Refuse Leslie (Nelson)	P	2002	X	X	X	X	X				×	X	Х				Х	-		Р	P			P	D
Swiss Drennan	P	2002	_^	_^	_^	^	^				_^	x	^	-				\vdash			P			-	P
Minden C	Р	2002	Х	X	Х	Х	Х			Х	Х				Х						P			Р	P
Weston	P	2002										X									P		$\overline{}$	1.6	Р
Parkette East Dupont Avenue Landslide	P	2002 2003	_	X	~	-			X		-	X					X				P				P
Skin Creek Phase II	P	2003	×		X	X					X	-		-	Х	×	X		-		P P				P P
Witcher Creek	Р	2001	_^	X	X	X					X		X		_^	^	x				P				P
Crane Creek	Р	2004	Х		X	X	X				X	Х				×	X				P	_			P
Yoursco	Р	2004	Х	X	Х							Х									P			Р	Р
Carswell	Р	2004	Х			Х	X				X		X		X	X	X				Р				Р
Craigmoor Downey Pierpont	P	2004 2006				X					X		X				Х				P				Р
Ames (Clare) Landslide	P	2006		×					Х		Х						X				P P				P
Lorado	Р	1995	Х	x	х	X					×	X			X		×		_		P		-		-
Madeline Refuse	Р	1995	Х	X	Х	X	X			X	×				X	X	X				P				P
Rocklick	Р	1995	Х	Х	Х	Х					Х						Х				Р				Р
Wahoo	Р	1996	Х			X	Х	Х			X				X		Х				Р				Р
Meadowbrook	Р	1996	Х	X	Х	Х	Х				X	X			Х		Х				Ρ				Р
Jumping Branch Beard's Fork	P	1996 1997	Х	X	V	X			-	-	-	Х						_			P				P
Turkey Wallow	P	1997	x	×	X	X	X	X		X	X	_		-	X		Х	-			P				P P
Otsego	Р	1997	X	X	X	X	X	_^			x				Х		x				P	_			P
Miller	P	1997	X	X	X	X					X	Х									P				P
Whitby	Р	1998	Х	Х	Х	Х					Х	Х		Х	Х	Х	Х				P				P
Barker	Р	1999	Х	X	Х	Х					Х	Х									Р			Р	P
Gauley River Road	P	1999										X									Р				Р
Skin Creek Jolo	P	2000 2001	Х	X	Х	Х	Х				Х	X			Х	Х	Х				P				P.
Tioga	P	2001										X				-		-			P	_			P
Turkey Gap	Р	2001	Х	Х	Х	Х					X	_^			X	X					P				P
Big Sandy	Р	1987	Х			Х		Х			X				X						P				
Marfrance	Ρ	1988	Х	Х	Х	Х					X	Х								Р	Р				
New Hill Ballpark	P	1988	X	X	X	Х	Х				X	X					-			Р	Р				
Jones Run Chapmanville Landslide	P	1988 1989	X	X	X	X			Х		X	Х			Х		X				Р				
Wharncliff Landslide	P	1989		X	X	X			-		X					-	X	-			P				P
Joyce Sturm	Р	1990		X	X	X					x	Х		X			^	\vdash			P				P
Marianna Refuse	P	1991	Х			X	Х				X			-,			Х				P				P
Cedar Grove	Р	1991		Х	Х	Х					Х	Х		Х			Х				Р				P
Eskdale	Р	1991		X	Х	X					Х			Х	X						Р				Р
Hodgesville	P	1991	X	X	X	X					X	Х		Х			Х				Р				Р
Newsome Branch Morrison	P	1992 1992	Х	X	X	X	Х		-		X	v			Х		X				Р				P
Snake Island	P	1992	х		Α.	X	Х	×	-		X	Х			Х	Х	Х		_		Р	_		_	P
Orchard Branch	Р	1994	x	х	х	x	x	^			x	Х		X		^	Х			-	P				P
Beckley Layne	P	1994	-20	X	X	X	-/\				x	x		- ^			X				P			_	P
Quinwood Booth	Р	1994		Х	Х	Х			Х		X	X									P				P
Little Fork	Р	1983	Х	Х	Х	X	Х	Х			Х					X	Х				Р				
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AML and RELATED PRO	JECT EXPERI	ENCE MATE	XIX							Attach	ment "	C"	t Test												
				HHE						and the			906				144			Prim	ary Sta			tion	
	Mary J. W.						PROJE	CTEX	PERIEN	ICE			-						_		1	A-Mngm	t	_	
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Elkridge Refuse	P	1984 1984		X	X	X	X	X			X				X		X				P			_	-
Lando Mines West Varney	P	1984		X	X	X					X						X				P				-
Bethel Portals	P	1985		X	X	X					X	×					×	1			P				-
Mammoth Landslide	P	1985		^	^	x					x			X	X		X	1		-	P		1		\neg
Cheyenne	P	1985				x					X	х		X	X		X	i –			P				
Mudlick A Landslide	Р	1985			X	X					X	X				Х	X				P				
Nelson Landslide	Р	1985	X	Х							X						Х				Р				\neg
Mudlick B Refuse	Р	1985		Х	Х	X	Х				X				Х	Х	Х			Р	Р				
Bluff Mountain	P	1985	Х	Х	X	Х	Х				X	Х			Х	Х	X				Р				
Montgomery Drainage	Р	1986		Х	Х	Х					Х			Х			Х				Р				
Mayoros Drainage	Р	1986		X	X	Х					X	X		X							P				
Ridgeview A & B	Р	1987	Х	Х	X	X	X	Х			X	X		Х	X		X				Р				
Tupper Valley	Р	1987	X	Х	X	X					X	Х		Х			X	_			Ρ				_
Airport Bottom	Р	1987		Х	X	X					X	X						_		Р					_
Manilla Creek	Р	1987	X	Х	X	X	Х				X	X		X	X		X	-			P			_	
McAlpin	Р	2009	- V					_			X	_					X	-			9				P
Robey	P	2009	X	Х	X	X					X	-					X	-			P				P
Katy Lick Clear Fork	c	2009	X			X			_		X	X	_	_			^	м	-		P				P
Coal Mountain	C	2009	-									x	_					M	-		P			33	P
Naugatuck/East Kermit	C	2009									-	x						M			P				P
Prenter	P	2008										x		-				101			P				P
Hanover	P	2009		-					-	-		X									P				P
Lower Dempsey	P	2009		Х	Х	Х					X						Х			P	P			P	P
Island Creek #18	C	2009		X	X	X					X	X			X		X			Р	Р		P	P	Р
Brownton Landslide	Ċ	2009		X	X	X					X	X					Х			Р	Р		P	Р	Р
East Bank Emergency	C	2009																	-	1.0	Р				Р
Dunloup Creek	С	2010		Х	Х	Х					Х	Х			Х	Х	Х			Р	P				Р
Otsego/Pierpoint/Maben	С	2010										X								Р	P				Р
Barkers Ridge/Basin	С	2010										X						_		P	P				P
Herndon/Covel/Garwood	С	2010										X		-				-	_	P	P			100	P
Bud/Alpoca/Mill Branch	С	2010									_	X						-		P	P				P
Keystone (Avery)	С	2010				_		_				-			_					P	P				P
Keystone (Emergency)	C	2010										X		-				+-		P	P				-
Cane Branch	С	2010	_	1		-	-		-	-	-			-				-		r .	F		+	-	-
Spy Rock/Edmond/ Flanagan Mountain	С	2010										Х						\perp		Р	Р			Р	
Wildemess PSD	С	2010										X								Р	Р			P	
Gordon C	С	2010		X	Х	X					X						X			Р	P			Р	
Keaton Branch	С	2010		X	X	Х					X						Х	_		Р	Р		P	Р	
Verner Grimmett Burning Refuse	С	2010						×			x					_				Р			Р		
Shinnston-Lumberport	C	2011							Х		X									Р	Р		P	Р	
Newtown-Kinder	С	2011		Х	X	Х					X						X			Р	Р			P	
Dan's Branch Emergency	С	2011		Х	Х	Х					X						Х			Р			Р		
Cartright Branch	С	2011		Х	Х	Х					Х						Х			Р	Р			Ρ	
Thorpe Refuse Pile	С	2011		X	X	Х					X						X			Р	Р			Р	
Glen Rogers Emergency	С	2012		X	Х						X									Р			Р		
Abney Refuse Piles	С	2012	1	X	X	Х		1		1	X			l	l		X	1		Р	Р		P	P	-

AML and RELATED PRO	JECT EXPERI	ENCE MATE	RIX							Attach	ment "	C"			() 										
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Milam Ridge Refuse West Columbia "B"	C	2012		X	X	X					X						X	-			P			Р	
		2012		X	X	X					X						Х			Р	Р		Р	Р	
Coburn Invest Gouge Landslide	P		-	X		-			X		-						X	-	Р						
Adamsville	P		X	X	×	X			X	-	X	-	X				Х	-	P		_				
Mount Pisgah	P		x			x			^		X		X	-	-				P	-					-
Pleasant Valley Church	P		- ~	X	х	X					X		x						P		_		\vdash	\rightarrow	-
Hodgesville B	Р			X	X	X	_				X		X	-	X		X		P	-				\rightarrow	-
Lynch Chapel	P			X	X	X					X		X		- //	Х			P					\rightarrow	-
Snider Portals	Р			X	X	X					X		X			- "			P					\rightarrow	
Wash Run	Р			X	X	X					X		X						P					-	
Junior Sewage Plant	Р		Х	X	X	Х					Х	X	Х		Х				P					\rightarrow	
Shavers Fork/Stonecoal	Р			Х	Х	X					Х	Х	X						Р						
Vargo Drainage	Р			Х	Х	Х					Х		Х						Р					\neg	
Fairhills Plaza Subsidence	Р			X					X		X		X						P						
Karen Vance AMD	Р		Х	X	X	Х					X		X						Р						
Leroy Wilmoth Drainage	P		- V	X	X	X					X		Х						Р					$\overline{}$	
Big Knob Acid Mine Drainage Matthew Smith Subsidence	P		Х	X	Х	X		_	-		X	X	X	Х				_	Р						
Worthington Portals	P		X	X	×	X			Х		X		X					_	Р					$\overline{}$	-
Red Rock Drainage	P		x	x	x	X					X		X			_		_	P	_	-	_			-
Blackwater Manor	Р		X	x	X	X	х				×	X	Х	Х	Х			_	P					\rightarrow	-
Buckhannon River Refuse	Р		<u> </u>	X	X	X	_^				×	^	X	_^	x				P					\rightarrow	\dashv
Hutcheson AMD	P			X	X	X				-	X		X		_^				P	_	_			\rightarrow	-
Nutter Fort Tressle -7th	Р					7.5					X		X						P					\rightarrow	-
East Bank Portals - A# 2	Р			Х	Х	Х					X		X						P					$\overline{}$	\neg
Manilla Creek - A#2	Р			X	Х	Х					X		X		-		X		P						\neg
Big Creek C	Р			Х	Х	Х					Х		Х						Р					\neg	
Covey Creek Refuse	Р			Х	Х	Х)			Х		Х						Р						
Omar Drainage G2	Р			X	X	Х					Х		Х						Р						
Crooked Ck Refuse & Portals	P			X	X	X					X		X		Х				Р						
Jims Br. (Tyree) LS Galloway Mine Portal/Refuse	P			X	X	X					X		X				Х		Р						
Newtown (Harmon) Drainage	P			X	X	X					X		X	_		Х	Х		Р	_			\vdash		
Whitman Ck. (Williams) VO	P			X	X	X					X								P				\vdash		-
Coal Branch (Cantrell)	P			X	X	X	-				X		_					\vdash	P		_	-			_
Jordanville Tipple/Refuse	P		х	_^		x		-		X	X				х				P					\rightarrow	-
Heizer Creek A Maintenance	Р			Х	X	X					X			Х					P				\vdash	_	-
Orlando Mining Facility	Р		Х			X				X	X			,	Х				P					\rightarrow	
Verdunville Drainage	Р			Х	Х	Х					Х								P					\neg	
Holden Portals	Р			X	Х	Х					X								Р						
Molinar Subsidence	Р			Х					X		X		X				Х		P/M						
Smith Landslide	P		Х	X	Х	Х					Х		Х				Х		P/M						
Lutz Vertical Opening	P			X	X						Х		Х						P/M						
Swiger Mine Blowout	Р			X	Х	Х					Х		Х			X			P/M						
Blair Wolfe Subsidence	P			X					Х		X		Х						P/M						
Lake (Winkler) Phase II	Р			Х		X					X						Х		P/M						
					_																				

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

(Company)	Engineering Co.
(Authorized Signature)	hot
Richard W. Watts (Representative Name, T	itle) Project manyer
304-776-7473	304-776-6426
(Phone Number)	(Fax Number)
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(Date)