March 12, 2013

Statement of Qualifications

ORIGINAL BICKMORE AREA COMPLEX DESIGN DEP16076

CLAY COUNTY, WEST VIRGINIA



E.L. Robinson Engineering Co. 5088 Washington Street West Charleston, West Virginia 25313 Phone: (304) 776-7473 www.elrobinsonengineering.com



RFQ COPY

TYPE NAME/ADDRESS HERE

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

Solicitation

NUMBER:

DEP16076

PAGE

3-7-13

ADDRESS CORRESPONDENCE TO ATTENTION OF:

FRANK WHITTAKER 1304-558-2316

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

304-926-0499

25304 DATE PRINTED 02/07/2013 BID OPENING DATE: OPENING TIME AMOUNT 03/07/2013 UNIT PRICE ITEM NUMBER CAT NO. UOP QUANTITY LINE 906-29 JB 0001 1 BICKMORE AREA COMPLEX DESIGN EXPRESSION OF INTEREST FOR THE AGENCY, THE WEST VIRGINIA PURCHASING DIVISION, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL IS SQLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE BICKMORE AREA COMPLEX PROJECT IN CLAY COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS. TOTAL: DEP16076 ***** IS THE END OF RFQ THIS

TELEPHONE 76-7473 304 ADDRESS CHANGES TO BE NOTED ABOVE SIGNATURE



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

Solicitation

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ADDRESS CORRESPONDENCE TO ATTENTION OF:

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25304 304-926-0499

DATE PRINTED

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BID OPENING DATE:	03/12/	2013	RTD	OPENING TIME 1:	30PM
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SIGNATURE TELEPHONE DATE

TITLE FEIN ADDRESS CHANGES TO BE NOTED ABOVE

SOLICITATION NUMBER: DEP16076 Addendum Number: 01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[1]	Modify bid opening date and time	
[]	Modify specifications of product or service being	g sought
[]	Attachment of vendor questions and responses	
[]	Attachment of pre-bid sign-in sheet	
[/]	Correction of error	
[]	Other	

Description of Modification to Solicitation:

- To replace page # 2 of the original solicitation to correct project name.
 Correct project name is listed on the attached page.
- 2. To move the bid opening date from March 07, 2013 to March 12, 2013 @ 1:30 PM.
- 3. To provide Addendum Acknowledgement.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith.
 Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

EXPRESSION OF INTEREST BICKMORE AREA COMPLEX DEP16076

TABLE OF CONTENTS:

- 1. Table of Contents
- 2. Section One: General Information
- 3. Section Two: Instructions to Vendors Submitting Bids
- 4. Section Three: Project Specifications
- 5. Section Four: Vendor Proposal, Evaluation, and Award
- 6. Section Five: Terms and Conditions
- 7. Certification and Signature Page

SECTION ONE: GENERAL INFORMATION

- 1. PURPOSE: The Acquisition and Contract Administration Section of the Office of West Virginia State Purchasing Division (Purchasing Division) is soliciting Expression(s) of Interest (EOI) for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML), from qualified firms (Vendors) to provide architectural/engineering services as defined herein.
- 2. PROJECT: The mission or purpose of the project for which bids are being solicited is to provide design services for the following:

BICKMORE AREA COMPLEX:

Design of drainage conveyances. Installation of mine seals. Refuse reclamation. Re-vegetation of disturbed areas.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DEP16076

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[\	1	Addendum No. 1	1]	Addendum No. 6
[]	Addendum No. 2	1]	Addendum No. 7
[]	Addendum No. 3]	Addendum No. 8
]]	Addendum No. 4]]	Addendum No. 9
[]	Addendum No. 5]]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company

Authorized Signature

3 7 13

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012





5088 Washington St. West Charleston, WV 25313

March 12, 2013

elrobinsonengineering.com

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

Attn: Joe Reppy, Acting Chief

Re: Bickmore Area Complex Design

DEP16076

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 Bickmore Area Complex design project located in Clay 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 all of the 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:

Eric Y. Coberly, P

Project Manager



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Hydrology and Hydraulics						
Aerial Photography and Contour Mapping						
Key Personnel						
AML & RPEMAttachment C						
Certification and Signature Page						



Executive Summary

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.



Project Approach

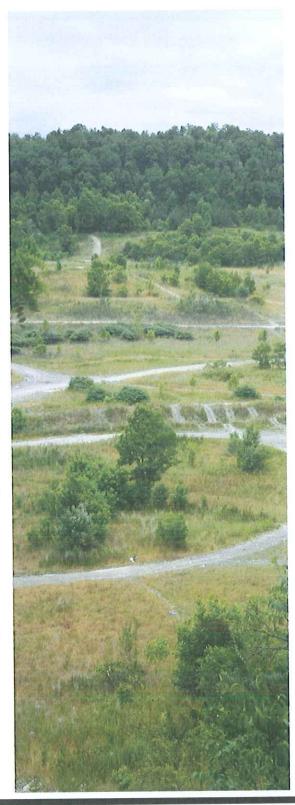
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

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 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.

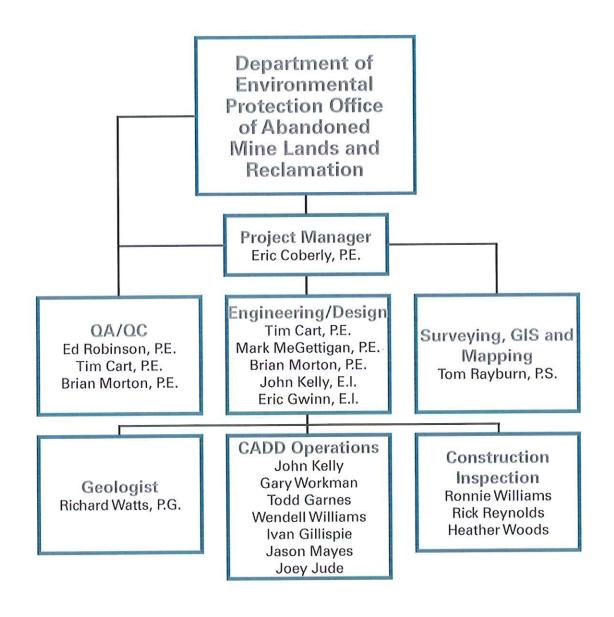
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their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

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.





Previous Experience

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



		INIA DEPARTMENTANT CONFIDENT		ONMENTAL CATION Q	PROTECTIONNA UESTIONNA	ON AIRE	Attachi	t "B"
PROJECT NAME Bickmore Area Complex Design DEP16076 1. FIRM NAME E.L. Robinson Engineering Co.		DATE (DAY, MONTH March 7, 2013 2. HOME OFFICE F 5088 Washington Charleston, WV 2	H, YEAR) BUSINESS ADDRE Street, West		FEIN 55-059463 3. FORMER	3	Œ	
4. HOME OFFICE TELEPHONE 5. ESTABL 1978		LISHED (YEAR) 6. TYPE OWNERSHIP Individual x Corpo Partnership Joint-		x Corpor Joint-V	ration (Disadvantaged Business Enterprise) YES X NO			
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 5088 Washington Street, West 304-776-7473/Eric Coberly, P.E./57 Staff in Charleston Area Charleston, WV 25313 8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM 8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS Ed Robinson, P.E. 304 776-7473 Ext 211								
APCHITECTS	<pre>— ESTIMA 2 GEOLOG</pre>	ISTS ICAL ENGINEERS NMENTALISTS TORS ISTS TANS	- MECHAI 1 MININ - PHOTO PLANN - SANIT 1 SOILS	CAPE ARCHIT NICAL ENGIN G ENGINEERS GRAMMETRIST ERS: URBAN/ ARY ENGINEE ENGINEERS FICATION	EERS S S REGIONAL	7 SURVI — TRAFI — OTHEI	FIC ENGINEERS	ERS
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE:14 *RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.								
								_
10. HAS THIS JOINT-VENTURE W	ORKED TOGE	THER BEFORE?	□ YES N	O X This	is not app	plicable		

11. OUTSIDE KEY CONSULTANTS/SUB-CONSU Que: >nnaire" for each if copy is	LTANTS ANTICIPATED TO BE USED. Attach "AML Cost on file with AMI	
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
State of the state	Drilling	X YES
Novel Geo – Environmental (NGE)		<u> </u>
806 B Street, St. Albans, WV		NO
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NAIVIL AND ADDINESS.		YES
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12.	A	YES Description and Number of Projects: Eight, -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
	E.	Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)
	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?
	<u>X</u>	YES Description and Number of Projects: Seven (7) Projects
	-	ОИ

3. PERS AL HISTORY STATEMENT (OF PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AML PROJECT D	ESIGN (Furnish comple	
data but keep to essentials				
AME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
dward L. Robinson, President	YEARS OF AML DESIGN EXPERIENCE: 12	YEARS OF AML RELATED DESIGN EXPERIENCE: 26	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
rief Explanation of Responsibi	lities			
Ir. Robinson worked in the Righ major utility plans. He has ex and acquisition. He has provi Provide and coordinate Quality	tensive experience in property ded quality control on all pro Control on all design projects	y surveys, property title sea ojects designed by this firm	il Cires, acriar mapping and	
DUCATION (Degree, Year, Specia achelor of Science 1969 Civil aster of Science 1981 Civil	Engineering			
EMBERSHIP IN PROFESSIONAL ORGA		REGISTRATION (Type, Year, St	cate)	
merican Society of Civil Engin merican Council of Engineering Jational Society of Professiona	Companies 1 Engineers	1975 Civil Engineering Registered in West Virginia Professional Licensed Survey	or No. 1150	
3. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT I	DESIGN (Furnish complete data	
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE		
Richard W. Watts, P.G.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 34	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1	
Brief Explanation of Responsibi Mr. Watts has served as project include project management, fic analysis, specification writing Projects included surface and d	geologist on more than nineted reconnaissance, drilling connaissance, drilling continuity determinations, condeep mine reclamation, subside	est estimates pre-bid and pro-	e-construction meetings.	
EDUCATION (Degree, Year, Specia B.S./1977/Geology M.S./1994/Geography	alization)			
MEMBERSHIP IN PROFESSIONAL ORGA Geological Society of America Association of Engineering Geol		REGISTRATION (Type, Year, S Professional Geologist/1992 Professional Geologist/1993	/Virginia	

13. PERS L HISTORY STATEMENT Conditions and the state of	F PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AML PROJECT DE	SSIGN (Furnish comple
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
John Kelly II, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 14	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 14
Brief Explanation of Responsibil Mr. Kelly has worked on many AMI sampling of coal refuse material plans. Estimation of quantities Mr. Kelly has performed layout addition, he has designed cut so County, WV and Meadowbrook Road	projects since joining ELR. s, hydrology, hydraulics des developed estimated cost. and inspection of core drilli lopes for large-scale roadway	Mr. Kelly is proficient with	Auto Cadd.
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering/1998/WVU			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St.	ate)
		Engineer Intern, WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D YEARS OF EXPERIENCE	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		Westerdament and Control of the Cont	
Timothy B. Cart, P.E.	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	DESIGN EXPERIENCE:
Brief Explanation of Responsibi 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 geotechnembankments.	we reclamation projects unvegetation cover, disposal of and disposal of old mining studies to determine if grounce in the design and constructed	tructures. Designed passive adwater had been affected by pation management of waterline	AMD treatment systems. re-law mining. extension projects. Mr. Cart
EDUCATION (Degree, Year, Special Bachelor of Science 1981 Civil			
Bacheror or Scrence 1901 CIVII			
MEMBERSHIP IN PROFESSIONAL ORGA	ANIZATIONS	REGISTRATION (Type, Year, St Professional Engineer WV OH	cate)

13. PERS \L HISTORY STATEMENT data ut keep to essentials	OF PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish compl ϵ	
		VIII OF THE PROPERTY OF THE PR		
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE			
Mark McGettigan, P.E.	YEARS OF AML DESIGN EXPERIENCE: 7	YEARS OF AML RELATED DESIGN EXPERIENCE: 7	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 8	
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 experied He has also performed various con	quantity calculations. He has last on Engineering Co. He has last once with surveying and equipments	as also served as a field insponded the lead designer on water the lead including; theodolites, lead to the contract of the co	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, State)		
		Professional Engineer WV		
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish complete data	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE		
Randall L. Lackey, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1	
Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri	lics and scour for Ripley Town	n Bridge; Tallman Bridge; Meac nd Blennerhassett Bridge.	dowbrook Road Bridge; Simpson	
Mr. Lackey has also performed canalysis; prepared design study Highways projects.				
EDUCATION (Degree, Year, Specia	lization)			
B.S. Civil Engineering/1999				
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)	
		Professional Engineer WV		

13. PERSONAL HISTORY STATEMENT (data but keep to essentials	OF PRINCIPALS AND ASSOCIATES F	RESPONSIBLE FOR AML PROJECT DE	ESIGN (Furnish complete	
NAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
J. Todd Garnes	5	5	6	
Brief Explanation of Responsibi	lities			
Mr. Garnes experience surveying extrusions. He has provided common Mr. Garnes has performed numero mapping, mine research, and dev EDUCATION (Degree, Year, Specia	nstruction inspection services us water feasibility studies, elopment of final reports.	s for landsides and Subsideric	e brolects in onio.	
A.S. Architectural Design/ 1999 A.S. Computer Aided Drafting an	d Design/ 1999			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St.	ate)	
13. PERSONAL HISTORY STATEMENT but keep to essentials) NAME & TITLE (Last, First, Middle	OF PRINCIPALS AND ASSOCIATES:	RESPONSIBLE FOR AML PROJECT D YEARS OF EXPERIENCE	ESIGN (Furnish complete data	
Int.)	YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
Thomas Rayburn, P.S.		EXPERIENCE:	DESIGN ENTERVEE	
		31		
Brief Explanation of Responsibi Mr. Rayburn has experience in m types of coal mining, designed ventilation plans and systems w systems.	nine mapping and surveying, for mine drainage and water supply which include precision pressurvey calc	re quality surveys and computuations, provides computer a	er simulation of ventilation nalysis for mining al permits.	
He has performed slope stability applications, work with leases By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed	collects data and develops GI	S for utility mapping.	t, ĥe performs control	
applications, work with leases By utilizing "state of the art"	collects data and develops GI surveying and mapping for lar	S for utility mapping.	t, ĥe performs control	
applications, work with leases By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed	collects data and develops GI surveying and mapping for lar	S for utility mapping.	t, ĥe performs control	
applications, work with leases By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed EDUCATION (Degree, Year, Special	relectronic total stations and collects data and develops GI surveying and mapping for lar alization)	S for utility mapping.	c, he performs concern	

13. PERSONAL HISTORY STATEMENT data but keep to essentials		RESPONSIBLE FOR AML PROJECT DE	ESIGN (Furnish complete	
NAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
Int.) Scott LeRose, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 1	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
Brief Explanation of Responsibilities Mr. LeRose is experienced in developing major highway and right of way plans; Bridge Construction Inspections; Core Drilling Operations; Groundwater Sampling/Monitoring; UST Removal/Replacement and Mine Permitting/Reclamation. Specific major highway design and right of way plan development projects include: Meadowbrook Road, a 2 mile design of new four lane highway; US 52(I-73), a 3.5 mile design and ROW plans for a new four lane highway with two major interchanges; design of 2 mile section of Appalachian Corridor H from Davis to Bismark; design of 5.2 mile section of Corridor H from Grant/Hardy County line to Moorefield. While working on these projects, he has gained experience in major drainage design, site grading design, utility relocation, MOT, signing and pavement stripping. He has performed quantity calculations for pavement, drainage, seeding, pollution control quantities, and other items associated with roadway plans. He is also experienced in the development of ROW plans, including deed plots and legal descriptions.				
EDUCATION (Degree, Year, Specia	lization)			
B.S. Civil Engineering/1997				
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)	
		Professional Engineer WV		
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		YEARS OF EXPERIENCE		
Int.) Ray Tilley, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
144, 11113, 7, 1111		5	31	
Brief Explanation of Responsible Mr. Tilley has over 30 years ex Mr. Tilley is a certified Water projects over his career. His EDUCATION (Degree, Year, Special	operience in water and wastewa Plant Operator. Mr. Tilley current duties include managi	had diccessfilly completed nu	merous wateritine design	
B.S. Civil Engineering/WV Tech		ng Virginia Tech, 1976		
MEMBERSHIP IN PROFESSIONAL ORGA	ANIZATIONS	REGISTRATION (Type, Year, St	ate)	
		Professional Engineer WV		

13. PERS AL HISTORY STATEMENT (data but keep to essentials	OF PRINCIPALS AND ASSOCIATES	ESPONSIBLE	FOR AML PROJECT DE	SIGN (Furnish comple
NAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
Int.)	YEARS OF AML DESIGN EXPERIENCE:		RELATED DESIGN	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
James Eric Gwinn, E.I.	10	EXPERIENCE:	10	11
Brief Explanation of Responsibi	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 Projection He has performed calculation slabs, decks and extensive delization)	ect and the ns on variou etailing on	raw water intake : s AML project.	scructure for the rayeste
B.S. Civil Engineering/1998/ We	st Virginia Institute of Tech	nology		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATIO	N (Type, Year, Sta	ate)
13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE	FOR AML PROJECT D	ESIGN (Furnish complete data
but keep to essentials) NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE		
Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML	RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
Brian D. Morton, P.E.	2	EXPERIENCE:	2	DESIGN EXPERIENCE: 12
Brief Explanation of Responsibi	lities			
Mr. Morton has worked on waterl waterline relocation projects i	ine extension projects in Put nvolving the West Virginia Di	VISION OF H.	Lgiiways.	
Mr. Morton has prepared signing culverts and other drainage str specifications, bid documents,				
EDUCATION (Degree, Year, Specia	alization)			
B.S. Civil Engineering/1998				
MEMBERSHIP IN PROFESSIONAL ORGA	ANIZATIONS	REGISTRATION OF THE PROPERTY O	ON (Type, Year, St	ate)
		Profession	al Engineer WV	

JAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
nt.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGNATED DESIGNATED DESIGNATION OF THE PROPERTY OF THE	GN YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
arney, Joseph T. P.E.			36	
rief Explanation of Responsibi	lities			
	de has worked on a variety of the roadway, bridge design, hydro		documents, construction inspectior cts including grading, earthwork, sanitary sewer and water systems	
EMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Yea	ar, State)	
		Professional Engineer, 1976, WV		
3. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES		JECT DESIGN (Furnish complete dat	
NAME & TITLE (Last, First, Middle int.)	YEARS OF EXPERIENCE			
Workman, Gary A., CADD	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DE EXPERIENCE:	ESIGN YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
	23	23	4	
Senior Technician				
Senior Technician	CADD design on AMT, projects.	as well as geotechnical ed on 18 AML projects w	soil analysis. He Worked on 44 hile at E. L. Robinson.	
Senior Technician Brief Explanation of Responsible for	CADD design on AML projects, yed at Ackenheil, and has work	as well as geotechnical ed on 18 AML projects wi	soil analysis. He Worked on 44 hile at E. L. Robinson.	

	OF PRINCIPAL C AND ACCOUNTABLE	SPONSIBLE FOR AML PROJECT DE	SIGN (Furnish comple
13. PERS \L HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AME PRODUCT DE	ordin (Larinzon company)
data ut keep to essentials		TOTAL OF EVERTENCE	
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
	YEARS OF AML DESIGN EXPERIENCE.	EXPERIENCE:	DESIGN EXPERIENCE:
Mayes, Jason M.	2	2	2
Brief Explanation of Responsibi	lities		
			NE Projects Mr Mayos has
Provides CADD Design for site d	evelopment, waterline and sew	er extensions, and layout on F	ML Projects. Mr. Mayes has
Nearly ten years experience in	WV DOT design with a prior fi:	rm.	
EDUCATION (Degree, Year, Specia			
EDUCATION (Degree, rear, Specia	1120010101		
B.S. Industrial Technology 1997	WVU Tech		
A.S. Drafting and Design 1996 W	VU Tech		
MEMBERSHIP IN PROFESSIONAL ORGA		REGISTRATION (Type, Year, Sta	ite)
MEMBERSHIP IN PROFESSIONAL ORGA	MIZATIONS		
l .			
		PROPERTY FOR AME PROJECT D	ESTEN (Furnish complete data
13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AME PROCECT D	JOZON (1 dzirzon odnip
but keep to essentials)		THE STATE OF THE PROPERTY OF	
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
Int.)	THE RESERVE	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
	YEARS OF AML DESIGN	EXPERIENCE:	DESIGN EXPERIENCE:
Scott A. Pratt	EXPERIENCE:	EXTERCES.	
	13	13	
	13		
_			
Brief Explanation of Responsib			
BILEL EXPLANACION OF RESPONDEN	ilities		
Brief Explanation of Responsi	ilities	Suming test boring over-sigh	t logging soil and core
	3. 2. 2. 2. 3. 3. 3.	forming test boring over-sigh	t, logging soil and core
Mr. Pratt has extensive experie	ence as a Field Geologist, per	forming test boring over-sigh any geotechnical soil tests i	t, logging soil and core n the laboratory. He is also ns for AML projects.
Mr. Pratt has extensive experienced in mine map research	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and	forming test boring over-sigh any geotechnical soil tests i quantity and cost calculatio	t, logging soil and core n the laboratory. He is also ns for AML projects.
Mr. Pratt has extensive experie	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and	forming test boring over-sigh any geotechnical soil tests i guantity and cost calculatio	t, logging soil and core n the laboratory. He is also ns for AML projects.
Mr. Pratt has extensive experienced in mine map research EDUCATION (Degree, Year, Species	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and alization)	forming test boring over-sigh any geotechnical soil tests i quantity and cost calculatio	t, logging soil and core n the laboratory. He is also ns for AML projects.
Mr. Pratt has extensive experienced in mine map research	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and alization)	forming test boring over-sigh many geotechnical soil tests i d quantity and cost calculatio	t, logging soil and core n the laboratory. He is also ns for AML projects.
Mr. Pratt has extensive experienced and obtaining water leaverienced in mine map research EDUCATION (Degree, Year, Special B.S. Geology, 1999, Marshall University)	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and alization)	quantity and cost calculatio	ns for AML projects.
Mr. Pratt has extensive experienced and obtaining water leaverienced in mine map research EDUCATION (Degree, Year, Special B.S. Geology, 1999, Marshall University)	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and alization)	forming test boring over-sigh any geotechnical soil tests i quantity and cost calculatio	ns for AML projects.
Mr. Pratt has extensive experienced in mine map research EDUCATION (Degree, Year, Species	ence as a Field Geologist, per evels. He has also performed m ch, specification writing, and alization)	quantity and cost calculatio	ns for AML projects.

13. PERS \L HISTORY STATEMENT (data ut keep to essentials)	OF PRINCIPALS AND ASSOCIATES		SIGN (Furnish comple	
NAME & TITLE (Last, First, Middle	All the state of t	YEARS OF EXPERIENCE		
Coberly, P.E., Eric J.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 10	
Brief Explanation of Responsibility. Coberly has performed AML Grant backfill, refuse regarding, por participated in the design of or 20 emergency project designs continuous construction and design hundreds of additional projects	rant and Emergency project destals, mine drainage, subsidence wer 80 such project while work mpleted in Ohio. Mr. Coberly gn administrator as well as the in the 22 years spent with Al	king for WVDEP or at ELR. Inches has served in various capacitate the Chief of the Office. This	cluded in that total is over	
EDUCATION (Degree, Year, Specia B.S. Engineering of Mines, 1983 M.S. Engineering of Mines, 1990				
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)	
		WV P.E 10619 Ohio P.E. 71562		
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES		ESIGN (Furnish complete data	
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE		
Int.) Ryan Haws, EIT	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
	0	7	0	
Brief Explanation of Responsibing. Haws is our Bridgeport Officompliance, storm water collect engineering design and CADD expension of Responsibility.	ce Manager. He brings experied tion systems, and all aspects perience. His work has also enteresting with existing	tailed communication and coor infrastructure and developmen	dination with local	
EDUCATION (Degree, Year, Special B.S. Civil Engineering, 2005 M.B.A. 2012				
MEMBERSHIP IN PROFESSIONAL ORGA	ANIZATIONS	REGISTRATION (Type, Year, St	cate)	
ASCE		Engineer-In-Training		

14. PROVIDE A LIST OF SOF DESIGN SERVICES	TWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE	USED TO COMPLETE AML
Various computer hardware applications,	e and software including: Microstation, InRoads, AutoCAD, ELRSoil, Haested, Water CADD, Culvert Master, Flo	Microsoft Office w Master
Various surveying equipme	ent:	
Instruments - Topcon	Total Station (6), Trimble Robotic DR200+ (2)	
*all equipment list	ole 5700 Receiver (6), Trimble TSCe Controller/Handheld (5) ts have various misc. survey equipment to go along (poles, tape me	asures, data collectors,
etc.) Riegl LMS - 360 3D La means of electro-opti	aser Scanner - surface imaging system based upon accurate distance ical range measurement and a two axis scanning mechanism.	measurement by

 \bigcirc

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
bney Refuse Piles Raleigh County	WVDEP/AML&R	Surveying, Mapping and Design	\$885,575	98
Gilam Ridge Refuse Nyoming County	WVDEP/AML&R	Surveying, Mapping and Design	\$595,000	90
est Columbia B ason 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	100
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

DO THOSE NAME OF THE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
PROJECT NAME, TYPE AND LOCATION	OWNER	RESPONSIBILITY	COST	THICHIT COILIBETE
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	\$6.0 M	85
ower 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 Water Phase 2	Lavalette PSD 5308 Route 152 Lavalette, WV 25535	Design and Construction Management	\$4.7 M	98%
Iaeger Regional Sewer Project	McDowell County PSD HC 31 Box 436J Welch, WV	Design and Construction Management	\$5 M	40
TOTAL NUMBER OF PROJECT	TS:14	TOTAL ESTIN	MATED CONSTRUCTION COSTS:	\$ 60 Million

PROJECT NAME, TYPE	NATURE OF FIRMS	NAME AND ADDRESS	JB-CONSULTANT TO OTHE	ESTIMATED CONS	RUCTION COST	
AND LOCATION RESPONSIBILITY	RESPONSIBILITY	OF OWNER	COMPLETION DATE	ENTIRE PROJECT YOUR FIRMS		
				ENTIRE PRODECT	RESPONSIBILITY	
				11		

17. CC ETED WORK WITHIN LA	ST 5 YEARS ON WHICH YOUR FIRM	S THE DESIGNATED ENGINEER OF RECORD		
PAUJECT 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

18. (LETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIF IAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICAT HASE WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Appalachian Corridor D Blennerhassett Island Bridge X354-D-0.00	Sub to Michael Baker, Jr., Inc. Post Design Services	\$7,500,000	2008	Yes	Michael Baker, Jr., Inc.
Appalachian Corridor H Section 6 X316-H-100.40	Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies	\$950,000	2008	Yes	Michael Baker, Jr., Inc.
Appalachian Corridor H Section 3 Davis to Bismark	Sub to Modjeski & Masters Survey, Geotech & ROW Plans	\$9,000,000	2008	No	Modjeski & Masters
Robinson Creek Bridge S303-85-27.81 Boone County	Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans	\$1,000,000	2008	Yes	EDG
Holley Grove Bridge Kanawha County	Sub to Triton Construction Plans for Bridge, Hydraulics, Post Design	\$500,000	2010	Yes	Triton Construction
19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program. E. L. Robinson Engineering Co. is committed to the WVDEP/AML program to provide professional design, 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.					
		Title: PROJECT MANAGER		Date: March 7, 2013	



Glen Rogers Emergency Project:

Wyoming County, WV

2012 Year:

WVDEP-AML Client: Charleston, WV

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

Abney Refuse Pile Project:

Raleigh County, WV

2011-2013 Year: WVDEP-AML Client:

Oak Hill, WV

Field surveying and mapping, subsurface investigation, design Description:

work for refuse regarding, mine seals, and drainage.

Cartright Branch Refuse Pile Project:

Logan County, WV

2011-2013 Year: WVDEP-AML Client:

Charleston, WV

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

drainage control.

Thorpe Refuse Pile Project:

McDowell County, WV

2011-2012 Year: WVDEP-AML Client:

Oak Hill, WV

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

and mine drainage control.

Shinnston-Lumberport Subsidence Project:

Harrison County, WV

2010-2012 Year: WVDEP-AML Client:

Philippi, WV

Performed site survey, drilling and prepared subsidence **Description:**

abatement design.



Abandoned Mine Land Reclamation Experience

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

Charleston, WV

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

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
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 January 2005

Client: ODNR-AML

Year:

1855 Fountain Square Columbus, OH

Description: Performed drilling to develop subsidence abatement solutions.



Project:

Parsons Landslide Emergency

New Philadelphia, OH

Year: Client: December 2004 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

Year:

Rayland, OH 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

Columbus, OH

Description:

Prepared plans and specifications to stabilize an emergency

landslide area.

Project:

Lewis Landslide Emergency

Year:

Pomeroy, OH

March 2004

Client:

ODNR-AML

1855 Fountain Square

Description:

Columbus, OH

Performed surveying, drilling, prepared plans and specifications

to stabilize an emergency landslide area, and provided

construction monitoring.

Project:

Moran Subsidence

Year:

Clinton, OH January 2004

ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Prepared plans and specifications to stabilize an emergency

subsidence area.



Project: Ron Bobar Subsidence

Flushing, OH January 2004

Year: January 2004
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

Description: Investigation and report of an emergency subsidence area.

Project: Gooney Otter Refuse

Wyoming County, WV

Year: January 2004 Client: 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.



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.



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
October 2000

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:

Riffe Branch Impoundment

Fayette County, WV

Year:

June 2000 WVDEP-AML

Client: Description:

Performed surveying and design for regrading refuse and

drainage control.

Project:

Ven's Run Landslide Harrison County, WV

Year: Client: September 1999 WVDEP-AML

Description:

Performed surveying and design for regraded landslide area.

Project:

Fickey Run

Preston County, WV

Year: Client: September 1999 WVDEP-AML

Description:

Performed surveying and design for refuse and spoil regrading

and drainage control.

Project: Year: Bull Run #35

Client:

July 1999 WVDEP-AML

Description:

Performed surveying and design for refuse and spoil regrading.

Project:

Securro Mine Drainage Site 1 & 2

Fairmont, WV

Year:

July 1998

Client:

WVDEP-AML

Description:

Performed surveying and design for mine drainage system.

Project:

Brown's Creek #10 Reclamation Project

Year:

1997

Client:

WVDEP-AML

Description:

Performed surveying and design for refuse regrading and

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.



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:

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
- 1-70 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

2000

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 ASCE 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





- 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 methods systems, treatment 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 The responsibilities include experience. 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 Photogrammetric Control, Scanning, Surveys, Topographic Surveys, Cemetery 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 164/177 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





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 engineering preliminary developing funding scenarios, designing the system, developing the plans and developing specifications, the 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	RIX				No.			Attach	ment "	C''					417					7			
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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	x 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 Rhodell Refuse & Portals	C	YES YES		x	X	x					×					x	x	M		P		P	P		
Gilmer B Sites 3-8	c	YES		X	X	X					X					X	X	M		P		Р	P		
Creek Waterline Feasibility	С	YES										х						М		Р		Р	Р		П
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	Р		
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	С	YES										X						M	Р	Р		Р	Р		
Mercer County Commission	С	YES										X						M	Р	Р		Р	Р	\rightarrow	-
Danese PSD Waterline	С	YES							_			X						M	P	P		P	P	-	$\overline{}$
New Haven Waterline	С	YES	-									X					_	IVI	P		_		P	-	-
Nubbin Ridge/Camp Creek Waterline Feasibility Study	С	YES										Х						М		Р		Р			\Box
Bramwell Hill Waterline Feasibility Study	С	YES										Х						М		Р		Р	Р		
Coaldale and Coaldale Mountain Waterline Feasibility Study	С	YES										х	_					М		Р		Р	Р		
Jennie Creek Waterline Feasibility Study	С	YES										х						M		Р		Р			
Beech Creek and Ben Areas Waterline Feasibility Study	С	YES										х						М		Р		Р	Р		
Blair/Sharples Area Waterline Feasibility Study	С	YES										х						М		Р		Р	Р		
Brown's Creek #10	С	YES	Х	Х	X	Х	X				X				X	X	X	M		Р			P	-	\mathbf{H}
Bull Run #35	С	YES	Х	X	X	X	X				X	X		X	X	X	X	M		P			P		-
Seccuro Mine Drainage	С	YES	- V	X	X	X	-				X	- V		-		· ·		M		P			P		$\overline{}$
Fickey Run	C	YES YES	X	Х	X	X	Х	-			X	X	-	X		Х	×	M		P	-	_	P		$\overline{}$
Ven's Run Bull Run #27	C	YES	X	×	×	X	×				X	X		X		X	×	M		P		P	P		$\overline{}$
Riffe Branch	C	YES	X	X	x	×	x				×	1				×	x	M		P		-	P		-1
Hot Coal	c	YES	_^	x	x	x	x				X		<u> </u>			X	X	M		P		Р	Р		\neg
Minden Refuse Pile	Č	YES		X		X					X					X		M		Р		Р	P		
Jeffrey Mine Complex	Č	YES		X	Х	X	Х				X						Х	М		Р		Р	Р		
Pigeon Creek Waterline	C	YES				X					Х	Х	Х					М		Р			Р		
Red Jacket, Matewan, Newtown Waterline	С	YES				х					х	х						М		Р		Р	Р		
Marrowbone Waterline Mount Zion Waterline	C	YES YES				X					X	X	Х					M		P		P	P		

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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
Coopers Rock, Pisgah, and Laurel Run Waterline	С	YES				X					X	Х						М		Р		Р	Р		
Davis Water Tank	С	YES				Х					X	Х						М		Р		Р	Р		\vdash
Whittington Hill (Walker)Slide	С	YES		Х	х	Х					Х						х	М	P/M	Р					
Maidsville Landslide	С	YES	X								Х						Х	М	Р	Р		Р	Р		
Rich Fork Landslide	С	YES	X	Х							X						X	M	P	P		P	P		\vdash
Tupppers Creek Landslide	С	YES	Х	X			_		-		X	- v			-		_ X	M	P	P		P	P	_	\vdash
Glen Rogers Waterline	C	YES YES	Х	X	Х	X	X		-	_	X	X		-			×	M	Р	P		P	P		
Gooney Otter Refuse Chapmanville Mine Blowout	C	YES	_^		_^	^	_^											M	Р	Р		Р	Р		
Charleston Romeo Landslide	c	YES		X	Х	X					Х						Х	M	Р	Р		Р	P		
Big Creek C Refuse	С	YES		X										_			X	М	P	P		P	P		\vdash
North Matewan Sipple	С	YES		X	Х	Х			-		X			_			X	M	P	P		P	P		\vdash
Moran Subsidence	С	YES YES	-	X		X			Х	-	X	-	X	+			х	M	P	P		P	P		\vdash
Lewis Landslide Roush Landslide	C	YES	-	- x		x					X		X				X	M	Р	Р		Р	Р		
Jefferson 26 Landslide	Č	YES		X		X					X						Х	М	ρ	Р		P	Р		
Titus Road Landslide	С	YES	Х	Х		Х					Х						X	M	Ω.	Р	_	P	P		\vdash
Imboden Landslide	С	YES	Х	X										_			X	M	P P	P		P	P		\vdash
Baisden Subsidence	С	YES	_	X					X		-			-			X	M	P	P		P	P		\vdash
Parsons Landslide	С	YES	-	X		· ·		-			Х	-		+	-		x	M	P	P		P	P		\vdash
Treadway Landslide	C	YES	X	X	_	X	-				x	_		1			X	M	P	P		P	P		
Phalen Landslide Adkins Landslide	C	YES	X	1 x		x	-				X						X	M	Р	Р		Р	P		
Goetz Subsidence	c	YES	_ ^	X					Х									M	Р				P		
Lavender Refuse Fire	c	YES		X				X			X		Х					M	Р				P		\vdash
Cox Refus Fire	С	YES		X				X			X		X				_	M	P	-		Р	P	_	\vdash
Toney Fork Landslide	С	YES		X		X		-	1		X	_	X	-			-	M	P	Р	-	P	P		\vdash
Athens Rt. 13 Refuse Fire	C	YES	-	X			-	Х	X	-	X	-		_		-	-	M	P	-	-		P	$\overline{}$	\vdash
McAdams Subsidenc Ermer	C	YES	-	X			_	_	x	_	X	_	X					M	P				Р		
Rodgers Subsidence Brown Landslide	C	YES	+	x		Х			- "		X							M	Р	Р		P	Р		
Town Run	P	NO										X													
Witcher Creek	Р	NO										X										_	1		\vdash
Pond Gap, Hitop & Spangler	Р	NO										X		-	-	-	-	-				_	+		\vdash
Elk City	Р	NO	-	-	=		-	1970		_		X	<u> </u>	+		1497		-		-			+		\vdash
Little Fork Refuse Pile	P			X		X	X	Х								Х	X	-		Р	-		4		+
OSM-Tackett Fork	Р		Х	Х	Х	Х											X	-		P	Р		+		_
OSM-Ironton	Р		_	X		X						-	Х	-	-	-	X	+		P	P		+		
OSM-Williamson LS	P		-	X		X		-			_	_	^	+	+		1 x	_		P	P	 	+		
OSM-Ray Landslide	P		+-	X		X	1	+	+					-			X			P	P				
OSM-Spence Landslide OSM-Ratliff Landslide	P		+	1 x		x	1				1	1					X				Р				
OSM-Pigeon Roost LS	P	1	1	X		X											Х			Р	Р				1
OSM-Oak Hill Subsidence	Р			X	Х	Х			Х		X						X	_			Р		1		-
OSM-Little Prater Creek	Р			X		X								1				-			P	-	+-		+
OSM-Hamilton II Landslide	Р			X		X		-			-	-		+		-	X	1	_	P	P	-	+-	_	+-
Tuppers Creek B	Р		X	X	Х	X		1				1		1			_ ^		_	F	Tree-		4		-

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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
Big Sandy Refuse	P			Х		Х											Х	-		P	P			P	P
Leslie (Nelson)	Р	2002	X	X	Х	X	Х				X	X	X					-		-	P		_		P
Swiss Drennan	P	2002										X			~			-		-	P	-			P
Minden C	Р	2002		Х	Х	Х	X			X	X	×		-	Х			_			P		_		P
Weston	P	2002					_		X		_	x		_			Х				Р			P	P
Parkette	Р	2002			- V	X	_		^		X	^					X				Р				P
East Dupont Avenue Landslide	P	2003		X	X	x		-			X				X	Х	X				P			P	Р
Skin Creek Phase II	Р	2003			X	x	_				X		X				Х				Р	VI.		Р	Р
Witcher Creek	P	2001		X	x	×	X		_		X	X				X	X				Р				Ρ
Crane Creek	P	2004		×	x		-					X					-				Р		_	Р	Р
Yoursco	P	2004		- /	- /-	X	X			120	Х		Х		X	X	X				Р	-	-	Р	P
Carswell	P	2004				X					X		X				X	_	_	_	Р		-	P	P
Craigmoor Downey Pierpont	P	2006							X								X	-	-	-	P		-	P	B
Ames (Clare) Landslide	Р	2007		Х							X						X	-	-	-	P	-	\vdash	_	P
Lorado	P	1995		X	Х	X					X	X			X	X	X	+	-	+	P	-	_		P
Madeline Refuse	Р	1995		X	X	Х	X			X	X	-		_	^	^	x	1			P				P
Rocklick	Р	1995		Х	X	X		- V	_	-	X	_	-	_	X		X				P				P
Wahoo	Р	1996			-	X	X	X	_		x	X		_	X	-	X				Р				P
Meadowbrook	Р	1996		Х	X		 ^	_	-	_	_^_	X									Р				P
Jumping Branch	Р	1996		X	×	X	X	X	-	X	X	1			X	Tr.				1	P				P
Beard's Fork	P	199		x	x	x	X	×		1	X						X		V - 13-		P			_	Р
Turkey Wallow	P	199		x	x	X	X	- 1			X				Х		X				Р			-	Р
Otsego	P	199		X	X	X	1				X	X									Р			_	P
Miller	P	199		X	X	X					X	X		X	X	X	X		-		P	_	-	D	P
Whitby Barker	P	199		X	X	X					Х	X					-	-			P	-	-	P	P
Gauley River Road	Р	199				1						X		1			-	-	-	-	P	-	+	P	P
Skin Creek	Р	200		Х	X	X	X				X	X		1	X	X	X	+	+-	-	P		+	P	P
Jolo	Р	200								-	-	X	-	+	-	-	_	+	+		P		1	P	P
Tioga	Р	200		-			-	-		-	X	\ \ \	+	1	X	X			1		P			Р	Р
Turkey Gap	P	200		X	X	X	-	X	+	+	X		+		×	1					P				
Big Sandy	Р	198		X	×	X	-	_^		_	X	X								Р	P				_
Marfrance	Р	198		X	X	X	X	1	-		X	X								Р	P			_	1
New Hill Ballpark	P	198		X	+ x	X	1		X		X	X			X		Х			Р	Р			-	-
Jones Run	P	198		1 x	1 x	X	1		1		X						X				P	-	_	-	P
Chapmanville Landslide	P	198		X	X	X					X						X		-	-	P	-	+	-	P
Wharncliff Landslide Joyce Sturm	P	199		X	X	X					X	X		X			-	-	-	-	P	-	+-	+-	P
Marianna Refuse	P	199				X	X				X			-	-	-	X	+	-	+	P	+-	+-	+	P
Cedar Grove	Р	199		Х	X	Х					X	X		X	-	_	X	-	+	+	P	+	-	+	P
Eskdale	P	199		X	Х	X					X	-		X	X	-	X	+	+	+	P	+	1	1	P
Hodgesville	Р	199		X	X	X					X	X		X	X	+	X	+	+	+	P				P
Newsome Branch	Р	199		X	X	X	X		-		X	×		+	+ ^	+	+ ^	+	+	+-	P	1			P
Morrison	Р	199		X	X	X			-		X	_ X	-	+	X	X	1	_	+	1	1				
Snake Island	Р	199		—		X	X	X	-		X	×	-	X	1 ^		X				Р				Р
Orchard Branch	Р	199		X	X	X	X	+	+		x	+ x	_		1		X				P				Р
Beckley Layne	Р	199		X	X	X	+	-	X		×	X		+							Р				Р
Quinwood Booth	Р	199		X	X	X	X	X	1 ~		X	1 .,			//	X	Х				Р				
Little Fork	P	198	N X	_ ^	^	_ ^	_ ^	^				_			_							111111111111111111111111111111111111111		10	

AML and RELATED PRO	JECT EXPERI	ENCE MATE	RIX							Attach	ment "	C"		A	The same of			1000				CPELOC			
			200					Mal			ine le		90.95	TO COM						Prim	ary St	aff Par	ticipa	tion	-
							PROJE	CT EX	PERIEN	ICE												W-Mngm	ALC: UNKNOWN		
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
Elkridge Refuse Lando Mines	P	1984 1984	X	X	X	X	Х	X			X				Х		X				Р			- "	
West Varney	P	1984 1984		X	X	X					X	_					X				P				
Bethel Portals	P	1985	_	x	X	×					X	×					X	_			P				-
Mammoth Landslide	P	1985		_^		x		_			X			×	X		X				P				-
Cheyenne	P	1985	X			x					x	X		×	X		X			Arriva .	P				-
Mudlick A Landslide	Р	1985	X		X	X					X	x		^	^	х	x			1.0	P				-
Nelson Landslide	Р	1985	Х	Х							X					_^_	X				P				-
Mudlick B Refuse	Р	1985	X	Х	Х	X	Х				X				X	X	X				P				-
Bluff Mountain	Р	1985	Х	Х	X	Х	Х				X	Х			X	X	X			_	P			_	
Montgomery Drainage	Р	1986		Х	X	Х					X			Х			X			P	P				
Mayoros Drainage	Р	1986		Х	X	Х					Х	X		Х						Р	P				
Ridgeview A & B	Р	1987	Х	Х	X	X	Х	X			X	Х		Х	X		Х			P	Р				
Tupper Valley	Р	1987	Х	Х	X	X					Х	Х		Х			Х				Р				
Airport Bottom	Р	1987		X	X	X					X	Х								Р					
Manilla Creek McAlpin	P	1987	X	X	X	Х	Х				X	X		Х	X		X			1.	Р				
Robey	P	2009 2009	~	V	-						X						Х			*	Р		P		P
Katy Lick	P	2009	X	Х	Х	X					X						Х				Р				Р
Clear Fork	c	2009	_^_		_	Х		_		_	Х	- ,				-	X				Р				Р
Coal Mountain	č	2009				_						X	_					M			P				P
Naugatuck/East Kermit	c	2009										x			-			M		P	2				P
Prenter	Р	2008										X						IVI	-	P	0	-	_		P
Hanover	Р	2009										X						\vdash	_	P	P	_			P
Lower Dempsey	Р	2009		Х	Х	X					Х						X			1.0	P				P
Island Creek #18	С	2009		X	Х	X					X	X			Х		X			1.00	P	_			P
Brownton Landslide	С	2009		Х	Х	Х					Х	Х					X				P				P
East Bank Emergency	С	2009																			P		P		P
Dunloup Creek	С	2010	Х	Х	Х	Х					Х	Х			Х	Х	Х			Р	P		P	5	Р
Otsego/Pierpoint/Maben	С	2010			1							X									Р		1	>	Р
Barkers Ridge/Basin	С	2010										Х									Р		ı		Ρ
Herndon/Covel/Garwood Bud/Alpoca/Mill Branch	C	2010										X								•	P		F	1000	Р
Keystone (Avery)	C	2010 2010										Х									Р		F		Р
Keystone (Emergency)	c	2010		-																P	2		P		Р
Cane Branch	c	2010										×			_					P	2		P	-	Р
Spy Rock/Edmond/ Flanagan		2010															_		_	Р	r .		_		
Mountain	С	2010										X			1	_			- 1	D	_		Ι,	,	- 1
Wildemess PSD	С	2010										х			_						P		-		\rightarrow
Gordon C	С	2010		X	Х	Х					Х	_^_					Х				P		P		-
Keaton Branch	Ċ	2010		X	X	X					X						x				P		P		-
Verner Grimmett Burning	2.74																			-		_		\rightarrow	\dashv
Refuse	С	2010						X			×	- 1								Р			p		
Shinnston-Lumberport	С	2011							Х		X									P	Р		PF	>	\dashv
Newtown-Kinder	C	2011		X	X	X					X						Х				Р		P		
Dan's Branch Emergency	С	2011		Х	Х	Х					X						Х			Р			P		
Cartright Branch	С	2011		Х	Х	Х					X						Х			P	Р		PF	>	
Thorpe Refuse Pile	С	2011		X	X	X					X						Х			1	Р		P P	>	
Glen Rogers Emergency Abney Refuse Piles	C	2012		X	X	V					X									Р			Р		
Autrey Refuse Piles	С	2012		Х	X	X	- 1	1	- 1		X					T	X		1	P	9		PF		

AML and RELATED PRO	DJECT EXPERI	ENCE MATE	XIX							Attach	ment "	C"-													
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Milam Ridge Refuse	С	2012		Х	Х	X					Х						Х			Р	Р			Р	
West Columbia "B"	С	2012		X	X	X					X						Х			Р	Р		Р	Р	
Coburn Invest.	Р			Х					Х								Х		Р						
Gouge Landslide	Р		Х			Х					Х		X				X		Р						
Adamsville	Р		Х	X	X	X			X		Х		Х						Р						_
Mount Pisgah	Р		Х			Х					Х		Х						Р						<u> </u>
Pleasant Valley Church	Р			Х	Х	Х					Х		Х					_	Р						\vdash
Hodgesville B	Р			X	X	X			_		X		X	_	Х		X	_	Р	_					-
Lynch Chapel	Р			X	X	Х			-		X		X			Х		_	P		-				\vdash
Snider Portals	Р			X	X	X					X	_	X		_			_	P		_		-		\leftarrow
Wash Run	Р		- , , , , , , , , , , , , , , , , , , ,	X	X	X	_	-	_		X	-	X	-	-			-	P		-	-			\leftarrow
Junior Sewage Plant Shavers Fork/Stonecoal	P		X	X	X	X	_	-	-	-	X	X	X	_	X	_		_	P	_	-	—	-	-	\vdash
Vargo Drainage	P		_	x	x	x		_	_		x		x					 	P	-	_		1		\vdash
Fairhills Plaza Subsidence	Р		_	x	-			_	X		X		X					_	P						
Karen Vance AMD	P		X	X	X	Х					X		X	-					P					$\overline{}$	
Leroy Wilmoth Drainage	Р		- /	X	X	X					X		X	1					P					- 7	
Big Knob Acid Mine Drainage	Р		Х	X	X	X		1			X	X	X	X					Р						
Matthew Smith Subsidence	P			X		X			X		Х		X					1	P						
Worthington Portals	Р		Х	Х	X	X					Х		X						Р						
Red Rock Drainage	Р		Х	Х	Х	Х					Х		Х						Р						
Blackwater Manor	P		Х	Х	Х	Х	X				Х	Х		Х	Х				Р						
Buckhannon River Refuse	Р			Х	X	Х					X		X		X				Р				0 3		
Hutcheson AMD	Р			Х	X	Х					Х		X						Р						_
Nutter Fort Tressle -7th	Р										Х		X						Р						_
East Bank Portals - A# 2	Р			X	Х	Х				-	Х		X					_	Р						—
Manilla Creek - A#2	Р			X	X	X		-			X	-	X				Х		P		-	_			\vdash
Big Creek C	P			X	X	X	-			-	X	-	X	_					P	-			-	_	\vdash
Covey Creek Refuse	P		\vdash	X	X	X	_	-	+	-	X	-	X		_	<u> </u>		+	P		-	-	-		-
Omar Drainage G2 Crooked Ck Refuse & Portals	P		_	X	X	X			+	-	X		X		×				P		_			_	\vdash
Jims Br. (Tyree) LS	P			x	x	x			1		x	-	x	_		-	X		P		_		1		\vdash
Galloway Mine Portal/Refuse	P			X	X	×		1			X		X			х	X		Р					_	-
Newtown (Harmon) Drainage	P			X	X	X					X					- 00	-		P						
Whitman Ck. (Williams) VO	Р			X	X						Х								Р						
Coal Branch (Cantrell)	Р			Х	Х	Х					Х								Р						
Jordanville Tipple/Refuse	Р		Х			Х				X	Х				Х				Р						
Heizer Creek A Maintenance	Р			Х	X	X					X			Х					Р						
Orlando Mining Facility	Р		Х			X				X	Х				X				Р						-
Verdunville Drainage	Р			Х	X	Х					Х								Р						-
Holden Portals	Р			X	X	X					X							-	P		-				\vdash
Molinar Subsidence	Р		-	X					X		X	-	X	_			X		P/M		-				-
Smith Landslide	Р		X	X	X	Х		-	-		X		X				Х	-	P/M		-		-	_	-
Lutz Vertical Opening	Р			X	X		-	-	-	-	X	_	X	-				-	P/M P/M	-	-		-		\vdash
Swiger Mine Blowout	P		_	X	X	Х	-	-	X	-	X		X	-		Х		-	P/M		-				-
Blair Wolfe Subsidence	P		_	X	-	Х	-	-	_ X	-	X	_		_	_	_	X	-	P/M		_			_	\vdash
Lake (Winkler) Phase II	P -		_	X	-		_	+	+	-	^	_	-	_			_^	_	F/IVI		_		1	_	-
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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.

E.L. ROBINSON	ENGINEERING
(Company)	
= Coly	
(Authorized Signature)	
ERIK J. COBE	YLLY
(Representative Name, Title)	
304 776.7473	304 776.6426
(Phone Number)	(Fax Number)
3 7 13	
(Date)	