May 20, 2010

**EXPRESSION OF INTEREST** 

### ORIGINAL

# MONTANA MINE SUBSIDENCE DESIGN DEP14990

MARION COUNTY, WEST VIRGINIA



the Challenge. the Choice.

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

Fax: (304) 776-6426 www.elrobinson.com

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WW PURCHASING PORMO



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

#### Request for Quotation

DEP14990

ADDRESS CORRESPONDENCE TO ATTENTION OF

PA	GE :
	1

CHUCK BOWMAN 304-558-2157

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

RFQ COPY TYPE NAME/ADDRESS HERE E.L. Robinson Engineering Co. 5088 Washington Street, West Charleston, WV 25313 25304

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ADDRESS CHANGES TO BE NOTED ABOVE

550594633 WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



May 20, 2010

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

Attn: Eric J. Coberly, P.E., Chief

Re: Montana Mine Subsidence Design

**DEP14990** 

**Expression of Interest** 

Dear Mr. Coberly:

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 Montana Mine Subsidence Design project located in Marion County.

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

The ELR staff has combined experience in the design of nearly 100 AML projects.

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

- A. Thirteen (13) registered professional engineers (civil or mining), 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 more than forty (40) abandoned mine land remediation projects. Personal experience on nearly one hundred (100) 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 80 employees today. Throughout this growth period we have continued to meet project deadlines while providing a high quality engineering product.

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

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

Sincerely,

E. L. Robinson Engineering Co.

By:

Richard W. Watts, P.G.

Ribert W. Walls

Project Manager



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#### **Executive Summary**

For more than 10 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 and Ohio DNR 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

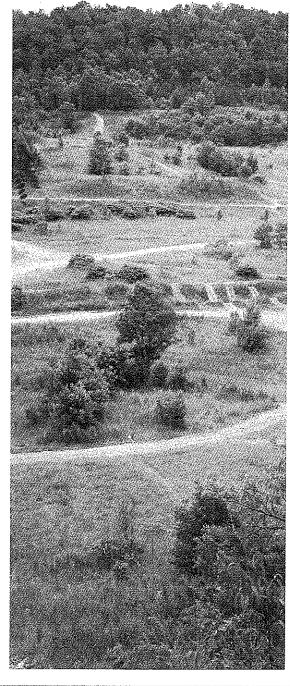
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

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 Project Team

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

Mr. Rich Watts, P.G. will be assigned as the Project Manager.

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

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

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

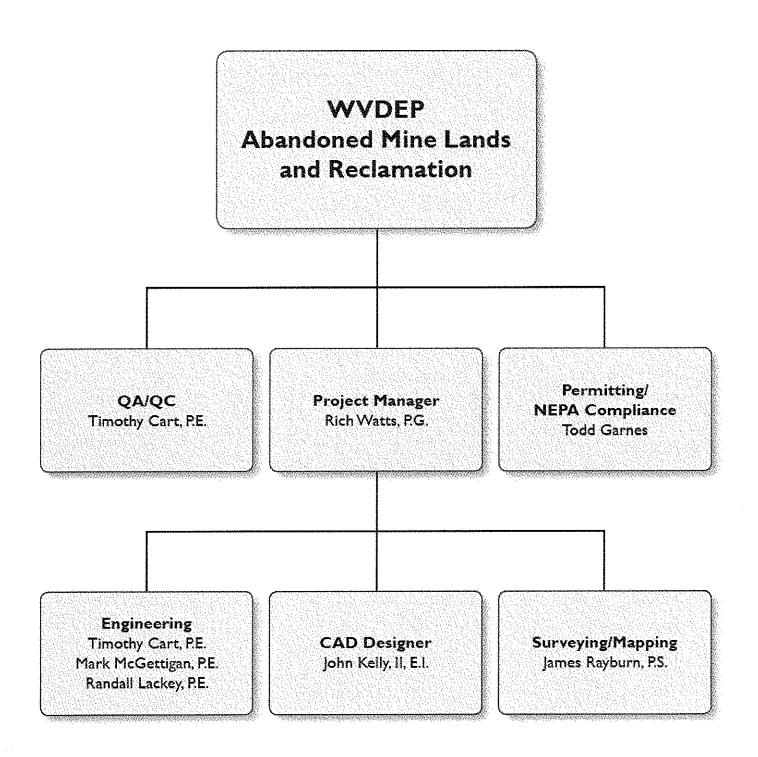
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their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

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

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



### **Our Project Team**





#### **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 10 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:

- Jacob's Fork Complex substantially complete December 2008
- Rhodell Refuse and Portals substantially complete October 2008
- Gilmer B Sites 3-8 substantially complete September 2008
- Ohio DNR Emergency Reclamation 19 sites completed
- Toney Fork Landslide Emergency complete February 2006
- North Matewan complete February 2005
- Big Creek "C" Refuse complete July 2004
- Charleston Romeo Landslide complete May 2004
- Gooney Otter Refuse complete January 2004
- Chapmanville (Gorby) Mine Blowout December 2003
- Tuppers Creek (Layne) Landslide July 2003
- Rich Fork (Thaxton) Landslide July 2003
- Maidsville (Tennant) Landslide February 2003



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PROJECT NAME Montana Mine Subsidence Design DEP14990	1	~	MONTH,	A.		FEIN 55-0594633		
1. FIRM NAME 3.L. Robinson Engineering Co.		2. HOME OFF 5088 Washin Charleston,	HOME OFFICE BUSINESS '8 Washington Street, Irleston, WV 25313	INESS ADDRESS reet, West 13	ESS	3. FORMER F	FIRM NAME	
1. HOME OFFICE TELEPHONE 304-776-7473	5. ESTABLISHED 1978	SHED (YEAR)	LR) 6.	TYPE Indivi	RSH1 x p	Φ	6a. WV REGISTERED D (Disadvantaged Busi Enterprise) x NO	KED DBE Business x NO
7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313	ADDRESS/ TELEPHONE/ PER. 304-776-7473/Tim Cart,	ELEPHONE/	PERSON I	PERSON IN CHARGE/ art, P.E./56 Staff	NO. AML DESIGN PER in Charleston Area	IGN PERSONNE on Area	AML DESIGN PERSONNEL EACH OFFICE harleston Area	
3. NAMES OF PRINCIPAL OFFICERS Ed Robinson, P.E. 304 776-7473	S OR MEMBERS 3 Ext 211	S OF FIRM		8a. NAME, TJ	TITLE, & TEL	TELEPHONE NUMBER	OTHER PRINCIPALS	S
9. PERSONNEL BY DISCIPLINE								
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15 CONSTRUCTION INSPECTORS DESIGNERS DRAFTSMEN	— HISTOKIANS — HYDROLOGISTS	LANS OGISTS		1 SOLLS E SPECIFI WRITERS	SOILS ENGINEERS SPECIFICATION WRITERS	r.	56 TOTAL PERSONNEL	7
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS *RPEs other than Civil and Mining must provide supporsupervise and perform this type of work.	ISTERED PROFESSIC and Mining must this type of worl	OFESSIONAL Mg must prov of work.	ENGINEERS ride suppo	NAL ENGINEERS IN PRIMARY OFFICE: provide supporting documentation 		13 that qualifies	s them to	
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10. HAS THIS JOINT-VENTURE WORKED TOGETHER	NRKED TOGETH	HER BEFORE?		YES	NO X This	is not applicable	cable	

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NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
Novel Geo – Environmental (NGE) 806 B Street, St. Albans, WV	Dining	X YES
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND APPEECE.	ANDOTATIONS	ON
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
ANALYST ATTACABLE		ON
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
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		YES
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12. A Is your fir X YES Descr	your firm experienced in Abandoned Mine Lan Remediation/Mine Reclamation Engineering?
NO	
B. Is your fix X YES Descr	r firm experienced in Soil Analysis? Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet
ON -	
C. Is your fir	r firm experienced in hydrology and hydraulics? 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?
X YES Desci	Description and Number of Projects: > 200 - in Firm History - 65 Recent Projects Listed
A11 I	ELR WV & OH AML Projects since 2003 have been surveyed with ELR Surveying Staff
NO -	
E. Is your firm evaluation of	firm experienced in domestic waterline design? (Include any experience your firm has in on of aquifer degradation as a result of mining.)
X YES Desci	five (45) Total (11) Domestic Waterline Exp (20) Evaluation of Aquifer
ON	Twenty Five (25) Non-AML Domestic Water Lines
F. Is your firm Evaluation ar	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
X YES Desci	Description and Number of Projects: Seven (7) Projects
ON —	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND data but keep to essentials)	F PRINCIPALS AND ASSOCIATES	ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish	ESIGN (Furnish complete
First, Middle		YEARS OF EXPERIENCE	
rd L. Robinson, President	YEARS OF AML DESIGN EXPERIENCE: 10	YEARS OF AML RELATED DESIGN EXPERIENCE: 24	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	ities		
Mr. Robinson worked in the Right of Way major utility plans. He has extensive land acquisition. He has provided qual Provide and coordinate Quality Control	d in the Right of Way Division of the WV Departments. He has extensive experience in property surveys. He has provided quality control on all projects desnate Quality Control on all design projects.	nt of Highways for ys, property title designed by this fi	ten years where he reviewed searches, aerial mapping and rm for the past 25 years.
EDUCATION (Degree, Year, Special	Specialization)		
Bachelor of Science 1969 Civil E Master of Science 1981 Civil E	Engineering Engineering		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	IIZATIONS	REGISTRATION (Type, Year, Sta	State)
American Society of Civil Engineers - Past American Council of Engineering Companies National Society of Professional Engineers	eers - Past President WV Companies I Engineers	1975 Civil Engineering Registered in West Virginia and Ker Professional Licensed Surveyor No.	and Kentucky or No. 1150
<pre>13. PERSONAL HISTORY STATEMENT O but keep to essentials)</pre>	STATEMENT OF PRINCIPALS AND ASSOCIATES : s)	RESPONSIBLE FOR AML PROJECT DESIGN (Furnish	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
ard W. Watts, P.G.	YEARS OF AML DESIGN EXPERIENCE: 27	YEARS OF AML RELATED DESIGN EXPERIENCE: 32	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities Mr. Watts has served as project geologis include project management, field reconn analysis, specification writing, quantit Projects included surface and deep mine	ties leologist on more l reconnaissance, quantity determin	than eighty (80) abandoned mine land projects. Responsibilities drilling coordination, laboratory testing and analysis, stability ations, cost estimates, pre-bid and pre-construction meetings. In subsidence, AMD treatment and waterline feasibility studies.	land projects. Responsibilities y testing and analysis, stability and pre-construction meetings. waterline feasibility studies.
EDUCATION (Degree, Year, Special B.S./1977/Geology M.S./1994/Geography	Specialization)		
MEMBERSHIP IN PROFESSIONAL ORGAN Geological Society of America Association of Engineering Geolo	ORGANIZATIONS .ca Geologists	REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia Professional Geologist/1993/Kentucky	ate) Virginia Kentucky

13. PER. AL HISTORY STATEMENT C data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE:	ESPONSIBLE FOR AML PROJECT DESIGN	SIGN (Furnish compl. :
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
John Kelly II, B.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 8
Brief Explanation of Responsibilities Mr. Kelly has worked on many AML projects since joining ELR. F sampling of coal refuse materials, hydrology, hydraulics design plans. Estimation of quantities developed estimated cost. Mr. Mr. Kelly has performed layout and inspection of core drilling addition, he has designed cut slopes for large-scale roadway pr County, WV and Meadowbrook Road in Harrison County, WV.	lities  projects since joining BLR.  s, hydrology, hydraulics des: developed estimated cost.  and inspection of core drilli) lopes for large-scale roadway in Harrison County, WV.	is responsibilities have of drainage structures, Kelly is proficient with operations for bridge and ojects such as the US Ro	included drilling inspection, and development of regrading h Auto Cadd. d roadway projects. In ute 52 Kermit Bypass in Mingo
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Civil Engineering/1998/WVU			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Engineer Intern, WV	
13. PERSONAL HISTORY STATEMENT OF but keep to essentials)	PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DESIGN	<b>SSIGN</b> (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Timothy B. Cart, P.E.	YEARS OF AML DESIGN EXPERIENCE: 25	YEARS OF AML RELATED DESIGN EXPERIENCE: 25	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 20
ひからの石 ロシアン・0 ロック・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		)	N
Mr. Cart has completed numerous mine materials, re-establishment of vegeta extinguishing burning materials and doucted phase I and Phase II Studie Mr. Cart has extensive experience in has recently completed water projects Mr. Cart has performed geotechnical embankments.	mine reclamation projects egetation cover, disposal and disposal of old mining tudies to determine if gree in the design and constructs in Mingo; Kanawha; I cal engineering calculation.	L program, includin ucing materials, an Designed passive been affected by p ement of waterline abell counties. as for settlement a	cam, including regrading of coal refuse naterials, and developing methods for med passive AMD treatment systems. Iffected by pre-law mining. If waterline extension projects. Mr. Cart counties.
(December 1722)	1,7 - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1, 1, - 1		
Jegree, Year,	Specialization)		
	Engineering		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State) Professional Engineer WV OH	ite)

13. PER, AL HISTORY STATEMENT O data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT D	DESIGN (Furnish compl.
ы		YEARS OF EXPERIENCE	
Mark McGettigan, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 7	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Mr. McGettigan has worked on several sections, estimated and checked quan Projects designed by E. L. Robinson years.	AML projects since tity calculations. Engineering Co. He	our firm. He has deve 11so served as a field 1 the lead designer on	loped grading plans, cross inspector for several waterline waterlines
Mr. McGettigan also has experience with He has also performed various concrete a	surveying and md soil tests	equipment including; theodolites, levels, an and is certified on Troxler nuclear density	evels, and total stations. density gage.
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Civil Engineering Technici	Technician/Fairmont State/1999		
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, St	State)
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	DESIGN (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:
Brief Explanation of Responsibilities Mr. Lackey has performed hydraulics a Creek Bridge; Kermit Bypass Bridge; L	nd scour eft Hand	Tallman Bridge;	Meadowbrook Road Bridge; Simpson
Mr. Lackey has also performed canalysis; prepared design study Highways projects.	performed calculations for deck drainage design study reports; type, size and loca	drainage; performed girder design and analysis; and location reports and final plans on many of	analysis; pier design and on many of our Division of
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Civil Engineering/1999			
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, St.	State)
		Professional Engineer WV	
	, and the state of		

13. PER. AL HISTORY STATEMENT O data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DESIGN	SIGN (Furnish compl
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
J. Todd Garnes	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 5	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Mr. Garnes experience surveying and providing extrusions. He has provided construction inspar. Garnes has performed numerous water feasil mapping, mine research, and development of fir EDUCATION (Degree, Year, Specialization)	riding CADD Design n inspection servi feasibility studie of final reports.	mine reclamati for landsides hich involved	on projects and waterline and sewer and subsidence projects in Ohio. interviews, water sampling and analysis,
A.S. Architectural Design/ 1999 A.S. Computer Aided Drafting and	d Design/ 1999		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Ste	State)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES 1	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Thomas Rayburn, P.S.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
		30	
Brief Explanation of Responsibilities Mr. Rayburn has experience in mine matypes of coal mining, designed mine deventilation plans and systems which is exercise.	sibilities in mine mapping and surveying, for ned mine drainage and water supply ms which include precision pressu	aspaing and surveying, formulated short term and long range mining plans for all drainage and water supply systems for underground and surface mines, designed mine include precision pressure quality surveys and computer simulation of ventilation	ange mining plans for all surface mines, designed mine or simulation of ventilation
erformed slope ions, work with zing "state of for aerial maph urn has also pe	stability analysis and hydrology calculations, leases and land management as well as reclamat the art" electronic total stations and/or GPS and and collects data and develops GIS for utility and surveying and mapping for large scale?	ulations, provides computer analysis for mining s reclamation and environmental permits. d/or GPS (Satellite) equipment, he performs con S for utility mapping.	alysis for mining 11 permits. 7, he performs control
EDUCATION (Degree, Year, Specia	Specialization)		
A.S. Mechanical Engineering, WV	WVIT/1970		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Professional Surveyor WV	

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. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data 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. YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: In addition, Mr. Tilley has over 30 years experience in water and wastewater design as a Project Manager/Engineer. In addition Mr. Tilley is a certified Water Plant Operator. Mr. Tilley has successfully completed numerous waterline design projects over his career. His current duties include managing both water and wastewater design projects for ELR. ESPONSIBLE FOR AML PROJECT DESIGN (Furnish compl 30 REGISTRATION (Type, Year, State) REGISTRATION (Type, Year, State) YEARS OF AML RELATED DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN EXPERIENCE: Professional Engineer WV Professional Engineer WV YEARS OF EXPERIENCE YEARS OF EXPERIENCE Sanitary Engineering Virginia Tech, 1976 <del>~</del> ທ YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML DESIGN EXPERIENCE: AL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATE. B.S. Civil Engineering/WV Tech 1975; M.S. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS EDUCATION (Degree, Year, Specialization) Year, Specialization) Brief Explanation of Responsibilities data but keep to essentials) NAME & TITLE (Last, First, Middle NAME & TITLE (Last, First, Middle B.S. Civil Engineering/1997 keep to essentials) EDUCATION (Degree, ь Б Ray Tilley, P.E. Scott LeRose, 13. PER. Int.) but Int.)

EIST. Middle  E.I.  8  Of Responsibilities  riest. Middle  Of Responsibilities  riest. Specialization  riest. Specialization  First, Middle  Responsibilities  First, Middle  Fir	data but keep to essentials)	OF FIXTH FALS AND ASSOCIATED	ESPONSIBLE FOR AML PROJECT DESIGN	ssign (furnish compl.
Explanation of Responsibilities  f Explanation of Responsibilities  f Explanation of Responsibilities  f Explanation of Responsibilities  Govinn has designed approach aleas worked on the Cabell County waterline projects. He performs calculatements He has worked on the Cabell County water intake standard approach aleas worked on the Cabell County water intake standard approach aleas worked on the Cabell County water intake standard approach aleas worked on the Cabell County water intake standard approach aleas and extensive detailing on several bridge produced to the cabell county water intake standard and extensive of Technology  ENSHIP IN PROFESSIONAL ORGANIZATIONS  RESHIP IN PROFESSIONAL ORGANIZATIONS  F Explanation of Responsibilities  Norton has worked on waterline extension projects in Putnam County. He also has completed and other drahade structures and highways construction.  Civil Engineering/1998  RESHIP IN PROFESSIONAL ORGANIZATIONS  RESHIP IN PROFESSIONAL ORGANIZATIONS  RESISTING (Type, Year, Specialization)  Civil Engineering/1998  RESHIP IN PROFESSIONAL ORGANIZATIONS  RECISTRATION (Type, Year, Standard standard and parameter marking plans and performed hydrologic and hydrony construction.  RESHIP IN PROFESSIONAL ORGANIZATIONS  RESISTIP IN PROFESSIONAL ORGANIZATIONS  RESHIP IN PROFESSIONAL ORGANIZATIONS	& TITLE (Last, Fir		O.F	
Explanation of Responsibilities	s Eric Gwinn,		l <sub>a</sub>	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Gwinn has experience in construction layout for waterline projects. He performs calculatements worked on the Cabell County Water Project and the raw water intake sea nearly water Project. He has performed calculations on various All project. Goal mass designed approach alabs, decks and extensive detailing on several bridge processional Mater Project. He has performed calculations on various All project. He has performed calculations on various All project and the several bridge processional mass designed approach alabs, decks and extensive detailing on several bridge processional bridge processional mass designed approach alabs, decks and extension of Responsibilities  Morton has worked on waterline extension projects in Putnam County. He also has complication of Responsibilities  Morton has worked on waterline extension projects in Putnam County. He also has complication brojects involving the West Virginia Division of Highways.  Morton has prepared signing and pavement marking plans and performed hydrologic and hydron (Degree, Year, Specialization)  Civil Engineering/1998  ERSHIP IN PROFESSIONAL ORGANIZATIONS  REGISTRATION (Type, Year, Statement Marking Internation)  Professional Engineer West, Statement Marking Branch Internation of Marking Internation Internation of Marking Internation Inte	Explanation of	lities		
Civil Engineering/1998/ West Virginia Institute of Technology RESHIP IN PROFESSIONAL ORGANIZATIONS RESONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DE RETITLE (Last, First, Middle TTTLE (Last, First, Middle TTTLE (Last, First, Middle TEXPLANDED TO SECONAL PROJECT DE REPRESENCE:  D. Morton, P.E.  Explanation of Responsibilities  Cotton has worked on waterline extension projects in Putnam County. He also has complation projects involving the West Virginia Division of Highways.  Cotton has prepared signing and pavement marking plans and performed hydrologic and hymostys and other drainage structures and highway construction.  CIVIL Engineering/1998  CIVIL Engineering/1998  REGISTRATION (Type, Year, States)  Professional Engineer WV	Gwinn has experience in irements. He has worked eau Regional Water Proje Gwinn has designed approATION (Degree Year She	truction lathe Cabell He has perselslabs, decl	He performs raw water int is AML project several bridg	ulation and permit structure for the Fayette ojects.
ERSUNAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESCRIPTION (Type, Year, States) to essentials)  E TITLE (Last, First, Middle Teast, First, Middle Teast, First, Middle Teast, First, Middle Teast of AML DESIGN EXPERIENCE:  E TITLE (Last, First, Middle Teast of AML DESIGN EXPERIENCE: 2  Explanation of Responsibilities  Outon has worked on waterline extension projects in Putnam County. He also has complication projects involving the West Virginia Division of Highways.  FION (Degree, Year, Specialization)  Civil Engineering/1998  FRSHIP IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV  PERSTRAIL TOWN (Type, Year, States)  Professional Engineer WV	B.S. Civil Engineering/1998/ Wes	Institute of	nology	
ERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DE (Lest, First, Middle TITLE (Last, First, Middle TEARS OF AML DESIGN EXPERIENCE: TO Morton, P.E. 2  Explanation of Responsibilities  Corton has worked on waterline extension projects in Putnam County. He also has complated on the marking plans and performed hydrologic and hydrolog	IN PROFESSIONAL	VIZATIONS	(Type, Year,	ıte)
EXPENSIONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESCRIPTION OF SERVICE (Last, First, Middle YEARS OF AML PROJECT DESCRIPTION OF PRINCIPAL STATEMENT OF AMERICAN STATEMENT OF THE TEATED DESIGN STATEMENT OF THE TEATED DESIGN OF MACHINE STATEMENT OF THE TEATED DESIGN				
EXPLANCE. (Last, First, Middle  YEARS OF AML DESIGN EXPERIENCE:  EXPLANCE.)  EXPLANCE:	PERSONAL HISTORY STATEMENT keep to essentials)	PRINCIPALS AND ASSOCIATES	FOR AML	
FEARS OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN  FEXPERIENCE: 2  FEXPERIENCE: 2  FEXPERIENCE: 2  FEXPERIENCE: 2  Morton has worked on waterline extension projects in Putnam County. He also has complected in projects involving the West Virginia Division of Highways.  Morton has prepared signing and pavement marking plans and performed hydrologic and hyerton has prepared signing and highway construction.  ATION (Degree, Year, Specialization)  Civil Engineering/1998  FESSHIP IN PROFESSIONAL ORGANIZATIONS  FEGISTRATION (Type, Year, Stapenship In Professional Engineer WV)	હ	=	OF	
Morton has worked on waterline extension projects in Putnam County. He also has completed numerous ocation projects involving the West Virginia Division of Highways.  Morton has prepared signing and pavement marking plans and performed hydrologic and hydraulic calcul verts and other drainage structures and highway construction.  CATION (Degree, Year, Specialization)  Civil Engineering/1998  BERSHIP IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	n D. Morton,	OF		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Morton has worked on waterline extension projects in Putnam County. He also has completed numerous ocation projects involving the West Virginia Division of Highways.  Morton has prepared signing and pavement marking plans and performed hydrologic and hydraulic calcul verts and other drainage structures and highway construction.  CATION (Degree, Year, Specialization)  Civil Engineering/1998  BERSHIP IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	Explanation of	lities		
has prepared signing and pavement marking plans and performed hydrologic and hydraulic of other drainage structures and highway construction.  (Degree, Year, Specialization)  Engineering/1998  IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	Morton	ojects in Division	ty. He also has	
(Degree, Year, Specialization)  Engineering/1998  IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	pared sign drainage	and pavement marking plans uctures and highway construc	erformed hydrologic and	ydraulic calculations for
Engineering/1998  IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	(Degree, Year,	lization)		
IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV	Civil			
Engineer	IN PROFESSIONAL	NIZATIONS	(Type, Year,	ate)
			Engineer	

13. PER. AL HISTORY STATEMENT data but keep to essentials	STATEMENT OF PRINCIPALS AND ASSOCIATE. essentials)	ESPONSIBLE FOR AML PROJECT DESIGN (Furnish compl.	SIGN (Furnish compl.
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Joseph T. Carney, P.E.	YEARS OF AML, DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Mr. Carney has extensive experience and contract administration. He has storm sewer, drainage studies, roadw	lesign e rked on bridge	engineering, preparation of contract documents, construction a variety of Civil Engineering projects including grading, design, hydrologic/hydraulic reports, sanitary sewer and we	its, construction inspection, luding grading, earthwork, ary sewer and water systems.
EDUCATION (Degree, Year, Specialization)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Workman, Gary A., CADD Senior Technician	YEARS OF AML DESIGN EXPERIENCE: 20	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
		0.0	н
Brief Explanation of Responsibilities Mr. Workman is responsible for CADD design on A WVDEP/AML projects while employed at Ackenheil,	ML projects, and has work	well as geotechnical soil on 7 AML projects while at	analysis. He Worked on 44 E. L. Robinson.
EDUCATION (Degree, Year, Specialization) Technical School/1987/CADD	lization)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State) WVDOH certifications compaction,	State) ction, aggregates and concrete.

	The second secon	The second secon	
13. PER. AL HISTORY STATEMENT C data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DE	DESIGN (Furnish compl.
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Mayes, Jason M.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
	it, waterline and sign with a prior	sewer extensions, and layout on A firm.	on AML Projects. Mr. Mayes has
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Industrial Technology 1997 WVU Tech A.S. Drafting and Design 1996 WVU Tech	WVU Tech VV Tech		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE S)	RESPONSIBLE FOR AML PROJECT DESIGN	SIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)	T. T	YEARS OF EXPERIENCE	
Scott A. Pratt	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
	10	1.0	
Brief Explanation of Responsibilities	lities		
Mr. Pratt has extensive experience as a Field samples, and obtaining water levels. He has a experienced in mine map research, specification and the same of the sa	is extensive experience as a Field Geologist, peril obtaining water levels. He has also performed min mine map research, specification writing, and	Field Geologist, performing test boring over-sight, logging soil and chas also performed many geotechnical soil tests in the laboratory. He itcation writing, and quantity and cost calculations for AML projects.	, logging soil and core the laboratory. He is also s for AML projects.
POCALLON (POGLEC, IGAL, Specia	Specialization)		
B.S. Geology, 1999, Marshall University	iversity		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State	te)

14. PRC E A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE?  DESign Services
Various computer hardware and software including: Microstation, InRoads, AutoCAD, ELRSoil, Microsoft Office applications,
Various surveying equipment:
Instruments - Topcon Total Station (6), Trimble Robotic DR200+ (2)
GPS Equipment - Trimble 5700 Receiver (6), Trimble TSCe Controller/Handheld (5) *all equipment lists have various misc. survey equipment to go along (poles, tape measures, data collectors, etc.)
Riegl LMS - 360 3D Laser Scanner - surface imaging system based upon accurate distance measurement by means of electro-optical range measurement and a two axis scanning mechanism.

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PROJECT NAME, TYPE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
Keystone (Avery) LS Drainage McDowell County	McDowell County	Surveying, Mapping and Design	\$100,000	10
Brownton Landslide Barbour County	WVDEP/AML&R	Surveying, Mapping and Design	\$644,000	95
ιυ	WVDEP/AML&R	Surveying, Mapping and Design	\$1.1 M	95
	Logan County PSD P. O. Box 506 Logan, WV Attn: Rick Roberts	Design and Construction Management	\$6.0 M	80
Labtown Extensio	Town of Gilbert P.O. Box 188 Gilbert, WV Attn: John White	Design and Construction Management	\$2.3 M	15
PSD Rt. 37 Extension	Lavalette PSD 5308 Route 152 Lavalette, WV	Design and Construction Management	\$5.0 M	80 52
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	\$6.0 M	8 5
TOTAL NUMBER OF PROJECTS:	3:	TOTAL ESTIMA	TOTAL ESTIMATED CONSTRUCTION COSTS:	v.

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PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Island Creek #18 Logan County	WVDEP/AML&R	Surveying, Mapping and Design	\$500,000	. 85
Miller Mountain Water Extension, Webster County	Webster County BDA Webster Springs, WV	Design and Construction Management	¥3.0 M	80
McDowell PSD Jolo Phase II Water McDowell County	McDowell Public Service District	Design and Construction Management	\$4.0 M	85.5
Dille/Widen Water Extension Clay County	Birch River PSD	Design and Construction Management	\$4.0 M	85
Dutch Ridge/Sanderson Water Extension, Kanawha County	Kanawha County RDA	Design and Construction Management	\$2.5 M	85
Williamson Sanitary Sewer Improvements	City of Williamson	Design and Construction Management	\$1.1 M	5.0
Lubeck Sanitary Sewer Extension, Wood County	Lubeck PSD Lubeck, WV	Design and Construction Management	\$2.1 M	0
TOTAL NUMBER OF PROJECTS:14	S:14	TOTAL ESTIMATED	ATED CONSTRUCTION COSTS:	\$ 38.8 Million

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS	ESTIMATED CONSTRUCTION COST	YOUR FIRMS RESPONSIBILITY				
IRS	ESTIMATED CONS	ENTIRE PROJECT				
B-CONSULTANT TO OTHE	ESTIMATED COMPLETION DATE					
M IS SERVING AS A SU	NAME AND ADDRESS OF OWNER					
ES ON WHICH YOUR FIR	NATURE OF FIRMS RESPONSIBILITY					
16. CURRENT ACTIVITI	PROJECT NAME, TYPE AND LOCATION					

WITHIN	LAST 5 YEARS ON WHICH YOUR FIRM AND	WAS THE DESIGNATED ENGINEER OF RECORD		
r NAME, TYPE LOCATION	NAME AND ADDRESS OF OWNER	00	YEAR	CONSTRUCTED (YES OR NO)
Glen Rogers Waterline Extension Wyoming County	WVDEP-AML 601 57 <sup>th</sup> Street Charleston, WV 25304	\$1.2 M	2007	Yes
Guyandotte River Bridge I-64 Cabell County	of ing on, reg	\$2.25 M	2006	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&R 601 57 <sup>th</sup> Street Charleston, WV 25304	\$0.8 M	2009	Yes
Chief Logan Recreational Center Logan County	WV State Parks	\$4.0 M	2007	Xex
. Streete	Flat Top PSD	\$2.5 M	2007	Yes
Gilmer B Sites 3-8 Gilmer County	WVDEP-AML&R 601 57 <sup>th</sup> Street Charleston, WV 25304	\$675,000	2009	Yes
Upshur County Industrial Park Upshur County	Upshur County EDA	\$4.0 M	2009	Yes

To the state of th	MLTANT TO OTHER FIRMS (INDICAL, PHASE	YEAR CONSTRUCTED FIRM ASSOCIATED (YES OR NO) WITH	Michael Inc.	Michael Baker, Jr., Inc.	Modjeski & Masters 2008 No	2008 Yes		resources supporting your firm's ds Program.  provide professional design, surveying and ient manner. Our business plan relies	
	ICH YOUR FIR. AAS BEEN A SUB-CONSULTANT IBLE)	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	\$7,500,000	\$950,000	\$9,000,000	\$1,000,000		ormation or description of /irginia Abandoned Mine Lar to the WVDEP/AML program to in a timely and cost-effic program.	Hitl
	N WH PONS	NAME AND ADDRESS OF OWNER	Sub to Michael Baker, Jr., Inc. Post Design Services	Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies	Sub to Modjeski & Masters Survey,Geotech & ROW Plans	Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans		Use this space to provide any additional infequalifications to perform work for the West V E. L. Robinson Engineering Co. is committed t mapping and construction monitoring services heavily on the work offered by the WVDEP/AML	a statement of facts.
ı	18. C. PLETED WORK WORK WIT	PROJECT NAME, TYPE AND LOCATION	Appalachian Corridor D Blennerhassett Island Bridge X354-D-0.00	Corridor .0	Appalachian Corridor H Section 3 Davis to Bismark	Robinson Creek Bridge S303-85-27.81 Boone County		Use this space qualifications E. L. Robinson mapping and cor heavily on the	20. The foregoing is

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

Printed Name: Richard W. Watts

Date: May 20, 2010



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** 

Year:

Gallia County, OH

rear.

December 2005

Client:

ODNR-AML

1855 Fountain Square Columbus, OH

Description:

Performed abatement design for fire extinguishment.

Project:

**Lavender Refuse Fire Emergency** 

Meigs County, OH

Year:

November 2005

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** 

Performed abatement plan and monitored construction.

Project:

**Goetz Subsidence Emergency** 

Columbiana County, OH

Year:

November 2005

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Performed investigation and prepared report of findings.

Project:

**Adkins Landslide Emergency** 

Gallia County, OH

Year:

December 2005

**Client:** 

ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** 

Performed surveying, drilling, landslide abatement and

construction monitoring.

Project:

North Matewan (Sipple Drainage)

Mingo County, WV

Year:

February 2005

Client:

WVDEP-AML

**Description:** 

Performed surveying, drilling and design for drainage project

abatement.



Project:

**Phalen Landslide Emergency** 

Year:

Martins Ferry, OH

Client:

January 2005 ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** 

Performed site surveying and landslide abatement design.

Project:

**Baisden Subsidence Emergency** 

Jackson, OH

Year:

January 2005

Client:

ODNR-AML 1855 Fountain Square

Columbus, OH

Description:

Performed drilling to develop subsidence abatement solutions.

Project:

Parsons Landslide Emergency

New Philadelphia, OH

Year:

December 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** 

Performed site review and report concerning landslides relation

to mining and potential solutions.

Project:

**Treadway Landslide Emergency** 

Rayland, OH

Year:

October 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** 

Performed site surveying, drilling and landslide abatement

design.

Project:

Big Creek "C" Refuse

Logan County, WV

Year:

July 2004

Client:

WVDEP-AML

**Description:** 

Performed surveying and drilling for design.



Project: Imboden Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed drilling and surveying to develop landslide abatement

solutions and cost estimates.

Project: Titus Road Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.

Project: Jefferson County Road 26 Landslide Emergency

Winterville, OH

Year: May 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling and prepared plans and

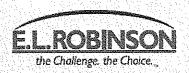
specifications to stabilize and emergency landslide area.

Project: Charleston Romeo Landslide

Kanawha County, WV

Year: May 2004 Client: WVDEP-AML

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



Project: Roush Landslide Emergency

Pomeroy, OH

Year: 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

Pomeroy, OH

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling, prepared plans and specifications

to stabilize an emergency landslide area, and provided

construction monitoring.

Project: Moran Subsidence

Clinton, OH

Year: January 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Prepared plans and specifications to stabilize an emergency

subsidence area.

Project: Ron Bobar Subsidence

Flushing, OH

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 WVDEP-AML

Client: 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: Client:

September 2001 WVDEP-AML

**Description:** 

Performed surveying and design for emergency project to

upgrade drainage control.

Project:

**Jeffrey Mine Complex Reclamation Project** 

Boone County, WV

Year: Client: July 2001 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.



## 12A Abandoned Mine Land Reclamation Experience

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design for an emergency

landslide.

Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001
Client: WVDEP-AML

**Description:** Performed surveying and design for emergency project to

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001

Client: WVDEP-AML

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

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000 Client: WVDEP-AML

charleston, WV

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

Project: Bull Run #27

Preston County, WV

Year: October 2000
Client: WVDEP-AML

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



## 12A Abandoned Mine Land Reclamation Experience

Project:

Riffe Branch Impoundment

Fayette County, WV

Year:

June 2000

Client:

WVDEP-AML

Description:

Performed surveying and design for regrading refuse and

drainage control.

Project:

Ven's Run Landslide

Harrison County, WV

Year: Client:

September 1999

Description:

WVDEP-AML

Performed surveying and design for regraded landslide area.

Project:

Fickey Run

Preston County, WV

Year:

September 1999 WVDEP-AML

Client: Description:

Performed surveying and design for refuse and spoil regrading

and drainage control.

Project:

Bull Run #35

Year:

July 1999

Client:

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.



## 12B 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.



## 12B 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.



## 12B 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.

## 1-79 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:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

using the USACE 1-D HEC-RAS program.



Project:

Bridge No. 2922.1 NB & SB

I-79 Over Left Hand Creek & US 119

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 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.



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 3<sup>rd</sup> 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.



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.



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.



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.



# 12D Aerial Photography and Contour Mapping Experience

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

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



# 12D Aerial Photography and Contour Mapping Experience

E.L. Robinson Engineering Co. has completed the preliminary mapping, within the past five years, for West Virginia Department of Environmental Protection for the projects listed below:

## 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' x 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 33<sup>rd</sup> Street Relocation: Engineering design and construction management for the relocation of 33<sup>rd</sup> 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





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.





## 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 50 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.





## 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 performed layout and inspection of core drilling operations for bridges and roadway projects. He has also designed numerous mine reclamation projects as well as assisted in completion of water feasibility studies.

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





## 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 Scanning, Photogrammetric Control, Topographic Surveys, Cemetery Surveys, Boundary Surveys, Construction Stakeout, Subdivision Surveys, along with Hydrographic surveys of river and lake bottoms. A few of the more notable surveying projects performed by ELR under the supervision of Mr. Rayburn, has been the Blennerhassett Bridge Project, 11 continuous miles of Corridor H design surveys, GPS Control for the West Virginia Statewide Mapping and Addressing Board Project, 3D Laser Scan and mapping of the





CAMC Parking Garage partial collapse, and 3D Laser Scanning of 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 33<sup>rd</sup> Street Relocation and Building Expansion, Charleston, WV: Lead Surveyor for construction layout surveys for 33<sup>rd</sup> 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 Engineer

## 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 preliminary engineering report, developing funding scenarios, designing the system, developing the plans and specifications, developing the bid documents/overseeing the bid process and managing the construction inspection.



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

## Representative Projects

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

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



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## STATE OF WEST VIRGINIA Purchasing Division

## **PURCHASING AFFIDAVIT**

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

### **DEFINITIONS:**

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

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

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

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

## WITNESS THE FOLLOWING SIGNATURE Vendor's Name: E.L. Robinson Engineering Vendor's Name: <u>E.L. Robinson Engineering Co.</u> Authorized Signature: <u>Rishing W. Walls</u> Date: State of West Viccinia County of Kanauna, to-wit: Taken, subscribed, and sworn to before me this 5th day of \_\_\_\_\_\_ My Commission expires October 5 AFFIX SEAL HERE

