May 19, 2010

EXPRESSION OF INTEREST

ORIGINAL

ZEBBS CREEK HIGHWALL #2 DESIGN DEP14991

BARBOUR 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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W PUNCHASING DIVISION



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

Request for Quotation

DEP14991

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11

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

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

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WANGE 550594633 ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

TELEPHONE 304-776-7473

ADDRESS CHANGES TO BE NOTED ABOVE



May 19, 2010

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

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

Re: Zebbs Creek Highwall #2 Design

DEP14991

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 Zebbs Creek Highwall #2 Design project located in Barbour 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.

Richmy W. Wats

Project Manager



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Hydrology and Hydraulics	Section 12C
Aerial Photography and Contour Mapping	Section 12D
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Purchasing Affidavit	



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

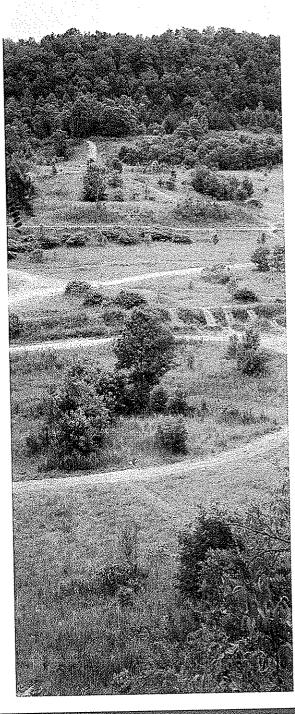
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

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.

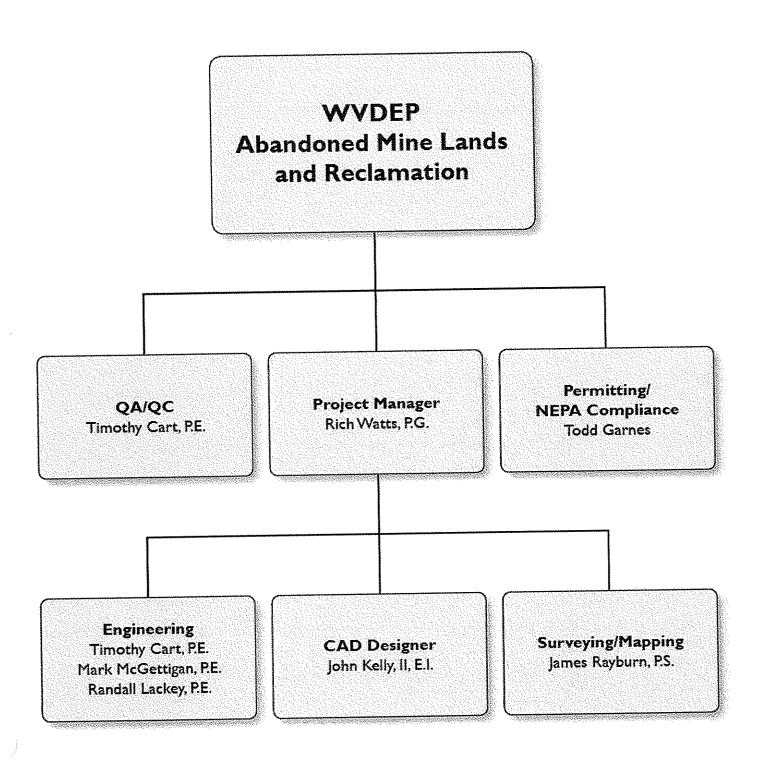
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their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



E S	VIRGINIA DEPARTMENT	ENVIRONMENTAL OUALIFICATION	PROTECTION QUESTIONNAIRE	E Attachment "B"
PROJECT NAME		1R)	FEIN 55-0594633	
991 RM NAME Robinson Engineerin	OME OFFICE Washington	BUSINESS ADDRESS 1 Street, West 25313	3. FORMER FI	FIRM NAME
4. HOME OFFICE TELEPHONE 5. ESTAB 304-776-7473 1978	5. ESTABLISHED (YEAR) 1978	6. TYPE OWNERSHIP Individual x Corporation Partnership Joint-Venture		<pre>6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) x NO YES x</pre>
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ 5088 Washington Street, West 304-776 Charleston, WV 25313	EPHONE/ PERS 3/Tim Cart,	IN CHARGE/ NO. E./56 Staff in C	DESIGN PERSONNEI leston Area	AML DESIGN PERSONNEL EACH OFFICE harleston Area
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS Ed Robinson, P.E. 304 776-7473 Ext 211	ERS OF FIRM	ষ		
9. PERSONNEL BY DISCIPLINE				
6 ADMINISTRATIVE — ECOLG ARCHITECTS — ECONG BIOLOGIST — ELECT 7 CADD OPERATORS — ENVIR	ECOLOGISTS ECONOMISTS ELECTRICAL ENGINEERS ENVIRONMENTALISTS	2 LANDSCAPE ARCHITECTS — MECHANICAL ENGINEERS MINING ENGINEERS — PHOTOGRAMMETRISTS DIAMEDS: IRRAN/REGIONAL	ICTS 6 IEERS 7 S	STRUCTURAL ENGINEEKS SURVEYORS TRAFFIC ENGINEERS OTHER
CHEMICAL ENGINEERS 0 CIVIL ENGINEERS 5 CONSTRUCTION INSPECTORS - DESIGNERS DRAFTSMEN	ESTIMATORS GEOLOGISTS HISTORIANS HYDROLOGISTS	SANITARY ENGINEERS 1 SOILS ENGINEERS — SPECIFICATION WRITERS		56 TOTAL PERSONNEL
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS *RPEs other than Civil and Mining must provide supporsupervise and perform this type of work.	ED PROFESSIONAL ENGINE Mining must provide su type of work.	IN PRIMARY OFFICE:	13 that qualifies	ss them to
	овения	NO X This	is not	applicable
10. HAS THIS JOINT-VENTURE WORKED TO	TOGETHER BEFORE:			

11. OUT E KEY CONSULTANTS/SUB-CONSULTA	<u></u>	USED. Attach "AML Consultant Confidential Qual cation
Questionnaire" for each if copy is mot on this with NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
(3010)	Drilling	XYES
Novel Geo – Environmental (INGE) 806 B Street, St. Albans, WV		ON
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		YES
		ON

12. A	Abandoned Mine Lan Remediation/Mine Recl
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111000000	NO
B.	Is your firm experienced in Soil Analysis? \underline{x} YES Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet
- Commonwealth	_ NO
U	Is your firm experienced in hydrology and hydraulics? \underline{x} YES Description and Number of Projects: Ten (10) Projects Listed - See attached sheet
	ON The state of th
Ġ.	firm produce cription and
1	
Ħ	Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)
	X YES Description and Number of Projects: Forty five (45) Total Eleven (11) Domestic Waterline Experience (AML Related) Twenty (20) Evaluation of Aquifer Degradation Twenty Five (25) Non-AML Domestic Water Lines
	NO
T.	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
	$\underline{\mathrm{X}}$ YES Description and Number of Projects: Seven (7) Projects
	NO

13. PERSONAL HISTORY STATEMENT OF	F PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DE	FOR AML PROJECT DESIGN (Furnish complete
(Last, First, Middle		YEARS OF EXPERIENCE	
rd L. Rob	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 24	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 32
Brief Explanation of Responsibilities	lities		
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	r Divexpe	of Highways for property title igned by this fi	ten years where he reviewed searches, aerial mapping and .rm for the past 25 years.
EDUCATION (Degree, Year, Specia	Specialization)		
Bachelor of Science 1969 Civil	Engineering Engineering		
SHIP IN PROFESSIONAL ORGA	ANIZATIONS	REGISTRATION (Type, Year, Sta	State)
Society of Council of	neers - Past President WV Companies	1975 Civil Engineering Registered in West Virginia and Kentucky Professional Licensed Surveyor No. 1150	ınd Kentucky or No. 1150
PERSC	AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DESIGN	ssign (Furnish complete data
DAL REED TO ESSENTATES, NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Richard W. Watts, P.G.	27	32	
Brief Explanation of Responsibilities Mr. Watts has served as project geolo include project management, field recanalysis, specification writing, quan Projects included surface and deep mi	ties reologist on more reconnaissance, quantity determin	than eighty (80) abandoned mine land projects. Responsibilities drilling coordination, laboratory testing and analysis, stability lations, 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. I waterline feasibility studies.
EDUCATION (Degree, Year, Specie B.S./1977/Geology M.S./1994/Geography	Specialization)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATI Geological Society of America Association of Engineering Geologists	ORGANIZATIONS .ca Geologists	REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia Professional Geologist/1993/Kentucky	ate) Virginia Kentucky

AL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DESIGN	3N (Furnish compl
data but keep to essentials)		YEARS OF EXPERIENCE	
Kelly II, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN YEAR DESIGN YEAR EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 8
Brief Explanation of Responsibilities Mr. Kelly has worked on many AML projects since joining ELR. His responsibilities sampling of coal refuse materials, hydrology, hydraulics design of drainage plans. Estimation of quantities developed estimated cost. Mr. Kelly is prown. Kelly has performed layout and inspection of core drilling operations for addition, he has designed cut slopes for large-scale roadway projects such addition, wy and Meadowbrook Road in Harrison County, WV.	ilities ML projects since joining ELR. als, hydrology, hydraulics des. es developed estimated cost. and inspection of core drillilislopes for large-scale roadway. d in Harrison County, WV.	lities have structures, ficient with or bridge and structure is the US Rou	included drilling inspection, and development of regrading Auto Cadd. I roadway projects. In tee 52 Kermit Bypass in Mingo
EDUCATION (Degree, Year, Special	Specialization)		
B.S. Civil Engineering/1998/WVU			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State)	(3)
		Engineer Intern, WV	
PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DESIGN	rgn (Furnish complete data
but keep to essentials)		YEARS OF EXPERIENCE	
, E	YEARS OF AML DESIGN EXPERIENCE: 25	YEARS OF AML RELATED DESIGN EXPERIENCE: 25	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 20
Brief Explanation of Responsibilities Mr. Cart has completed numerous mine reclamation materials, re-establishment of vegetation cover extinguishing burning materials and disposal of Conducted Phase I and Phase II Studies to deter Mr. Cart has extensive experience in the design has recently completed water projects in Mingo; Mr. Cart has performed geotechnical engineering embankments.	n projects , disposal old mining mine if gre and constr Kanawha; k	programa programa peen peen peen peen peen peen peen pee	ram, including regrading of coal refuse materials, and developing methods for gned passive AMD treatment systems. affected by pre-law mining. of waterline extension projects. Mr. Cart counties.
EDUCATION (Degree, Year, Specie	Specialization)		
Bachelor of Science 1981 Civil	l Engineering		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	ANIZATIONS	REGISTRATION (Type, Year, State)	(e)

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TOTAL DESIGNATION OF RESPONSIBILITIES Experignation of Responsibilities Type Secretary and projects since joining our firm. He has developed grading plans, cross severable waveled on severable Mar projects since joining our firm. He has developed grading plans, cross severable waveled on severable Mar projects since joining our firm. He has developed grading plans, cross severable waveled on severable Mar projects since joining our firm. He has developed grading plans, cross severable may be in Robinson England the designer on watering severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England the past of severable may be in Robinson England England the many of our Division is propared design study reports; type, size and location reports and final plans on many of our Division English in PROPESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)	lata but keep to & TITLE (Last, Fir		OF	
Explanation of Responsibilities setting has worked on several AML projects since joining our firm. He has developed grading plans, cross setting do and checked quantity calculations. He has has been the ledd designer on waterlines over the past factoring and checked quantity calculations. He has been the ledd designer on waterlines over the past factoring checked quantity calculations. He has been the ledd designer on waterlines over the past factoring checked quantity calculations. He has been the ledd designer on waterlines over the past factoring checked quantity calculations. He has been the ledd designer on waterlines over the past factoring checked quantity calculations and equipment including; theodolites, leave; leave, specialization) WEARS OF PIRCHARS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete populations) WEARS OF EXPLEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete populations) WEARS OF EXPLEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete populations) WEARS OF AML DESIGN EXPRESSIONAL ORDER EXPRESSION AND PROJECT DESIGN (Furnish complete paper be performed obtainable) WEARS OF EXPLESSIONAL DESIGN EXPRESSIONAL ORDER EXPLISED THAT AND ASSOCIATES THE PROFESSIONAL WATER HEAVED THE PROFESSIONAL ORGANIZATIONS WEARS OF EXPLISED THE PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, Specialization) WEARS OF STERMENT OF PROJECT THE PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) WEARD THE PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Professional Engineering (Type) (Type, Year, State) Professional Engineering (Type, Year, State)	McGettigan, P	OF OF	OF AME	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 7
Sertigan has worked on several AMC projects since joining our time. He has developed grading plans, cross is, estimated and checked quantity calculations. He has also served as a field inspector for several waters is designed by E. I. Robinson Engineering Co. He has been the lead designer on waterlines over the past fast setting and equipment including; theodolites, levels, and total static also performed various concrete and soil tests and is certified on Troxler nuclear density gage. INTURE INSTRUCTIONS RECHISTRATION (Type, Year, State)	Explanation of	lities		,
Jettigan also has experience with surveying and equipment including; theodolites, levels, and total static also performed various concrete and soil tests and is certified on Troxler nuclear density gage. TON (Degree, Year, Specialization) Ivil Engineering Technician/Fairmont State/1999 SHIP IN PROFESSIONAL ORGANIZATIONS FROMAL HISTORY SPATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANI PROJECT DESIGN (Furnish complete pp to essentials) THILE itast, First, Middle THE LACKBY SPATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANI PROJECT DESIGN (Furnish complete pp to essentials) 1 L. LackBy, P.E. 1 L. LackBy, P.E. Explanation of Responsibilities Creap has also performed and sour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Bridge; Remit Bypass Bridge; Left Hand Fork Bridge; Tallman Bridge; Meadowbrook Road Bridge; Bridge; Remit Bypass Bridge; Left Hand Fork Bridge; Performed dides (assign and analysis; pler design sits) prepared design study reports; type, size and location reports and final plans on many of our Division by projects. TION (Degree, Year, Specialization) SHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Professional Engineer WV	McGettigan has worked cions, estimated and che	projects since calculations.	irm. He has deve erved as a field lead designer on	grading plans, c stor for several lines over the pa
Engineering Technician/Fairmont State/1999	Settigan also has also performed va	surveying and ind soil tests	including; theodolites, tiffied on Troxler nucle	wels, and total density gage.
Civil Engineering Technician/Fairmont State/1999 ERSHIP IN PROFESSIONAL ORGANIZATIONS PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete Rept to essentials) **EARSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete Rept to essentials) **TILE (Last, First, Middle Technology Teach Completed Technology P.B. all L. Lackey, P.B. I EXPERIENCE: EXPERIENCE: EXPERIENCE: EXPERIENCE: BETTLE TO THE TOTAL THE TO THE TOTAL THE	(Degree, Year,	alization)		
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AL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANL PROJECT DESIGN (Furnish complete constraints) LECKEY, P.E. Lackey, P.E. anation of Responsibilities Anation of Responsibilities and socur for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Pergared design study reports; type, size and location reports and final plans on many of our Division projects. (Degree, Year, Specialization) Empirical Engineering/1999 Professional Engineer WV YEARS OF ANL DESIGN EXPERIENCE: BERRIENCE BERRIE	RI	ANIZATIONS	(Type, Year,	ate)
RESONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANL PROJECT DESIGN (Furnish complete keep to essentials) E. TITLE (Last, First, Middle YEARS OF ANL DESIGN EXPERIENCE: 8 dall L. Lackey, P.E. 1 ef Explanation of Responsibilities Lackey has performed hydraulics and scour for Ripley Town Bridge; Meadowbrook Road Bridge; Remit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge. Lackey has also performed calculations for deck drainage; performed girder design and analysis; pier design lackey has also performed size and location reports and final plans on many of our Division hways projects. CATION (Degree, Year, Specialization) REGISTRATION (Type, Year, State) Professional Engineer WV				
keep to essentials) E & TITLE (Last, First, Middle E & TITLE (Last, First, Middle TEARS OF AML DESIGN EXPERIENCE: E & TITLE (Last, First, Middle TEARS OF AML DESIGN EXPERIENCE: EXPE	PERSONAL HISTORY	PRINCIPALS AND	RESPONSIBLE FOR AML PROJECT	(Furnish complete
TEARS OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC WATER EXPERIENCE: BESTON BRIGGS; FOR BRIGGS; Tallman Bridgs; Meadowbrook Road Bridgs; ALION BRIGGS; Meadowbrook Road Bridgs; Tallman Bridgs; Meadowbrook Road Bridgs; Tallman Bridgs; Meadowbrook Road Bridgs; Tallman Bridgs; Tallman Bridgs; Meadowbrook Road Bridgs; Tallman Bri	keep to essentials)		OF.	
Explanation of Responsibilities Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge. Relige; Rermit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge. Lackey has performed calculations for deck drainage; performed girder design and analysis; pier design. Lysis: prepared design study reports; type, size and location reports and final plans on many of our Division. Ways projects. SATION (Degree, Year, Specialization) Civil Engineering/1999 REGISTRATION (Type, Year, State) BERSHIP IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV		YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Explanation of Responsibilities Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Rermit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge. Lackey has also performed calculations for deck drainage; performed girder design and analysis; pier design ysis; prepared design study reports; type, size and location reports and final plans on many of our Division Projects. AATION (Degree, Year, Specialization) Civil Engineering/1999 BERSHIP IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV		₩	EXPERIENCE:	
performed calculations for deck drainage; performed girder design and analysis; pier design a lesign study reports; type, size and location reports and final plans on many of our Division fear, Specialization) ing/1999 SSIONAL ORGANIZATIONS Professional Engineer WV	Brief Explanation of Responsib Mr. Lackey has performed hydra Creek Bridge; Kermit Bypass Br	for Ri Fork E	Bridge; Bridge.	adowbrook Road Bridge;
(Degree, Year, Specialization) Engineering/1999 IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV	performed lesign stuć	deck	e; performed girder design anation reports and final plans	analysis; pier design on many of our Division
Engineering/1999 IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV	(Degree, Year,	(alization)		
IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV	Civil			
	N.	SANIZATIONS	(Type, Year, Engineer WV	tate)

PER. AL HISTORY STA	PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DE YEARS OF EXPERIENCE	DESIGN (Furnish comple s
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	I RE	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
J. Todd Garnes	Ŋ	EXPERIENCE: 5	5
Brief Explanation of Responsibilities			τ ; (
as experience surveying as. He has provided cores has performed numeron	sign servi studie	mine reclamation projects for landsides and subsiden which involved interviews,	j H H L
mapping, mine research, and development EDUCATION (Degree, Year, Specialization)	zation)		
A.S. Architectural Design/ 1999	Design/ 1999		
	ZATIONS	REGISTRATION (Type, Year, Sta	State)
PERSONAL	PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DESIGN	ESIGN (Furnish complete data
but keep to essentials) NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
-	VEARS OF AMT, DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
Thomas Rayburn, P.S.		EXPERIENCE:	DESIGN BAFBALLACE.
		30	
Brief Explanation of Responsibilities			range mining p
Mr. Rayburn has experience in mir types of coal mining, designed mountilation plans and systems who	pping and surveying, rainage and water sup nclude precision pres	formulated short term and rous responsible of pply systems for underground and surface mines, sure quality surveys and computer simulation of	designe ventil
systems. He has performed slope stability applications, work with leases a	ned slope stability analysis and hydrology calculations, provides work with leases and land management as well as reclamation and	ulations, provides computer analysis for mining sreclamation and environmental permits.	analysis for mining cal permits.
"state of the art" erial mapping and c as also performed s	electronic total stations and collects data and develops Granveying and mapping for lan	and/or utility mapping. GIS for utility mapping. large scale highway projects.	
Degree, Year,	Specialization)		
A.S. Mechanical Engineering, WVI	WVIT/1970		
MEMBERSHIP IN PROFESSIONAL ORGAN	ORGANIZATIONS	REGISTRATION (Type, Year, St	State)
		Professional Surveyor WV	

13. PERE AL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATEL ESPONSIBLE FOR AML PROJECT DESIGN data but keep to essentials)	N (Furnish comple, J
I RELATED DESIGN	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1
Brief Explanation of Responsibilities Mr. LeRose is experienced in developing major highway and right of way plans; Bridge Construction In: Drilling Operations; Groundwater Sampling/Monitoring; UST Removal/Replacement and Mine Permitting/Re- Specific major highway design and right of way plan development projects include: Meadowbrook Road, of new four lane highway; US 52(I-73), a 3.5 mile design and ROW plans for a new four lane highway w interchanges; design of 2 mile section of Appalachian Corridor H from Davis to Bismark; design of 5. Corridor H from Grant/Hardy County line to Moorefield.	Bridge Construction Inspections; Core and Mine Permitting/Reclamation. Ide: Meadowbrook Road, a 2 mile design the four lane highway with two major bismark; design of 5.2 mile section of
gained experience in major drainage design, site grad ripping. He has performed quantity calculations for and other items associated with roadway plans. He is plots and legal descriptions.	ing design, utility pavement, drainage, also experienced in the
EDUCATION (Degree, Year, Specialization)	
B.S. Civil Engineering/1997	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)	
)	
PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR	GN (Furnish complete data
pp to essentials) TITLE (Last First Middle	
YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML PESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Ray Tilley, P.E.	30
in water and wastewater design as a Project Operator. Mr. Tilley has successfully complet	Manager/Engineer. In addition, ed numerous waterline design vater design projects for ELR.
lization)	
B.S. Civil Engineering/WV Tech 1975; M.S. Sanitary Engineering Virginia Tech, 1976	
WEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)	(6)

HISTORY STATEMENT	F PRINCIPALS AND ASSOCIATEL	ESPONSIBLE FOR AML PROJECT DE	DESIGN (Furnish compl. ,
		YEARS OF EXPERIENCE	
vinn,	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 8
Brief Explanation of Responsibilities	lities	1	-
Gwinn has experience in uirements. He has worked teau Regional Water Proje	struction layout for waterli the Cabell County Water Pro He has performed calculati	He performs raw water int is AML project several bridg	calculation and permitake structure for the Fayette
Mr. Gwinn has designed approach EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering/1998/ West Virginia	Institute of	Technology	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
THE STATE THE PROPERTY THE PROP	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
,		VEARS OF EXPERIENCE	
NAME & TITLE (Last, First, Middle			VEADS OF DOMESTIC WATERLINE
Int.) Brian D. Morton, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	DESIGN EXPERIENCE:
Brief Explanation of Responsibilities		,	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Mr. Morton has worked on waterline relocation projects involving the	extension projects in Pu West Virginia Division of	Putnam County. He also has comp of Highways.	4
Mr. Morton has prepared signing and culverts and other drainage structum	pavement marking plans ses and highway construc	and performed hydrologic and hydraulic calculations	ydraulic calculations 101
EDUCATION (Degree, Year, Speci	Specialization)		
B.S. Civil Engineering/1998			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	ANIZATIONS	REGISTRATION (Type, Year, St	State)
		Professional Engineer WV	

AL HISTORY STATEMENT	F PRINCIPALS AND ASSOCIATES.	ESPONSIBLE FOR AML PROJECT D	FOR AML PROJECT DESIGN (Furnish complement)
data but keep to essentials)		YEARS OF EXPERIENCE	
५ मू	YEARS OF AME DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 32
Brief Explanation of Responsibilities Mr. Carney has extensive experience i and contract administration. He has storm sewer, drainage studies, roadwa	lesign engineeri ked on a variet bridge design,	contract do ing project c reports,	cuments, construction inspection, s including grading, earthwork, sanitary sewer and water systems.
EDUCATION (Degree, Year, Specialization)	lization)		
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, St Professional Engineer WV	State)
13 DERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT 1	DESIGN (Furnish complete data
keep to essential		YEARS OF EXPERIENCE	
NAME & IlibE (bast, filst, micelo-	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERTENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Workman, Gary A., CADD Senior Technician	20	20	1
Brief Explanation of Responsibilities Mr. Workman is responsible for CADD design on WVDEP/AML projects while employed at Ackenhei	esign on AML projects, Ackenheil, and has work	as well as geotechnical soil ana ked on 7 AML projects while at E.	analysis. He Worked on 44 t E. L. Robinson.
EDUCATION (Degree, Year, Specialization) Technical School/1987/CADD	alization)		
MEMBERSHIP IN PROFESSIONAL ORG	ORGANIZATIONS	REGISTRATION (Type, Year, State) WVDOH certifications compaction,	State) ction, aggregates and concrete.

AL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	SPONSIBLE FOR AML PROJECT DESIGN	SIGN (Furnish comple.)
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 2
Brief Explanation of Responsibilities	ne and	sewer extensions, and layout on AML Projects.	ML Projects. Mr. Mayes has
cabb bes n years 1 (Degree		firm.	
B.S. Industrial Technology 1997 WVU Tech	WVU Tech VU Tech		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State	ite)
PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DE	DESIGN (Furnish complete data
but keep to essentials) NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
<pre>Int.) Scott A. Pratt</pre>	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
	10	10	
Brief Explanation of Responsibilities			•
Mr. Pratt has extensive experience as a samples, and obtaining water levels. He experienced in mine map research, specif EDUCATION (Degree, Year, Specialization)	e as a Field Geologist, ls. He has also performe specification writing, zation)	performing test boring over-sight, of many geotechnical soil tests in tand quantity and cost calculations	t, logging soil and core n the laboratory. He is also ns for AML projects.
B.S. Geology, 1999, Marshall U	University		
MEMBERSHIP IN PROFESSIONAL ORG	ORGANIZATIONS	REGISTRATION (Type, Year, St	State)

14. PRO E A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN PRIMARY OFFICE WILLIAM WILL DE CLEAR OF STRUCKS. 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)
nt - Trimble 5700 Receiver (6), Trimble TSCe Controller/Handheld (5) ement lists have various misc. survey equipment to go along (poles, tape measures, data
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.

15. CURA. T ACTIVITIES ON WHICH	YOUR FIRM IS TH	E DESIGNATELNGINEER OF 1	RECORD	1
~	Z	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
LOCATION Keystone (Avery) LS Drainage McDowell County	OWNEK McDowell County	Surveying, Mapping and Design	\$100,000	10
Brownton Landslide Barbour County	WVDEP/AML&R	Surveying, Mapping and Design	\$644,000	95
Dunloup Mine Complex, Raleigh County	WVDEP/AML&R	Surveying, Mapping and Design	\$1.1 M	95
Holden Water System Upgrade Logan County	Logan County PSD P. O. Box 506 Logan, WV Attn: Rick Roberts	Design and Construction Management	¥6.0 M	80
Gilbert Slabtown Waterline Extension	Town of Gilbert P.O. Box 188 Gilbert, WV Attn: John White	Design and Construction Management	\$2.3 M	15
Lavalette PSD Rt. 37 Waterline Extension	Lavalette PSD 5308 Route 152 Lavalette, WV	Design and Construction Management	\$5.0 M	85
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	\$6.0 M	8 8 5
TOTAL NUMBER OF PROJECTS:	TS:	TOTAL ESTIN	ESTIMATED CONSTRUCTION COSTS:	₹¢-

15. CURA.,T ACTIVITIES O	ON WHICH YOUR FIRM IS THE	THE DESIGNATELNGINEER OF R	RECORD	
JECT 1	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S E	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
0N #18	OWNER WVDEP/AML&R	Surveying, Mapping and Design	\$500,000	82 82
Miller Mountain Water Extension, Webster County	Webster County EDA 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	£8
Dille/Widen Water Extension Clay County	Birch River PSD	Design and Construction Management	\$4.0 M	8 2
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	TS:14	TOTAL ESTIM	ESTIMATED CONSTRUCTION COSTS:	\$ 38.8 Million

YOUR FIRMS RESPONSIBILITY ESTIMATED CONSTRUCTION COST ENTIRE PROJECT 16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS ESTIMATED COMPLETION DATE NAME AND ADDRESS OF OWNER NATURE OF FIRMS RESPONSIBILITY PROJECT NAME, TYPE AND LOCATION

ì

III C. d. Andreas Andreas de Company		S THE DESIGNATED ENGINEER OF RECORD		
17. CC CLETED WORK WITHIN LAST PROJECT NAME, TYPE	PROJECT NAME, TYPE NAME AND ADDRESS	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
AND LOCALLON Glen Rogers Waterline Extension Wyoming County	WVDEP-AML 601 57th Street Charleston, WV 25304	\$1.2 M	2007	Yes
Guyandotte River Bridge I-64 Cabell County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$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 57th Street Charleston, WV 25304	\$0.8 M	2009	Yes
Chief Logan Recreational Center Logan County	WV State Parks	\$4.0 M	2007	Yes
Mt View Streeter Water Raleigh County	Flat Top PSD	\$2.5 M	2007	Yes
Gilmer B Sites 3-8 Gilmer County	WVDEP-AML&R 601 57 th Street Charleston, WV 25304	\$675,000	2009	Yes
Upshur County Industrial Park Upshur County	Upshur County EDA	\$4.0 M	2009	Yes

WOF	WORK WITHIN LAST 5 YEARS ON WHICH	OUR FIR. AAS BEEN A	SULTANT T	SUB-CONSULTANT TO OTHER FIRMS	(INDICAL_PHASE
OF WORK FOR WHIC PROJECT NAME, TYPE	WHICH YOUR FIRM WAS KESFONSIBLED FOR THE AND ADDRESS ES	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	
70	Sub to Michael Baker, Jr., Inc. Post Design Services	· v	2008	Yes	Michael Baker, Jr., Inc.
Appalachian Corridor H Section 6 X316-H-100.40	Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies	\$950,000	2008	Yes	m i
Appalachian Corridor H Section 3 Davis to Bismark	Sub to Modjeski & Masters Survey, Geotech & ROW Plans	000'000'6\$	2008	No	Modjeski & Masters
Robinson Creek Bridge S303-85-27.81 Boone County	Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans	\$1,000,000	2008	Yes	EDG
19. Use this space to qualifications to E. L. Robinson Eng mapping and constructive on the wor	lis space to provide any additional info lications to perform work for the West V Robinson Engineering Co. is committed to and construction monitoring services by on the work offered by the WVDEP/AML	ormation or description /irginia Abandoned Mine to the WVDEP/AML program in a timely and cost-ef program.	of resources Lands Program to provide p	supporting your rofessional desir. Our business	r firm's sign, surveying and ss plan relies
20. The foregoing is Signature:	nt of	Title: PROJECT MANAGER	4GER	Date: May 19, 2010	
FINCE Name: Atomara W. Wash	wacco	THE STATE OF THE S	MODGER SA		

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



Project:

Jacob's Fork Complex

Boone County, WV

Year: Client: 2008-2009 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

Description:

Charleston, WV 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 September 2007

Year: Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Performed site survey, drilling and prepared landslide abatement

design.

Project:

Brown Landslide Emergency

Rayland, OH August 2007

Year:

ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Performed site survey and prepared landslide abatement design.



Project:

Rodgers Subsidence Emergency

Year:

Wellston, OH January 2007

rear.

ODNR-AML

Client:

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 December 2005

ODNR-AML

Client:

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 December 2005

Year:

ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Performed surveying, drilling, landslide abatement and

construction monitoring.

Project:

North Matewan (Sipple Drainage)

Mingo County, WV

Year:

February 2005

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design for drainage project

abatement.



Project:

Phalen Landslide Emergency

Martins Ferry, OH

Year:

January 2005

Client:

ODNR-AML 1855 Fountain Square

Columbus, OH

Description:

Performed site surveying and landslide abatement design.

Project:

Baisden Subsidence Emergency

Jackson, OH

Year:

January 2005 ODNR-AML

Client:

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

Description:

Columbus, OH
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

Year:

Rutland, OH

June 2004 ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Performed drilling and surveying to develop landslide abatement

solutions and cost estimates.

Project:

Titus Road Landslide Emergency

Year:

Rutland, OH June 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.

Project:

Jefferson County Road 26 Landslide Emergency

Winterville, OH

Year:

May 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.

Project:

Charleston Romeo Landslide

Kanawha County, WV

Year:

May 2004

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.



Project:

Roush Landslide Emergency

Year:

Pomeroy, OH

x ear:

March 2004 ODNR-AML

Client:

1855 Fountain Square

Columbus, OH

Description:

Prepared plans and specifications to stabilize an emergency

landslide area.

Project:

Lewis Landslide Emergency

Year:

Pomeroy, OH March 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Performed surveying, drilling, prepared plans and specifications

to stabilize an emergency landslide area, and provided

construction monitoring.

Project:

Moran Subsidence

Year:

Clinton, OH January 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Prepared plans and specifications to stabilize an emergency

subsidence area.

Project:

Ron Bobar Subsidence

Year:

Flushing, OH January 2004

Client:

ODNR-AML

1855 Fountain Square

Columbus, OH

Description:

Investigation and report of an emergency subsidence area.



Project:

Gooney Otter Refuse

Wyoming County, WV

Year:

January 2004

Client:

WVDEP-AML

Description:

Performed surveying, drilling and site design for refuse

regarding project.

Project:

Chapmanville (Gorby) Mine Blowout

Logan County, WV

Year:

December 2003

Client: Description: WVDEP-AML Performed surveying, drilling and design of landslide regrading

and retaining wall design.

Project:

Tuppers Creek (Layne) Landslide

Kanawha County, WV

Year:

July 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.

Project:

Maidsville (Tennant) Landslide

Monongalia County, WV

Year:

February 2003

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design of landslide abatement.

Project:

Whittington Hill (Walker Landslide)

Kanawha County, WV

Year:

June 2002

Client:

WVDEP-AML

Description:

Performed surveying, drilling and design for an emergency

landslide.



Project:

Minden Refuse Pile Reclamation Project

Fayette County, WV

Year:

September 2001

Client:

WVDEP-AML

Description:

Performed surveying and design for emergency project to

upgrade drainage control.

Project:

Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year:

July 2001

Client:

WVDEP-AML

Description:

Performed surveying and design regrading refuse.

Project:

Hot Coal Reclamation Project

Raleign County, WV

Year:

October 2000

Client:

WVDEP-AML Charleston, WV

Description:

Performed surveying and design for regrading refuse.

Project:

Bull Run #27

Preston County, WV

Year:

October 2000 WVDEP-AML

Client: 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: Description:

WVDEP-AML

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:

September 1999

Client:

WVDEP-AML

Description:

Performed surveying and design for regraded landslide area.

Project:

Fickey Run

Preston County, WV

Year:

September 1999

Client:

WVDEP-AML

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.

I-79 Meadowbrook Road Over Pass

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

Ripley Town Bridge

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

Ripley Route 21 Road Widening

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

I-64 Cross Roads Overpass Bridge

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

I-79 Left Hand Fork Bridge

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



12C Hydrology and Hydraulics

Project:

Blennerhassett Island Bridge Over Ohio River

Year:

1999-2003

Client:

Michael Baker Jr., Inc.

5088 Washington Street, West

Charleston, WV 25313

Contact:

Pi Amin, P.E.

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

304-769-0821

Description:

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

provided by our survey group.

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

provide more accurate simulations of scour hole geometry.

Project:

US 52 Mainline Bridge

KY 40 Bridge/Kermit Bypass over Marrowbone Creek

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

using the USACE 1-D HEC-RAS program.



12C Hydrology and Hydraulics

Project:

Bridge No. 2922.1 NB & SB

I-79 Over Left Hand Creek & US 119

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

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

Project:

Bridge No. 2448.1 - Simpson Creek Bridge

I-79 Over Simpson Creek

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

Prepared an analysis of the hydraulic impact of the widening of the Simpson Creek Bridge over Simpson Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS program.

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



12C Hydrology and Hydraulics

Project:

Bridge No. 10059 - Ripley Town Bridge

US 33 Over Mill Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

Project:

Bridge No. 4732 - Jackson Bridge

WV 18 Over Point Pleasant Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

903 3rd Street

Moundsville, WV 26041

Contact:

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

304-843-4008

Description:

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

D HEC-RAS program.



12C Hydrology and Hydraulics

Project:

Bridge No. 4636 - Indian Creek Bridge

CR 3/25 Over Big Coal River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 1

1334 Smith Street Charleston, WV 25301

Contact:

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

304-558-3001

Description:

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

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

Project:

Bridge No. 4769 – Tallman Bridge

CR 24 Over Middle Island Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

904 3rd Street

Moundsville, WV 26041

Client:

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

304-843-4008

Description:

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

program.



12C Hydrology and Hydraulics

Project:

Bridge No. 10058 – Meadowbrook Road Bridge

CR 24 Over West Fork River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

Prepared an analysis of the hydraulic impact of the new Meadowbrook Road Bridge over the West Fork River and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process and the Harrison County Flood Insurance Study model of the West Fork River was also used. Computer modeling was prepared using the USACE 1-D HEC-RAS program.

Prepared Section 404 permitting documents outlining the effects temporary sheet piling, which would be used during the construction phase, would have on the outlying areas upstream of the projects.

Project:

Bridge No. 4426 - Lower Gassaway Bridge

WV 4 Over Elk River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

D HEC-2 program and the FHWA WSPRO program.



12C Hydrology and Hydraulics

Project:

Bridge No. 4574 – Camp Creek Bridge

WV 52 Over Camp Creek

Year:

1998

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 2

P.O. Box 880

Huntington, WV 25712

Contact:

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

304-528-5625

Description:

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

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

program and the FHWA WSPRO program.



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
Ouintain 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

<u>Professional Experience</u>

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-of-way, 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 33rd Street Relocation: Engineering design and construction management for the relocation of 33rd street and site development for a five story clinical teaching facility in Charleston, WV.

Offices Held

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

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

<u> Honors Awarded</u>

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





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

Representative Projects

Design Surveys

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

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

- 164/US 35 (WVDOT) 164 to US 34 Crooked Creek, Putnam County, WV: Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately four miles of US 35 including Interstate 64 Ramps and Flyovers in Putnam County, WV. This included the 164 Bridges and Flyovers, which is now under construction.
- ATB-Parrish Road (ODOT) Ashtabula County,
 Ohio: Project Design Surveyor for rail grade separation project. Project involved roadway realignment, 900' new bridge, new waterline, storm and sanitary sewers. Project is currently under construction. Estimated construction cost: \$8.6 million.
- PIC-23-3.21 and Various (ODOT) Pickaway
 County, Ohio: Project Design Surveyor for ODOT
 Project PIC-23-3.21 and Various. Project involves
 deck replacements along 11 miles of US 23 in
 Pickaway County. Project includes large diameter
 culvert liner, interchange upgrade that includes
 mainline profile correction, ramp reconstruction,
 and addition of barrier wall and storm drainage.
 Project is currently under design (90%). Project
 scheduled for construction in 2007. Estimated
 construction cost: \$12 million.
- ATB-90-22.06 (ODOT) Ashtabula County, Ohio: Project Design Surveyor for Interstate Reconstruction Project. Project includes total pavement replacement, bridge widening, and contra—crossover maintenance of traffic, culvert replacements and storm sewer rehabilitation and sign replacements. Project is currently under design (50%) and scheduled for construction in 2011. Estimated construction cost: \$36 million.





Construction Surveys

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





Randall L. Lackey, P.E. Project Engineer

Education

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

Registrations

Registered Professional Engineer in West Virginia, Ohio and Kentucky

Professional Memberships

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

Computer Skills

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

Professional Experience

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



Representative Projects

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

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





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 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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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.

Vendor's Name: E.L. Robinson Engineering Co. Authorized Signature: Siebrm W. Wills Date: 5-5-2010 State of West Virginia County of Kanawha, to-wit: Taken, subscribed, and sworn to before me this 5th day of May, 2010. My Commission expires October 5, 2016. AFFIX SEAL HERE NOTARY PUBLIC & M.



WITNESS THE FOLLOWING SIGNATURE