



January 8, 2014

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

Attn: Robert Rice, Chief

Re: McAlpin Portals & Drainage
DEP16437
Expression of Interest

Dear Mr. Rice:

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 McAlpin Portals & Drainage design project located in Harrison County.

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

The ELR staff has combined experience in the design of more than 241 AML projects.

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

- A. Fourteen (14) registered professional engineers (civil or mining), two (2) geologists, two (2) Landscape architects, four (4) engineers in training as well as several CADD technicians that may be used on these teams.
- B. ELR Corporate experience in designing seventy-six (76) abandoned mine land remediation projects. Personal experience on approximately two hundred forty-one (241) AML projects. This number does not include surveying/mapping/drilling projects.

01/14/14 12:48:21PM
West Virginia Purchasing Division

E. L. Robinson Engineering Co. has grown from 13 employees in 1996 to over 110 employees today. Throughout this growth period we have continued to meet project deadlines while providing a high quality engineering product.

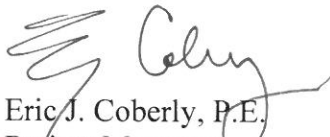
In 2012 and 2013 ELR was named to the Engineering News Record (ENR) 500 at numbers 485 and 500, respectively. This prestigious honor is reserved for the top performing civil engineering companies throughout the country. ELR is one of the few West Virginia based firms ever to be included on this list.

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

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

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

Sincerely,
E. L. Robinson Engineering Co.
By:



Eric J. Coberly, P.E.
Project Manager



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

Solicitation

NUMBER
DEP16437

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
TARA LYLE 304-558-2544

V E N D O R	RFQ COPY
	TYPE NAME/ADDRESS HERE

S H I P T O	ENVIRONMENTAL PROTECTION DEPARTMENT OF OFFICE OF AML&R 601 57TH STREET SE CHARLESTON, WV 25304	304-926-0499
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DATE PRINTED
12/11/2013

BID OPENING DATE: 01/14/2014 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
MCALPIN PORTALS & DRAINAGE DESIGN						
EXPRESSION OF INTEREST						
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE MCALPIN PORTALS AND DRAINAGE PROJECT IN HARRISON COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
***** THIS IS THE END OF RFQ DEP16437 ***** TOTAL:						

SIGNATURE <i>E. Colby</i>	TELEPHONE 304 776-7473	DATE 1-8-14
TITLE Project Manager	FEIN 550 594 633	ADDRESS CHANGES TO BE NOTED ABOVE

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



Executive Summary.....	Page 1
Project Approach.....	Page 2
Our Project Team.....	Pages 3-4
Our Capabilities.....	Page 5
Previous Experience.....	Page 6
CCQQ.....	Attachment B
Abandoned Mine Lands Reclamation Experience	
Soil Analysis	
Hydrology and Hydraulics	
Aerial Photography and Contour Mapping	
Key Personnel	
AML & RPEM.....	Attachment C
Purchasing Affidavit	
Certification and Signature Page	



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

Understanding of Project Requirements

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

Firm's Capacity

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

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

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



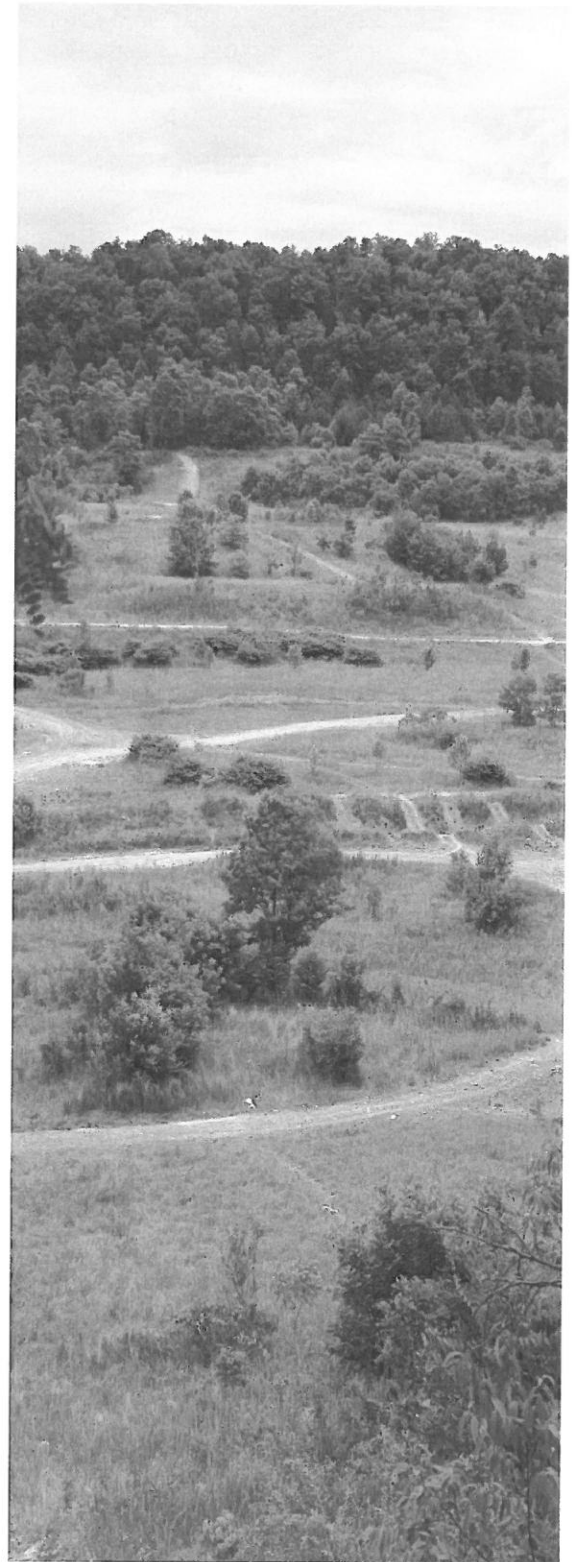
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

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

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

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

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





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

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

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

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

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

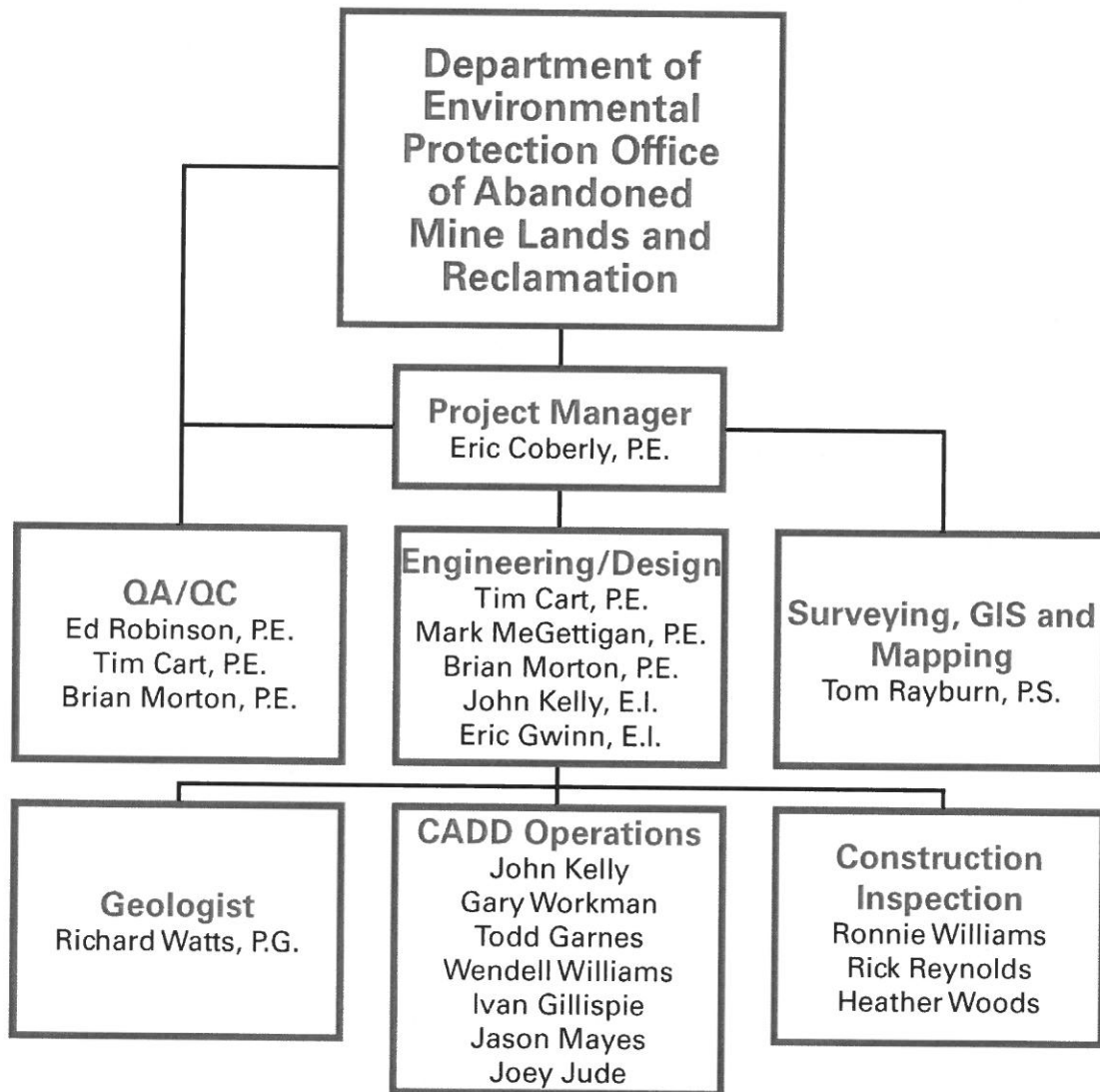
Mr. James Rayburn, P.S. will be assigned to oversee all surveying and mapping activities.

Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project.

In addition to your primary project team, other members of our organization may be called upon from time to time to provide their expertise and assistance to ensure this important project is completed on time and on budget.

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

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





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-notch 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 14 registered professional engineers, degreed design engineers, construction inspectors and a support team of administrative and technical personnel to assist the WVDEP/AML.

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

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





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

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

- **Milam Ridge Refuse Pile - 2012**
- **Cartright Branch Refuse Pile - 2012**
- **West Columbia "B" - 2012**
- **Glen Rogers Emergency - 2012**
- **Thorpe Refuse Pile - 2011**
- **Abney Refuse Piles - 2011**
- **Shinnston-Lumberport Subsidence - 2011**
- **Keaton Branch Complex - 2010**
- **Gordon "C" Refuse - 2010**
- **Newtown-Kinder Portals - 2010**
- **Island Creek #18 Mine Complex - 2010**
- **Keystone (Avery) Landslide and Portal - 2010**
- **Jacob's Fork Complex - 2008**



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

Attachment "B"

PROJECT NAME McAlpin Portals & Drainage Design DEP16437		DATE (DAY, MONTH, YEAR) December 31, 2013		FEIN 55-0594633																																					
1. FIRM NAME E.L. Robinson Engineering Co.		2. HOME OFFICE BUSINESS ADDRESS 5088 Washington Street, West Charleston, WV 25313		3. FORMER FIRM NAME																																					
4. HOME OFFICE TELEPHONE 304-776-7473	5. ESTABLISHED (YEAR) 1978	6. TYPE OWNERSHIP Individual x Corporation Partnership Joint-Venture		6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES x NO																																					
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 5088 Washington Street, West 304-776-7473/Eric Coberly, P.E./57 Staff in Charleston Area Charleston, WV 25313																																									
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Ed Robinson, P.E. 304 776-7473 Ext 211			8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS																																						
9. PERSONNEL BY DISCIPLINE																																									
<table style="width:100%; border: none;"> <tr> <td style="width:25%;">6 ADMINISTRATIVE</td> <td style="width:25%;">— ECOLOGISTS</td> <td style="width:25%;">2 LANDSCAPE ARCHITECTS</td> <td style="width:25%;">6 STRUCTURAL ENGINEERS</td> </tr> <tr> <td>ARCHITECTS</td> <td>— ECONOMISTS</td> <td>— MECHANICAL ENGINEERS</td> <td>7 SURVEYORS</td> </tr> <tr> <td>BIOLOGIST</td> <td>— ELECTRICAL ENGINEERS</td> <td>1 MINING ENGINEERS</td> <td>— TRAFFIC ENGINEERS</td> </tr> <tr> <td>7 CADD OPERATORS</td> <td>— ENVIRONMENTALISTS</td> <td>— PHOTOGRAMMETRISTS</td> <td>— OTHER</td> </tr> <tr> <td>— CHEMICAL ENGINEERS</td> <td>— ESTIMATORS</td> <td>PLANNERS: URBAN/REGIONAL</td> <td></td> </tr> <tr> <td>10 CIVIL ENGINEERS</td> <td>2 GEOLOGISTS</td> <td>— SANITARY ENGINEERS</td> <td></td> </tr> <tr> <td>15 CONSTRUCTION INSPECTORS</td> <td>— HISTORIANS</td> <td>1 SOILS ENGINEERS</td> <td></td> </tr> <tr> <td>— DESIGNERS</td> <td>— HYDROLOGISTS</td> <td>— SPECIFICATION</td> <td>57 TOTAL PERSONNEL</td> </tr> <tr> <td>DRAFTSMEN</td> <td></td> <td>WRITERS</td> <td></td> </tr> </table>						6 ADMINISTRATIVE	— ECOLOGISTS	2 LANDSCAPE ARCHITECTS	6 STRUCTURAL ENGINEERS	ARCHITECTS	— ECONOMISTS	— MECHANICAL ENGINEERS	7 SURVEYORS	BIOLOGIST	— ELECTRICAL ENGINEERS	1 MINING ENGINEERS	— TRAFFIC ENGINEERS	7 CADD OPERATORS	— ENVIRONMENTALISTS	— PHOTOGRAMMETRISTS	— OTHER	— CHEMICAL ENGINEERS	— ESTIMATORS	PLANNERS: URBAN/REGIONAL		10 CIVIL ENGINEERS	2 GEOLOGISTS	— SANITARY ENGINEERS		15 CONSTRUCTION INSPECTORS	— HISTORIANS	1 SOILS ENGINEERS		— DESIGNERS	— HYDROLOGISTS	— SPECIFICATION	57 TOTAL PERSONNEL	DRAFTSMEN		WRITERS	
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TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: <u>14</u> *RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.																																									
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES NO X This is not applicable																																									

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire" for each if copy is not on file with AML.

[illegible]

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

☒ YES Description and Number of Projects: Ninety-seven (97) Projects - See Attached Sheet

☐ NO

B. Is your firm experienced in Soil Analysis?

☒ YES Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet

☐ NO

C. Is your firm experienced in hydrology and hydraulics?

☒ YES Description and Number of Projects: Ten (10) Projects Listed - See attached sheet

☐ NO

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

☒ YES Description and Number of Projects: > 200 - in Firm History - 65 Recent Projects Listed

All ELR WV & OH AML Projects since 2003 have been surveyed with ELR Surveying Staff

☐ NO

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

☒ YES Description and Number of Projects: Seventy-one (71) Total
Eleven (11) Domestic Waterline Experience (AML Related)
Thirty-five (35) Evaluation of Aquifer Degradation
Twenty Five (25) Non-AML Domestic Water Lines

☐ NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

☒ YES Description and Number of Projects: Seven (7) Projects

☐ NO

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Edward L. Robinson, President	12	26	34

Brief Explanation of Responsibilities

Mr. Robinson worked in the Right of Way Division of the WV Department of Highways for ten years where he reviewed major utility plans. He has extensive experience in property surveys, property title searches, aerial mapping and land acquisition. He has provided quality control on all projects designed by this firm for the past 25 years. Provide and coordinate Quality Control on all design projects.

EDUCATION (Degree, Year, Specialization)

Bachelor of Science 1969 Civil Engineering
Master of Science 1981 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers - Past President WV
American Council of Engineering Companies
National Society of Professional Engineers

REGISTRATION (Type, Year, State)

1975 Civil Engineering
Registered in West Virginia and Kentucky
Professional Licensed Surveyor No. 1150

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Richard W. Watts, P.G.	29	34	1

Brief Explanation of Responsibilities

Mr. Watts has served as project geologist on more than ninety (90) abandoned mine land projects. Responsibilities include project management, field reconnaissance, drilling coordination, laboratory testing and analysis, stability analysis, specification writing, quantity determinations, cost estimates, pre-bid and pre-construction meetings. Projects included surface and deep mine reclamation, subsidence, AMD treatment and waterline feasibility studies.

EDUCATION (Degree, Year, Specialization)

B.S./1977/Geology
M.S./1994/Geography

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Geological Society of America
Association of Engineering Geologists

REGISTRATION (Type, Year, State)

Professional Geologist/1992/Virginia
Professional Geologist/1993/Kentucky

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) John Kelly II, E.I.	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 14	YEARS OF AML RELATED DESIGN EXPERIENCE: 14	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 14
Brief Explanation of Responsibilities Mr. Kelly has worked on many AML projects since joining ELR. His responsibilities have included drilling inspection, sampling of coal refuse materials, hydrology, hydraulics design of drainage structures, and development of regrading plans. Estimation of quantities developed estimated cost. Mr. Kelly is proficient with Auto Cadd. Mr. Kelly has performed layout and inspection of core drilling operations for bridge and roadway projects. In addition, he has designed cut slopes for large-scale roadway projects such as the US Route 52 Kermit Bypass in Mingo County, WV and Meadowbrook Road in Harrison County, WV.			
EDUCATION (Degree, Year, Specialization) B.S. Civil Engineering/1998/WVU			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State) Engineer Intern, WV	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Timothy B. Cart, P.E.	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 22
Brief Explanation of Responsibilities Mr. Cart has completed numerous mine reclamation projects under the AML program, including regrading of coal refuse materials, re-establishment of vegetation cover, disposal of acid producing materials, and developing methods for extinguishing burning materials and disposal of old mining structures. Designed passive AMD treatment systems. Conducted Phase I and Phase II Studies to determine if groundwater had been affected by pre-law mining. Mr. Cart has extensive experience in the design and construction management of waterline extension projects. Mr. Cart has recently completed water projects in Mingo; Kanawha; Putnam; and Cabell counties. Mr. Cart has performed geotechnical engineering calculations and designs for settlement analysis of dams and other embankments.			
EDUCATION (Degree, Year, Specialization) Bachelor of Science 1981 Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State) Professional Engineer WV OH	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Mark McGettigan, P.E.	7	7	8

Brief Explanation of Responsibilities

Mr. McGettigan has worked on several AML projects since joining our firm. He has developed grading plans, cross sections, estimated and checked quantity calculations. He has also served as a field inspector for several waterline Projects designed by E. L. Robinson Engineering Co. He has been the lead designer on waterlines over the past five years.

Mr. McGettigan also has experience with surveying and equipment including; theodolites, levels, and total stations. He has also performed various concrete and soil tests and is certified on Troxler nuclear density gage.

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering Technician/Fairmont State/1999

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

Professional Engineer WV

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Randall L. Lackey, P.E.	1	8	1

Brief Explanation of Responsibilities

Mr. Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Simpson Creek Bridge; Kermit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge.

Mr. Lackey has also 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 our Division of Highways projects.

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering/1999

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

Professional Engineer WV

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
J. Todd Garnes	5	5	6

Brief Explanation of Responsibilities

Mr. Garnes experience surveying and providing CADD Design for mine reclamation projects and waterline and sewer extrusions. He has provided construction inspection services for landsides and subsidence projects in Ohio. Mr. Garnes has performed numerous water feasibility studies, which involved interviews, water sampling and analysis, mapping, mine research, and development of final reports.

EDUCATION (Degree, Year, Specialization)

A.S. Architectural Design/ 1999
A.S. Computer Aided Drafting and Design/ 1999

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Thomas Rayburn, P.S.		31	

Brief Explanation of Responsibilities

Mr. Rayburn has experience in mine mapping and surveying, formulated short term and long range mining plans for all types of coal mining, designed mine drainage and water supply systems for underground and surface mines, designed mine ventilation plans and systems which include precision pressure quality surveys and computer simulation of ventilation systems.

He has performed slope stability analysis and hydrology calculations, provides computer analysis for mining applications, work with leases and land management as well as reclamation and environmental permits.

By utilizing "state of the art" electronic total stations and/or GPS (Satellite) equipment, he performs control surveys for aerial mapping and collects data and develops GIS for utility mapping.

Mr. Rayburn has also performed surveying and mapping for large scale highway projects.

EDUCATION (Degree, Year, Specialization)

A.S. Mechanical Engineering, WVIT/1970

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

Professional Surveyor WV

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Scott LeRose, P.E.	1	1	2

Brief Explanation of Responsibilities

Mr. LeRose is experienced in developing major highway and right of way plans; Bridge Construction Inspections; Core Drilling Operations; Groundwater Sampling/Monitoring; UST Removal/Replacement and Mine Permitting/Reclamation. Specific major highway design and right of way plan development projects include: Meadowbrook Road, a 2 mile design of new four lane highway; US 52(I-73), a 3.5 mile design and ROW plans for a new four lane highway with two major interchanges; design of 2 mile section of Appalachian Corridor H from Davis to Bismark; design of 5.2 mile section of Corridor H from Grant/Hardy County line to Moorefield.

While working on these projects, he has gained experience in major drainage design, site grading design, utility relocation, MOT, signing and pavement stripping. He has performed quantity calculations for pavement, drainage, seeding, pollution control quantities, and other items associated with roadway plans. He is also experienced in the development of ROW plans, including deed plots and legal descriptions.

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering/1997

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

Professional Engineer WV

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Ray Tilley, P.E.		5	31

Brief Explanation of Responsibilities

Mr. Tilley has over 30 years experience in water and wastewater design as a Project Manager/Engineer. In addition, Mr. Tilley is a certified Water Plant Operator. Mr. Tilley has successfully completed numerous waterline design projects over his career. His current duties include managing both water and wastewater design projects for ELR.

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering/WV Tech 1975; M.S. Sanitary Engineering Virginia Tech, 1976

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

Professional Engineer WV

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
James Eric Gwinn, E.I.	10	10	11
Brief Explanation of Responsibilities			
Mr. Gwinn has experience in construction layout for waterline projects. He performs calculation and permit requirements. He has worked on the Cabell County Water Project and the raw water intake structure for the Fayette Plateau Regional Water Project. He has performed calculations on various AML project. Mr. Gwinn has designed approach slabs, decks and extensive detailing on several bridge projects.			
EDUCATION (Degree, Year, Specialization)			
B.S. Civil Engineering/1998/ West Virginia Institute of Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brian D. Morton, P.E.	2	2	12
Brief Explanation of Responsibilities			
Mr. Morton has worked on waterline extension projects in Putnam and Kanawha County. He also has completed numerous waterline relocation projects involving the West Virginia Division of Highways.			
Mr. Morton has prepared signing and pavement marking plans and performed hydrologic and hydraulic calculations for culverts and other drainage structures and highway construction. Also prepared site development plans, specifications, bid documents, and has performed construction administration for these projects.			
EDUCATION (Degree, Year, Specialization)			
B.S. Civil Engineering/1998			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
		Professional Engineer WV	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES . RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Carney, Joseph T. P.E.	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 36
Brief Explanation of Responsibilities Mr. Carney has extensive experience in design engineering, preparation of contract documents, construction inspection, and contract administration. He has worked on a variety of Civil Engineering projects including grading, earthwork, storm sewer, drainage studies, roadway, bridge design, hydrologic/hydraulic reports, sanitary sewer and water systems.			
EDUCATION (Degree, Year, Specialization)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State) Professional Engineer, 1976, WV	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Workman, Gary A., CADD Senior Technician	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 23	YEARS OF AML RELATED DESIGN EXPERIENCE: 23	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 4
Brief Explanation of Responsibilities Mr. Workman is responsible for CADD design on AML projects, as well as geotechnical soil analysis. He Worked on 44 WVDEP/AML projects while employed at Ackenheil, and has worked on 18 AML projects while at E. L. Robinson.			
EDUCATION (Degree, Year, Specialization) Technical School/1987/CADD			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State) WVDOH certifications compaction, aggregates and concrete.	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **POSSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Mayes, Jason M.	2	2	2

Brief Explanation of Responsibilities

Provides CADD Design for site development, waterline and sewer extensions, and layout on AML Projects. Mr. Mayes has Nearly ten years experience in WV DOT design with a prior firm.

EDUCATION (Degree, Year, Specialization)

B.S. Industrial Technology 1997 WVU Tech
A.S. Drafting and Design 1996 WVU Tech

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Scott A. Pratt	13	13	

Brief Explanation of Responsibilities

Mr. Pratt has extensive experience as a Field Geologist, performing test boring over-sight, logging soil and core samples, and obtaining water levels. He has also performed many geotechnical soil tests in the laboratory. He is also experienced in mine map research, specification writing, and quantity and cost calculations for AML projects.

EDUCATION (Degree, Year, Specialization)

B.S. Geology, 1999, Marshall University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Coberly, P.E. , Eric J.	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 10
Brief Explanation of Responsibilities Mr. Coberly has performed AML Grant and Emergency project designs since 1984. Projects have included highwall backfill, refuse regarding, portals, mine drainage, subsidence, refuse and mine fire abatement. Mr. Coberly has participated in the design of over 80 such project while working for WVDEP or at ELR. Included in that total is over 20 emergency project designs completed in Ohio. Mr. Coberly has served in various capacities with the WV AML Program including construction and design administrator as well as the Chief of the Office. This involved the review of hundreds of additional projects in the 22 years spent with AML program.			
EDUCATION (Degree, Year, Specialization) B.S. Engineering of Mines, 1983 M.S. Engineering of Mines, 1990			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
		WV P.E 10619 Ohio P.E. 71562	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Ryan Haws, EIT	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 7	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities Mr. Haws is our Bridgeport Office Manager. He brings experience with commercial developments, drainage analysis, ADA compliance, storm water collection systems, and all aspects of subdivision planning and design. This includes engineering design and CADD experience. His work has also entailed communication and coordination with local municipalities to ensure seamless integration with existing infrastructure and development. Mr. Haws also draws from his experience in marketing, finance, and business development.			
EDUCATION (Degree, Year, Specialization) B.S. Civil Engineering, 2005 M.B.A. 2012			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
ASCE		Engineer-In-Training	

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AMI DESIGN SERVICES

Various computer hardware and software including: Microstation, InRoads, AutoCAD, ELRSoil, Microsoft Office applications, Haested, Water CADD, Culvert Master, Flow Master

Various surveying equipment:

Instruments - Topcon Total Station (6), Trimble Robotic DR200+ (2)

GPS Equipment - Trimble 5700 Receiver (6), Trimble TSCe Controller/Handheld (5)

*all equipment lists have various misc. survey equipment to go along (poles, tape measures, data collectors, etc.)

Riegl LMS - 360 3D Laser Scanner - surface imaging system based upon accurate distance measurement by means of electro-optical range measurement and a two axis scanning mechanism.

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Marsh Run Portals Braxton County	WVDEP/AML&R	Surveying, Mapping and Design	\$967,050	70
Donnie Thorn HW Preston County	WVDEP/AML&R	Surveying, Mapping and Design	\$1,491,555	80
Vickers Branch Drainage Logan County	WVDEP/AML&R	Surveying, Mapping and Design	\$444,575	90
Morgan HW Preston County	WVDEP/AML&R	Surveying, Mapping and Design	\$1,150,125	80
Sugarcamp Run Burning Refuse Nicholas County	WVDEP/AML&R	Surveying, Mapping and Design	\$6 M	50
Big Ugly Creek Waterline Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$11 M	20
Phase III-A Sanitary Sewer Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$ 9 M	90
TOTAL NUMBER OF PROJECTS:		TOTAL ESTIMATED CONSTRUCTION COSTS: \$		

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Lower Mud River Waterline Extension	Lincoln County PSD 240 Lower Coal River Rd. Alum Creek, WV 25003	Design and Construction Management	\$7.9 M	20
McDowell PSD Jolo Phase V Water McDowell County	McDowell Public Service District	Design and Construction Management	\$ 2.4 M	20
Martin Luther King Jr. Memorial Bridge Replacement	WV Dept. of Transportation Engineering Division Charleston, WV	Design and Construction Management	\$ 2.5 M	80
Iaeger Regional Sewer Project	McDowell County PSD HC 31 Box 436J Welch, WV	Design and Construction Management	\$ 5 M	40
TOTAL NUMBER OF PROJECTS:11		TOTAL ESTIMATED CONSTRUCTION COSTS: \$ 48 Million		

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS				
PROJECT NAME	TYPE	NAME OF FIRM		

[illegible]

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM, THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Thorpe Refuse Pile McDowell County	WVDEP-AML Oak Hill, WV Mark Proctor	\$744,240	2011	Yes
Shinnston-Lumberport Subsidence Harrison County, WV	WVDEP-AML Philippi, WV Timothy LeMasters	\$442,000	2011	Yes
Corridor H Davis-Bismark X347-H-64.85 00 Tucker County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$15.5 M	2012	No
WVDEP-Emergency East Bank (Willis) Mine Blowout	WVDEP-AML 601 57 th Street Charleston, WV 25304	\$0.8 M	2009	Yes
Newtown (Kinder) Portals Mingo County	WVDEP-AML 601 57 th Street Charleston, WV 25304 Roger Earle	\$490,410	2010	Yes
Keaton Branch Complex Raleigh County	WVDEP-AML Oak Hill, WV Mark Proctor	\$527,250	2010	Yes
McQuain Brothers Bridge Kanawha County, WV	WV Dept. of Transportation Engineering Division Charleston, WV 25301	\$7.5 M	2011	Yes
Tuppers Creek - Pocatalico Bridges Kanawha County, WV	WV Dept. of Transportation Engineering Division Charleston, WV, 25301	\$11.0 M	2012	Yes

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE CASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Linmont Bridge Replacement Cabell County	WV Dept of Transportation Engineering Division Charleston, WV 25301	Bridge Design (VE)	2011	Yes	Paul's Concrete
Clothier Bridge Logan County	WV Dept of Transportation Engineering Division Charleston, WV 25301	Bridge Design (VE)	2011	Yes	Paul's Concrete
Market Street Bridge Brooks County, WV	WV Dept of Transportation Engineering Division Charleston, WV	Post Design Services	2011	Yes	Ahern & Assoc.
Leon Thru Girder Bridge Mason County, WV	WV Dept of Transportation Engineering Division Charleston, WV	Plans for Bridge (VE) Hydraulics Post Design	2010	Yes	Triton Construction
Holley Grove Bridge Kanawha County	WV Dept of Transportation Engineering Division Charleston, WV	\$500,000	2010	Yes	Triton Construction

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.
E. L. Robinson Engineering Co. is committed to the WVDEP/AML program to provide professional design, surveying and mapping and construction monitoring services in a timely and cost-efficient manner. Our business plan relies heavily on the work offered by the WVDEP/AML program.

20. The foregoing is a statement of facts.

Signature: Eric J. Coberly Title: PROJECT MANAGER

Printed Name: Eric J. Coberly, P.E.

Date: 1-8-14

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



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Marsh Run Portals**
Braxton County, WV
Year: 2013
Client: WVDEP-AML
Charleston, WV
Description: Performed survey, drilling, and design for mine seals/regrading.

Project: **Donnie Thorn Highwall**
Preston County, WV
Year: 2013
Client: WVDEP-AML
Bridgeport, WV
Description: Field surveying and mapping, subsurface investigation, design work for refuse regrading, mine seals, and drainage.

Project: **Vickers Branch (Butcher) Drainage**
Logan County, WV
Year: 2013
Client: WVDEP-AML
Charleston, WV
Description: Performed survey, drilling, design for mine seals and mine drainage control.

Project: **Morgan #46 Highwall**
Preston County, WV
Year: 2013
Client: WVDEP-AML
Bridgeport, WV
Description: Performed survey and design for refuse and spoil regrading and drainage control.

Project: **Sugarcamp Run Burning Refuse Phase II**
Nicholas County, WV
Year: 2013
Client: WVDEP-AML
Oak Hill, WV
Description: Performed site survey, drilling and prepared burning refuse abatement design.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project:	Glen Rogers Emergency
Year:	Wyoming County, WV 2012
Client:	WVDEP-AML Charleston, WV
Description:	Performed survey, drilling, and design for shaft seals.

Project:	Abney Refuse Pile
Year:	Raleigh County, WV 2011-2013
Client:	WVDEP-AML Oak Hill, WV
Description:	Field surveying and mapping, subsurface investigation, design work for refuse regrading, mine seals, and drainage.

Project:	Cartright Branch Refuse Pile
Year:	Logan County, WV 2011-2013
Client:	WVDEP-AML Charleston, WV
Description:	Performed survey, drilling, design for refuse regrading and mine drainage control.

Project:	Thorpe Refuse Pile
Year:	McDowell County, WV 2011-2012
Client:	WVDEP-AML Oak Hill, WV
Description:	Performed survey, drilling, design for refuse and spoil regrading and mine drainage control.

Project:	Shinnston-Lumberport Subsidence
Year:	Harrison County, WV 2010-2012
Client:	WVDEP-AML Philippi, WV
Description:	Performed site survey, drilling and prepared subsidence abatement design.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: Newtown (Kinder) Portals Design
Mingo County, WV
Year: 2010-2012
Client: WVDEP-AML
Charleston, WV
Description: Performed site survey, and prepared design for portals reclamation and drainage abatement design.

Project: Gordon "C" Refuse Pile
Boone County, WV
Year: 2010-2012
Client: WVDEP-AML
Oak Hill, WV
Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and refuse reclamation.

Project: Keaton Branch Complex
Raleigh County, WV
Year: 2010-2011
Client: WVDEP-AML
Oak Hill, WV
Description: Performed survey, drilling, design for refuse regrading and mine drainage control.

Project: Dunloup Creek Complex
Raleigh County, WV
Year: 2009-2011
Client: WVDEP-AML
Oak Hill, WV
Description: Performed survey, drilling, design for refuse and spoil regrading and mine drainage control.

Project: Brownton (McCord) Landslide
Barbour County, WV
Year: 2009-2011
Client: WVDEP-AML
Philippi, WV
Description: Performed site survey, drilling and prepared landslide abatement design.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Keystone (Avery) Landslide and Portal**
McDowell County, WV
Year: 2009-2011
Client: WVDEP-AML
Charleston, WV
Description: Performed site survey and prepared landslide abatement design, portals reclamation, and drainage control.

Project: **Dan's Branch (Pennington) Landslide Emergency**
Mingo County, WV
Year: 2011
Client: WVDEP-AML
Charleston, WV
Description: Field surveying and mapping, subsurface investigation, design work for landslide reclamation.

Project: **East Bank (Willis) Mine Blowout**
Kanawha County, WV
Year: 2009
Client: WVDEP-AML
Charleston, WV
Description: Field surveying and mapping, design work for mine seal and drainage control.

Project: **Island Creek #18 Mine Complex**
Logan County, WV
Year: 2009-2011
Client: WVDEP-AML
Oak Hill, WV
Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and refuse reclamation.

Project: **Jacob's Fork Complex**
Boone County, WV
Year: 2008-2009
Client: WVDEP-AML
Charleston, WV
Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and reclamation.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Rhodell Refuse & Portals**
Wyoming County, WV
Year: 2008
Client: WVDEP-AML
Charleston, WV
Description: Performed survey, drilling, design for refuse and spoil regarding and mine drainage control.

Project: **Gilmer B Site 3.8**
Gilmer County, WV
Year: 2008
Client: WVDEP-AML
Charleston, WV
Description: Performed survey, drilling, design for refuse and spoil regarding and mine drainage control.

Project: **Gouge Landslide Emergency**
Scott Town, OH
Year: September 2007
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site survey, drilling and prepared landslide abatement design.

Project: **Brown Landslide Emergency**
Rayland, OH
Year: August 2007
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site survey and prepared landslide abatement design.

Project: **Rodgers Subsidence Emergency**
Wellston, OH
Year: January 2007
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site survey and prepared subsidence abatement design.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **McAdams Subsidence Emergency**
Stark County, OH
Year: April 2006
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed investigation and prepared report of findings.

Project: **Athens Rt. 13 Refuse Fire Emergency**
Athens County, OH
Year: March 2006
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site survey, prepared abatement design and monitored on site construction for fire extinguishment.

Project: **Toney Fork Landslide Emergency**
Boone County, WV
Year: February 2006
Client: WVDEP-AML
Charleston, WV
Description: Performed site survey, drilling and prepared plans and specifications to stabilize an emergency landslide area.

Project: **Cox Refuse Fire Emergency**
Gallia County, OH
Year: December 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed abatement design for fire extinguishment.

Project: **Lavender Refuse Fire Emergency**
Meigs County, OH
Year: November 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed abatement plan and monitored construction.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Goetz Subsidence Emergency**
Columbiana County, OH
Year: November 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed investigation and prepared report of findings.

Project: **Adkins Landslide Emergency**
Gallia County, OH
Year: December 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed surveying, drilling, landslide abatement and construction monitoring.

Project: **North Matewan (Sipple Drainage)**
Mingo County, WV
Year: February 2005
Client: WVDEP-AML
Description: Performed surveying, drilling and design for drainage project abatement.

Project: **Phalen Landslide Emergency**
Martins Ferry, OH
Year: January 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site surveying and landslide abatement design.

Project: **Baisden Subsidence Emergency**
Jackson, OH
Year: January 2005
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed drilling to develop subsidence abatement solutions.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Parsons Landslide Emergency**
New Philadelphia, OH
Year: December 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site review and report concerning landslides relation to mining and potential solutions.

Project: **Treadway Landslide Emergency**
Rayland, OH
Year: October 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed site surveying, drilling and landslide abatement design.

Project: **Big Creek "C" Refuse**
Logan County, WV
Year: July 2004
Client: WVDEP-AML
Description: Performed surveying and drilling for design.

Project: **Imboden Landslide Emergency**
Rutland, OH
Year: June 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed drilling and surveying to develop landslide abatement solutions and cost estimates.

Project: **Titus Road Landslide Emergency**
Rutland, OH
Year: June 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed surveying, drilling and prepared plans and specifications to stabilize and emergency landslide area.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: Jefferson County Road 26 Landslide Emergency
Winterville, OH
Year: May 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed surveying, drilling and prepared plans and specifications to stabilize and emergency landslide area.

Project: Charleston Romeo Landslide
Kanawha County, WV
Year: May 2004
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide abatement.

Project: Roush Landslide Emergency
Pomeroy, OH
Year: March 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Prepared plans and specifications to stabilize an emergency landslide area.

Project: Lewis Landslide Emergency
Pomeroy, OH
Year: March 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Performed surveying, drilling, prepared plans and specifications to stabilize an emergency landslide area, and provided construction monitoring.

Project: Moran Subsidence
Clinton, OH
Year: January 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Prepared plans and specifications to stabilize an emergency subsidence area.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Ron Bobar Subsidence**
Flushing, OH
Year: January 2004
Client: ODNR-AML
1855 Fountain Square
Columbus, OH
Description: Investigation and report of an emergency subsidence area.

Project: **Gooney Otter Refuse**
Wyoming County, WV
Year: January 2004
Client: WVDEP-AML
Description: Performed surveying, drilling and site design for refuse regarding project.

Project: **Chapmanville (Gorby) Mine Blowout**
Logan County, WV
Year: December 2003
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide regrading and retaining wall design.

Project: **Tuppers Creek (Layne) Landslide**
Kanawha County, WV
Year: July 2003
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide abatement.

Project: **Maidsville (Tennant) Landslide**
Monongalia County, WV
Year: February 2003
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide abatement.



E.L. ROBINSON
ENGINEERING

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**
Raleigh County, WV
Year: October 2000
Client: WVDEP-AML
Charleston, WV
Description: Performed surveying and design for regrading refuse.

Project: **Bull Run #27**
Preston County, WV
Year: October 2000
Client: WVDEP-AML
Description: Performed surveying and design for regrading refuse.

Project: **Rich Fork (Thaxton) Landslide**
Kanawha County, WV
Year: July 2003
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide abatement.



E.L. ROBINSON
ENGINEERING

Abandoned Mine Land Reclamation Experience

Project: **Maidsville (Tennant) Landslide**
Monongalia County, WV
Year: February 2003
Client: WVDEP-AML
Description: Performed surveying, drilling and design of landslide abatement.

Project: **Whittington Hill (Walker Landslide)**
Kanawha County, WV
Year: June 2002
Client: WVDEP-AML
Description: Performed surveying, drilling and design for an emergency landslide.

Project: **Minden Refuse Pile Reclamation Project**
Fayette County, WV
Year: September 2001
Client: WVDEP-AML
Description: Performed surveying and design for emergency project to upgrade drainage control.

Project: **Jeffrey Mine Complex Reclamation Project**
Boone County, WV
Year: July 2001
Client: WVDEP-AML
Description: Performed surveying and design regrading refuse.

Project: **Hot Coal Reclamation Project**
Raleigh 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.



E.L. ROBINSON
ENGINEERING

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**
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**
1997
Client: WVDEP-AML
Description: Performed surveying and design for refuse regrading and mine seal installation.



E.L. ROBINSON
ENGINEERING

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.



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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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.



E.L. ROBINSON
ENGINEERING

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



Aerial Photography and Contour Mapping Experience

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

2003-Present

All ELR AML Projects
WV and OH

2002

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

2001

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

2000

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

1999

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

1998

Bull Run #35
Fickey Run

1997

Browns Creek
Marrowbone
Matewan
Pigeon Creek



E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

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

Education

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

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

Registrations

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

Registered Professional Surveyor in West Virginia.

Professional Memberships

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

Professional Experience

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

Under his leadership, E. L. Robinson has entered the new millennium as a multi-disciplined 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-

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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.

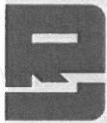
Offices Held

- 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

Honors Awarded

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



E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

Eric J. Coberly, P.E. **Project Manager**

Education

M.S. Engineering of Mines
West Virginia University, 1990
B.S. Engineering of Mines
West Virginia University, 1983

Registrations

Registered Professional Engineer in West Virginia and Ohio

Professional Achievements

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

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

Professional Experience

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



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

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

Representative Projects

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

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E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

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

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

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





Richard W. Watts

Project Manager/Geologist

Education

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

Professional Registrations

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

Professional Memberships

Geological Society of America Association of
Engineering Geologists

Teaching Experience

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

Professional Experience

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

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



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

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

AML and Coal Industry Projects:

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

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



E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

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





E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

- 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.

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John R. Kelly, III

Engineer Intern

Education

B.S. Civil Engineering
West Virginia University, 1998

Computer Skills

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

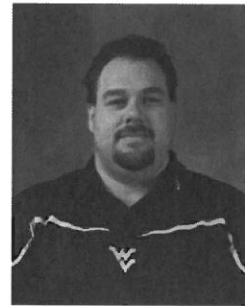
Professional Memberships

- American Society of Civil Engineers

Professional Experience

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

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



Representative Projects

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

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

Representative Mine Reclamation Projects:

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



E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

James T. Rayburn, P.S.

Chief Surveyor

Education

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

Registrations

Registered Professional Surveyor in West
Virginia

Professional Memberships

American Congress on Surveying and
Mapping

The American Association for Geodetic
Surveying (AAGS)

Member Organization of ACSM.

Cartography and Geographic Information
Society (CaGIS)

Geographic and Land Information Society
(GLIS)

National Society of Professional Surveyors
(NSPS)

West Virginia Association of Land
Surveyors, Inc.



Professional Experience

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



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

Representative Projects

Design Surveys

- **Corridor H (WVDOT) Hardy County, WV:** Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately 11 miles of Corridor H in Hardy County, WV. This was for Sections 6 & 7 of Corridor H, both Sections of which are now under construction. Estimated construction cost of \$150 million dollars.
- **WV Route 10 (WVDOT) Logan to Man WV, Logan County, WV:** Lead Surveyor for Design Surveys for a section approximately five miles in length from Man, WV, to Rita, WV, including the Man Bridge. Also provided control surveying for the entire project length of approximately 12 miles. The approximate five miles section of roadway is now under construction at an estimated cost of \$51 million dollars.
- **Blennerhassett Bridge, Corridor D (WVDOT), Wood County, WV :** Lead Surveyor for Design Surveys for this landmark Bridge Project which is now under construction at an estimated cost of \$120 million dollars.
- **James Ramsey Bridge (WVDOT) Potomac River, Shepardstown, WV:** Lead Surveyor for Design Surveys for this Bridge Project which is now completed at an estimated cost \$15.5 million dollars. This project involved working in an environmentally historic area, which adjoined a National Park.
- **US Route 35 (WVDOT) Mason County, WV:** Lead Surveyor for Design Surveys for two Design Sections each approximately 2.5 miles in length from Lower Five Mile Road to Upper Nine Mile Road. Also provided control surveying for the entire US 35 design project length of approximately 22 miles.
- **I64/US 35 (WVDOT) I64 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 I64 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.



E.L. ROBINSON
ENGINEERING

KEY PERSONNEL

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,
MS PowerPoint, Windows, MDX, MERLIN,
BRASS Systems, SIMON, HEC-RAS, RC
Pier, and HY8

Professional Experience

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



Representative Projects

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

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

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KEY PERSONNEL

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

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

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

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





Mark Allen McGettigan, PE,
Project Manager

Education

M.S.E. Engineering Management/Environmental
Engineering,
Marshall University December 2007

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

Registrations

Registered Professional Engineer in West
Virginia

Professional Memberships

- American Society of Civil Engineers

Professional Experience

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

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



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

Representative Projects

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

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

AML and RELATED PROJECT EXPERIENCE MATRIX																										
Attachment "C"																										
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	PROJECT EXPERIENCE															Primary Staff Participation								
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberly	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly, E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD	
Jacob's Fork Complex	C	YES		X	X	X					X					X	X	M		P		P	P			
Rhodell Refuse & Portals	C	YES		X	X	X					X					X	X	M		P		P	P			
Gilmer B Sites 3-8	C	YES		X	X	X										X	X	M		P		P	P			
Morrisvale/Cameo/Big Horse Creek Waterline Feasibility Study	C	YES										X					X	M		P		P	P			
Camp Creek Waterline Feasibility Study	C	YES										X						M		P		P	P			
Lick Creek Waterline Feasibility Study	C	YES										X						M		P		P	P			
Ragland Waterline Feasibility Study	C	YES										X						M		P		P	P			
Beech Creek and Ben II Waterline Feasibility Study	C	YES										X						M	P	P		P	P			
Dingess Waterline Feasibility Study	C	YES										X						M		P		P	P			
Sharon Heights Waterline Feasibility Study	C	YES										X						M	P	P		P	P			
Amherstdale Water Feasibility	C	YES										X						M	P	P		P	P			
Mercer County Commission	C	YES										X						M	P	P		P	P			
Danese PSD Waterline	C	YES										X						M	P	P		P	P			
New Haven Waterline	C	YES										X						M	P	P		P	P			
Nubbin Ridge/Camp Creek Waterline Feasibility Study	C	YES										X						M		P		P	P			
Bramwell Hill Waterline Feasibility Study	C	YES										X						M		P		P	P			
Coaldale and Coaldale Mountain Waterline Feasibility Study	C	YES										X						M		P		P	P			
Jennie Creek Waterline Feasibility Study	C	YES										X						M		P		P	P			
Beech Creek and Ben Areas Waterline Feasibility Study	C	YES										X						M		P		P	P			
Blair/Sharples Area Waterline Feasibility Study	C	YES										X						M		P		P	P			
Brown's Creek #10	C	YES	X	X	X	X	X					X						M		P		P	P			
Bull Run #35	C	YES	X	X	X	X	X					X	X		X	X	X	M		P			P			
Seccuro Mine Drainage	C	YES		X	X	X						X				X		M		P			P			
Fickey Run	C	YES	X	X	X	X	X					X	X		X			M		P			P			
Ven's Run	C	YES	X			X						X						M		P			P			
Bull Run #27	C	YES	X	X	X	X	X					X	X				X	M		P			P	P		
Riffe Branch	C	YES	X	X	X	X	X					X				X	X	M		P		P	P			
Hot Coal	C	YES		X	X	X	X					X				X	X	M		P			P	P		
Minden Refuse Pile	C	YES		X		X						X				X	X	M		P			P	P		
Jeffrey Mine Complex	C	YES		X	X	X	X					X						M		P		P	P			
Pigeon Creek Waterline	C	YES				X						X	X	X			X	M		P		P	P			
Red Jacket, Matewan, Newtown Waterline	C	YES				X						X	X		X			M		P		P	P			
Marrowbone Waterline	C	YES				X						X	X					M		P		P	P			
Mount Zion Waterline	C	YES				X						X	X	X				M		P		P	P			

AML and RELATED PROJECT EXPERIENCE MATRIX			Attachment "C"															Primary Staff Participation							
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	PROJECT EXPERIENCE															M-Mngmt							
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberly	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly, E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Coopers Rock, Pisgah, and Laurel Run Waterline	C	YES				X					X	X						M		P		P	P		
Davis Water Tank	C	YES				X					X	X						M		P		P	P		
Whittington Hill (Walker)Slide	C	YES		X	X	X					X						X	M	P/M	P		P	P		
Maldsville Landslide	C	YES	X								X						X	M	P	P		P	P		
Rich Fork Landslide	C	YES	X	X							X						X	M	P	P		P	P		
Tupppers Creek Landslide	C	YES	X	X							X						X	M	P	P		P	P		
Glen Rogers Waterline	C	YES				X					X	X						M	P	P		P	P		
Gooney Otter Refuse	C	YES	X	X	X	X	X				X						X	M	P	P		P	P		
Chapmanville Mine Blowout	C	YES															X	M	P	P		P	P		
Charleston Romeo Landslide	C	YES		X	X	X					X						X	M	P	P		P	P		
Big Creek C Refuse	C	YES		X													X	M	P	P		P	P		
North Matewan Sipple	C	YES		X	X	X					X						X	M	P	P		P	P		
Moran Subsidence	C	YES		X						X	X							M	P	P		P	P		
Lewis Landslide	C	YES		X		X					X						X	M	P	P		P	P		
Roush Landslide	C	YES		X		X					X			X				M	P	P		P	P		
Jefferson 26 Landslide	C	YES		X		X					X						X	M	P	P		P	P		
Titus Road Landslide	C	YES	X	X		X					X						X	M	P	P		P	P		
Imboden Landslide	C	YES	X	X													X	M	P	P		P	P		
Balsden Subsidence	C	YES		X						X							X	M	P	P		P	P		
Parsons Landslide	C	YES		X														M	P	P		P	P		
Treadway Landslide	C	YES	X	X		X					X						X	M	P	P		P	P		
Phalen Landslide	C	YES		X		X					X						X	M	P	P		P	P		
Adkins Landslide	C	YES	X	X		X					X						X	M	P	P		P	P		
Goetz Subsidence	C	YES		X						X							X	M	P	P		P	P		
Lavender Refuse Fire	C	YES		X				X			X			X				M	P				P		
Cox Refus Fire	C	YES		X				X			X			X				M	P				P		
Toney Fork Landslide	C	YES		X		X					X							M	P	P		P	P		
Athens Rt. 13 Refuse Fire	C	YES		X					X		X			X				M	P	P		P	P		
McAdams Subsidienc Ermer	C	YES		X						X	X							M	P	P		P	P		
Rodgers Subsidence	C	YES		X						X	X			X				M	P	P		P	P		
Brown Landslide	C	YES		X		X					X							M	P	P		P	P		
Town Run	P	NO																M	P						
Witcher Creek	P	NO										X													
Pond Gap, Hitop & Spangler	P	NO										X													
Elk City	P	NO										X													
Little Fork Refuse Pile	P			X		X	X	X								X	X			P					
OSM-Tackett Fork	P		X	X	X	X											X			P	P				
OSM-Ironton	P			X		X														P	P				
OSM-Williamson LS	P			X		X												X		P	P				
OSM-Ray Landslide	P			X									X					X		P	P	P			
OSM-Spence Landslide	P			X		X												X		P	P	P			
OSM-Ratliff Landslide	P			X		X												X		P	P	P			
OSM-Pigeon Roost LS	P			X		X												X		P	P	P			
OSM-Oak Hill Subsidence	P			X	X	X				X	X							X		P	P	P			
OSM-Little Prater Creek	P			X		X														P	P	P			
OSM-Hamilton II Landslide	P			X		X														P	P	P			
Tuppers Creek B	P		X	X	X	X												X		P	P	P			
																		X		P	P	P			

AML and RELATED PROJECT EXPERIENCE MATRIX

Attachment "C"

PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	PROJECT EXPERIENCE															Primary Staff Participation							
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																					Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly, E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Big Sandy Refuse	P			X		X											X			P					
Leslie (Nelson)	P	2002	X	X	X	X	X				X	X	X							P				P	P
Swiss Drennan	P	2002										X												P	P
Minden C	P	2002	X	X	X	X	X			X	X			X										P	P
Weston	P	2002										X												P	P
Parkette	P	2002							X			X					X							P	P
East Dupont Avenue Landslide	P	2003		X	X	X					X						X							P	P
Skin Creek Phase II	P	2003	X			X					X				X	X	X							P	P
Witcher Creek	P	2001		X	X	X					X		X		X	X	X							P	P
Crane Creek	P	2004	X		X	X	X	X			X	X				X	X							P	P
Yoursco	P	2004	X	X	X							X				X	X							P	P
Carswell	P	2004	X			X	X				X		X											P	P
Craigmoor	P	2004				X		X			X		X		X	X	X							P	P
Downey Pierpont	P	2006							X								X							P	P
Ames (Clare) Landslide	P	2007		X							X						X						P	P	P
Lorado	P	1995	X	X	X	X					X	X			X		X							P	P
Madeline Refuse	P	1995	X	X	X	X	X			X	X	X			X	X	X							P	P
Rocklick	P	1995	X	X	X	X					X						X							P	P
Wahoo	P	1996	X			X	X	X		X		X				X	X							P	P
Meadowbrook	P	1996	X	X	X	X	X				X	X			X		X							P	P
Jumping Branch	P	1996										X												P	P
Beard's Fork	P	1997	X	X	X	X	X	X		X	X				X									P	P
Turkey Wallow	P	1997	X	X	X	X	X	X		X							X							P	P
Otsego	P	1997	X	X	X	X	X				X				X		X							P	P
Miller	P	1997	X	X	X	X					X	X												P	P
Whitby	P	1998	X	X	X	X					X	X		X	X	X	X							P	P
Barker	P	1999	X	X	X	X					X	X											P	P	P
Gauley River Road	P	1999										X											P	P	P
Skin Creek	P	2000	X	X	X	X	X				X	X			X	X	X							P	P
Jolo	P	2001										X												P	P
Tioga	P	2001										X												P	P
Turkey Gap	P	2001	X	X	X	X					X				X	X								P	P
Big Sandy	P	1987	X			X		X			X				X									P	P
Marfrance	P	1988	X	X	X	X	X				X	X												P	P
New Hill Ballpark	P	1988	X	X	X	X		X			X	X												P	P
Jones Run	P	1988	X	X	X	X			X		X	X			X		X							P	P
Chapmanville Landslide	P	1989		X	X	X					X						X							P	P
Wharnclyff Landslide	P	1989		X	X	X					X						X							P	P
Joyce Sturm	P	1990		X	X	X					X	X		X										P	P
Marianna Refuse	P	1991	X			X	X	X			X						X							P	P
Cedar Grove	P	1991		X	X	X	X				X	X		X			X							P	P
Eskdale	P	1991		X	X	X	X				X			X	X									P	P
Hodgesville	P	1991	X	X	X	X					X	X		X			X							P	P
Newsome Branch	P	1992	X	X	X	X	X	X				X			X		X							P	P
Morrison	P	1992		X	X	X	X				X	X												P	P
Snake Island	P	1993	X			X	X	X	X	X		X	X			X	X							P	P
Orchard Branch	P	1994	X	X	X	X	X	X				X	X		X									P	P
Beckley Layne	P	1994		X	X	X	X				X	X		X			X							P	P
Quinwood Booth	P	1994		X	X	X	X		X		X	X												P	P
Little Fork	P	1983	X	X	X	X	X	X	X	X		X				X	X							P	P

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Attachment "C"

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Elkridge Refuse	P	1984	X	X	X	X	X	X			X				X		X			P	P				
Lando Mines	P	1984	X	X	X	X					X				X		X			P	P				
West Varney	P	1984		X	X	X					X						X			P	P				
Bethel Portals	P	1985		X	X	X					X	X					X			P	P				
Mammoth Landslide	P	1985				X					X			X	X		X			P	P				
Cheyenne	P	1985	X				X				X	X		X	X		X			P	P				
Mudlick A Landslide	P	1985	X		X	X					X	X				X	X			P	P				
Nelson Landslide	P	1985		X							X						X			P	P				
Mudlick B Refuse	P	1985	X	X	X	X		X			X				X	X	X			P	P				
Bluff Mountain	P	1985	X	X	X	X	X	X			X	X				X	X			P	P				
Montgomery Drainage	P	1986		X	X	X					X			X		X				P	P				
Mayoros Drainage	P	1986		X	X	X					X	X		X						P	P				
Ridgeview A & B	P	1987	X	X	X	X		X	X		X	X		X	X		X			P	P				
Tupper Valley	P	1987	X	X	X	X					X	X		X			X			P	P				
Airport Bottom	P	1987		X	X	X					X	X								P					
Manilla Creek	P	1987	X	X	X	X		X			X	X		X	X		X			P	P				
McAlpin	P	2009									X			X	X		X			P	P			P	P
Robey	P	2009	X	X	X	X					X						X			P	P		P	P	P
Katy Lick	P	2009	X			X					X						X			P	P		P	P	P
Clear Fork	C	2009										X						M		P	P		P	P	P
Coal Mountain	C	2009										X						M		P	P		P	P	P
Naugatuck/East Kermit	C	2009										X						M		P	P		P	P	P
Prenter	P	2008										X								P	P		P	P	P
Hanover	P	2009										X								P	P		P	P	P
Lower Dempsey	P	2009		X	X	X					X						X			P	P		P	P	P
Island Creek #18	C	2009		X	X	X					X	X		X			X			P	P		P	P	P
Brownnton Landslide	C	2009		X	X	X					X	X					X			P	P		P	P	P
East Bank Emergency	C	2009																		P	P		P	P	P
Dunlop Creek	C	2010	X	X	X	X					X	X			X	X	X			P	P		P	P	P
Otsego/Pierpoint/Maben	C	2010										X								P	P		P	P	P
Barkers Ridge/Basin	C	2010										X								P	P		P	P	P
Hemdon/Covel/Garwood	C	2010										X								P	P		P	P	P
Bud/Alpoca/Mill Branch	C	2010										X								P	P		P	P	P
Keystone (Avery)	C	2010																		P	P		P	P	P
Keystone (Emergency)	C	2010																		P	P		P	P	P
Cane Branch	C	2010										X								P	P				P
Spy Rock/Edmond/ Flanagan Mountain	C	2010										X								P	P			P	
Wilderness PSD	C	2010										X								P	P			P	
Gordon C	C	2010		X	X	X					X						X			P	P		P	P	
Keaton Branch	C	2010		X	X	X					X						X			P	P		P	P	
Verner Grimmer Burning Refuse	C	2010							X		X									P			P		
Shinnston-Lumberport	C	2011								X	X									P	P		P	P	
Newtown-Kinder	C	2011		X	X	X					X						X			P	P		P	P	
Dan's Branch Emergency	C	2011		X	X	X					X						X			P			P	P	
Cartright Branch	C	2011		X	X	X					X						X			P	P		P	P	
Thorpe Refuse Pile	C	2011		X	X	X					X						X			P	P		P	P	
Glen Rogers Emergency	C	2012		X	X						X									P			P		
Abney Refuse Piles	C	2012		X	X	X					X						X			P	P		P	P	

AML and RELATED PROJECT EXPERIENCE MATRIX

Attachment "C"

PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	PROJECT EXPERIENCE															Primary Staff Participation							
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberly	M-Mngmt					
																				Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly, E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Milam Ridge Refuse	C	2012		X	X	X					X						X								
West Columbia "B"	C	2012		X	X	X					X						X			P	P			P	
Coburn Invest.	P			X					X								X		P		P				
Gouge Landslide	P		X			X					X		X				X			P					
Adamsville	P		X	X	X	X			X		X		X							P					
Mount Pisgah	P		X			X					X		X							P					
Pleasant Valley Church	P			X	X	X					X		X							P					
Hodgesville B	P			X	X	X					X		X		X		X			P					
Lynch Chapel	P			X	X	X					X		X		X					P					
Snider Portals	P			X	X	X					X		X			X				P					
Wash Run	P			X	X	X					X		X							P					
Junior Sewage Plant	P		X	X	X	X					X		X		X					P					
Shavers Fork/Stonecoal	P			X	X	X					X	X	X		X					P					
Vargo Drainage	P			X	X	X					X		X							P					
Fairhills Plaza Subsidence	P			X					X		X		X							P					
Karen Vance AMD	P		X	X	X	X					X		X							P					
Leroy Wilmoth Drainage	P			X	X	X					X		X							P					
Big Knob Acid Mine Drainage	P		X	X	X	X					X	X	X	X						P					
Matthew Smith Subsidence	P			X	X	X			X		X		X							P					
Worthington Portals	P		X	X	X	X					X		X							P					
Red Rock Drainage	P		X	X	X	X					X		X							P					
Blackwater Manor	P		X	X	X	X	X				X	X	X							P					
Buckhannon River Refuse	P			X	X	X					X		X	X	X					P					
Hutcheson AMD	P			X	X	X					X		X		X					P					
Nutter Fort Tressle -7th	P										X		X							P					
East Bank Portals - A# 2	P			X	X	X					X		X							P					
Manilla Creek - A#2	P			X	X	X					X		X				X			P					
Big Creek C	P			X	X	X					X		X							P					
Covey Creek Refuse	P			X	X	X					X		X							P					
Omar Drainage G2	P			X	X	X					X		X							P					
Crooked Ck Refuse & Portals	P			X	X	X					X		X		X					P					
Jims Br. (Tyree) LS	P			X	X	X					X		X							P					
Galloway Mine Portal/Refuse	P			X	X	X					X		X							P					
Newtown (Harmon) Drainage	P			X	X	X					X				X		X			P					
Whitman Ck. (Williams) VO	P			X	X						X									P					
Coal Branch (Cantrell)	P			X	X	X					X									P					
Jordanville Tipple/Refuse	P		X			X					X		X		X					P					
Heizer Creek A Maintenance	P			X	X	X					X			X						P					
Orlando Mining Facility	P		X			X				X	X				X					P					
Verdunville Drainage	P			X	X	X					X									P					
Holden Portals	P			X	X	X					X									P					
Molinar Subsidence	P			X					X		X		X				X			P/M					
Smith Landslide	P		X	X	X	X					X		X							P/M					
Lutz Vertical Opening	P			X	X						X		X					X		P/M					
Swiger Mine Blowout	P			X	X	X					X		X			X				P/M					
Blair Wolfe Subsidence	P			X					X		X		X			X				P/M					
Lake (Winkler) Phase II	P			X			X				X									P/M					
Preston County PSD #4	C											X					X			P/M					
Marsh run Portals	C		X	X	X	X													P		P				P
Donnie Thorn HW	C		X	X	X	X					X						X			P		P		P	P

Attachment "C"

[illegible]

RFQ No. 16437STATE OF WEST VIRGINIA
Purchasing Division**PURCHASING AFFIDAVIT**

MANDATE: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

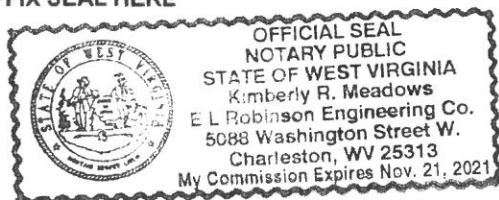
DEFINITIONS:

"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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:Vendor's Name: E. L. ROBINSON ENGINEERING Co.Authorized Signature: [Signature] Date: 1-8-14State of West VirginiaCounty of Kanawha, to-wit:Taken, subscribed, and sworn to before me this 8 day of January, 2014My Commission expires November 21, 2021.**AFFIX SEAL HERE****NOTARY PUBLIC**

[Signature]
Purchasing Affidavit (Revised 07/01/2012)

CERTIFICATION AND SIGNATURE PAGE

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

E.L. ROBINSON ENGINEERING
(Company)


(Authorized Signature)

ERIC COBERLY, PROJECT MANAGER
(Representative Name, Title)

304 776-7473 304 776-6426
(Phone Number) (Fax Number)

1 - 8 - 14
(Date)