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W PURCHASING DIVISION

submitted November 26, 2019

### STATEMENT OF QUALIFICATIONS



West Virginia Department of Environmental Protection Abandoned Mine Lands

Camden (Wilson) Landslide







5088 Washington Street, West • Charleston, WV 25313 • T: 800.856.6485

November 26, 2019

West Virginia Department of Environmental Protection Office of AML c/o Brittany E. Ingraham Department of Administration, Purchasing Division 2019 Washington Street, East Charleston, WV 25305

Dear Ms. Ingraham,

E.L. Robinson Engineering (ELR) is pleased to have the opportunity to submit our Statement of Qualifications to provide the West Virginia Department of Environmental Protection AML with design services for the Camden (Wilson) Landslide Project.

ELR has completed plans and specifications for numerous reclamation projects for WVDEP/AML for over 20 years in addition to several projects with ODNR and Maryland AML. We have included descriptions of our project experience later in this proposal. Please note that all staff that completed tasks on these projects are still with ELR.

The ELR staff has combined experience in the design of more than 280 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), one (1) geologist, three (3) landscape architects, six (6) engineers in training as well as several CADD technicians that may be used on these teams.
- B. ELR Corporate experience in designing one hundred thirty-two (132) abandoned mine land remediation projects. Personal experience on approximately two hundred eighty (280) AML projects. This number does not include surveying/mapping/drilling projects.
- E.L. Robinson Engineering has grown from 13 employees in 1996 to over 150 employees today. Throughout this growth period, we have continued to meet project deadlines while providing a high quality engineering product.

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

We at E.L. Robinson Engineering 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.

Eric J. Coberly, P.E. Project Manager

E.L. Robinson Engineering







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Project Team Resumes	37-46
Project Experience Matrix	Attachment C
Contract Documents	



For more than 20 years, E.L. Robinson Engineering (ELR) 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 fully understands the requirements for the Camden (Wilson) Landslide Project and is committed to giving the WVDEP/Office of Abandoned Mine Lands and Reclamation the time and attention that is necessary for this 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 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.

ELR has more than 170 professionals on staff including many 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. ELR 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.

Our company 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 the 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 agencies.

#### Our Office Locations.

- 5088 Washington Street, West, Charleston, WV 25313
- 93 Virginia Street, Becidey, WV 25801
- 738 Airport Road, Chapmarwille, WV 25508
- 600 Marketplace Avenue, Suite 106, Bridgeport, WV 26330
- 25 Hillcrest Avenue. Little Hocking: OH 45742.

- 202 N. 5th Street, Invoton, OH 45638
- 1801 Watermark Drive, Suite 310, Columbia, GH 43215
- 1468 West 9th Street, Soite SQD Cleveland DFI 44113
- 3345 Greenup Avenue, Ashfand, KY 41101
- 3362 Six Forks Road, Raleigh, NC 27609
- 1301 Gervais Street Suite 450, Columbia, SC 29201



E.L. Robinson is familiar with the Camden (Wilson) Landslide project area and the desired design services for which you are seeking. We understand that the work to be provided to the WVDEP/AML for this reclamation project shall consist of:

- Upgrading access
- Stabilizing landslide
- Geotechnical analysis
- Clearing and grubbing of affected areas
- Elimination of highwall
- Regrading
- Installation of drainage channels, underdrains and/or other controls to convey water off-site
- Revegetation of all disturbed areas
- Permitting

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 if requested



### WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS

#### Project Manager

Eric Coberly, P.E.



#### QA/QC

Edward Robinson, P.E.

#### **Project Engineers**

Tim Cart, P.E. Mark McGettigan, P.E. J.D. Kinder, P.E.

#### Surveyor

Tom Rayburn, P.S.

#### Geologist

Richard Watts, P.G.

#### **Project Designers**

John Kelly Gary Workman Todd Garnes

#### Inspecto

Heather Woods-Shaffer



Over the past 40 years, E.L. Robinson Engineering has focused its efforts on delivering quality projects to our clients and building strong relationships based on trust and partnership. We believe building lasting relationships with our clients is key to delivering exceptional service for many years to come.

E.L. Robinson provides WVDEP/AML with the capabilities, expertise and resources of one of the top-notched civil engineering firms in the region. Our offices are staffed with professionals experienced in AML reclamation mapping, permitting, design and construction monitoring. Further, we are very familiar with the requirements of the permitting and regulatory agencies which 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 feasible and functional 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. 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 prior work on our most recent reclamation projects including:

- Maryland Shallmar Landslide Emergency
- Maryland Scenic Railroad Landslide
- Red Warrior Gob & Slide
- North Matewan (Akers) Landslide
- Branchland (Blankenship) Landslide
- Coburns Creek Landslide
- Sauls Run Landslide
- Missouri Fork Landslide
- Worthington (Hess) Landslide
- Copen Road Landslide
- Dans Branch (Dillon) Landslide
- Pendleton Creek Highwall
- Maryland Barton Mine Pool
- Glen Alum Complex
- Carson One Special Reclamation Project
- Vickers Branch (Butcher) Drainage
- Sugarcamp Run Burning Refuse Phase II

- Craigmoor (Strader) Landslide Emergency
- Maryland G&S Landslide Study
- Sauls Run (Bennett) Landslide
- West Milford (Chapman) Landslide
- Roderfield (Simpson) Landslide
- Scotch Hill Mine Fire
- Mammoth (Shamblin) Landslide
- Delbarton (Curry) Landslide
- Big Creek (Surgoine) Landslide
- Crooked Run (Davis) Landslide
- Procious (Doughty) Landslide
- Rivesville (Parker) Landslide
- · Bridgeport (Ridgeway) Landslide
- North Matewan (Ross) Landslide
- Summerlee Refuse Phase II
- Weston (Williams) Landslide
- Smithers Landslide

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A	ML CONSUI	LTANT CONFIDEN	TIAL QUALIFICATION	QUESTIONN	JAIRE Attachment "E	R"
PROJECT NAME Camden (Wilson) Landslide DEP20000000002		DATE (DAY, MONT) November 26, 20	TH, YEAR) 019	FEIN 55-059463		>
1. FIRM NAME E.L. Robinson Engineering Co.		5088 Washington Charleston, WV	BUSINESS ADDRESS Street, West 25313	3. FORMER	R FIRM NAME	
4. HOME OFFICE TELEPHONE 304-776-7473	1978	ISHED (YEAR)	Partnership Joint	poration t-Venture	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)	
7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313	304-776-	·/4/3/Eric Coberly	y, P.E./54 Staff in Ch	narleston Are	ea	,
8. NAMES OF PRINCIPAL OFFICER Ed Robinson, P.E. 304 776-747  9. PERSONNEL BY DISCIPLINE	S OR MEMBER	RS OF FIRM	8a. NAME, TITLE, & TR	ELEPHONE NUME	BER - OTHER PRINCIPALS	
4 ADMINISTRATIVE ARCHITECTS BIOLOGIST 6 CADD OPERATORS — CHEMICAL ENGINEERS 22 CIVIL ENGINEERS 22 CONSTRUCTION INSPECTORS — DESIGNERS DRAFTSMEN  TOTAL NUMBER OF WV REGIS	ENVIROR ESTIMAT GEOLOGI HISTORI HYDROLO	ISTS ICAL ENGINEERS NMENTALISTS TORS ISTS IANS OGISTS	3 LANDSCAPE ARCH — MECHANICAL ENG 1 MINING ENGINEE — PHOTOGRAMMETRI PLANNERS: URBA — SANITARY ENGIN 1 SOILS ENGINEER — SPECIFICATION WRITERS	GINEERS ERS ISTS AN/REGIONAL NEERS RS	7 STRUCTURAL ENGINEERS 7 SURVEYORS TRAFFIC ENGINEERS OTHER 74 TOTAL PERSONNEL	
*RPEs other than Civil a supervise and perform th	and Mining	must provide sur	pporting documentation	14 that qualif	ies them to	
<del></del>						
10. HAS THIS JOINT-VENTURE WOR	RED TOGETI	HER BEFORE?	YES NO X This	s is not app	licable	_

11. OUTSIDE KEY CONSULTANTS/SUB-COM Questionnaire" for each if copy	SULTANTS ANTICIPATED TO BE USED.  is not on file with AML.	Attach "AML Consultant Confidential Qualification
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
Novel Geo – Environmental (NGE) 806 <b>B</b> Street, St. Albans, WV	Drilling	<u>X</u> YES
NAME AND ADDRESS:	SPECIALTY:	NO WORKED WITH BEFORE
A A A A A A A A A A A A A A A A A A A	BIECIAETT.	YES
NAME AND ADDRESS:	SPECIALTY:	NO
THE PROPERTY.	STECIAL II.	YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	CONTROL AND	NO NO
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NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFOREYES
NAME AND ADDRESS		NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	NO NO NOTICE WATER DEFENDE
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFOREYES
NAME AND ADDRESS:	SPECIALTY:	NO WORKED WITH BEFORE
,		YES
		NO

12.	Α.	x	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?  YES Description and Number of Projects: One hundred twenty one (132) Projects - See Attached Sheet
		_	NO
	В.		Is your firm experienced in Soil Analysis?
		X	YES Description and Number of Projects: Ten (10) Projects Listed - See attached Sheet
		_	NO
	C.		Is your firm experienced in hydrology and hydraulics?
		X	YES Description and Number of Projects: Ten (10) Projects Listed - See attached sheet
		-	NO
	D.		Does your firm produce its own Aerial Photography and Develop Contour Mapping?
		<u>x</u>	YES Description and Number of Projects: > 200 - in Firm History - 65 Recent Projects Listed
			All ELR WV & OH AML Projects since 2003 have been surveyed with ELR Surveying Staff
		_	NO
	E.		Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)
		X	YES Description and Number of Projects: Ninety-seven (97) Total  Twelve (12) Domestic Waterline Experience (AML Related)  Thirty-five (35) Evaluation of Aquifer Degradation  Seventy (70) Non-AML Domestic Water Lines
			NO
	F.		Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
		X	YES Description and Number of Projects: Seven (7) Projects
		_	NO

13. PERSONAL HISTORY STATEMENT data but keep to essentials	OF PRINCIPALS AND ASSOCIATES 1 )	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE		
Edwar <b>d</b> L. Robinson, President	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 30	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 36	
Brief Explanation of Responsibi	lities			
Mr. Robinson worked in the Righ major utility plans. He has ex land acquisition. He has provipersovide and coordinate Quality	tensive experience in property ded quality control on all pro Control on all design projects	y surveys, property title sea ojects designed by this firm	rches, aerial mapping and	
EDUC <b>AT</b> ION (Degree, Year, Specia	lization)			
Bachelor of Science 1969 Civil Master of Science 1981 Civil	Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)				
American Society of Civil Engin American Council of Engineering National Society of Professiona	Companies	1975 Civil Engineering Registered in West Virginia Professional Licensed Survey	and Kentucky or No.	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES 1	RESPONSIBLE FOR AML PROJECT D	<b>ESIGN</b> (Furnish complete data	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE		
Richard W. Watts, P.G.	YEARS OF AML DESIGN EXPERIENCE: 35	YEARS OF AML RELATED DESIGN EXPERIENCE: 40	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
Brief Explanation of Responsibi Mr. Watts has served as project include project management, fie analysis, specification writing Projects included surface and d	geologist on more than ninety ld reconnaissance, drilling co , quantity determinations, co	oordination, laboratory testi st estimates, pre-bid and pre	ng and analysis, stability -construction meetings.	
EDUCATION (Degree, Year, Specia B.S./1977/Geology M.S./1994/Geography	lization)		,	
MEMBERSHIP IN PROFESSIONAL ORGA Geological Society of America Association of Engineering Geol		REGISTRATION (Type, Year, St Professional Geologist/1992/ Professional Geologist/1993/	Virginia	

data but keep to essential		RESPONSIBLE FOR AML PROJECT I	<b>ESIGN</b> (Furnish complete
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
John Kelly II, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 20	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 15
sampling of coal refuse materi plans. Estimation of quantiti Mr. Kelly has performed layout	ML projects since joining ELR. als, hydrology, hydraulics des es developed estimated cost. and inspection of core drilli slopes for large-scale roadway in Harrison County, WV.	ign of drainage structures, a Mr. Kelly is proficient with ng operations for bridge and	nd development of regrading Auto Cadd. roadway projects. In
B.S. Civil Engineering/1998/WV	<b>v</b> U		
MEMBERSHIP IN PROFESSIONAL ORG	ANIZATIONS	REGISTRATION (Type, Year, St	cate)
		Engineer Intern, WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT I	DESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Timothy B. Cart, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 24
	oilities		
materials, re-establishment of extinguishing burning material Conducted Phase I and Phase II Mr. Cart has extensive experients recently completed water processing the statement of the statement	as mine reclamation projects un every expertation cover, disposal of es and disposal of old mining so Estudies to determine if ground ence in the design and construction projects in Mingo; Kanawha; Put anical engineering calculations	E acid producing materials, and structures. Designed passive adwater had been affected by pation management of waterline tham; and Cabell counties.	nd developing methods for AMD treatment systems. ore-law mining. extension projects. Mr. Cart
Mr. Cart has completed numerous materials, re-establishment of extinguishing burning material Conducted Phase I and Phase II Mr. Cart has extensive experients recently completed water part has recently completed geotech	is mine reclamation projects un vegetation cover, disposal of s and disposal of old mining s Studies to determine if ground ence in the design and construct projects in Mingo; Kanawha; Put anical engineering calculations	E acid producing materials, and structures. Designed passive adwater had been affected by pation management of waterline tham; and Cabell counties.	nd developing methods for AMD treatment systems. ore-law mining. extension projects. Mr. Cart
Mr. Cart has completed numerous materials, re-establishment of extinguishing burning material Conducted Phase I and Phase II Mr. Cart has extensive experients recently completed water pmr. Cart has performed geotechembankments.	s mine reclamation projects un vegetation cover, disposal of s and disposal of old mining s Studies to determine if ground ence in the design and construct projects in Mingo; Kanawha; Put anical engineering calculations	E acid producing materials, and structures. Designed passive adwater had been affected by pation management of waterline tham; and Cabell counties.	nd developing methods for AMD treatment systems. ore-law mining. extension projects. Mr. Cart

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data but keep to essentials		RESPONSIBLE FOR AML PROJECT D.	raidm (Edinian complete
The transfer of the control of the c	J		and the second s
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE
Mark McGettigan, P.E.		EXPERIENCE:	DESIGN EXPERIENCE:
	10	10	10
Brief Explanation of Responsibi	lities		
Mr. McGettigan has worked on se sections, estimated and checked Projects designed by E. L. Robi years. Mr. McGettigan also has experie He has also performed various c	quantity calculations. He hnson Engineering Co. He has nce with surveying and equipm	as also served as a field ins been the lead designer on wat ent including; theodolites, l	pector for several waterline erlines over the past five evels, and total stations.
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering Technici	an/Fairmont State/1999		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St	ate)
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES		ESIGN (Furnish complete data
	OF PRINCIPALS AND ASSOCIATES		<b>ESIGN</b> (Furnish complete data
but keep to essentials)		RESPONSIBLE FOR AML PROJECT D	
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)	OF PRINCIPALS AND ASSOCIATES YEARS OF AML DESIGN EXPERIENCE:	RESPONSIBLE FOR AML PROJECT D YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
but keep to essentials) NAME & TITLE (Last, First, Middle	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:	
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)		RESPONSIBLE FOR AML PROJECT D YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Randall L. Lackey, P.E.  Brief Explanation of Responsibing Mr. Lackey has performed hydrau	YEARS OF AML DESIGN EXPERIENCE:  1 lities lics and scour for Ripley Tow	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  10  m Bridge; Tallman Bridge; Mea	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Randall L. Lackey, P.E.  Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri	YEARS OF AML DESIGN EXPERIENCE:  1  lities lics and scour for Ripley Tow. dge; Left Hand Fork Bridge; a	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  10  m Bridge; Tallman Bridge; Meand Blennerhassett Bridge. e; performed girder design and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1 adowbrook Road Bridge; Simpson a analysis; pier design and
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Randall L. Lackey, P.E.  Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass BriMr. Lackey has also performed of analysis; prepared design study	YEARS OF AML DESIGN EXPERIENCE:  1  lities lics and scour for Ripley Tow. dge; Left Hand Fork Bridge; a calculations for deck drainage reports; type, size and loca	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  10  m Bridge; Tallman Bridge; Meand Blennerhassett Bridge. e; performed girder design and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1 adowbrook Road Bridge; Simpson a analysis; pier design and
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Randall L. Lackey, P.E.  Brief Explanation of Responsibin Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bridmr. Lackey has also performed of analysis; prepared design study Highways projects.	YEARS OF AML DESIGN EXPERIENCE:  1  lities lics and scour for Ripley Tow. dge; Left Hand Fork Bridge; a calculations for deck drainage reports; type, size and loca	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  10  m Bridge; Tallman Bridge; Meand Blennerhassett Bridge. e; performed girder design and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1 adowbrook Road Bridge; Simpson a analysis; pier design and
but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Randall L. Lackey, P.E.  Brief Explanation of Responsibin Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bridge, Kermit Bypass Bridge, Lackey has also performed analysis; prepared design study Highways projects.  EDUCATION (Degree, Year, Special Education of Responsibing Mr. Lackey has performed analysis and performed design study Highways projects.	YEARS OF AML DESIGN EXPERIENCE:  1  lities lics and scour for Ripley Tow. dge; Left Hand Fork Bridge; a calculations for deck drainage reports; type, size and loca	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  10  m Bridge; Tallman Bridge; Meand Blennerhassett Bridge. e; performed girder design and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  adowbrook Road Bridge; Simpson analysis; pier design and on many of our Division of

NAME & TITLE (Last, First, Middle	YEARS OF EXPERIENCE			
Int.) J. Todd Garnes	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
Brief Explanation of Responsib	l ilities			
extrusions. He has provided c Mr. Garnes has performed numer mapping, mine research, and de EDUCATION (Degree, Year, Speci A.S. Architectural Design/ 199 A.S. Computer Aided Drafting a MEMBERSHIP IN PROFESSIONAL ORG	ous water feasibility studies, velopment of final reports. alization) 9 nd Design/ 1999		vater sampling and analysis,	
13. PERSONAL HISTORY STATEMENT but keep to essentials) NAME & TITLE (Last, First, Middle	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT I	DESIGN (Furnish complete data	
Int.)				
Thomas Rayburn, P.S.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
		40		
types of coal mining, designed ventilation plans and systems systems.  He has performed slope stabili applications, work with leases by utilizing "state of the art	mine mapping and surveying, for mine drainage and water supple which include precision pressurty analysis and hydrology calculates and land management as well a collects data and develops GI surveying and mapping for lar	prmulated short term and long by systems for underground and are quality surveys and computer culations, provides computer a as reclamation and environmentad/or GPS (Satellite) equipments	d surface mines, designed mine ter simulation of ventilation analysis for mining tal permits.	
Mr. Rayburn has experience in types of coal mining, designed ventilation plans and systems systems.  He has performed slope stabili applications, work with leases By utilizing "state of the art surveys for aerial mapping and Mr. Rayburn has also performed	mine mapping and surveying, for mine drainage and water supple which include precision pressurty analysis and hydrology calculates and land management as well as electronic total stations and collects data and develops GI surveying and mapping for larealization)	prmulated short term and long by systems for underground and are quality surveys and computer culations, provides computer a as reclamation and environmentad/or GPS (Satellite) equipments	d surface mines, designed mine ter simulation of ventilation analysis for mining tal permits.	
Mr. Rayburn has experience in types of coal mining, designed ventilation plans and systems systems.  He has performed slope stabili applications, work with leases By utilizing "state of the art surveys for aerial mapping and Mr. Rayburn has also performed EDUCATION (Degree, Year, Speci	mine mapping and surveying, for mine drainage and water supple which include precision pressurty analysis and hydrology calculates and land management as well as electronic total stations and collects data and develops GI surveying and mapping for large alization)	prmulated short term and long by systems for underground and are quality surveys and computer culations, provides computer a as reclamation and environmentad/or GPS (Satellite) equipments	d surface mines, designed mine ter simulation of ventilation analysis for mining tal permits.  nt, he performs control	

13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	DECDANGIDIE HAD AMI DDAITHON D	
data but keep to essentials	)	KESPONSIBLE FOR AME PROJECT D	<b>ESIGN</b> (Furnish complete
NAME & TITLE (Last, First, Middle	1 t t t t t t t t t t t t t t t t t t t		
Int.)		YEARS OF EXPERIENCE	·
	YEARS OF AMI, DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
James Eric Gwinn, E.I.		EXPERIENCE:	DESIGN EXPERIENCE:
	10	10	11
			<u> </u>
Brief Explanation of Responsibi	lities	<u> </u>	<del></del>
Mr. Gwinn has experience in con	struction layout for waterlin	e projects. He performs calc	ulation and normit
requirements. He has worked on	the Capell County Water Proje	ect and the raw water intako	aracion and permit
Plateau Regional Water Project.	He has performed calculation	ng on warious AMI project	structure for the Fayette
Mr. Gwinn has designed approach	slabs decks and extensive d	otalliam on access 1 builder	
EDUCATION (Degree, Year, Specia	lization)	ecalling on several bridge pr	ojects.
booming (begree, rear, breera	ilzacion)		
B C Civil Engineering/1999/ Wa			
B.S. Civil Engineering/1998/ We	st Virginia Institute of Tech	nology	
MEMDEDCUTD IN DOCECCIONAL ODGA			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St.	ate)
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A CONTROL OF THE PROPERTY OF T			
13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSTRIKE FOR AMI, PROJECT D	COTON (Dynamical gornal at a date
but keep to essentials)		MALOWSTRUE FAK WHIN ENGIRCT N	esign (furnish complete data
NAME & TITLE (Last, First, Middle	or the state of th	The state of the s	
Int.)		YEARS OF EXPERIENCE	
	VENDO OF AM DEGION EXPEDITION		
Workman, Gary A., CADD	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE
WOLKHIAH, GALY A., CADD	2.4	EXPERIENCE:	DESIGN EXPERIENCE:
Senior Technician	24	24	.4
Brief Explanation of Responsibi	lities		
Mr. Workman is responsible for (	CADD design on AML projects. ;	es well as geotechnical soil :	anni lingi a lite ivie di a di
WVDEP/AML projects while employe	ed at Ackenheil and has worke	od on 23 AMT products suit	analysis. He worked on 44
EDUCATION (Degree, Year, Special	lization)	ed on 23 AME projects white a	E. L. Robinson.
Dodiniton (Degree, rear, ppecia	ilzacion,		
Technical School/1987/CADD			
Technical School/198//CADD			
MUMBERGUID IN PROPERTIES			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
		·	,
		WVDOH certifications compact:	on accrecated and concrete
		The second second compaces	ton, aggregates and concrete

13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT DI	SIGN (Furnish complete
data but keep to essentials	)		
NAME & TITLE (Last, First, Middle	The second of th	YEARS OF EXPERIENCE	
Int.)		TEARS OF EXPERTENCE	
Coberly, P.E. , Eric J.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
, 222 91	35	35	15
Brief Explanation of Responsibi	lities		-
Mr. Coberly has performed AML Grackfill, refuse regarding, por participated in the design of or 30 emergency project designs couthe WV AML Program including couthe review of hundreds of addit	tals, mine drainage, subsiden ver 100 such project while wo mpleted in Ohio and West Virg nstruction and design adminis	ce, refuse and mine fire abate rking for WVDEP or at ELR. In inia. Mr. Coberly has served trator as well as the Chief o	ement. Mr. Coberly has acluded in that total is over in various capacities with
EDUCATION (Degree, Year, Specia	lization)		
B.S. Engineering of Mines, 1983 M.S. Engineering of Mines, 1990			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta WV P.E	ate)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Wendell Williams	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 15	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 5
Brief Explanation of Responsibi	lities		
Mr. Williams has been employed experience. Mr. Williams has w aspect of the process including editing and the submittal of fi	with ELR since 1978, having o orked on over one hundred fif initial site visits, ground	ty WVDEP-AML projects. He has	s been involved with every
EDUCATION (Degree, Year, Specia A.A.S. CAD Technology, West Vir B.A. Board of Regents, West Vir	ginia State University, 1997	, 1999	
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES
Various computer hardware and software including: Microstation, InRoads, AutoCAD, ELRSoil, Microsoft Office applications, Haested, Water CADD, Culvert Master, Flow Master/Civil 3D
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.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
Weston (Williams) Landslide AML Lewis County	WVDEP/AML	Landslide Abatement Design	\$1,220,000	80
Smithers Landslide AML Fayette County	WVDEP/AML	Landslide Abatement Design	\$1,000,000	75
Willis Branch Sewer Extension Wastewater Pax, WV	Town of Pax	Design and Construction Inspection	\$2,291,000	95
West Virginia Great Barrel Company Project Site Development Greenbrier County, WV	West Virginia Great Barrel Company, LLC	Surveying, Design and Construction Inspection	\$1,500,000	95
Route 60 East Sewer Wastewater White Sulphur Springs, W	City of White Sulphur Springs	Design and Construction Inspection	\$1,500,000	40
City of Hinton CSO Abatement Project Phase I Wastewater Hinton, WV	City of Hinton	Testing, Design, Construction Inspection	\$3,500,000	50
lity of Ronceverte Water Distribution System Rehab Water Ronceverte, WV	City of Ronceverte	Design and Construction Inspection	\$2,000,000	50

PROJECT NAME, TYPE AND LOCATION	OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Taeger Regional Sewer Project Wastewater McDowell County PSD	McDowell County PSD	Design and Construction Inspection	\$7,900,000	40
Heaters-Weyerhaeuser Waterline Upgrade Water Braxton County, WV	Flatwoods-Canoe Run PSD	Design and Construction Inspection	\$8,000,000	90
Frank-Bartow Sanitary Sewer Extension Wastewater Pocahontas County, WV	Pocahontas County PSD	Design and Construction Inspection	\$2,766,000	80
Deep Water & Powellton Water Distribution Water Fayette County, WV	Fayette County, WV	Design and Construction Management	\$2,515,000	40
Harts Run Waterline Extension Project Water White Sulphur Springs, WV	City of White Sulphur Springs	Design and Construction Management	\$2,000,000	95
Berwind Water Freatment Plant Improvements Water McDowell County, WV	McDowell County PSD	Design and Construction Management	\$243,000	70
Coalwood Sewer Project Phase I Wastewater McDowell County	McDowell County PSD	Design and Construction Management	\$3,250,000	80

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Snowshoe Regional Wastewater Project Wastewater Pocahontas County, WV	Pocahontas County PSD	Design and Construction Management	\$5,000,000	40
Corridor H Design Build Kerens-Parsons Roadway/Structures Randolph/Tucker County, WV	WVDOT-DOH	Surveying, Design and Construction Management	\$200,000,000	40
Corridor H Design Build US 219-WV 72 Roadway/Structures Randolph/Tucker County, WV	WVDOT-DOH	Surveying, Design and Construction Management	\$176,000,000	0
WV Route 10 Operational Improvements (Con 2) Roadway/Structures Mercer/Wyoming County,	WVDOT-DOH	Surveying, Design and Construction Management	\$17,000,000	30
WV Route 10 Operational Improvements (Con 5) Roadway/Structures Mercer/Wyoming County,	WVDOT-DOH	Surveying, Design and Construction Management	\$33,000,000	50
WV Route 10 Operational Improvements (Con 3) Roadway/Structures Mercer/Wyoming County,	WVDOT-DOH	Surveying, Design and Construction Management	\$31,000,000	50

TOTAL NUMBER OF PROJECTS:

TOTAL ESTIMATED CONSTRUCTION COSTS:

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONS	STRUCTION COST
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
					<u>.                                    </u>
				<u> </u>	

17. COMPLETED WORK WITHIN LAS	T 5 YEARS ON WHICH YOUR FIRM WA	S THE DESIGNATED ENGINEER OF RECORD	)	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Route 18 South-Snowbird Road Waterline Extension Water Doddridge County, WV	Doddridge County PSD	969,500	2019	Yes
Cheat Mountain Water System Acquisition Water Pocahontas County, WV	Pocahontas County PSD	\$2,109,000	2018	Yes
Airport-Ameagle Water Project Water Raleigh County, WV	Raleigh County PSD	\$5,100,000	2016	Yes
Blue Knob Waterline Extension Project Water Clay County, WV	Clay Municipal Water Works	\$2,321,000	2019	Yes
City of Salem Sanitary Sewer Evaluation Survey Wastewater Salem, WV	City of Salem	\$96,000	2016	Yes
Emergency Intake Construction Project Water Mingo County, WV	Mingo County PSD	\$500,000	2018	Yes
Besoco-Pickshin Water Extension Project Water Raleigh County, WV	Raleigh County PSD	\$369,939	2019	Yes
Kenova Downtown School Waterline Improvements Project Water Kenova, WV	City of Kenova	\$1,961,000	2018	Yes

17. COMPLETED WORK WITHIN LA	ST 5 YEARS ON WHICH YOUR FIRM WA	S THE DESIGNATED ENGINEER OF RECOR	D	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Cheat Mountain Water Post Acquisition Project Water Pocahontas County, WV	Pocahontas County PSD	\$2,300,000	2019	Yes
Scott Road-Findley Road Waterline Extension Water Randolph County, WV	Norton Harding Jimtown PSD	\$1,300,000	2016	Yes
Otsego/Pierpoint/Maben Waterline Extension Water Wyoming County, WV	Eastern Wyoming PSD	\$9,800,000	2018	Yes
Covel Waterline Extension Project Water Wyoming County, WV	Eastern Wyoming PSD	\$5,600,000	2016	Yes
Barkers Ridge Basin Waterline Extension Ph 1 Water Wyoming County, WV	Eastern Wyoming PSD	\$5,600,000	2017	Yes
Mozart Sanitary Sewer Project Wastewater Marshall County, WV	Marshall County Sewerage District	\$9,500,000	2019	Yes
Green Valley Glenwood PSD Water System Improvements Water Mercer County, WV	Green Valley Glenwood PSD	\$15,711,000	2019	Yes
Cow Creek Waterline Replacement Project Water Putnam County, WV	Putnam PSD	\$500,000	2018	Yes

17. COMPLETED WORK WITHIN LAS	T 5 YEARS ON WHICH YOUR FIRM W.	AS THE DESIGNATED ENGINEER OF RECORD	D	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Maryland Consol Shaft AML Frostburg, MD	Maryland AML	\$200,000	2017	Yes
Craigmoor (Strader) Landslide Emergency AML Randolph County, WV	WVDEP-AML	\$400,000	2017	Yes
Sauls Run (Bennett) Landslide AML Lewis County, WV	WVDEP-AML	\$500,000	2017	Yes
Shaffer Investigation AML Harrison County, WV	WVDEP-AML	\$50,000	2017	Yes
West Milford (Chapman) Landslide AML Harrison County, WV	WVDEP-AMI,	\$1,000,000	2019	Yes
Roderfield (Simpson) Landslide AML McDowell County, WV	WVDEP-AML	\$250,000	2017	Yes
Scotch Hill Mine Fire AML Preston County, WV	WVDEP-AML	\$1,000,000	2019	Yes
Mammoth (Shamblin) Landslide AML Kanawha County, WV	WVDEP-AML	\$500,000	2017	Yes

17. COMPLETED WORK WITHIN LAS	ST 5 YEARS ON WHICH YOUR FIRM W	AS THE DESIGNATED ENGINEER OF RECORD	Ď	· · · · · · · · · · · · · · · · · · ·
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Delbarton (Curry) Landslide AML Mingo County, WV	WVDEP-AML	\$500,000	2019	Yes
Big Creek (Surgoine) Landslide AML Logan County, WV	WVDEP-AML	\$400,000	2019	Yes
Crooked Run (Davis) Landslide AML Harrison County, WV	WVDEP-AML	\$300,000	2017	Yes
Procious (Doughty)Landslide AML Clay County, WV	WVDEP-AML	\$350,000	2017	Yes
Rivesville (Parker) Landslide AML Marion County, WV	WVDEP-AML	\$400,000	2018	Yes
Bridgeport (Ridgeway) Landslide AML Harrison County, WV	WVDEP-AML	\$900,000	2019	Yes
North Matewan (Ross) Landslide AML Mingo County, WV	WVDEP-AML	\$500,000	2019	Yes
Summerlee Refuse Phase II AML Fayette County, WV	WVDEP-AML	\$900,000	2019	Yes

OF WORK FOR WHI	VITHIN LAST 5 YEARS ON WHI ICH YOUR FIRM WAS RESPONSI	CH YOUR FIRM HAS BEEN A SUB-COM	ISULTANT '	TO OTHER FIRMS	(INDICATE PHASE
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 like this space to	provide any additional	nformation or description of re			

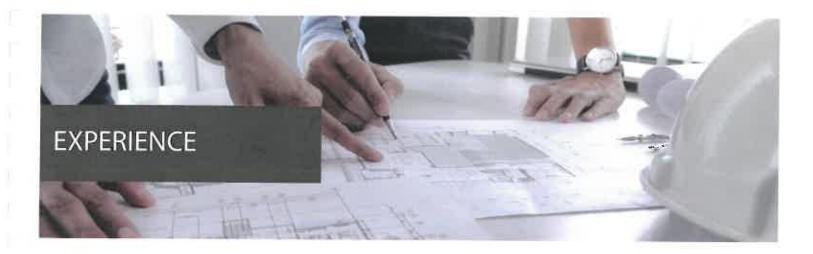
<sup>19.</sup> Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

	mapping and construction monitoring services in a t	imely and cost-efficient manne	r. Our business plan relies
_	heavily on the work offered by the WVDEP/AML progra	m.	
20.	The foregoing is a statement of facts.		
	$\mathcal{L}_{\Lambda}$		
Sign	ature:Title:	PROJECT MANAGER	Date:

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

November 26, 2019

E. L. Robinson Engineering Co. is committed to the WVDEP/AML program to provide professional design, surveying and



## Maryland Shallmar Landslide Emergency

Project Location: Garrett County, Maryland Completion Date: September 2018

Client: Maryland Department of the Environment Project Description: Landslide Abatement Design

## Maryland Scenic Railroad Landslide

Project Location: Frostburg, Maryland Completion Date: August 2016

Client: Maryland Department of the Environment Project Description: Landslide Abatement Design

#### Red Warrior Gob & Slide

Project Location: Kanawha County, West Virginia

Completion Date: June 2015 Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying, drilling and design for a potential blowout area. Designed horizontal bore for dewatering.

#### North Matewan (Akers) Landslide

Project Location: Mingo County, West Virginia

Completion Date: June 2013

Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying, drilling and emergency design for stabilizing landslide.



### Branchland (Blankenship) Landslide

Project Location: Lincoln County, West Virginia

Completion Date: May 2014

Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying, drilling and emergency design for stabilizing landslide.

#### Coburns Creek Landslide

Project Location: Preston County, West Virginia

Completion Date: May 2014

Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and emergency design for stabilizing landslide.

#### Sauls Run Landslide

Project Location: Lewis County, West Virginia

Completion Date: May 2015

Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying and emergency design for stabilizing landslide.

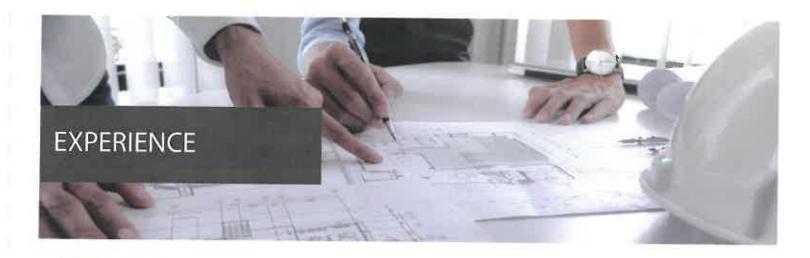
#### Missouri Fork Landslide

Project Location: Boone County, West Virginia

Completion Date: May 2015

Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying and emergency design for stabilizing landslide.



# Worthington (Hess) Landslide

Project Location: Marion County, West Virginia

Completion Date: May 2015

Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and emergency design for mine blowout and landslide abatement.

#### Copen Road Landslide

Project Location: Braxton County, West Virginia

Completion Date: July 2015

Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and emergency design for stabilizing landslide.

### Dans Branch (Dillon) Landslide

Project Location: Kanawha County, West Virginia

Completion Date: June 2015

Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying, drilling and design for a potential blowout area. Designed horizontal bore for dewatering.

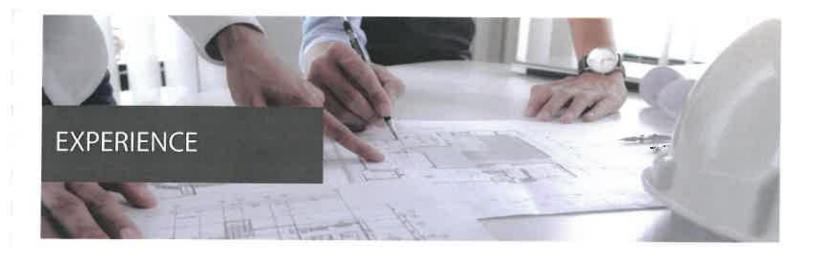
# Pendleton Creek Highwall

Project Location: Tucker County, West Virginia

Completion Date: September, 2018

Client: WVDEP-AML

Project Description: Highwall Backfill



### Maryland Barton Mine Pool

Project Location: Allegany County, Maryland

Completion Date: June 2018

Client: Maryland Department of the Environment Project Description: Mine Pool Evaluation and Design

### Glen Alum Complex

Project Location: Mingo County, West Virginia

Completion Date: September 2014 Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying and design for large refuse area and upgrading of surface drainage.

### Carson One Special Reclamation Project

Project Location: Upshur County, West Virginia

Completion Date: June 2015

Client: WVDEP-Special Reclamation, Philippi, WV

Project Description: Performed surveying, drilling and design for regrading refuse, sealing mine shafts and slopes and upgrading drainage

structures.

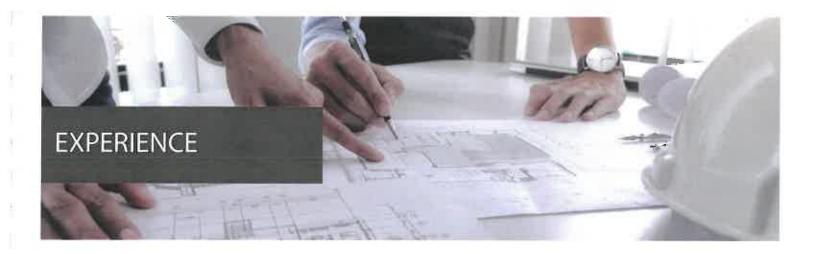
### Vickers Branch (Butcher) Drainage

Project Location: Logan County, West Virginia

Completion Date: 2013

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling, design for mine seals and mine drainage control.



### Sugarcamp Run Burning Refuse Phase II

Project Location: Nicholas County, West Virginia

Completion Date: 2013

Client: WVDEP-AML, Oak Hill, WV

Project Description: Performed site survey, drilling and prepared burning refuse abatement design.

#### Craigmoor (Strader) Landslide Emergency

Project Location: Harrison County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design

## Maryland G&S Landslide Study

Project Location: Kitzmiller, Maryland

Completion Date: 2019 Client: Maryland AML

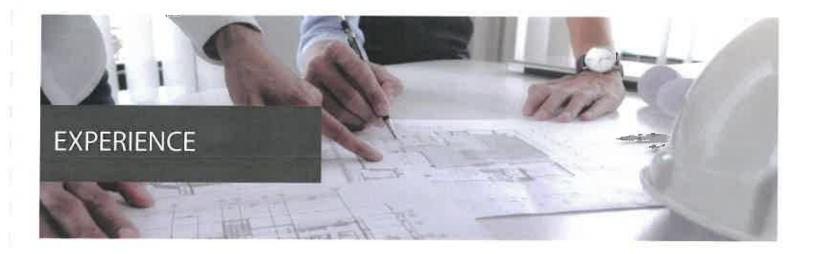
Project Description: Landslide causation study

#### Sauls Run (Bennett) Landslide

Project Location: Lewis County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design



### West Milford (Chapman) Landslide

Project Location: Harrison County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Landslide abatement design

# Roderfield (Simpson) Landslide

Project Location: McDowell County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design

#### Scotch Hill Mine Fire

Project Location: Preston County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Mine fire abatement design

#### Mammoth (Shamblin) Landslide

Project Location: Kanawha County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design



### Delbarton (Curry) Landslide

Project Location: Mingo County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Landslide abatement design

### Big Creek (Surgoine) Landslide

Project Location: Logan County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Landslide abatement design

### Crooked Run (Davis) Landslide

Project Location: Harrison County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design

#### Procious (Doughty) Landslide

Project Location: Clay County, West Virginia

Completion Date: 2017 Client: WVDEP-AML

Project Description: Landslide abatement design



### Rivesville (Parker) Landslide

Project Location: Marion County, West Virginia

Completion Date: 2018 Client: WVDEP-AML

Project Description: Landslide abatement design

# Bridgeport (Ridgeway) Landslide

Project Location: Harrison County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Landslide abatement design

### North Matewan (Ross) Landslide

Project Location: Mingo County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

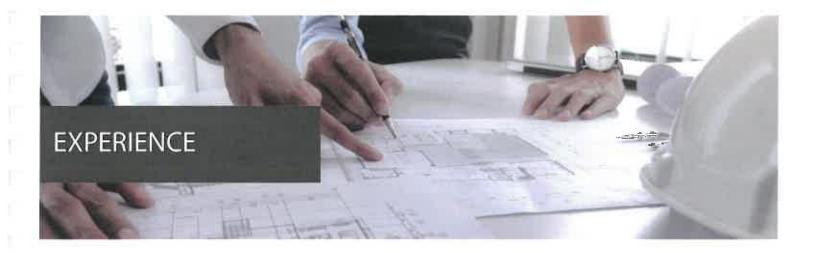
Project Description: Landslide abatement design

#### Summerlee Refuse Phase II

Project Location: Fayette County, West Virginia

Completion Date: 2019 Client: WVDEP-AML

Project Description: Refuse and drainage design



### Weston (Williams) Landslide

Project Location: Lewis County, West Virginia

Completion Date: Current Client: WVDEP-AML

Project Description: Landslide abatement design

#### Smithers Landslide

Project Location: Fayette County, West Virginia

Completion Date: Current Client: WVDEP-AML

Project Description: Landslide abatement design

### Abney Refuse Pile

Project Location: Raleigh County, West Virginia

Completion Date: 2011-2013 Client: WVDEP-AML, Oak Hill, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for refuse regrading, mine seals, and drainage.

### Cartright Branch Refuse Pile

Project Location: Logan County, West Virginia

Completion Date: 2011-2012

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling, design for refuse regrading and mine drainage control.



### Milam Ridge

Project Location: Wyoming County, West Virginia

Completion Date: December 2012 Client: WVDEP-AML, Charleston, WV

Project Description: Performed surveying, drilling and design for numerous mine portals.

#### Squires Creek (Moats) Portal and Refuse

Project Location: Preston County, West Virginia

Completion Date: December 2014 Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and design of refuse area and portals.

#### Preston Energy/Rockville/Viking Coal Special Reclamation

Project Location: Preston County, West Virginia

Completion Date: October 2015

Client: WVDEP-Special Reclamation, Philippi, WV

Project Description: Performed surveying and design for design of reclamation of portals and piping system to convey mine water to treatment

plant.

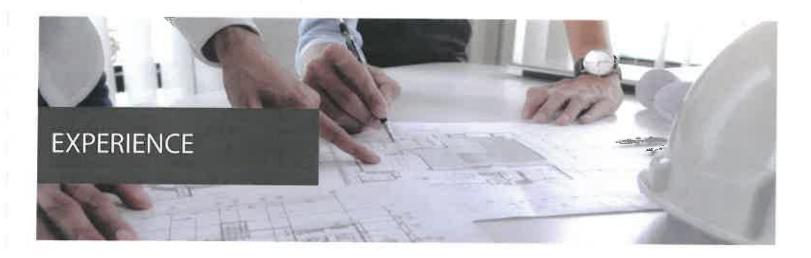
### McGraws Vertical Opening

Project Location: Wyoming County, West Virginia

Completion Date: July 2013

Client: WVDEP-AML, Charleston, WV

Project Description: Performed emergency design for mine shaft cap.



### New Cumberland Mine Blowout

Project Location: Hancock County, West Virginia

Completion Date: June 2013 Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and design for mine blowout abatement.

### Fairview Mine Shaft

Project Location: Marion County, West Virginia

Completion Date: October 2013 Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed emergency design for mine shaft cap.

### Whitehall Mine Fire

Project Location: Marion County, West Virginia

Completion Date: October 2013 Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and design for extinguishment of mine fire.

### Lynch Run Mine Blowout

Project Location: Gilmer County, West Virginia

Completion Date: May 2015

Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed surveying, drilling and emergency design for mine blowout and landslide abatement.



### Marsh Run Portals

Project Location: Braxton County, West Virginia

Completion Date: 2013

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling and design for mine seals and regrading.

### Donnie Thorn Highwall

Project Location: Preston County, West Virginia

Completion Date: 2013

Client: WVDEP-AML, Bridgeport, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for refuse regrading, mine seals, and drainage.

### Glen Rogers Emergency

Project Location: Wyoming County, West Virginia

Completion Date: 2012

Client: WVDEP-AML, Charleston, WV

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

### Morgan #46 Highwall

Project Location: Preston County, West Virginia

Completion Date: 2013

Client: WVDEP-AML, Bridgeport, WV

Project Description: Performed survey and design for refuse and spoil regrading and drainage control.



### Thorpe Refuse Pile

Project Location: McDowell County, West Virginia

Completion Date: 2011-2012 Client: WVDEP-AML, Oak Hill, WV

Project Description: Performed survey, drilling, design for refuse and spoil regrading and mine drainage control.

## Shinnston Lumberport Subsidence

Project Location: Harrison County, West Virginia

Completion Date: 2010-2012 Client: WVDEP-AML, Philippi, WV

Project Description: Performed site survey, drilling and prepared subsidence abatement design.

### Newtown (Kinder) Portals Design

Project Location: Mingo County, West Virginia

Completion Date: 2010-2012 Client: WVDEP-AML, Charleston, WV

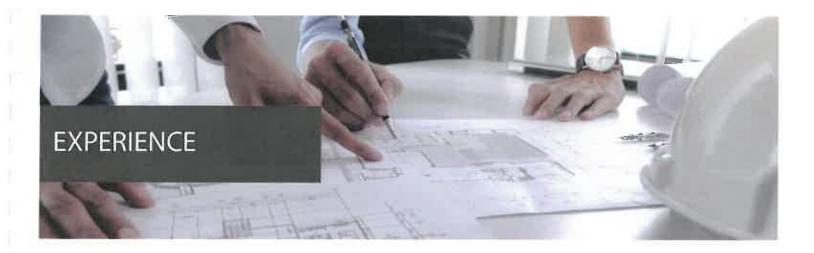
Project Description: Performed site survey, and prepared design for portals reclamation and drainage abatement design.

### Gordon "C" Refuse Pile

Project Location: Boone County, West Virginia

Completion Date: 2010-2012 Client: WVDEP-AML, Oak Hill, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and refuse reclamation.



### **Keaton Branch Complex**

Project Location: Raleigh County, West Virginia

Completion Date: 2010-2011 Client: WVDEP-AML, Oak Hill, WV

Project Description: Performed survey, drilling, design for refuse, regrading and mine drainage control.

### **Dunloup Creek Complex**

Project Location: Raleigh County, West Virginia

Completion Date: 2009-2011 Client: WVDEP-AML, Oak Hill, WV

Project Description: Performed survey, drilling, design for refuse and spoil regrading and mine drainage control.

### Brownton (McCord) Landslide

Project Location: Barbour County, West Virginia

Completion Date: 2009-2011 Client: WVDEP-AML, Philippi, WV

Project Description: Performed site survey, drilling and prepared landslide abatement design.

### Keystone (Avery) Landslide Portal

Project Location: McDowell County, West Virginia

Completion Date: 2009-2011 Client: WVDEP-AML, Charleston, WV

Project Description: Performed site survey and prepared landslide abatement design, portals reclamation, and drainage control.



### Dan's Branch (Pennington) Landslide Emergency

Project Location: Mingo County, West Virginia

Completion Date: 2011

Client: WVDEP-AML, Charleston, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for landslide reclamation.

### East Bank (Willis) Mine Blowout

Project Location: Kanawha County, West Virginia

Completion Date: 2009

Client: WVDEP-AML, Charleston, WV

Project Description: Field surveying and mapping, design work for mine seal and drainage control.

### Island Creek #18 Mine Complex

Project Location: Logan County, West Virginia

Completion Date: 2009-2011 Client: WVDEP-AML, Oak Hill, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and refuse reclamation.

### Jacob's Fork Complex

Project Location: Boone County, West Virginia

Completion Date: 2008-2009

Client: WVDEP-AML, Charleston, WV

Project Description: Field surveying and mapping, subsurface investigation, design work for mine seals, drainage, and reclamation.



### Gilmer B Site 3.8

Project Location: Gilmer County, West Virginia

Completion Date: 2008

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling, design for refuse and spoil regarding and mine drainage control.

### Rhodell Refuse & Portals

Project Location: Wyoming County, West Virginia

Completion Date: 2008

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling, design for refuse and spoil regarding and mine drainage control.

### Gouge Landslide Emergency

Project Location: Scottown, Ohio

Completion Date: 2007

Client: ODNR-AML, Columbus, OH

Project Description: Performed site survey, drilling and prepared landslide abatement design.

### Rodgers Subsidence Emergency

Project Location: Logan County, West Virginia

Completion Date: 2011-2012

Client: WVDEP-AML, Charleston, WV

Project Description: Performed survey, drilling, design for refuse regrading and mine drainage control.



### McAdams Subsidence Emergency

Project Location: Stark County, Ohio

Completion Date: 2006

Client: ODNR-AML, Columbus, OH

Project Description: Performed investigation and prepared report of findings.

### Athens Rt. 13 Refuse Fire Emergency

Project Location: Athens County, Ohio

Completion Date: 2006

Client: ODNR-AML, Columbus, OH

Project Description: Performed site survey, prepared abatement design and monitored on site construction for fire extinguishment.

### **Brown Landslide Emergency**

Project Location: Rayland, OH Completion Date: 2007

Client: ODNR-AML, Columbus, OH

Project Description: Performed site survey and prepared landslide abatement design.

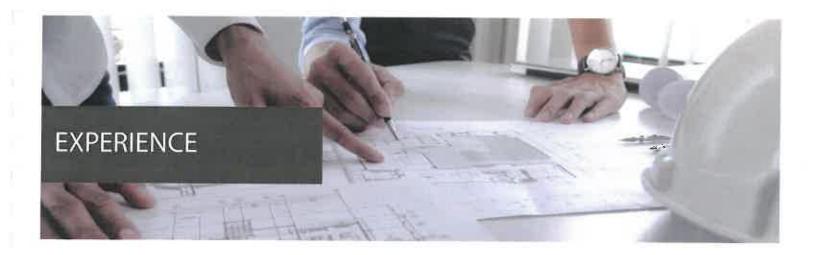
### Toney Fork Landslide Emergency

Project Location: Boone County, West Virginia

Completion Date: 2006

Client: WVDEP-AML, Charleston, WV

Project Description: Performed site survey, drilling and prepared plans and specifications to stabilize an emergency landslide area.



# Lavender Refuse Fire Emergency

Project Location: Meigs County, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

Project Description: Performed abatement plan and monitored construction.

### Goetz Subsidence Emergency

Project Location: Columbiana County, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

Project Description: Performed investigation and prepared report of findings.

### Cox Refuse Fire Emergency

Project Location: Gallia County, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

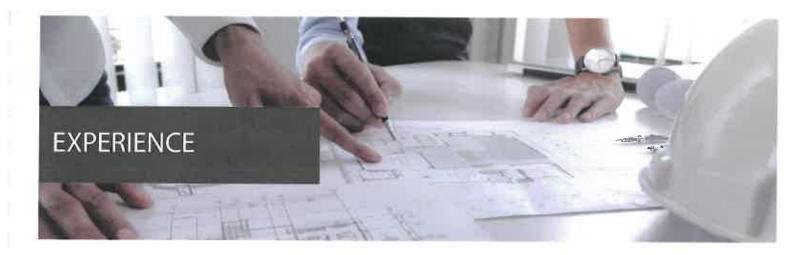
Project Description: Performed abatement design for fire extinguishment.

### North Matewan (Sipple Drainage)

Project Location: Mingo County, West Virginia

Completion Date: 2005 Client: WVDEP-AML

Project Description: Performed surveying, drilling and design for drainage project abatement.



### Phalen Landslide Emergency

Project Location: Martins Ferry, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

Project Description: Performed site surveying and landslide abatement design.

### Adkins Landslide Emergency

Project Location: Gallia County, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

Project Description: Performed surveying, drilling, landslide abatement and construction monitoring.

### Baisden Subsidence Emergency

Project Location: Jackson County, Ohio

Completion Date: 2005

Client: ODNR-AML, Columbus, OH

Project Description: Performed drilling to develop subsidence abatement solutions.

### Treadway Landslide Emergency

Project Location: Rayland, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed site surveying, drilling and landslide abatement design.



### Big Creek "C" Refuse

Project Location: Logan County, West Virginia

Completion Date: 2004 Client: WVDEP-AML

Project Description: Performed surveying and drilling for design.

### Imboden Landslide Emergency

Project Location: Rutland, Ohio Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed drilling and surveying to develop landslide abatement solutions and cost estimates.

### Parsons Landslide Emergency

Project Location: New Philadelphia, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed site review and report concerning landslides relation to mining and potential solutions.

### Jefferson County Road 26 Landslide Emergency

Project Location: Weinterville, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed surveying, drilling and prepared plans and specifications to stabilize and emergency landslide area.



### Charleston Romeo Landslide

Project Location: Kanawha County, West Virginia

Completion Date: 2004 Client: WVDEP-AML

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

### Titus Road Landslide Emergency

Project Location: Rutland, Ohio Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed surveying, drilling and prepared plans and specifications to stabilize and emergency landslide area.

### Lewis Landslide Emergency

Project Location: Pomeroy, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Performed surveying, drilling, prepared plans and specifications to stabilize an emergency landslide area, and provided

construction monitoring.

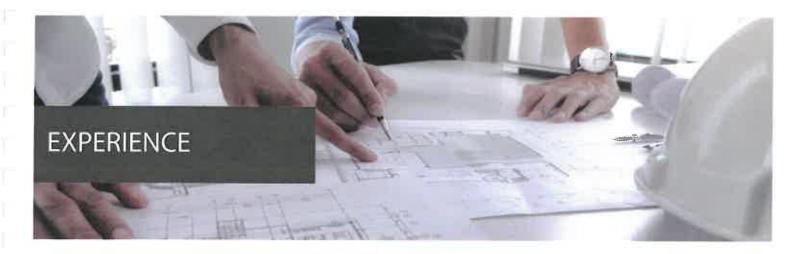
### Roush Landslide Emergency

Project Location: Pomeroy, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Prepared plans and specifications to stabilize an emergency landslide area.



### Moran Subsidence

Project Location: Clinton, Ohio Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Prepared plans and specifications to stabilize an emergency subsidence area.

### Ron Bobar Subsidence

Project Location: Flushing, Ohio

Completion Date: 2004

Client: ODNR-AML, Columbus, OH

Project Description: Investigation and report of an emergency subsidence area.

### Gooney Otter Refuse

Project Location: Wyoming County, West Virginia

Completion Date: 2004 Client: WVDEP-AML

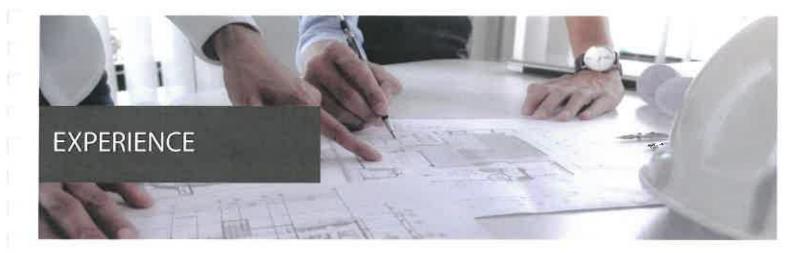
Project Description: Performed surveying, drilling and site design for refuse regarding project.

# Chapmanville (Gorby) Mine Blowout

Project Location: Logan County, West Virginia

Completion Date: 2003 Client: WVDEP-AML

Project Description: Performed surveying, drilling and design of landslide regrading and retaining wall design.



### Tuppers Creek (Layne) Landslide

Project Location: Kanawha County, West Virginia

Completion Date: 2003 Client: WVDEP-AML

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

### Maidsville (Tennant) Landslide

Project Location: Monongalia County, West Virginia

Completion Date: 2003 Client: WVDEP-AML

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

### Whittington Hill (Walker Landslide)

Project Location: Kanawha County, West Virginia

Completion Date: 2002 Client: WVDEP-AML

Project Description: Performed surveying, drilling and design for an emergency landslide.

### Minden Refuse Pile Reclamation Project

Project Location: Fayette County, West Virginia

Completion Date: 2001 Client: WVDEP-AML

Project Description: Performed surveying and design for emergency project to upgrade drainage control.



### Jeffrey Mine Complex Reclamation Project

Project Location: Boone County, West Virginia

Completion Date: 2001 Client: WVDEP-AML

Project Description: Performed surveying and design regrading refuse.

### Hot Coal Reclamation Project

Project Location: Raleigh County, West Virginia

Completion Date: 2000 Client: WVDEP-AML

Project Description: Performed surveying and design for regrading refuse.

### Bull Run #27

Project Location: Preston County, West Virginia

Completion Date: 2000 Client: WVDEP-AML

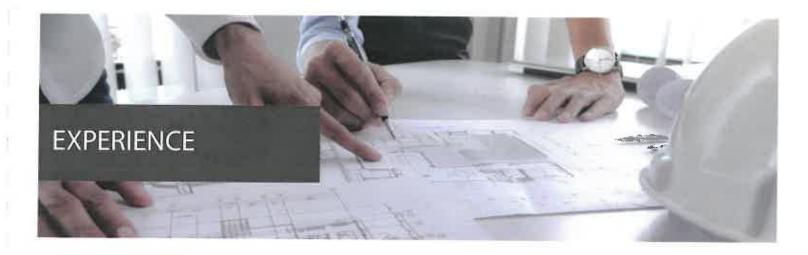
Project Description: Performed surveying and design for regrading refuse.

### Rich Fork (Thaxton) Landslide

Project Location: Kanawha County, West Virginia

Completion Date: 2003 Client: WVDEP-AML

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



### Riffe Branch Impoundment

Project Location: Fayette County, West Virginia

Completion Date: 2000 Client: WVDEP-AML

Project Description: Performed surveying and design for regrading refuse and drainage control.

### Ven's Run Landslide

Project Location: Harrison County, West Virginia

Completion Date: 1999 Client: WVDEP-AML

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

### Bull Run #35

Project Location: Preston County, West Virginia

Completion Date: 1999 Client: WVDEP-AML

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

### Securro Mine Drainage Site 1 & 2

Project Location: Fairmont, West Virginia

Completion Date: 1998 Client: WVDEP-AML

Project Description: Performed surveying and design for mine drainage system.



#### Geotechnical/Soil Analysis

Performed geotechnical analysis on 135 projects over the past 20 years. These project involved slope stability, mine pool locations and mine subsidence.

US 35 Design Build: Utilized provided core boring data, coordinated drilling of over 100 additional core borings to design 7.5 miles of 4 lane highway in Putnam County, West Virginia. This included the foundation designs of bridge piers and abutments for 2 bridges carrying the 4 lane roadway over a major stream and an existing roadway.

WVDOT-District 2 Mingo County: Solicited core borings, provided field personnel to log core samples, designed 4 pile retaining walls for landslides effecting existing roadways. Including analyzing piling, lagging and other aspects of each wall. Developed plans with profile, traffic control, estimated quantities, drainage controls, etc. in a bid package suitable for WVDOT to solicit bids.

WVDOT-District 2 Logan County: Solicited core borings, provided field personnel to log core samples, designed 5 pile retaining walls for landslides effecting existing roadways. Including analyzing piling, lagging and other aspects of each wall. Developed plans with profile, traffic control, estimated quantities, drainage controls, etc. in a bid package suitable for WVDOT to solicit bids.

WVDOT-District 2 Lincoln County: Solicited core borings, provided field personnel to log core samples, designed 14 pile retaining walls for landslides effecting existing roadways. Including analyzing piling, lagging and other aspects of each wall. Developed plans with profile, traffic control, estimated quantities, drainage controls, etc. in a bid package suitable for WVDOT to solicit bids.

WVDOT Cottageville Bridge: Solicited bids from drilling contractors, coordinated drilling for a bridge replacement in Jackson and Mason County, West Virginia. The geotechnical testing performed consisted of five hydrometer analysis and rock core compression testing. The design included pile foundations for the piers and abutments, sonar analysis of the creek channel as it relates to the soil materials and slope stability analysis for each abutment.

WVDEP-AML Dans Branch: Performed geotechnical investigation of an AML emergency landslide. Performed core borings and geotechnical testing of soil samples obtained from the borings. Designed pile retaining wall to support embankment and existing home below pre-law mining.

Dempsey Bottom Beam Spam: The subsurface investigation consisted of 6 test borings, all of which encountered bedrock. Four of the core borings were located at the site of the two proposed abutments, while the other two were drilled at the site of the proposed retaining wall. Hollow stem augers were utilized to drill the holes through the overburden. The Standard Penetration Test method utilizing split-spoon sampler was also used to sample the overburden soils.

Guyandotte River Bridge: ELR performed geotechnical design including future mine subsidence remediation for this bridge. During the design process a check of the mining records determined the presence of a coal seam in the vicinity of the bridge. After review of the mine maps and additional drilling, presence of mine voids was confirmed. Using the depths from the ground surface to the mine level a limit of grout protection was developed. The grouting program developed included some down hole camera work and confirmation borings to confirm the grout effectiveness. Grouting of the mine void eliminated the possibility of future mine subsidence in the vicinity of the substructure and allowed the bridge to be supported on conventional caissons.



#### Hydraulics/Hydrology

E.L. Robinson has worked with various clients, both private firms and public entities, in developing hydrology and hydraulics studies to determine effects that developments would have on floodplains and how they might adversely affect the surrounding communities.

- East Fork Bridge
- South Cuba Bridge
- WV 10 Operational Improvements

Jesse Bridge

Herndon Slab Bridge

Car Wash Bridge

Matoaka Bridge No. 1

Matoaka Bridge No 2

Ssg Gene Arden Vance Jr Memorial Bridge

Toney Fork Slab Bridge

Road Branch Bridge

Beech Branch Bridge

Giatto Overpass Bridge

Hiawatha Overpass Bridge

U.S. Army Sp4 Jackie (Hearn) Mcmillion Memorial Bridge

- Blue Creek Bridge
- Marsh Fork Bridge
- Junior Bridge
- Corridor H Kerens to Parsons

Baldlick Fork Bridge (Bridge #1)

Panther Run Bridge (Bridge #2)

South Branch of Haddix Run Bridge (Bridge #3)

Unnamed Trib of Haddix Run Bridge (Bridge #4)

Bridge over Haddix Run and US 219 (Bridge #5)

- Cherry Tree Bridge
- Laurel Creek Girder Bridge



#### Aerial Photography/Mapping

E.L. Robinson Engineering 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, ELR 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



#### Aerial Photography/Mapping

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

2003-Present

All ELR AML Projects WV and OH

2002

Community of Preston

**Rhodell Refuse Portals** 

Vivian Refuse Maintenance

Glen Rogers Waterline

Sundial (Hatfield) Refuse Pile

Jacob Fork Complex

Thomas (NE) Subsidence

2001

**Bartley Mine Dump** 

**Beckley Soccer Complex** 

Holden Portals/Structures

Jeffrey Complex

Minden Refuse Drainage

Roach Branch Refuse

Sauls Run Strip

Stonecoal Creek Complex

Waterline Photography

Weaver Portals/Mine Drain

2000

Micajah Refuse Pile

McAlphin Eroding Dump

Flemington Portals/Drainage

Minden "C" Refuse Pile

**National Mine Complex** 

Linger Clogged Stream

**Hotcoal Mine Dump** 

Layton Mine Drainage

Quintain Development

1999

Bull Run #27

8th Street-Warwood Avenue

Mabie Highwall

Coal Branch

Matoaka Subsidence

Elkins Coal

**Springton Refuse** 

Veins Run

1998

Bull Run #35

Fickey Run

1997

**Browns Creek** 

Marrowbone

Matewan

Pigeon Creek

# EDWARD ROBINSON, P.E., P.S.

### **President**



Education M.S. Civil Engineering, University of West Virginia Graduate Studies, 1981

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

Registrations
Registered Professional
Engineer in West Virginia,
Ohio, Kentucky, Virginia and
North Carolina

Registered Professional Surveyor in West Virginia Professional Experience

In 1978, Mr. Robinson founded E.L. Robinson Engineering with only four employees. Under his leadership, ELR has grown exponentially to what it is today – a highly diversified engineering and surveying firm with 170 full time, experienced professionals and support personnel. ELR, which was a small surveying firm at its inception, now offers a complete range of services, including construction management, transportation engineering, utilities engineering, geotechnical engineering, surveying and technology, land planning and landscape architecture, bridge and structural engineering, and site development.

Mr. Robinson is committed to quality engineering services and complete customer service. He recognizes the importance of every client he has interacted with and every staff member he has invested in. From holding sole ownership, Mr. Robinson converted ELR to an employee owned company through the Employee Stock Ownership Plan (ESOP).

Professional Memberships National Society of Professional Engineers

American Society of Civil Engineers

Offices Held

Current Chairman of WVUIT Advisory Board

President of West Virginia Council of Consulting Engineers

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** 

Alumnus of the Year – West Virginia University Institute of Technology, 1992

Engineer of the Year - West Virginia Society of Professional Engineers, 1997

Engineer of the Year - American Society of Civil Engineers, 1998

National Entrepreneur of the Year Finalist - Ernst & Young, 2001

Engineering Entrepreneur of the Year - Ernst & Young, 2001

Honorary PhD, Doctor of Science – West Virginia Institute of Technology 2002

West Virginia Section - ASHE - Man of the Year - 2010

# ERIC 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, Ohio, and Maryland

#### Professional Experience

Mr. Coberly has more than 35 years of experience as an infrastructure and mining engineer. He has extensive experience in project planning, funding coordination and design. Mr. Coberly has managed projects with ELR which have involved site development, infrastructure planning, water, sewer, geotechnical analysis, abandoned mine reclamation projects, building construction, active surface mining projects, insurance investigations, providing expert witness services and various post mining land use projects.

Additionally, Mr. Coberly served as the Chief for the West Virginia Department of Environmental Protection Abandoned Mine Lands Division for more than 4 years. In this position he was he was responsible for managing and directing all operations. He has spent his career working to better the State of West Virginia in both the private and public sectors.

- Frank-Bartow Sanitary Sewer Extension
- Heaters-Weyerhaeuser Waterline Upgrade
- City of Bluefield Commercialization Center
- Greenfield Cabinetry Building Expansion
- Scott Findley Road Waterline Extension Project
- Exchange Road Phase I Waterline Extension
- Exchange Road Phase II Waterline Extension
- Putnam Business Park Utility Extension Phase II
- Kenova Downtown School Waterline Improvements
- Prichard Waterline Upgrade
- Route 18 South-Snowbird Road Waterline Extension Project
- Town of Clay Water Storage Tank Replacement
- Poca Belt Press
- Blue Knob Waterline Extension Project
- Harts Run Water Project
- Bergoo Wastewater Collection and Treatment System Project
- Cow Creek Waterline Extension Project
- WVDEP OSR Viking Preston Mining Project
- Over 120 West Virginia Department of Environmental Protection Abandoned Mine Lands reclamation projects

# TIM CART, P.E.

### **Project Engineer**



Education B.S. Civil Engineering, West Virginia University, 1981

Registrations Registered Professional Engineer in West Virginia

Registered Professional Surveyor in West Virginia

#### Professional Experience

Mr. Cart has more than 37 years of experience in providing consulting engineering services. Clients served have included industrial, public and private institutions along with state and federal agencies. He has served as Project Engineer on numerous geotechnical investigations including highways, bridges, industrial sites, buildings and site development projects.

Mr. Cart has served as project manager, project engineer and lead geotechnical investigator on numerous geotechnical projects including highways, bridges, industrial sites, buildings and various developments.

Mr. Cart has designed numerous retaining structures and grading plans to reduce the likelihood of future landslide movement. He has also designed retaining walls including reinforced concrete cantilever walls, mechanically stabilized earth (MSE) walls, sheet pile walls, H-pile and lagging walls. Several of these designs included the use of rock anchors and tiebacks.

Geotechnical reports for highway projects included recommendations for rock cut slopes and fill slopes, as well as types of foundation systems for structures and recommended bearing capacities for deep and shallow foundations. Mr. Cart has made design recommendation for fill construction which focused on fill settlement and recommended methods to accelerate consolidation settlements so that the settlement would occur during the construction activities.

Mr. Cart has served as project engineer on several hundred AML projects for the WVDEP and USOSMRE. These projects include regrading major refuse piles into stable configurations, draining mine portals, stabilization of areas affected by mine subsidence, evaluation of areas for possible effects on structures due to mine subsidence, and the developing of plans and specifications to address landslides which have resulted from mining related activities.

Mr. Cart has also designed numerous bank stabilization projects for river banks throughout the state. These projects incorporated re-grading, rip-rap materials, cantilever and tieback wall designs. He has also performed numerous damage investigations for landslide and blast damage claims for insurance and law firms and has provided testimony in depositions and law suits.

- Lavalette Widening Project
- I-77 Bridges- Surface Drive Overpass Bridges
- Corridor H Kerens to Parsons Design Build
- Tuppers Creek-Pocatalico Bridges
- Corridor H Old Fields to Moorefield
- US 35 Lower Five Mile Creek to Three Mile Creek
- US 35 WV 34 to Buffalo Bridge Design Build
- WVDOH District 2 FEMA Emergency Landslides (35 Projects)
- WVDOH District 1 FEMA Emergency Landslides (9 Projects)

# MARK MCGETTIGAN, P.E.

### **Project Engineer**



Education M.S. Engineering Management/Environmental Engineering, Marshall University, 2007

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

Registrations
Registered Professional
Engineer in West Virginia

#### **Professional Experience**

Mr. McGettigan has more than 21 years of experience in providing consulting engineering services. He has worked on numerous land development and commercial building construction projects where his duties included procuring all necessary permits to designing potable water, sanitary sewer and storm sewer connections to development lots and commercial properties.

Mr. McGettigan has also served as project manager for numerous water and wastewater projects throughout West Virginia. He has secured funding, designed, obtained permitting and managed the construction for numerous water and sanitary sewer projects totaling well over \$60,000,000. Further, he has successfully worked on or managed numerous Phase I and Phase II ground water quality investigations and feasibility studies and reclamation projects for the West Virginia Department of Environmental Protection Abandoned Mine Lands program.

- Twisted Gun Recreational Area Development Water Extension Project
- Mingo County PSD Emergency Intake Construction Project
- Mingo County PSD Beech Creek Water Main Extension Project
- Mingo County PSD Ben Creek Phase I
- · Mingo County PSD Ben Creek Phase II
- Mingo County PSD Marrowbone Waterline Extension Project
- Mingo County PSD Jennies Creek Waterline Extension Project
- Dingess Water Distribution System Extension Phase I
- Dingess Water Distribution System Extension Phase II
- Crocket Miller Fork Waterline Extension Project
- Nestlow Water Project Phase I
- Nestlow Water Project Phase II
- Route 37 Water Extension Project
- Crum PSD Route 152 Phase I Water Project
- Crum PSD Route 152 Phase II Water Project
- Lavalette Water Storage Tank
- WVDNR Pipestem and Beech Fork Campgrounds
- North Landbay Phase I Infrastructure Project
- South Landbay Phase I Infrastructure Project
- Approximately 40 AML project designs including numerous waterline feasibility studies

# RICHARD WATTS, P.G.

### **Project Geologist**



Education M.S. Geography, Marshall University, 1994

B.S. Geology, Marshall University, 1977

Registrations Registered Professional Geologist in Virginia and Kentucky Professional Experience

Mr. Watts has 42 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, abandoned mine land reclamation, forensic damage investigations, hydrogeology and the coal industry.

Mr. Watts' AML experience includes over 100 projects spanning more than 33 years. He has served as both Project Manager and Designer for these projects. Further, he is proficient in field reconnaissance and drilling.

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 high rock cuts for surface mining operations and highways.

His 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.

- WVDEP Carswell
- WVDEP Prenter Road Waterline Feasibility
- WVDEP Jolo/Paynesville/Wolfpen
- WVDEP Swiss Drennan Areas, Gauley River
- WVDEP Coal Mountain Waterline Feasibility
- WVDEP Hanover Waterline Feasibility
- WVDEP Brownton Landslide
- Huntington Mall, Barboursville, WV
- Best Buy, Barboursville, WV
- Fiesta Bravo Restaurant, Barboursville, WV
- McDonalds, Gilbert, WV
- Numerous Cell Phone Towers Cites
- Marshall University Corbly Hall
- WVDOH Five Landslides, Charleston, WV
- WVDOH I-79 Landslide
- WVDEP New River Gorge Landslide

# JOHN KELLY

### **Project Designer**



Education B.S. Civil Engineering, West Virginia University, 1998

#### **Professional Experience**

Mr. Kelly has more than 20 years of experience as an engineer and principal production person for numerous mine reclamation projects in West Virginia, Ohio and Maryland. He has experience specifically in the design of several abandoned mine land reclamation projects. These projects include large refuse pile grading, hydraulic calculations, design of drainage structures, retaining wall design, permitting (including NPDES, USACOE, Highway Department), and construction cost estimates. Mr. Kelly has assisted in the completion of waterline feasibility studies in various areas. Further, he has worked on waterline extensions and sewer collection systems including providing service to many residential as well as industrial customers.

- Dunloup Creek Complex
- Jacobs Fork
- Bull Run #27
- Gilmer B
- Thorpe Refuse
- Milam Ridge Refuse
- Brownton Landslide
- Abney Refuse
- Gordon C Refuse
- West Columbia B
- East Bank Emergency
- Rhodell Refuse
- Lewis Landslide
- Gouge Landslide
- Maryland Shallmar Landslide Emergency
- Maryland Scenic Railroad Landslide
- Red Warrior Gob & Slide
- North Matewan (Akers) Landslide
- Branchland (Blankenship) Landslide
- Coburns Creek Landslide

# **GARY WORKMAN**

### **Project Designer**



Education
Drafting CADD Certificate
Carver Career and Technical
Center, 1986

#### **Professional Experience**

Mr. Workman has more than 31 years of experience as an Auto CAD designer with an emphasis on infrastructure and mine reclamation projects. He has experience specifically in the design of several abandoned mine land reclamation projects. These projects include large refuse pile grading, design of drainage structures, retaining wall design, permitting (including NPDES, USACOE, Highway Department), and construction costestimates. Additionally, Mr. Workman has assisted in the completion of waterline feasibility studies in various areas. Mr. Workman has worked on waterline extensions and sewer collection systems that have provided service to many residential and industrial customers.

- McGraws Shaft
- Dunloup Creek Complex
- Gilmer B
- Glen Rogers Emergency
- Marsh Run
- Milam Ridge Refuse
- Brownton Landslide
- Abney Refuse
- Gordon C Refuse
- West Columbia B
- East Bank Emergency
- Barkers Ridge Water Study
- Fayette Water Studies
- Covel Water Study
- Barkers Ridge Water Project
- Marsh Fork Water Project
- Otsego Water Project
- Big Hearts Creek Water Project
- Covel Water Project
- Gooney Otter
- Otsego Water Study

# **TODD GARNES**

### **Project Designer**



Education
A.A.S. Architectural Drafting
Technology
West Virginia State College,
1999
A.A.S. Computer Aided
Drafting and Design
West Virginia State College,
1999

#### Professional Experience

Mr. Garnes has more than 19 years of experience as a civil draftsman and designer. He is proficient in numerous drafting and mapping software platforms. His proficiency spans multiple areas such as Civil 3D, GIS, construction inspection, waterline planning and design, sanitary sewer planning and design, site development, cathodic protection planning, county-wide planning, infrastructure cataloging, and document preparation.

- Village of Rio Grande Wastewater System Improvements and Wastewater Treatment Plant
- Camp Caesar Infrastructure Improvements Project
- Doddridge County PSD 2015 County Wide Water Study
- Pocahontas County PSD: Cheat Mountain Water Acquisition; Dominion Waterline Extension
- Village of Cadiz Water System Improvements Project
- Bluefield Commercialization Station
- WVDNR North Bend State Park Waterline Extension
- Rahall Transportation Institute Land Use Master Plans Boone, Clay, Fayette, Lincoln, Logan, McDowell, Mercer, Wayne, Wyoming, Raleigh, Upshur, Webster, and Marshall Counties
- Webster County PSD Bergoo Wastewater System and Wastewater Treatment Plant Improvement
- Town of Gilbert: Slabtown, Tamcliff and Paynter Bottom Waterline Extension Project;
   Horsepen, Gilbert Creek and Browning Fork Waterline Extension; River Bend Road Waterline Extension; Upper Gilbert Creek Waterline Extension
- Logan County PSD: Upper Little Harts Creek Waterline Extension; Big Harts Creek Waterline
   Extension; Marsh Fork Waterline Extension; Hidden Valley/Airport Road Waterline Extension;

   Ridgeview Sewer Railroad Permits
- Lincoln EDA Lower Mud River Waterline Extension
- Town of Chapmanville Water Upgrade Project
- City of Charleston Lee Street Sidewalk Enhancements
- King Coal Highway Water and Sewer Project
- Putnam County Business Park Utilities Extension Project
- Norton Harding Jimtown PSD Scott Run/Findley Road Waterline Extension Project

# TOM RAYBURN, P.S.

### Manager of Surveying



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

Registrations Registered Professional Surveyor in West Virginia, Kentucky, North Carolina

#### **Professional Experience**

Mr. Rayburn currently serves as Manager of Surveying for E.L. Robinson Engineering and has more than 30 years of design surveying and construction surveying experience. His 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, have been the Blennerhassett Bridge Project, 11 continuous miles of Corridor H design surveys, GPS Control for the West Virginia Statewide Mapping and Addressing PSD Project, 3D Laser Scan and mapping of the CAMC Parking Garage partial collapse, and 3D Laser Scanning of 164/177 Retaining Wall for Monitoring.

- WVDOH Wellsburg Bridge Project
- WVDOH I-81 Widening Project
- WVDOH I-79 Flatwoods
- WVDOH I-70 Mining Project
- Corridor H Kerens to US 219 Connector
- WVDOH I-70 Mining Project
- WVDOH WV Route 10 Operational Improvements
- Mingo County Redevelopment Wood Park WVDOH Access Road ROW Plans
- Logan County Commission Building Elevator and Stairway Project-Logan, WV
- WVDOH WV Route 10 Operational Improvements
- Chief Logan Recreational Center- Logan, WV
- Forks of Coal Site Development
- Logan County Commission /WVANG C130 Camp Branch Landing Zone
- WVDOH Median Improvement Surveys I-64 and I-77
- Surveys for Huntington Tri-State Airport Improvements
- Huntington Federal Building/USACOE Seven Floor Reconstruction Surveys
- WVDOH / Modjesky and Masters New River Parkway Highway Design Surveys
- Moses Auto Group 5.5 Acre ALTA Survey South Charleston, WV
- Galipolis Ohio Waterfront Survey

# **HEATHER WOODS-SHAFFER**

# **Construction Inspection Manager**



Certifications
West Virginia Division of
Highways Portland Cement
Concrete Technician

West Virginia Division of Highways Portland Cement Concrete Inspector

West Virginia Division of Highways Aggregate Sampling Inspector

West Virginia Division of Highways Compaction Inspector

WV Transportation Engineering Technician Certification Level III

OSHA 10-hour Occupational Safety & Health Training Course

OSHA 30-hour Occupational Safety & Health Training Course in Construction

First Aid/CPR - Adult/AED/ Blood Borne Pathogens Training

Safe Gulf/Safe Land USA

**Professional Experience** 

Mrs. Woods-Shaffer has 27 years experience in all phases of construction projects. Mrs. Woods-Shaffer has mangaged numerous WV highway and bridge projects throughout the state and has extensive knowledge in all aspects of the construction process. For nearly 15 years, she has worked as E.L. Robinson's Construction Inspection Manager/Safety Officer. As the Construction Inspection Manager her duties include the management of all construction inspection operations; estimation, preparation and securing of construction inspection and material testing projects throughout the State of West Virginia; assignment of personnel, preparation of invoices for reimbursement, coordination and communication between field inspectors, designers, contractors and clients; approval of sub contractor and vendor invoices, material and cost tracking; and ensuring that ELR has a core group of inspectors capable of handling all future assignments.

Further, Mrs. Woods-Shaffer serves as ELR's Safety Officer. Her duties include the evaluation and monitoring of safety protocols and guidelines associated with ELR's day to day construction/oil and gas operations; orientation and education of new construction hires regarding ELR's safety policies along with planning and facilitating required annual occupational health and safety training programs for all employees; selecting, ordering and training employees on the appropriate PPE use and care; and conducting accident and incident investigations, along with reporting accident statistics, running OSHA audits and providing corrective action recommendations.

- Corridor H Kerens to US 219 Connector
- 🝴 Junior Bridge, Junior, WV
- Harmon Creek Bridge, Weirton, WV
- Various WVDOH Statewide contracts
- Cottageville T-Beam Bridge, Cottageville, WV
- South Fork Lee Exxon Bridge, Lubeck, WV
- -77 Bridges: Surface Drive Overpass Bridges, Sissonville, WV
- McQuain Brothers Bridge, Clendenin, WV
- US Route 35 Design Build (CR 34 Hurricane Creek), Winfield, WV
- US Route 35 Couch to Little Five Mile, Mason, WV
- Big Tyler Widening Project, Cross Lanes, WV
- Corridor D Ballfield relocation, Parkersburg, WV
- Corridor D Soccer field complex, Parkersburg, WV
- Garden Ground Highwall Phase II, Beckley, WV
- Hamlin Public Service District, Hamlin, WV

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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section		Abandoned Deep Mine Reclamation	Portal/Shaff Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mins/Rofuso 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 Carl, P E	Richard W. Watts, P.G.	Mark McGettigan, P.E.	E.I.	J D Kinder, P E	Gary A. Workman, CADD
Rhodell Refuse & Portals		YES		X.	X_	X	-				Х			1		X	X	M		P		P	P	-	
Gilmer B Sites 3-8	Č	YES YES		X	<del>                                     </del>	X			ļ		X					x	- â	M		-		- P	F	$\dashv$	
Morrisvale/Cameo/Big Horse	Ÿ	TES_	$\vdash$	X	X	_ X	<del></del>		-		X					X	X	М		P	$\neg\dashv$	P	5	-+	$\dashv$
Creek Waterline Feasibility Study	С	YES										×						м		Р		Р	Р		ョ
Camp Creek Waterline Feasibility Study	С	YES										х						м		P	$\dashv$	P	P	$\dashv$	-
Lic⊁ Creek Waterline Feasibility Study Ragland Waterline Feasibility	С	YES										х							T-i	P		P	P	-+	ᅥ
Study  Beech Creek and Ben II	С	YES										x						м	P	Р	-+	P	Р	+	一
Waterline Feasibility Study Dingess Waterline Feasibility	С	YES										х						М		Р	$\neg$	Р	Р	十	一
Siudy Sharon Heights Waterline	С	YES	<u> </u>		<u> </u>	<u> </u>						х						м	Р	Р		Р	P	$\top$	$\dashv$
Feasibility Study Amhestdale Water Feasibility	С	YES		_	<u> </u>							×						М	Р	Р		Р	7	十	$\dashv$
Study Mercer County Commission	C	YES					<u></u>					х						М	P	Р		P	P	$\top$	ᅱ
Denese PSD Waterline Feasibility Study	ć	YES	_		<u> </u>	<b>-</b>						X				-		М	P	P		Р	Р	#	ゴ
New Haven Waterline Feasibility	С	YES										×						М	P	P	-	Р	Р	4	4
Nubbin Ridge/Camp Creek Waterline Feasibility Study	С	YES					_					×						M	P	P		P	P	-+	4
Bramwell Hill Waterline Feasibility Study	С	YES							$\neg \neg$			x			$\vdash \dashv$			м		- -		P P	Р	+	
Coaldale and Coaldale Mountain Waterline Feasibility Study	С	YES								_		х						м	_	Р	-+	P	Р	+	$\dashv$
Jennie Creek Waterline Feasibility Study	С	YES									$\neg \dashv$	×						м	$\dashv$	-	$\dashv$	- P	-+	+	$\dashv$
Beech Creek and Ben Areas Waterline Feasibility Study	С	YES								$\neg \neg$	$\neg \dashv$	×				$\neg \dashv$	$\dashv$	м		P	$\dashv$	- P	P	+	$\dashv$
Blair/Sharples Area Waterline Feasibility Study	С	YE\$										×		$\dashv$		$\dashv$		м	$\dashv$	Ė	$\dashv$	F	P	-+-	$\dashv$
Brown's Creek #10	ç	YES	X	_ X	Х	X	X				×				<del>- x -  </del>	×	×	M	-	P			-+	-	
Bull Run #35 Seccuro Mine Drainage	- c	YES	X	X	X	X	_x				_ <del>X</del>	X		×	<del>- ŷ  </del>	<del>-</del>	<del>- ŷ -</del>	<u>м</u>	$\dashv$	P	$\rightarrow$		P	-+-	
Fickey Run	- <del>c</del> -	YES	- ,	_x	X	X			1	1	X					-^-	<del>-^  </del>	M	$\dashv$	<del> </del>	-		P	+	<b></b> -
Ven's Run	<del></del>	YES YES	X	Х	X	×	×				X	X.		X		_ x	1	М	$\neg$	P	$\neg \dashv$	$\neg$	<del>5  </del>	+	$\dashv$
Bull Run #27	č	YES YES	X	×	X	×	<del></del> -				X						X	M	$=$ $\pm$	P			P	+	-
Riffe Branch	č	YES	<del>- ŷ - l</del>	<del>-</del> <del>x</del> .	- <del>\( \)</del>	X	-X-		<del></del>		_ <u>X</u>	X		X		Х	Х	M		Р		Р	P	$\neg$	$\dashv$
Hot Coel	<u> </u>	YES	·.	<del></del>	- <del>x</del>	<del>- 2  </del>	<del>-ŝ l</del>	-			X	<b>⊸</b> —⊢	—4		$\rightarrow$	X	×	М		PΙ			Р	$\Box$	$\supset$
Minden Refuse Pile	C	YES		<del>- x</del>		<del>- x -</del>	-^-	$\dashv$	$\neg$	-+	<del>- 2  </del>	-		——	<b></b> ↓	×	×	. <u>М</u>		P	$\Box$	Р	P	$\Box$	
Jeffrey Mine Complex Pigeon Creek Waterline	<u>c</u>	YES		X	X	X	<u> </u>				- x	-				Х.	×	M	-+	P		린	P	_	$\dashv$
ICILISA I LIPER WATERING	C	YES				X			$\rightarrow$		_ <del>X</del>	<del>- , -</del>	х	$\overline{}$				M		P		$\mathbf{P}$ T	Р	- 1	

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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Weste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stebility	Ed Robinson, P.E.	Eric Coberly	Tim Cart, P.E.	Richard W Watts, P.G	Mark McGettigan, P.E.	John Kaliy E.I.	J. D. Kinder, P. E.	Gary A Workman, CADD
Red Jacket, Matewan. Newtown Waterline	С	YES				×					х	x			<u> </u>								_		i
Marrowbone Waterline	С	YES		_	<del>                                     </del>	×	<del> </del>	_	<u> </u>		$\frac{\hat{x}}{x}$	X	х		<b> </b>		<u> </u>	M		P		Р	Р		
Mount Zion Waterline	С	YES				x					X	- <del>X</del>	X				<del> </del>	M M		P		P	P	$\Box$	
Coopers Rock, Pisgah, and Laurel Run Waterline	С	YES				×					×	×				_	$\vdash$		-	_		Р	Р	-	
Davis Water Tank	c	YES	_		├──	X	_				×		_					М	i	Р		P	Р		
Whittington Hill (Walker)Silde	С	YES		х	×	x	_		-		X	X						M	$\neg$	Р	$\neg$	Р	Р	7	
Maidsville Landslide	C	YES	X	<u> </u>	<u> </u>	_ ^											×	м	P/M	P			ŀ		
Rich Fork Landslide	_ č	YES	<del>-</del> <del>x</del>	x			_		-		X						Х	М	P	P		Р	P		
Tupppers Creek Landslide	Ç	YES	Х	X	L						- X	$\vdash$				_	— <u>X</u>	M	P	P	-	-	P		
Glen Rogers Waterline Gooney Otter Refuse	00	YES YES	- ,,			X					X	Х			_			M	P	P	-	P	P	$\rightarrow$	_
Chapmanville Mine Blowout	Č	YES	Х	<u>X</u>	_ <u>×</u> _	X	X				×						Х	М	Р	P		P	P	_	
Charleston Romeo Landslide	С	YES		x	х	x	-				Х							M	₽□	P		P	P		
Big Creek C Refuse North Matewan Sipple	C	YES		X										_			_ X	M	P.	P		P	P		-
Moran Subsidence	č	YES YES		X	_X	X					Х						$\frac{\hat{x}}{x}$	. М	P	P		F	<del>-</del>	$\dashv$	$\dashv$
Lewis Landslide	C	YES				<del>-</del> x-			Х		X		X					M	P	Р		P	-		
Roush Landslide	C	YES		X X		X			_		x		<del>-</del> Ĉ-l				X	M	P	P		P	<u>P</u> .	-T	
Jefferson 26 Landslide Titus Road Landslide	C	YES YES	X	X		_ X					X					_	Ŷ	M	P	P	$\dashv$	P	P	$\dashv$	-
Imboden Landslide	č	YES	X	X		X					X						X	M	P	P		P	P	-+	
Balsden Subsidence	C	YES		x					×								X	М	Р	P		P	P	$\Box$	
Parsons Landslide Treadway Landslide	C	YES		x							_	-			$\overline{}$		×	M	P	P	$\dashv$	P	P	-+	-
Phalen Landslide		YES YES	_x	X		Х					X						x	M	P	P	_	F	声	$\rightarrow$	
Adkins Landslide	C	YES	х	<del>- \$  </del>		X	$\vdash$				X						Х	М	P	Р		Р	Р	J	
Goetz Subsidence Lavender Refuse Fire	<u> </u>	YES		Х					×			-				$\overline{}$	X	M	P	Р	-	P	P	$\dashv$	
Cox Refus Fire		YES		X				_X	$\Box$		Х		Х					M	P	$\neg$		$\rightarrow$	-	$\dashv$	
Toney Fork Landslide	C	YES		<del>-2  </del>		x		_ <u>x</u>			X		X.					м	P				Р	$\exists$	〓
Athens Rt. 13 Refuse Fire	C	YES		Х			-	х	-		X	-+	x					_М	P	P		P	Р	$\Box$	
McAdams Subsidenc Ermer Rodgers Subsidence	C C	YES		×					X		X							M	P			$\rightarrow$	P	+	
Brown Landslide	<del>c</del>	YES YES		_ X _		х			Х.	$\Box$	X		Χ					М	P				P	$\dashv$	
Town Run	Р	NO NO		_^-		-^-			-		X	×		-				М.	P	P	$\Box$	Р	P		
Witcher Creek	P	NO.										<del>- \$ -  </del>	-+		-		-					-	_	$\neg$	
Pond Gap, Hitop & Spangler Elk City	Р	NO NO					$\Box$					X					$\neg \dashv$	_	$\dashv$	$\dashv$	$\dashv$	-	$\dashv$	-+	-
Little Fork Refuse Pile	P	NO		×		$\overline{\mathbf{x}}$	<del>-                                    </del>	x	-			X	-1					$\rightrightarrows$							=1
OSM-Tackett Fork	Р		X	X	X	X	^_		_	-+						. х	X	$\rightarrow$		P	, T		$\Box$	$\Box$	$\Box$
OSM-Ironton OSM-Williamson LS	P			X		Х							$=$ $\uparrow$				<del>- X</del>	-+	$\rightarrow$	<del>-    </del>	-	_	<b>-</b> -⊦	$\dashv$	—{
OSM-Ray Landsilde	P		$\neg \dashv$	X X		_ X							Х				X	二	一	PF	,		_+	_	
OSM-Spence Landslide	P			<del>-</del> ŷ-l		×			_		$-\!\!+$	_	-		—.I		- <del>X</del>	_	$\neg$	P F					
OSM-Ratiliff Landslide OSM-Pigeon Roost LS	P			X		Х						<del></del> +	-		-+	<del></del>	X	$\dashv$	$\dashv$	P	,	<del></del>	$\dashv$	-	
OSM-Oak Hill Subsidence	P		-	X	<del></del> T	X											- <del>x</del>		$\dashv$	FF	,	~-	$\dashv$	┰	
				_ ^	_ x T	х			_ <u>_x_</u> _		Х						X			PF	,		$\neg$		

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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Redamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mittgation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberty	Tim Cart, P.E.	Richard W Watts, P.G.	Mark McGettigan, P.E.	John Kally. E.I	J D. Kinder, P E Gary A Workman, CADD
OSM-Lime Prater Creek	P			X	Ĺ	X			<u> </u>	1					<del> </del>									
OSM-Hamilton II Landslide Tuppers Creek B	P		<u> </u>	X		X											X	-		P	<del>-</del>		$\vdash$	
Blg Sandy Refuse	Р		_x	X	- <del>X</del> -	X	<del></del>	-	-	_							X			Р	P			
Leslie (Nelson) Swiss Drennan	P	2002	Х	X	Х	Ŷ	Х				X	×	×	<del>-</del>	_	_	x	$\vdash$		Р	P			=
Minden C	- <del>-</del> -	2002 2002	X	×	<del></del>		ļ.,					Х						$\vdash$		-	P			P
Weston	P	2002		-	x	X	X .			X	_ X	×			Х						2			P
Parkette East Dupont Ave Landslide	P	2002							×	<b>—</b>		<del>l û</del>	├──	$\vdash$		—-	X	$\vdash$			•			P
Skin Creek Phase II	P	2003 2003	х	X	x	X					X					_	⊢â⊢		$\rightarrow$		<del>-</del>			P
Witcher Creek	P	2001	~	x	×	<del>- x</del>	Ι	<del></del>			X				X	_ X	Х				•			P
Crane Creek Yoursco	P P	2004	X		Х	X	×	_			Ŷ	$\frac{1}{x}$	x			X	X	$\vdash$			<u> </u>			P
Carswell	P. P	2004	X	. X	_ X	×	<u> </u>					X				_^_	<u> </u>	$\vdash$	$\rightarrow$		5	_		P
Craigmoor	P	2004				- <del>X</del>	Х	-		<del></del>	X		X		X	×	X.				•			P
Downey Pierpont Ames (Clare) Landslide	P	2006							Х		_^_					_	X		$\rightarrow$		-			P
Lorado	P	2007 1995	×	×	x						X						- x	$\vdash$		<del>-  </del>				P P
Madeline Refuse	P	1995		- Ŷ	- x	X	x			X	X	X			X	ļ	. X							P
Rocklick Wehoo	P	1995 1996	×	X	Χ	Х					Х				X	X	X	-	-+	F				P P
Meadowbrook	P	1996 1996	X	×	х	X	X	X			X				X		Ŷ		_	<del> </del>		$\dashv$		P
Jumping Branch	P	1996		_^_		^	-	_	_		Х	X			х		Χ.	$\Box$	$\neg$					P
Beard's Fork Turkey Wallow	P	1997 1997	X	X	X	Х	X	x		X	X	^-		-	х		-		-	F				P
Otsego	- F	1997	X	X	X	X	X	X			X						X							P
Miller	Ρ	1997	_x	X	X	X	^				X	x			Х		X	$\rightarrow$	-	F				P
Whitby Barker	P	1998 1999	X	X	X	X					X	X		х	x	_ x	x			F		_		P
Gauley River Road	Р	1999	^	^		X				-	x	- X		$\Box$		$\Box$			$\Box$	F	<u>.                                     </u>			P
Skín Creek Jolo	P P	2000	X.	х	X	X	_x				×	X			×	x	x		-1	F		=		
Tioga	P	2001		<b></b> -↓			$-\Box$	_=				X										_		P
Turkey Gap	Р	2001	X	$\overline{\mathbf{x}}$	×	- x	<del> </del>				X	Х								E				-
Big Sandy Marfrance	P	1987	Х			Χ.		X			X				X	×			$\dashv$	<u> </u>	7	二丁	$-\Box$	P
New Hill Ballpark	- P	1988 1988	X	X	X	X					X	X					+	-+	-+	PP	-		-+	+-
Jones Run	P	1988	x	<del>- 🌣  </del>	X	X	Х		×		X	X			ΨŢ		□□	コ	$\Box$	PP		7		
Chapmanville Landslide Whamcliff Landslide		1989		X.	Х	X					<del>. ŵ</del>		$\overline{}$		_x_	-	X	$\rightarrow$	-+	? P	-			PP
Jayce Sturm	P	1989 1990		- <del>X</del>	X	X					Х						<del>- ŝ</del>		ightharpoonup	F		$\neg$	-+	9 P
Marianna Refuse	P	1991	Х			_ X	×			-	X	Х		_ <u>x                                   </u>	-1		×		$\neg$	F		$\Box$		P P
Cedar Grove Eskdale	P	1 <u>9</u> 91	$\neg$	X.	Х	X					_ X	X		X		-+	X	$\dashv$	-+	- IP		-		э Р э Р
Hodgesville	P	1991 1991	x	<del>X</del>	$-\frac{x}{x}$	X		-			Х			Х	Х		T			P				P
Newsome Branch	P	1992	x	х	X	X	×			-	X	<u> </u>		_×_	×		×	<b>_</b> I		P		$\Box$		P
Morrison Snake Island	P	1992	Ų.	Х	X	_x					X.	х		=	<del>^</del>		X	+	$\dashv$	P	-	$\rightarrow$		2 P
Orchard Branch	P	1993 1994	X	×	x	X	×	X	$\dashv$	$\Box$	×		$\Box$		. х	_X				ď	一		<del>-   '</del>	<del></del>
			^	_^_	^		Λ.				X	х		<u> </u>			_ X _			. P				P

AME and RELATED PRO	LECT EXPER	ENCE MATE	t(X							_	_	_		_											
							BDO N	ent ev	ocorr	MATERIA										Prim		aff Par		tion	
		\ \					PROJ	EUI EA	PERIE	NGE			1 =	_	-	_	_	<u> </u>	_	_	- 0	HAMO	m.		
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evakuation/Mitigadon/Replacement	Construction Inspection/Managemen	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geofechnical/Stability	Ed Robinson, P.E.	Eric Coberty	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E	John Kelly E.I	J D. Kinder, P E.	Gary A Workman, CADD
Geckley Layne Quinwood Booth	P	1994 1994		X	X	X	$\sqsubseteq$				X	×	<u> </u>				X	-			P		-	P	>
Little Fork	P	1983	X	X	X	- X	x	х	Х	-	X	Х									P		<del>   </del>	P	
Elkridge Refuse Lando Mines	P	1984	Х	X X	X	Х	x	×		$\vdash$	X	<del></del>	<del>  -</del> -		X	Х	X			_	P			ゴ	
West Vamey	P P	1984 1984	_ x	X	X	X					X						- x		-	P	P	-	$\vdash$	+	
Bethei Portals	P	1985	_	Ŷ	<del>- 2 -</del>	X	_			-	X	<del>  v</del>					X			P	-			重	_
Mammoth Landslide Cheyenne	P	1985				X					- x	<del>  ^ </del>	<del></del>	X	X		X		$\vdash$	P			$\Box$	$\Box$	
Mudlick A Landslide	P -	1985 1985	X		X	X					х	X		<del>x</del>	- <del>x</del>		- x	$\vdash$		- 6		_	$\vdash$	-+	_
Nelson Landslide	P	1985	_ x	. X			-		_	-	X	X				X	X			P				$\exists$	
Mudlick B Refuse Bluff Mountain	P	1985	X	X	X	X	×				Ŷ.	<del>                                     </del>			<u>-</u> -	X	X			P	- 1			$\neg$	
Montgomery Drainage	P	198 <u>5</u> 1986	Х	X	X	X	Х				X	Х			X	ŵ	X		$\neg$		-	$\neg$	$\vdash$ $+$	-	_
Mayoros Drainage	P	1986		Х	x	÷	-				X	×		X			X				2			二	
Ridgeview A & B Tupper Valley	P	1987 1987	Х	X	X	X	Х	X		-	Ŷ	- x	_	- x	х	_	x	$\vdash$		P	-		-1	$\dashv$	
Airport Bottom	P P	1987	X	- X	X	X				_	X	Х		Х			_ x̂		$\rightarrow$	-	<del>,</del> –		$\vdash$	-+	
Manilla Creek	P	1987	X	x	x	x	х	_		-	X	X		×	x				$\Box$	Р					
McAlpin Robey	. <u>Р</u>	2009 2009									×	<u> </u>					X	┝┈┥		P	3—		Р	P	
Katy Lick	P	2009	X	×	X	X	-				X						Х		$\neg \neg$	P		$\dashv$	P	計	-
Clear Fork Coal Mountain	C	2009									X	X					Х		$\Box$	P			P	PI	
Naugatuck/East Kermit	C	2009 2009										X				-	-	M	$\dashv$	P				P	
Prenter	P	2008	-					-				X						М		P	2			╆╁	_
Hanover Common C	Р	2009						_				X			<del></del> +			$\Box$	$\neg$	- F		$\Box$		P	
Lower Dempsey Island Creek #18	C	2009		X	<del>- Ş</del>	X					X					-	x	<del></del>	$\rightarrow$					P	-
Brownton Landslide	С	2009		- <del>^</del>	- X	X					X	X		$\Box$	X		X		二	P	,		Р	P	
East Bank Emergency Dunloup Creek	C	2009 2010									_^_	<del>_^</del>		-+			X			P F	2	$\neg$		P P	$\Box$
Otsego/Pierpoint/Maben	С	2010	X	_× T	_ <u>X</u>	_ X	-				X	X			X	_ X	x			PF	<del>.  </del>	-		╬┼	
Barkers Ridge/Basin	С	2010						-	-+		_	X		<del></del>		$-\Box$	$\Box$	$\dashv$		PF				P	
Hemdon/Covel/Garwood Bud/Alpoca/Mill Branch	C	2010 2010										Х		+	$\dashv$					PF	;—+	$\rightarrow$		타	二
Keystone (Avery)	С	2010	-				$\rightarrow$					×		$\Box$						P F				ᆉ	-1
Keystone (Emergency)	<u> </u>	2010						_		<del>- 1</del>					<b>—</b> ↓			-	$\dashv$	PF		$\Box$	P	P	$\Box$
Cane Branch Spy Rock/Edmond/ Flanegan		2010			$\Box$							×				-+			-+	PF	_		P	민	$\dashv$
Mountain	С	2010	ľ									х				$\neg \neg$			7	Р			$\neg$	_	⇥
Wilderness PSD Gordon C	c	2010									_	x		-				$\rightarrow$	_			$\rightarrow$	_+	4	
Keaton Branch		2010 2010		X	X	X			=		X						х		<del></del>	PF			₽	+	
Verner Grimmett Burning	c	2010	-	<del>- ^  </del>		X	-				Х				$\neg$		X	$\dashv$	ightharpoons	P. F		$\equiv$	P	$\pm$	
Refuse Shinnston-Lumberport	c							х			х									Р			Р		$\neg$
Newtown-Kinder	C C	2011 2011	-+	x	<del> </del>	×	-		X	$\Box$	X								$\exists$	P P	_		P	+	$\dashv$
Dan's Branch Emergency	С	2011		X	×	X	+	-	$\rightarrow$		X						- X	$\Box$	$\Box$	PP		$\Box$	Р	$\Rightarrow$	
Cartright Branch	с	2011		X	х	Х					$\frac{\hat{x}}{x}$		-	-+		<del></del>  -	X	-	-+	P P	-		P		_

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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information In Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E	Eric Cobarty	Tim Cart, P.E.	Richard W Watts, P.G.	Mark McGettigan, P. E.	lohn Kelly. E.I	J D Kinder, P E	Gary A Workman, CADD
Thorpe Refuse Pile	C	2011		X	X	X					X	1					X	_							
Glen Rogers Emergency Abney Refuse Piles	C	2012 2012		Х	X						X						<del>_ ^</del>	┝┈┤		P	Ē.		P	-	
Milam Ridge Refuse	Č	2012		X	X	. X	<del> </del>	$\vdash$		<u> </u>	X	H					X			Р	P		Р		
West Columbia "B" Coburn Invest	C P	2012		Х	X	X					x			<del>                                     </del>		_	X	-		P	P		P	_	
Gouge Landslide	P	_	- x	X		<u>x</u>			X		-						X		Р						$\neg$
Adamsville	P		Х	x	х	Х			×	-	X	┼	X	<u> </u>	<u> </u>		_ X	┞─╌┥	P	-			$\Box$	$\Box$	=
Mount Pisgah Pleasant Valley Church	P P		X	х	×	X					X		X					$\vdash$	P				┝╌┼	$\rightarrow$	
Hodgesville B	Р	_		X	X	- <del>X</del>					X	_	X		×		х		P						=
Lynch Chapel Snider Portals	P			X	Х	Х					Х		<del>-</del> x		<del>  ^</del>	x	Χ	$\vdash$	P	_		_	$\vdash$	+	
Wash Run	P	_		<del>- 2 - 1</del>	X	X	-				X	<u> </u>	X						Р						=
Junior Sewage Plant Shavers Fork/Stonecoal	P		Х	X	Х	_ X			_		<del>- x</del>	×	<del>  x</del> -		- x			$\vdash$	P	_			-	_	-
Vargo Drainage	- F	-		X	X	X					X	Х	Х						Р				ightharpoonup	$\dashv$	$\dashv$
Fairhills Plaza Subsidence	Р			X					×		X	<del>                                     </del>	X						P	_	-1			$\dashv$	
Karen Vance AMD Leroy Wilmoth Drainage	P		Х	. X	X	X					X		X	-					P	-+	<del></del> ⊦	-	-+	+	
Big Knob Acid Mine Drainage	Р		×		X						X		. х						Р						$\Box$
Matthew Smith Subsidence	P		_ ^	×	х	х	i				×	×	х	×					Р		- 1				
Worthington Portals	P		X	X	- x	_ <u>X</u>	_		X		X		X						P						
Red Rock Drainage Blackwater Manor	Р		Х	X	X	X					- x		<del>- 2</del> -						P	$\dashv$	_				$\blacksquare$
Buckhannon River Refuse	P		Х	X	X	X	Х				Х	х		X.	Х				P				$\dashv$	$\dashv$	$\dashv$
Hutcheson AMD	P			. Ŷ	- <del>x</del>	x	_			_	×		X	-	-X			-	P			$\Box$		_	コ
Nutter Fort Tressle -7th East Bank Portals - A# 2	P			×	x	X					X		_ X						P	$\dashv$		$\rightarrow$	-+	+	[
Manilla Creek - A#2	P			X	X	Х				-	××		X				×	$\Box$	P	$\Box$	$\Box$	$\Box$	_	$=$ $\pm$	コ
Big Creek C Covey Creek Refuse	P	-		X	х	X					x		_ X	-		_	<u> </u>	-	P	-			-	+	$\dashv$
Omar Drainage G2	P		-	X	X	X	-			-	X		X						Р						
Crooked Ck Refuse & Portals	Р			x	X	x					×		X		х				P					$\mp$	$\dashv$
Jims Br. (Tyree) LS	P			X	х	х			-		х		X	-			х -	$\rightarrow$	P	-		_	_	-	_
Galloway Mine Portal/Refuse Newtown (Harmon) Drainage	P			X	X	X			$\Box$		X		X			Х	- Ŷ		P		$\neg \vdash$		-+	+	
Whitman Ck. (Williams) VO	P			<b>X</b> . T	x	~			-		X	-			<b>—</b>		$\dashv$	<b>—</b> ↓	P	$\neg$			I	$\dashv$	二
Coal Branch (Cantrell) Jordanville Tipple/Refuse	P		x	X	X	X					Х								Р			-	$\dashv$	+	$\dashv$
Heizer Creek A Maintenance	Р			x	×	- <del>x</del> -				Х	X	-		×	Х.		-		P				`\	⇉	コ
Orlando Mining Facility Verdunville Drainage	P		Х			Х				х	Х				X				P P	$\rightarrow$	$\dashv$		+	+	$\dashv$
Holden Portals	P		-	X	- <del>X</del>	X	$\rightarrow$			$\neg$	X							=	Р				士	$\perp$	彐
Molinar Subsidence Smith Landslide	P			X.					X		X	-	X				X		P P/M	$\dashv$	<del></del>	$\dashv$	-	$\perp$	二
Lutz Vertical Opening	P		Х	-X	X	X			$\Box$		Χ.		X				x		P/M		寸		$\neg \vdash$	$\pm$	$\dashv$
Swiger Mine Blowout	Р	$\overline{}$		<del>- ŝ - l</del>	<del>- 2  </del>	X	$\rightarrow$		-	$\rightarrow$	X	-	X			x			P/M P/M					1	$\neg$

AML and RELATED PRO	JECT EXPERI	ENCE MATE	iiX		='=											-	- 1	1						-	
							PROJE	ECTEX	PERIE	WCE.										Prim		aff Par		tion	
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information In Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatoment	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	J D. Kinder, P. E.	Gary A. Workman, CADD
Blair Wolfe Subsidence	Р			X				L	X		ΪX		X	†				-	P/M						
Lake (Winkler) Phase II Preston County PSD #4	P			Х	-	X		ļ			Х						×		P/M	$\vdash$			╁─┤		
Marsh Run Portals	- <del>c</del>		×	×	x-	×	-	<u> </u>	<u> </u>			Х								Р	P			┍┪	_
Donnle Thom HW	C		X	X	├ <del>-</del> 余一	<del>- 2 -</del>		$\vdash$ —	<del></del>		. X	$\vdash$			-		Х		P		Р			P	_
Vickers Branch Drainage	C		X	X	X	x	L "				<del>-</del> x	<del>                                     </del>	<b>├</b> ──	<del></del>		<del>                                     </del>	<del>-</del> x-	М	P		P		P	<u> </u>	_
Morgan HW Sugarcamp Run Burning Ref	00		X			X					X			i –				M	P	-				-	
Glen White-Trap Hill PSD	C	-	_ x		ļ	. X		Х			X						X	M	P		P	-	<del>     </del>	-	
North Matewan Akers LS	- č			х	├	X		<b>-</b>				X						М		ρ	Þ			<del>-</del>	_
Fairview Laurel Run Shaft	С			x	<del>-</del> x	<del>  ҳ</del> −				<del></del> -	X	-					X	М		Р			P		
McGraws Shaft	C			X	X			_		<del> </del>	<del>  ŷ </del>	1		-			X	M M	P	P	-		P /		
Meadow Creek PSD Squires Creek (Moats) Portal	С									<u> </u>		X						M			┍╌┥		P	P	—
and Refuse	С		X	х	x	x					х						x	-			-		┪	┰	—
Red Warrior Gob & Slide	С .			х	<del>-</del> x	×				<u> </u>								М	Р	P	P		LP F	P	
Glen Alum Complex	_ c			x		<del>-</del>	_				X	-					_ X	М	P	P	P		P	2	
West Columbia "B"	С		×	х	X	X					â	-	<u> </u>				X	M	P	P	<u></u>		P [	2	
Mllam Ridge Carson One Special Rec	C		X	Х	X	X											_^	M		P	-		PF	<del>:  </del>	—
Preston Energy/Rockville/				Х	x	X				Х			Х		X		X	M	Р	F	P		F 1		—
Viking Coal Spec Rec	С		х	X	X	x						i						м	Р	P			F)	$\neg$	
Branchiand (Blankenship)	С							_				$\vdash$						~			P		L <sup>p</sup>	•	
Landside				X	х	Х								ĺ			x	м	Р	Р	.		P	,	
Coburns Creek Landslide New Cumberland Mine	C		X.		X	X											х	м	Р	P	5	-		<del>-</del>	—
Blowout	c [			x	х	х											X	м	P	P	_			_	—
Whitehall Mine Fire	С			х		x	-	Х				⊢									<u> </u>		PF	-	
Sauls Run Landslide	C		X	X		Х		^-		$\vdash$		$\vdash$	_	<b>—</b> —			Х	M	Ē		-		PF	- 1	_
Missouri Fork Landslide	C			"X	X	X								-			x	M	P	P	5		PF	<u>,                                    </u>	_
Worthington (Hess) Landside	С			х	х	х								$\Box$						_	_		-	$\dashv$	—
Copen Road Landslide	-c			X	X	X						$oxed{oxed}$					X	М	Р	Р	Р		P	.	
Lynch Run Mine Blowout	Č		X	â	- x	- <del>\$</del> -		-				$\vdash$					Х	M	Р	Р	P		ΡĒ	Ż	
Dans Branch (Dillon)	С			х	X	x						$\vdash$						M					<b>—</b> ↓	$\rightarrow$	_
Landslide Pendleton Creek Highwall	c											1					X	M	Р	Р	,		P	, I	
Maryland Matthew Run	- <del>c</del>		X	_ X _	X	X				-	X							М	Р	_Р	Р		P	<del></del>	_
Maryland Scenic RR Landslide		-			<del></del>	X						х		-			х	_M	P	卫	Р		P		
	С		Х	x	х	х					×		x				х	м	Р	Р	Р		P		
Maryland Barton Mine Pool Maryland G&S Landslide	С	-		X	X	Х					Х						×	м	- P	2	•	$\dashv$	Р	+	—
Study	С	1	×	ĺ		I											x	M	P	P	$\dashv$	$\neg$		$\dashv$	_
Maryland Consol Shaft				×						<u> </u>	<del>-</del>						. ^				•		Р		
Maryland Shallmar Landslide	С			- x		×			-		X	$\vdash$	_x	$\vdash$	_ X		×	М	Р	P	•		Р		
Craigmoor Landslide Emer	С		Х			X				-	ŵ	<del>   </del>	^	<del></del>	$\overline{}$	$\dashv$	<del>-</del> Ĉ-l	M	P	P	<del>;  </del>		P	$\rightarrow$	_
Coburn Creek Landslide Emer	С		х			×					x					- 1		-			-	-		$\dashv$	
Gilmar Biowout Emer	c			<u>_</u>													_х	М	Р	P	,	ļ	P		
- Synous Lille			X	_ X	X	X					X							M	P	Р	· —		P	$\neg$	

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							PROJE	CTEX	PERIEN	ICE										Prim		aff Par M. Umpr		ition	
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclanation	Portal/Shaft Closure	Hydrological/Hydraulic Design/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitgatton/Replacement	Construction Inspection/Manageme:	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Eric Coberty	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly, E.I.	J. D. Kinder, P. E	Gary A. Workman, CADD
Mary Ruth Spec Reclamation	С		х	х		х					х	х		х				м	Р	Р	D		Р		
Sauls Run Bennett Landslide	С		×			×			-		×						x	м	Р	Р	_	$\vdash$	P	$\neg$	$\dashv$
Shaffer Investigation	C			х		├			х	-		_									P			$\Box$	
West Milford Landslide Emer	<del>c</del>		x			<del>  x  </del>		-	_^_	_	×			<u> </u>				М	P		Р	—	Р	_	
Roderfield Landslide Emer	Č		<u> </u>	×	X	<del>                                     </del>	$\vdash$	-		-	<del>-</del> x	-	<b>⊢</b> −	—-	_		Х.	М	P	P	P		P		-
Scotch Hill Mine Fire	С		X	X		<del>- ~ -</del>		x			Î				<del></del>		X	M	P		<u> </u>	—	P P	$\rightarrow$	
Manimoth(Shamlin) Landslide	С			х	х	х		- ^			x						×	M	Р	P	_		Р		$\dashv$
Delbarton (Curry) Landslide	С			X		X	<del></del>	-		_	×		-		$\vdash$		×	М	P		P	<del></del>	P		-
Big Creek (Surgoine) Landslide	С			х	х	x					x						×	м	P	P P	<u>r</u>		P		
Crooked Run (Davis) Landside	С			х		×					×						×	м	Р	P	Р		Р		
Procious (Doughty) Landshide	С			×		х					х						×	м	Р	Р	<u>г</u>		P		$\exists$
Rivesville (Parker) Landsilde	С			х		×					- x				$\vdash$		X	M	P	P	P	<b></b>	<del>  </del>		
Bridgeport (Ridgeway) Landslide	С			х		×					x						×	м		`	<u>-</u>				$\exists$
North Matewan (Ross) Landslide	С			х		×					x		-		_			1						_	
Verdonville (Spry) Drainage	C	i		X	_	Ŷ		_			<del>-</del> x						_^	M M	<u> </u>	P P	P D	<b></b> -		-	$\boldsymbol{\dashv}$
Summerlee Refuse Phase II	C			x		<del>-</del> x			_	<u> </u>	<del>-</del> x	_	H .	-	<b>-</b>		X	M		<del>-</del> -	P D	$\vdash \vdash$			—
Weston (Williams) Landside	С	i"	X	X		<del>-                                    </del>					<del>- ŷ</del>		_	-			Ŷ	м			P D	<b> </b>	P		
Smithers Landslide	C		Х			X					Ŷ		<u> </u>	<del></del>			x	M			<del></del>	$\vdash \!$			-
											<del>- ``-</del>		$\vdash$	-				141	-	ŀH		$\vdash$	┞╼╌┥	-	$\dashv$
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						L												<u> </u>	$\vdash$	-		$\vdash$	$\vdash \vdash$	$\dashv$	
																		1-					t─┤		$\dashv$
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		L																T	-				┙	$\neg$	



Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

# State of West Virginia Centralized Expression of Interest 02 — Architect/Engr

Proc Folder: 645829

Doc Description: EOI - Camden (Wilson) Landslide- EPAM19051

Proc Type: Central Purchase Order

P10	c Type. Central Porch	ase Order			
Date Issued	Solicitation Closes	Solicitatio	n No		Version
2019-11-05	2019-11-26 13:30:00	CEO1	0313	DEP2000000002	1

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**BID CLERK** 

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

W

25305

US

Vendor Name, Address and Telephone Number:

E.L.Robinson Engineering 5088 Washington Street, West Charleston, WV 25313 304-776-7473

FOR INFORMATION CONTACT THE BUYER

Brittany E Ingraham (304) 558-2157

brittany.e.ingraham@wv.gov

Signature X

Ey long

FEIN # 55-0594633

DATE 11/26/19

All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CEOI-001

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Expression of Interest

#### Camden (Wilson) Landslide

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, the Department of Environmental Protection, from qualified firms to provide architectural/engineering services to provide necessary engineering, and other related professional services to design and specify for construction as well as provide construction administration, for the Camden (Wilson) Landslide, per the bid requirements, specifications, terms and conditions as attached hereto.

\*Online submissions of Expressions of Interest are prohibited.

HWEST WA	Service 1987 Asset		1.93%
ENVIRONMENTAL PROTECT OFFICE OF AML&R 601 57TH ST SE	TION	ENVIRONMENTAL PROTE OFFICE OF AML&R 601 57TH ST SE	CTION
CHARLESTON	WV25304	CHARLESTON	WV 25304
บร		us	

Line	Comm Ln Desc	Qty	Unit Issue	
1	EOI Engineering Design Services			
	<del></del>			

Comm Code	Manufacturer	Specification	Model #	
81100000				

**Extended Description:** 

<sup>\*</sup>Dates of Service are estimated for bidding purposes only.

DEP2000000002	Document Phase  Draft	Document Description  EOI - Carnden (Wilson) Landside-	Page 3 of 3
		EPAM19051	

#### ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Eric J. Coberly, F	P.E.
(Name, Title)	
(Printed Name and T 5088 Washingto	Title) n Street, West, Charleston, WV 25313
(Address) 304-776-7473	304-776-6426
(Phone Number) / (Faceberly@elrobi	
(email address)	

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

E.L. Robinson Engineering
(Company)
E/ Cuy PROJECT MANAGER
(Authorized Signature) (Representative Name, Title)
Eric J. Coberly, Project Manager
(Printed Name and Title of Authorized Representative)
November 26, 2019
(Date)
304-776-7473 304-776-6426
Phone Number) (Fax Number)

### West Virginia Ethics Commission



# Disclosure of Interested Parties to Contracts

Pursuant to W. Va. Code § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

"Interested party" or "Interested parties" means:

(1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;

(2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company): and

(3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

# West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: E.L. Engineering	Address: 5088 Washington Street, W, Charleston, WV
Name of Authorized Agent: Eric J. Coberly	Address: 5088 Washington Street, W, Charleston, WV
Contract Number: DEP 2000000002	Contract Description: Camden (Wilson) Landslide
Governmental agency awarding contract:WVDEP	
☐ Check here if this is a Supplemental Disclosure	
List the Names of Interested Parties to the contract which entity for each category below (attach additional pages	ch are known or reasonably anticipated by the contracting busines if necessary):
<ol> <li>Subcontractors or other entities performing wo</li> <li>Check here if none, otherwise list entity/individual</li> </ol>	
2. Any person or entity who owns 25% or more of  ☐ Check here if none, otherwise list entity/individual	contracting entity (not applicable to publicly traded entities)
3. Any person or entity that facilitated, or negotion services related to the negotiation or drafting of  ☐ Check here if none, otherwise list entity/individual	
Signature: Excellent Notary Verification	Date Signed:
•	
State of West Virginia	County of Kanawha :
I, <u>FRIC</u> OBPRIV entity listed above, being duly sworn, acknowledge that penalty of perjury.	the Disclosure herein is being made under oath and under the
Taken, sworn to and subscribed before me this	2 day of November, 2019
To be completed by Ofree C.	Notary Public's Signature
To be completed by State Agency:  Date Received by State Agency:	
Date submitted to Ethics Commission:  Governmental agency submitting Disclosure:	
Covernmental agency submitting Disclosure:	

# STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: 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 exceed 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: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, 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
Authorized Signature: En Cour Date: W 22 19
State of WV
County of Kanawha, to-wit:
Taken, subscribed, and sworn to before me this a day of November, 20 20 19
My Commission expires November 21 2019
OFFICIAL SEAL NOTARY PUBLIC
AFFIX HERE Kimberly R. Meadows  NOTARY PUBLIC  NOTARY PUBLIC  NOTARY PUBLIC
Charleston, WV 25313 My Commission Expires Nov. 21, 2021  Purchasing Affidavit (Revised 01/19/2018)