

DATE PRINTED

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

TERMS OF SALE

### Request for RECONUMBER

DEP15605

PAGE

FREIGHTTERMS

ADDRESS CORRESPONDENCE TO ATTENTION OF GUY NISBET

304-558-8802

SHIP-VIA

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

F.O.B

25304 304-926-0499

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

01/30/					L					
BID OPENING DATE	1 KC 2 057 055 050 050 050	03/06/	2012	D. 202000	100000.0000000000000000000000000000000	BID	OPENING	TIME	01:30PM	
LINE	QUA	VTITY	UOP	CAT. NO.	ITEM NU	MBER	UNIT	PAICE	AMOU	NT
0001	MILAM	l RIDGE	JB REFUS		906-29 E DESIGN	l				
	THE WESPROTECT PROFESSIONSTRUCE PROFESSIONSTRUCE PROFESSIONSTRUCE PROFESSIONS THE PROFESSION PROFES	ST VIRTION, SIONAL UCTION PILE IA PER	GINIA GINIA IS SO ENGI MONI PROJE	PURC DEPA LICIT NEERI TORIN CT IN FOLLO	N OF INTE HASING DI RTMENT OF ING EXPRE NG DESIGN G SERVICE WYOMING WING BID S.	VISION, ENVIRO SSIONS SERVIC S AT TH COUNTY,	NMENTAL OF INTERI ES AND E MILAM I WEST	EST FOR	,	
	FOR BAI	NKRUPT CT NUL	CY PRO	VOID	ENT THE V ION, THE , AND TER	STATE M	AY DEEM 1	THIS	RECEI	VED
	(1) HE THE BII THE BII THE BII THE BII	OR SH O OR A ODER, ODER I	E IS ANY DOC (2) TH N A CC AS PRO	AUTHO CUMEN HAT H DNTRA DPERL REQU	THIS BID RIZED BY IS RELATE OR SHE CTUAL REL Y REGISTE (RE REGIS	THE BID D THERE IS AUTH ATIONSH RED WIT TRATION	DER TO EX TO ON BEH DRIZED TO IP, AND O H ANY STA	THAT: (ECUTE HALF OF D BIND (3) THAT	012 MAR -5 F WW PURCH DIVISIO	ASING
SIGNATURE				SEC HEV	erse side for to	TELEPHONE	***************************************	DATE		
SIGNATURE //	ilml	W.	Walk	1		3	04-776-74	73 DATE	3/6/2012	
Project M	lanager	FE	5505	94633	3		ADDR	ESS CHANGI	S TO BE NOTED A	BOVE



RFQ COPY

TYPE NAME/ADDRESS HERE

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

### Request for Quotation

REQ NUMBER	
DEP15605	

PAGE	200
	2

ADDRESS CORRESPONDENCE TO ATTENTION OF

GUY NISBET 304-558-8802

6H-P TO

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

25304

304-926-0499

DATE PRINTE		TÉAN	is of sa	LŒ		8HIP VI	A		F.O.B.		FREIGHTTERMS
01/30/2 BID OPENING DATE:	012	10110						L			
	A STATE OF THE PARTY OF THE STATE OF	/06/2	and the second second	10004	313333333			OPEN	ING TIME	01	:30PM
LINE	QUANTIT	Y	UOP	OAT. NO		ITEM NUM	BEA		UNITPRICE		AMOUNT
×	****	THIS	IS T	HE EN	D OF	RFQ	DEP15	605	***** T	OTAL:	
SIGNATURE				SEE REV	ERSE SIC		MS AND CON LEPHONE	DITIONS		DATE	
						115	LUTTONE			VATE	
TITLE		FEIN							ADDRESS CH	IANGES T	TO BE NOTED ABOVE



March 6, 2012

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

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

Re: Milam Ridge Refuse Pile Design

DEP15605

**Expression of Interest** 

Dear Mr. Coberly:

E. L. Robinson Engineering Co. (ELR) is pleased to submit this proposal in response to your request to perform professional engineering design services, and construction monitoring services associated with the design of the Milam Ridge Refuse Pile design project located in Wyoming County.

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

The ELR staff has combined experience in the design of more than 177 AML projects.

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

- A. Thirteen (13) registered professional engineers (civil or mining), two (2) geologists, two (2) Landscape architects, four (4) engineers in training as well as several CADD technicians that may be used on these teams.
- B. ELR Corporate experience in designing nearly sixty-five (65) abandoned mine land remediation projects. Personal experience on approximately one hundred seventy-seven (177) AML projects. This number does not include surveying/mapping/drilling projects.
- E. L. Robinson Engineering Co. has grown from 13 employees in 1996 to over 80 employees today. Throughout this growth period we have continued to meet project deadlines while providing a high quality engineering product.

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

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

Sincerely,

E. L. Robinson Engineering Co.

Richmy W. Watter

By:

Richard W. Watts, P.G.

Project Manager



### **Table of Contents**

Executive SummaryPage 1
Project ApproachPage 2
Our Project TeamPages 3-4
Our CapabilitiesPage 5
Previous ExperiencePage 6
CCQQAttachment B
Abandoned Mine Lands Reclamation ExperienceSection 12A
Soil AnalysisSection 12B
Hydrology and HydraulicsSection 12C
Aerial Photography and Contour MappingSection 12D
Key PersonnelSection 13
RPEMAttachment C
Purchasing Affidavit



### **Executive Summary**

For more than 10 years, E.L. Robinson Engineering Company has been a prime and preferred engineering and surveying consultant to the WV Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML) program. We have provided this Executive Summary to directly respond to the Expression of Interest and provide ease for the evaluators to score this proposal.

#### **Understanding of Project Requirements**

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

#### Firm's Capacity

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

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

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



#### **Project Approach**

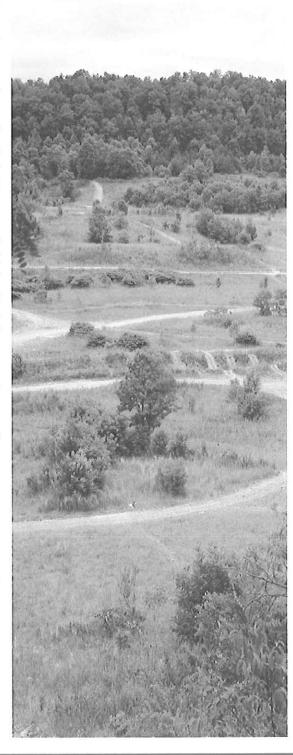
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

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

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

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

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





#### **Our Project Team**

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

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

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

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

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

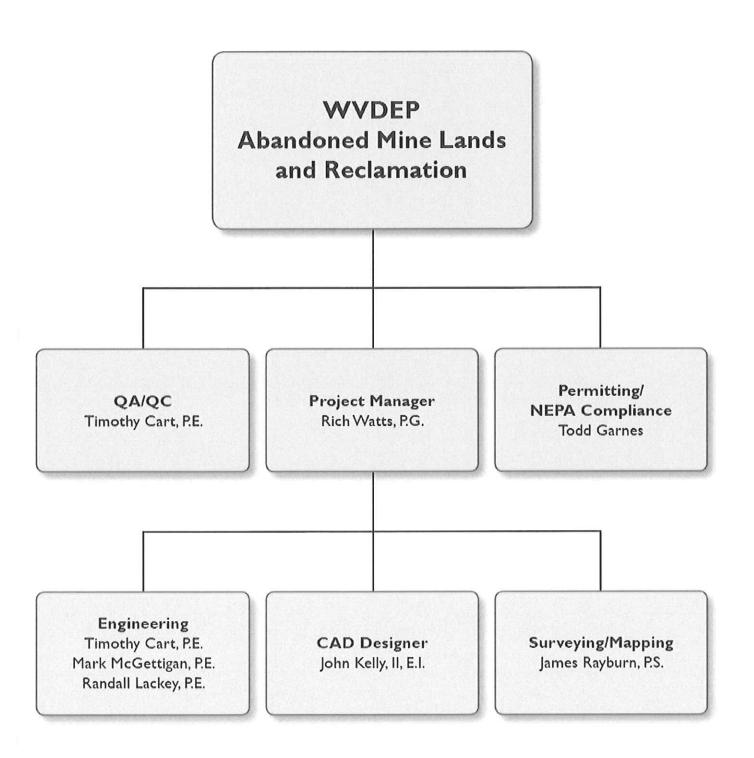
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their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

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

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



### **Our Project Team**





#### **Our Capabilities**

Over the past 30 years, E.L. Robinson Engineering Co. has focused its efforts on delivering quality projects to our clients and building strong relationships based on trust and partnership. We believe building lasting relationships with our clients is key to delivering exceptional service for many years to come.

E.L. Robinson provides WVDEP/AML with the capabilities, expertise and resources of one of the top-notched civil engineering firms in the region. Our offices are staffed with professionals experienced in AML reclamation mapping, permitting, design and construction monitoring projects with more than 50 employees, including 10 registered professional engineers, degreed design engineers, construction inspectors and a support team of administrative and technical personnel to assist the WVDEP/AML.

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

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





### Previous Experience

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

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

- Brownton (McCord) Landslide –2010
- Island Creek #18 Mine Complex –2010
- Keystone (Avery) Landslide and Portal –2010
- Jacob's Fork Complex –2008
- Rhodell Refuse and Portals –October 2008
- Gilmer B Sites 3-8 –2008
- Ohio DNR Emergency Reclamation 19 sites completed
- Toney Fork Landslide Emergency –2006
- North Matewan –2005
- Big Creek "C" Refuse –2004
- Charleston Romeo Landslide –2004
- Gooney Otter Refuse –2004
- Chapmanville (Gorby) Mine Blowout December 2003



W	WEST VIRGINIA		DEPARTMENT CONFIDENTIA	DEPARTMENT ENVIRONMENTAL PROTECTION CONFIDENTIAL QUALIFICATION QUESTIONNAI	RE	Attachnt "B"
PROJECT NAME Milam Ridge Refuse Pile DEP15605		DATE (DAY, March 6, 2	(DAY, MONTH, 6, 2012	YEAR)	FEIN 55-0594633	
1. FIRM NAME E.L. Robinson Engineering Co.		2. HOME OFFICE E 5088 Washington Charleston, WV 2		USINESS ADDRESS Street, West :5313	3. FORMER FIRM NAME	
4. HOME OFFICE TELEPHONE 304-776-7473	5. ESTABLISHED 1978	SHED (YEAR)	.9	. TYPE OWNERSHIP Individual x Corporation Partnership Joint-Venture	6a. WV REGISTER (Disadvantaged Enterprise)	ED DBE Business x NO
7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313	ADDRESS/ TELEPHONE/ 304-776-7473/Tim C	1 10	/ PERSON I) Cart, P.E.	SON IN CHARGE/ NO. AML DESIGN PER P.E./56 Staff in Charleston Area	AML DESIGN PERSONNEL EACH OFFICE harleston Area	
8. NAMES OF PRINCIPAL OFFICERS Ed Robinson, P.E. 304 776-7473	S OR MEMBERS 3 Ext 211	S OF FIRM	8a.	NAME, TITLE, &	TELEPHONE NUMBER - OTHER PRINCIPALS	PALS
9. PERSONNEL BY DISCIPLINE						
	- ECOLOGISTS - ECONOMISTS - ELECTRICAL ENG - ENVIRONMENTALI - ESTIMATORS 2 GEOLOGISTS	STS STS CAL ENGINEERS MENTALISTS ORS	ER S	4	S 7 SURVEYORS - TRAFFIC ENG - OTHER	ENGINEERS INEERS
15 CONSTRUCTION INSPECTORS DESIGNERS DRAFTSMEN	- HISTORIANS - HYDROLOGISTS	ANS GISTS		1 SOILS ENGINEERS — SPECIFICATION WRITERS	56 TOTAL PERSONNEL	NEL
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: *RPEs other than Civil and Mining must provide supporting documentation supervise and perform this type of work.	HISTERED PROFESSION and Mining must p	ESSIONAL ENGI must provide work.	NGINEERS de suppo		13 that qualifies them to	
10. HAS THIS JOINT-VENTURE WOR	WORKED TOGETHER	ER BEFORE?		YES NO X This	is not applicable	

NAME AND ADDRESS:	TO OH TITO MICH THE	
	SPECIALTY: Drilling	WORKED WITH BEFORE
Novel Geo – Environmental (NGE) 806 B Street, St. Albans, WV	O	XYES
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	NO WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
	A ADD AT A DECEMBER	ON
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
NAME AND ADDRESS:	SPECIALTY:	NO WORKED WITH BEFORE
		YES
		ON
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		YES
		NO

13. PERSONAL HISTORY STATEMENT data but keep to essentials	PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AND PROJECT DESIGN (Furnish complete data but keep to essentials)	RESPONSIBLE FOR AML PROJECT DI	ssign (Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Edward L. Robinson, President	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 25	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Mr. Robinson worked in the Righ major utility plans. He has ex land acquisition. He has proviprovide and coordinate Quality	n worked in the Right of Way Division of the WV Department of Highways for ten years where he review y plans. He has extensive experience in property surveys, property title searches, aerial mapping [tion. He has provided quality control on all projects designed by this firm for the past 25 years. coordinate Quality Control on all design projects.	Department of Highways for ten ty surveys, property title sea: projects designed by this firm	ten years where he reviewed searches, aerial mapping and rm for the past 25 years.
EDUCATION (Degree, Year, Specia	Specialization)		
Bachelor of Science 1969 Civil Master of Science 1981 Civil	Engineering Engineering		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
American Society of Civil Engineers American Council of Engineering Com National Society of Professional Eng	eers – Past President WV Companies 1 Engineers	1975 Civil Engineering Registered in West Virginia and Kentucky Professional Licensed Surveyor No. 1150	and Kentucky or No. 1150
13. PERSONAL HISTORY STATEMENT but keep to essentials)	F PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Richard W. Watts, P.G.	YEARS OF AML DESIGN EXPERIENCE: 28	YEARS OF AML RELATED DESIGN EXPERIENCE: 33	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1
Brief Explanation of Responsibilities Mr. Watts has served as project geologist on more the include project management, field reconnaissance, drianalysis, specification writing, quantity determinating projects included surface and deep mine reclamation,	sibilities ject geologist on more than ninety (90) abandoned mi field reconnaissance, drilling coordination, labora ting, quantity determinations, cost estimates, pre-b nd deep mine reclamation, subsidence, AMD treatment	than ninety (90) abandoned mine land projects. Responsibiliticderilling coordination, laboratory testing and analysis, stabilations, cost estimates, pre-bid and pre-construction meetings on, subsidence, AMD treatment and waterline feasibility studies	ojects. Responsibilities ng and analysis, stability construction meetings. ine feasibility studies.
EDUCATION (Degree, Year, Specia B.S./1977/Geology M.S./1994/Geography	Specialization)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATI Geological Society of America Association of Engineering Geologists	ORGANIZATIONS .ca Geologists	REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia Professional Geologist/1993/Kentucky	ate) /irginia Kentucky

Mr. Cart has extensive experience in the design and construction management of waterline extension projects. Mr. Cart has recently completed water projects in Mingo; Kanawha; Putnam; and Cabell counties.
Mr. Cart has performed geotechnical engineering calculations and designs for settlement analysis of dams and other OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data Mr. Kelly has worked on many AML projects since joining ELR. His responsibilities have included drilling inspection, sampling of coal refuse materials, hydrology, hydraulics design of drainage structures, and development of regrading plans. Estimation of quantities developed estimated cost. Mr. Kelly is proficient with Auto Cadd. Mingo Mr. Cart has completed numerous mine reclamation projects under the AML program, including regrading of coal refuse materials, re-establishment of vegetation cover, disposal of acid producing materials, and developing methods for YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: WATERLINE extinguishing burning materials and disposal of old mining structures. Designed passive AMD treatment systems. Conducted Phase I and Phase II Studies to determine if groundwater had been affected by pre-law mining. plans. Estimation of quantities developed estimated cost. Mr. Kelly has performed layout and inspection of core drilling operations for bridge and roadway projects. In addition, he has designed cut slopes for large-scale roadway projects such as the US Route 52 Kermit Bypass in County, WV and Meadowbrook Road in Harrison County, WV. compl YEARS OF DOMESTIC DESIGN EXPERIENCE: (Furnish ASPONSIBLE FOR AML PROJECT DESIGN State) (Type, Year, State) Engineer WV OH REGISTRATION (Type, Year, DESIGN RELATED DESIGN YEARS OF EXPERIENCE OF EXPERIENCE Engineer Intern, WV RELATED 28 REGISTRATION Professional YEARS OF AME EXPERIENCE: YEARS OF AME EXPERIENCE: YEARS YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML DESIGN EXPERIENCE: PRINCIPALS AND ASSOCIATE 28 13 Bachelor of Science 1981 Civil Engineering MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS EDUCATION (Degree, Year, Specialization) Year, Specialization) Brief Explanation of Responsibilities Brief Explanation of Responsibilities HISTORY STATEMENT OF data but keep to essentials) Engineering/1998/WVU STATEMENT NAME & TITLE (Last, First, Middle NAME & TITLE (Last, First, Middle but keep to essentials) PERSONAL HISTORY Timothy B. Cart, P.E. н Н EDUCATION (Degree, John Kelly II, . PERSCAAL embankments B.S. Civil Int.)

NAME & TITLE (LARL, FIRE, MEGNE PART DESIGN EXPERIENCE: 7  MARKE & TITLE (LARL, FIRE, MEGNE PART DESIGN EXPERIENCE: 7  MARKE & TOTAL PART DESIGN EXPERIENCE: 7  MATERIAN PROSPECTION OF Responsibilities  MICHAEL SECTION SECTION OF RESPONSIBILITIES  MICHAEL SECTION SECTION OF RESPONSIBILITIES  MICHAEL SECTION SECTION SECTION OF RESPONSIBILITIES OF ALL SET SHOW SECTION SECTIO	McGettigan, P.E.    Explanation of Responsibilities   Tarks of AML DES		
EXCRETEGATION OF RESPONSIBILITIES  MOCHETIGAT AS TO RESPONSIBILITIES  MOCHETIGAT AS TO RESPONSIBILITIES  MOCHETIGAT AS WELL SECONDARY OF AND DESIGN EXPERIENCE: 7  MOCHETIGAT HAS WORKED ON SEVERAL MAY DESIGN EXPERIENCE: 7  MOCHETIGATH AS WORKED ON SEVERAL MAY DESIGN EXPERIENCE: 7  MOCHETIGATH AS WORKED ON SEVERAL MAY DESIGN EXPERIENCE: 7  MOCHETIGATH AS WORKED ON SEVERAL MAY DESIGN EXPERIENCE: 8 A field inspector for Several was some the past face of the past week. The several was experience and soil rests and is certified on Troxler nuclear density gage.  MOCHETIGATH ENDINGED TO PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AND PRINCIPAL BY A SERVICE AND ASSOCIATES RESPONSIBLE FOR AND PRINCIPAL BY A SERVICE AND ASSOCIATES RESPONSIBLE FOR AND PRINCIPAL BY A SERVICE AND ASSOCIATES RESPONSIBLE FOR AND PRINCIPAL BY A SERVICE AND ASSOCIATES RESPONSIBLE FOR AND PRINCIPAL BY A SERVICE AND ASSOCIATES RESPONSIBLE FOR AND ASSOCIATES AND ASSO	McGettigan, P.E.  F. Explanation of Responsibilities  McGettigan has worked on several AML projects designed by E. L. Robinson Engineering.  McGettigan also has experience with survey has also performed various concrete and soinars also performed various concrete and soinars also performed various concrete and soinars also performed various concrete and soinarion (Degree, Year, Specialization)  Civil Engineering Technician/Fairmont StaneRSHIP IN PROFESSIONAL ORGANIZATIONS  BERSHIP IN PROFESSIONAL ORGANIZATIONS  E & TITLE (Last, First, Middle  S & TITLE (Last, First, Middle  B & TITLE (Last, First, Middle  E & TITLE (Last, First, Middle  S & TITLE (Last, First, Middle  E & TITLE (Last, First, Middle  NEARS OF AML DESTAIL IL Lackey, P.E.  E & TITLE (Last, First, Middle  NEARS OF AML DESTAIL IL Lackey has performed hydraulics and scour ek Bridge; Kermit Bypass Bridge; Left Hand  Lackey has also performed calculations for lysis; prepared design study reports; type, navys projects.  CATION (Degree, Year, Specialization)	OF	н
Medettigan has worked on several Aut projects since joining our firm. He has developed grading plans, crossing setimated anothed on several Aut projects since joining our firm. He has developed grading plans, crossing setimated and checked quantity calculations. He has also sarved as a field inspector for several wat setimated and checked quantity calculations. He has been the lead designer on waterlines over the past set set sets and checked quantity calculations. He has been the lead designer on waterlines over the past as also performed various concrete and soil tests and is certified on Troxler nuclear density gage.  PROFESSIONAL Specialization)  Civil Engineering Technician/Fairmont State/1999  PRESIDENTIAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AUL PROJECT DESIGN (Furnish completed to essentials)  MERRIP IN PROFESSIONAL ORGANIZATIONS  PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AUL PROJECT DESIGN (Furnish completed to essentials)  MERRIP IN Lackey, P.E.  I NEARLY PRESIDENT OF REMAINS FOR AUL DESIGN EXPERIENCE:  SETTLE clast, First, Midde  TEACH has performed and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Bridge; Remain Propersional Calculations for deck drainage; Performed grider design study reports; type, size and location reports and final plans on many of our Division ways projects.  MANION (Degree, Year, Specialization)  Civil Engineering/1999  PROFESSIONAL ORGANIZATIONS  REGISTRATION (Type, Year, State)  PROFESSIONAL WERE THE PIN PROFESSIONAL ORGANIZATIONS  REGISTRATION (Type, Year, State)	McGettigan has worked on several AML projects designed by E. L. Robinson Engineering.  McGettigan also has experience with survey has also performed various concrete and soinas also performed of Responsibilities  Explanation of Responsibilities  Lackey has performed hydraulics and scourek Bridge; Kermit Bypass Bridge; Left Hand  Lackey has also performed calculations for lysis; prepared design study reports; type, navys projects.  McGettigan has performed calculations for lysis; prepared design study reports; type, navys projects.	YEARS OF AML EXPERIENCE:	YEARS OF DOMESTIC DESIGN EXPERIENCE:
McGettigan has worked on several AML projects since joining our firm. He has developed grading plans, cros inclusions. He has a been the lead designed on waterlines over the past inconsection to be several as a field impered to the past inconsection of the has been the lead designed on waterlines over the past inconsection and solites and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and soil tests and is certified on Troxler nuclear density gage.  Manier also performed various concete and also performed by an about the past and analysis; pier design study reports; type, also also performed design and analysis; pier design ways projects.  Manier also performed calculations for deck drainage; performed girder design and analysis; pier design study reports; type, also and location reports and final plans on many of our Division mays projects.  Manier also performed calculations  Manier also performed	McGettigan has worked on several AML projects designed by E. L. Robinson Engineering.  McGettigan also has experience with survey has also performed various concrete and soication (Degree, Year, Specialization)  Civil Engineering Technician/Fairmont StaseRSHIP IN PROFESSIONAL ORGANIZATIONS  BERSHIP IN PROFESSIONAL ORGANIZATIONS  Reep to essentials)  E & TITLE (Last, First, Middle organization)  Seep to essentials)  E & TITLE (Last, First, Middle organization)  E & TITLE (Last, First, Middle organization)  E & TITLE (Last, First, Middle organization of Responsibilities and scourse be bridge; Kermit Bypass Bridge; Left Hand Lackey has also performed calculations for lysis; prepared design study reports; type, nways projects.  CATION (Degree, Year, Specialization)		
Scentigan also has experience with surveying and equipment including; theodolites, levels, and total stati has also performed various concrete and soil tests and is certified on Troxler nuclear density gage.  ENTINON (Degree, Year, Specialization)  Civil Engineering Technician/Fairmont State/1999  ERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AND PROJECT DESIGN (Furnish complet keep to essentials)  YEARS OF EXPERIENCE  THILE (Last, First, Madale responsibilities  Explanation of Responsibilities  I Explanation of Responsibilities  Explanation of Responsibilities  Eackey has performed hydraulies and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Lett Hand Fork Bridge; and Blemerhassett Bridge.  Lackey has principalization)  Ways projects  Civil Engineering/1999  Civil Engineering/1999  REGISTRATION (Type, Year, State)  When the state of the following and scour for Ripley Town Bridge; Meadowbrook Road Bridge; Meadowbrook Road Bridge; Lett Hand Fork Bridge; and Blemerhassett Bridge.  Civil Engineering/1999  Civil Engineering/1999  Professional Engineering/1999  REGISTRATION (Type, Year, State)  Professional Engineer WV  REGISTRATION (Type, Year, State)	McGettigan also has experience with survey as also performed various concrete and soi at also performed various concrete and soi at also performed various concrete and soi civil Engineering Technician/Fairmont StatesHID IN PROFESSIONAL ORGANIZATIONS  ERSHIP IN PROFESSIONAL ORGANIZATIONS  Reep to essentials)  ETITLE (Last, First, Middle reach to essentials)  ETITLE (Last, First, Middle reach of Responsibilities and scour backey, P.E.  Explanation of Responsibilities and scour backey has performed hydraulics and scour backey has also performed calculations for ysis; prepared design study reports; type, ways projects.  EATION (Degree, Year, Specialization)	ssince joining our firm. He has ations. He has also served as a fico. He has been the lead designer	iloped grading plans, inspector for several waterlines over the pa
Civil Engineering Technician/Fairmont State/1999  Civil Engineering Technician/Fairmont State/1999  ERSSINAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complet Keep to essentials)  **EARSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complet Keep to essentials)  **EARSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complet Keep to essentials)  **EARSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complet Keep to essentials)  **EARSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complet Keep to essentials)  **EXPLAINED TOWN Bridge; Tallman Bridge; Meadowbrook Road Bridge; Remain Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge; Meadowbrook Road Bridge; Assign study reports; type, size and location reports and final plans on many of our Division state)  **CIVIL Engineering/1999  **CIVIL Engineering/1999  **RESHIP IN PROFESSIONAL ORGANIZATIONS  **RESHIP IN PROFESSIONAL ORGANIZATIONS  **PERSONAL HISTORY (Type, Year, State)  **PERSONAL STATEMENT (Type, Year, State)	Civil Engineering Technician/Fairmont StateRSHIP IN PROFESSIONAL ORGANIZATIONS SERSHIP IN PROFESSIONAL ORGANIZATIONS Reep to essentials)  Extitle (Last, First, Middle representials)  Extitle (Last, First, Middle representials)  Explanation of Responsibilities Lackey has performed hydraulics and scour reckey has performed hydraulics and scour reckey has also performed calculations for resis; prepared design study reports; type, ways projects.  Personal Explanation of Responsibilities Lackey has also performed calculations for resis; prepared design study reports; type, ways projects.	equipment including; and is certified on	al
Civil Engineering Technician/Fairmont State/1999  BEGISTRATION (Type, Year, State)  PROFESSIONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AND PROJECT DESIGN (Furnish complete keep to essentials)  RETILE (Last, First, Middle	Civil Engineering Technician/Fairmont StatesHIP IN PROFESSIONAL ORGANIZATIONS  PERSONAL HISTORY STATEMENT OF PRINCIPALS A keep to essentials)  & TITLE (Last, First, Middle responsibilities)  Is TITLE (Last, First, Middle reach to be sentials)  If Explanation of Responsibilities and scour by has performed hydraulics and scour by Bridge; Kermit Bypass Bridge; Left Hand Lackey has also performed calculations for ysis; prepared design study reports; type, ways projects.  PATION (Degree, Year, Specialization)		
PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANT. PROJECT DESIGN (Furnish completed been to essentials)  **RESONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANT. PROJECT DESIGN (Furnish completed been to essentials)  **RESONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANT. PROJECT DESIGN (Furnish completed been to essentials)  **TITLE (Last, First, Middle	PERSONAL HISTORY STATEMENT OF PRINCIPALS A keep to essentials)  Rep to essentials)  Interpolation of Responsibilities  Lackey has performed hydraulics and scour backey has performed hydraulics and scour backey has also performed calculations for ysis; prepared design study reports; type, ways projects.  PERSONAL HISTORY STATEMENT OF PRINCIPALS A pear, Specialization)	tate/1999	
PRESCNAL HISTORY STATEWENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AND INCOMESTIC MATERIALS OF EXPERIENCE  TEARS OF DOMESTIC WATER  EXPERIENCE:  TEARS OF AND RELATED DESIGN (Furnish complet  EXPERIENCE:  TEARS OF AND RELATED DESIGN (Furnish complet  TEARS OF EXPERIENCE:  TEARS OF AND RELATED DESIGN  TEARS OF DOMESTIC WATER  EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF EXPERIENCE:  TEARS OF DOMESTIC WATER  TEARS OF EXPERIENCE:  TEARS OF E	PERSONAL HISTORY STATEMENT OF PRINCIPALS A keep to essentials)  Extitle (Last, First, Middle rear)  State (Last, First, Middle rear)  Interest (Last, First, Middle rear)  Explanation of Responsibilities  Lackey has performed hydraulics and scour receives has also performed calculations for ysis; prepared design study reports; type, ways projects.  Personal reary reports; type, ways projects.	(Type,	
PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish completed been to essentials)  **EXPERIENCE**  **ITILE** (Last, First, Middle	PERSONAL HISTORY STATEMENT OF PRINCIPALS A kept to essentials)  & TITLE (Last, First, Middle reacher, P.E.    It is the performed by the performed calculations for the performed design study reports; type, ways projects.		N
Tackey, has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Rermit Bypass Bridge; Left Hand Fork Bridge; performed girder design and analysis; pier design study reports; type, size and location reports and final plans on many of our Division ways projects.  Allow (Degree, Year, Specialization)  Civil Engineering/1999  REGISTRATION (Type, Year, State)  Professional Engineer WV	tall L. Lackey, P.E.  Is Explanation of Responsibilities Lackey has performed hydraulics and scour R Bridge; Kermit Bypass Bridge; Left Hand Lackey has also performed calculations for ysis; prepared design study reports; type, ways projects.  ATION (Degree, Year, Specialization)	AND ASSOCIATES RESPONSIBLE FOR AME.	DESIGN (Furnish complete
iall L. Lackey, P.E.  If Explanation of Responsibilities Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Ralige; Kermit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge.  Lackey has also performed calculations for deck drainage; performed girder design and analysis; pier design study reports; type, size and location reports and final plans on many of our Division ways projects.  ATION (Degree, Year, Specialization)  Civil Engineering/1999  REGISTRATION (Type, Year, State)  Professional Engineer WV	tall L. Lackey, P.E.  If Explanation of Responsibilities Lackey has performed hydraulics and scour sk Bridge; Kermit Bypass Bridge; Left Hand Lackey has also performed calculations for ysis; prepared design study reports; type, ways projects.  ATION (Degree, Year, Specialization)	OF	ш
Explanation of Responsibilities Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Explanation of Responsibilities Reckey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Rackey has also performed calculations for deck drainage; performed girder design and analysis; pier design study reports; type, size and location reports and final plans on many of our Divisio ways projects.  AATION (Degree, Year, Specialization) Civil Engineering/1999  Civil Engineering/1999  Professional Engineer WV	Explanation of Responsibilities Lackey has performed hydraulics and scour k Bridge; Kermit Bypass Bridge; Left Hand Lackey has also performed calculations for ysis; prepared design study reports; type, ways projects. ATION (Degree, Year, Specialization)		
Lackey has also performed calculations for deck drainage; performed girder design and analysis; pier design ways projects.  Ways projects.  Civil Engineering/1999  Professional Engineer WV  Professional Engineer WV	Mr. Lackey has also performed calculations for analysis; prepared design study reports; type, Highways projects.  EDUCATION (Degree, Year, Specialization)	for Ripley Town Bridge; Tallman Fork Bridge; and Blennerhassett	Meadowbrook Road Bridge;
(Degree, Year, Specialization)  Engineering/1999  IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	(Degree, Year,	deck drainage; size and locati	pier design our Divisior
Engineering/1999 IN PROFESSIONAL ORGANIZATIONS Professional Engineer WV			
IN PROFESSIONAL ORGANIZATIONS  Professional Engineer WV	Civil		
	NI	(Type,	1000
			W

13. PERSULAL HISTORY STATEMENT O	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DESIGN	SSIGN (Furnish compl.
Fir		YEARS OF EXPERIENCE	
J. Todd Garnes	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 5	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Mr. Garnes experience surveying and provextrusions. He has provided constructions. Mr. Garnes has performed numerous water mapping, mine research, and development	riding CADD Design on inspection servi feasibility studie of final reports.	mine reclamation projects for landsides and subsider which involved interviews,	and waterline and sewer Ice projects in Ohio.
EDUCATION (Degree, rear, specialization) A.S. Architectural Design/ 1999  A.S. Commiter bided brafting and Design/	ilzacion/ Joesion/1999		
ERSHIP IN PROFESSIONAL OF	- 1	REGISTRATION (Type, Year, Sta	State)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
E & TITLE		YEARS OF EXPERIENCE	
Thomas Rayburn, P.S.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
		30	
planation of Responsik urn has experience in coal mining, designed ion plans and systems	vilities mine mapping and surveying, fo mine drainage and water suppl which include precision pressu	es napping and surveying, formulated short term and long range mining pla drainage and water supply systems for underground and surface mines, include precision pressure quality surveys and computer simulation of	range mining plans for all surface mines, designed mine er simulation of ventilation
systems. He has performed slope stability analysis and hydapplications, work with leases and land managemen By utilizing "state of the art" electronic total surveys for aerial mapping and collects data and Mr. Rayburn has also performed surveying and mapp	lrology calt as well stations develops	alculations, provides computer analysis for mining a reclamation and environmental permits. and/or GPS (Satellite) equipment, he performs control GIS for utility mapping.	nalysis for mining al permits. c, he performs control
EDUCATION (Degree, Year, Specia	Specialization)		
A.S. Mechanical Engineering, WV	WVIT/1970		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Professional Surveyor WV	

Mr. LeRose is experienced in developing major highway and right of way plans; Bridge Construction Inspections; Core Drilling Operations; Groundwater Sampling/Monitoring; UST Removal/Replacement and Mine Permitting/Reclamation. Specific major highway design and right of way plan development projects include: Meadowbrook Road, a 2 mile design of new four lane highway; US 52(I-73), a 3.5 mile design and ROW plans for a new four lane highway with two major interchanges; design of 2 mile section of Appalachian Corridor H from Davis to Bismark; design of 5.2 mile section of PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data He is also experienced in the YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: YEARS OF DOMESTIC WATERLINE In addition, Pater Plant Operator. Mr. Tilley has successfully completed numerous waterline design His current duties include managing both water and wastewater design projects for ELR. relocation, MOT, signing and pavement stripping. He has performed quantity calculations for pavement, drainage, seeding, pollution control quantities, and other items associated with roadway plans. He is also experienced in development of ROW plans, including deed plots and legal descriptions. While working on these projects, he has gained experience in major drainage design, site grading design, utility DESIGN EXPERIENCE Mr. Tilley has over 30 years experience in water and wastewater design as a Project Manager/Engineer. Mr. Tilley is a certified Water Plant Operator. Mr. Tilley has successfully completed numerous waterl State State REGISTRATION (Type, Year, (Type, Year, YEARS OF AML RELATED DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN Professional Engineer WV Professional Engineer WV YEARS OF EXPERIENCE EXPERIENCE B.S. Civil Engineering/WV Tech 1975; M.S. Sanitary Engineering Virginia Tech, 1976 S OF REGISTRATION YEARS EXPERIENCE YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML DESIGN EXPERIENCE: Corridor H from Grant/Hardy County line to Moorefield. Н MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS IN PROFESSIONAL ORGANIZATIONS EDUCATION (Degree, Year, Specialization) EDUCATION (Degree, Year, Specialization) Brief Explanation of Responsibilities Brief Explanation of Responsibilities PERSONAL HISTORY STATEMENT OF data but keep to essentials) NAME & TITLE (Last, First, Middle NAME & TITLE (Last, First, Middle Engineering/1997 projects over his career. keep to essentials) Scott LeRose, P.E 면 면 Tilley, MEMBERSHIP B.S. Civil Int.) Ray Int.)

compl

(Furnish

ESPONSIBLE FOR AML PROJECT DESIGN

PRINCIPALS AND ASSOCIATE.

.AL HISTORY STATEMENT OF

STATEMENT	OF PRINCIPALS AND ASSOCIATE.	SSPONSIBLE FOR AML PROJECT DESIGN	SSIGN (Furnish compl
& TITLE (Last, Fir		YEARS OF EXPERIENCE	
Int.) James Eric Gwinn, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
has experience in ts. He has worked gional Water Proje has designed appro	truction the Cabe He has	projects. He perfor it and the raw water on various AML proj	ms calculation and permit intake structure for the Fayette ect. idge projects.
EDUCATION (Degree, Year, Specia			
B.S. Civil Engineering/1998/ West Virginia	Institute of	Technology	
MEMBERSHIP IN PROFESSIONAL ORGAN	ORGANIZATIONS	REGISTRATION (Type, Year, Sta	State)
13. PERSONAL HISTORY STATEMENT (but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DE	DESIGN (Furnish complete data
		YEARS OF EXPERIENCE	
Brian D. Morton, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 11
Brief Explanation of Responsibilities	lities		
Mr. Morton has worked on waterline waterline relocation projects invo	extension proj lving the West	ects in Putnam and Kanawha County. He a Virginia Division of Highways.	also has completed numerous
Mr. Morton has prepared signing culverts and other drainage struspecifications, bid documents, a	and pavement marking plans ctures and highway construc nd has performed constructi	l performed hydrologic and on. Also prepared site dev administration for these p	<pre>ind hydraulic calculations for development plans, se projects.</pre>
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Civil Engineering/1998			
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Professional Engineer WV	

13. PERL AL HISTORY STATEMENT OF data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE.	ESPONSIBLE FOR AML PROJECT DESIGN	ESIGN (Furnish compl
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
Carney, Joseph T. P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 35
Brief Explanation of Responsibilities	lities		
Mr. Carney has extensive experiand contract administration. Hestorm sewer, drainage studies,	lesign eng rked on a bridge d	gineering, preparation of contract documents, construction variety of Civil Engineering projects including grading, esign, hydrologic/hydraulic reports, sanitary sewer and wa	nts, construction inspection, cluding grading, earthwork, tary sewer and water systems.
egree, Year, Speci	and a		
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, Sta	State)
		Professional Engineer, 1976,	WV
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT DI	DESIGN (Furnish complete data
S & TITLE		YEARS OF EXPERIENCE	
Workman, Gary A., CADD	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Senior Technician	3	77	м
Brief Explanation of Responsibilities Mr. Workman is responsible for CADD design on A WYDEP/AML projects while employed at Ackenheil,	on AML projects, heil, and has work	well as geotechnical soil on 18 AML projects while a	. analysis. He Worked on 44 at E. L. Robinson.
EDUCATION (Degree, Year, Specialization) Technical School/1987/CADD	lization)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, State) WVDOH certifications compaction,	State) ction, aggregates and concrete.

13. PERLUAL HISTORY STATEMENT OF PRINCIPALS data but keep to essentials)	OF PRINCIPALS AND ASSOCIATE. )	ESPONSIBLE FOR AML PROJECT DESIGN	ESIGN (Furnish compl.
NAME & TITLE (Last, First, Middle		YEARS OF EXPERIENCE	
Mayes, Jason M.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities	lities		
Provides CADD Design for site development, waterline Nearly ten years experience in WV DOT design with a	and s	ewer extensions, and layout on AML Projects. firm.	AML Projects. Mr. Mayes has
EDUCATION (Degree, Year, Specia	Specialization)		
B.S. Industrial Technology 1997 WVU Tech A.S. Drafting and Design 1996 WVU Tech	WVU Tech VU Tech		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	NIZATIONS	REGISTRATION (Type, Year, Sta	State)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DE	DESIGN (Furnish complete data
& TITLE		YEARS OF EXPERIENCE	
Scott A. Pratt	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
	12	12	
Brief Explanation of Responsibilities	lities		
Mr. Pratt has extensive experience as a samples, and obtaining water levels. He experienced in mine map research, specif	ience as a Field Geologist, performing levels. He has also performed many geot irch, specification writing, and quantit	test bori echnical y and cos	ng over-sight, logging soil and core soil tests in the laboratory. He is also t calculations for AML projects.
EDUCATION (Degree, rear, Specialization)	llzacion)		
B.S. Geology, 1999, Marshall Un	University		
MEMBERSHIP IN PROFESSIONAL ORGA	ORGANIZATIONS	REGISTRATION (Type, Year, Sta	State)

15. CURALINT ACTIVITIES	ON WHICH YOUR FIRM IS THE	E DESIGNATEL LINGINEER OF	RECORD	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Keaton Branch Complex Raleigh County	McDowell County	Surveying, Mapping and Design	\$512,500	<u>ග</u> ග
Gordon 'C' Complex Boone County	WVDEP/AML&R	Surveying, Mapping and Design	\$381,700	φ Θ
Newtown (Kinder) Portals Mingo County	WVDEP/AML&R	Surveying, Mapping and Design	\$250,000	89
Shinnston-Lumbperport Subsidence Harrison County	WVDEP/AML&R	Surveying, Mapping and Design	\$500,000	06
Holden Water System Upgrade Logan County	Logan County PSD P. O. Box 506 Logan, WV Attn: Rick Roberts	Design and Construction Management	\$6.0 M	80
Gilbert Slabtown Waterline Extension	Town of Gilbert P.O. Box 188 Gilbert, WV Attn: John White	Design and Construction Management	\$2.3 M	15
Lavalette PSD Rt. 37 Waterline Extension	Lavalette PSD 5308 Route 152 Lavalette, WV	Design and Construction Management	\$5.0 M	85
TOTAL NUMBER OF PROJECTS:	:5:	TOTAL ESTIMATED	ATED CONSTRUCTION COSTS:	w

PROJECT NAME, TYPE AND LOCATION		NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	₩ 0.9\$	85
Miller Mountain Water Extension, Webster County	Webster County EDA Webster Springs, WV	Design and Construction Management	\$3.0 M	80
McDowell PSD Jolo Phase II Water McDowell County	McDowell Public Service District	Design and Construction Management	\$4.0 M	85
Dille/Widen Water Extension Clay County	Birch River PSD	Design and Construction Management	\$4.0 M	85
Dutch Ridge/Sanderson Water Extension, Kanawha County	Kanawha County RDA	Design and Construction Management	\$2.5 M	85
Williamson Sanitary Sewer Improvements	City of Williamson	Design and Construction Management	\$1.1 M	50
Lubeck Sanitary Sewer Extension, Wood County	Lubeck, MV	Design and Construction Management	\$2.1 M	0
TOTAL NUMBER OF PROJECTS:14	rS:14	TOTAL ESTIMATED	ATED CONSTRUCTION COSTS:	\$ 37.6 Million

15. CURKENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATEL ANGINEER OF RECORD

		<i>(4)</i>	/	1 - 1			
	TRUCTION COST	YOUR FIRMS RESPONSIBILITY					
ırs	ESTIMATED CONSTRUCTION COST	ENTIRE PROJECT					
SUB-CONSULTANT TO OTHERS	ESTIMATED COMPLETION DATE						
	NAME AND ADDRESS OF OWNER						
6. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A	NATURE OF FIRMS RESPONSIBILITY				¥		
16. CURRENT ACTIVITI	PROJECT NAME, TYPE AND LOCATION						

TA COMPLETED WORK WITHHIN LAST	5 YEARS ON WHICH YOUR FIRM	AS THE DESTGNATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION CO	YEAR	CONSTRUCTED (YES OR NO)
Glen Rogers Waterline Extension Wyoming County	WVDEP-AML 601 57 <sup>th</sup> Street Charleston, WV 25304	\$1.2 M	2007	Yes
Guyandotte River Bridge I-64 Cabell County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$2.25 M	2006	Yes
Corridor H Davis-Bismark X347-H-64.85 00 Tucker County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$9.0 ₪	2008	No
WVDEP-Emergency East Bank (Willis) Mine Blowout	WVDEP AML&R 601 57 <sup>th</sup> Street Charleston, WV 25304	\$0.8 M	2009	Yes
Chief Logan Recreational Center Logan County	WV State Parks	\$4.0 M	2007	Yes
Mt View Streeter Water Raleigh County	Flat Top PSD	\$2.5 M	2007	Yes
Gilmer B Sites 3-8 Gilmer County	WVDEP-AML&R 601 57 <sup>th</sup> Street Charleston, WV 25304	\$675,000	2009	Yes
Upshur County Industrial Park Upshur County	Upshur County EDA	\$4.0 M	2009	Yes

18. COLIPETED WORK WITHIN LAST 5	YEARS ON WH	FIR. HAS BEEN A	SUB-CONSULTANT	TO OTHER FIRMS	(INDICALHASE
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Appalachian Corridor D Blennerhassett Island Bridge X354-D-0.00	Sub to Michael Baker, Jr., Inc. Post Design Services	\$7,500,000	2008	Yes	Michael Baker, Jr., Inc.
Appalachian Corridor H Section 6 X316-H-100.40	Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies	\$950,000	2008	Ses	Michael Baker, Jr., Inc.
Appalachian Corridor H Section 3 Davis to Bismark	Sub to Modjeski & Masters Survey,Geotech & ROW Plans	\$9,000,000	2008	No	Modjeski & Masters
Robinson Creek Bridge S303-85-27.81 Boone County	Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans	\$1,000,000	2008	Yes	EDG
19. Use this space to provide any qualifications to perform work E. L. Robinson Engineering Co. mapping and construction moniton heavily on the work offered by	additional for the We is committ oring servi the WVDEP/	Cormation or description of Virginia Abandoned Mine Lar to the WVDEP/AML program to in a timely and cost-efficiprogram.	resources s ids Program. provide pr ient manner		rour firm's design, surveying and ness plan relies
20. The foregoing is a signature:  Signature:  Printed Name: Richard W.	a statement of facts.  MM  Watts	Title: PROJECT MANAGER	ER	Date: March 6, 2012	

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



Project: Jacob's Fork Complex

Boone County, WV

Year: 2008-2009 Client: WVDEP-AML

Charleston, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and reclamation.

Project: Rhodell Refuse & Portals

Wyoming County, WV

Year: 2008

Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gilmer B Site 3.8

Gilmer County, WV

Year: 2008

Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gouge Landslide Emergency

Scott Town, OH

Year: September 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey, drilling and prepared landslide abatement

design.

Project: Brown Landslide Emergency

Rayland, OH

Year: August 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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



Project: Rodgers Subsidence Emergency

Wellston, OH

Year: January 2007

Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey and prepared subsidence abatement

design.

Project: McAdams Subsidence Emergency

Stark County, OH

Year: April 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed investigation and prepared report of findings.

Project: Athens Rt. 13 Refuse Fire Emergency

Athens County, OH

Year: March 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey, prepared abatement design and monitored

on site construction for fire extinguishment.

Project: Toney Fork Landslide Emergency

Boone County, WV

Year: February 2006
Client: WVDEP-AML

Charleston, WV

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

specifications to stabilize an emergency landslide area.



Project: Cox Refuse Fire Emergency

Gallia County, OH
ar: December 2005

Year: December 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed abatement design for fire extinguishment.

Project: Lavender Refuse Fire Emergency

Meigs County, OH

Year: November 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed abatement plan and monitored construction.

Project: Goetz Subsidence Emergency

Columbiana County, OH

Year: November 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed investigation and prepared report of findings.

Project: Adkins Landslide Emergency

Gallia County, OH

Year: December 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling, landslide abatement and

construction monitoring.

Project: North Matewan (Sipple Drainage)

Mingo County, WV

Year: February 2005 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design for drainage project

abatement.



Project: Phalen Landslide Emergency

Martins Ferry, OH January 2005

Year: January 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site surveying and landslide abatement design.

Project: Baisden Subsidence Emergency

Jackson, OH
Year: January 2005
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed drilling to develop subsidence abatement solutions.

Project: Parsons Landslide Emergency

New Philadelphia, OH

Year: December 2004
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site review and report concerning landslides relation

to mining and potential solutions.

Project: Treadway Landslide Emergency

Rayland, OH

Year: October 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site surveying, drilling and landslide abatement

design.

Project: Big Creek "C" Refuse

Logan County, WV

Year: July 2004 Client: WVDEP-AML

**Description:** Performed surveying and drilling for design.



Project: Imboden Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

solutions and cost estimates.

Project: Titus Road Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

specifications to stabilize and emergency landslide area.

Project: Jefferson County Road 26 Landslide Emergency

Winterville, OH

Year: May 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

specifications to stabilize and emergency landslide area.

Project: Charleston Romeo Landslide

Kanawha County, WV

Year: May 2004 Client: WVDEP-AML

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



Project: Roush Landslide Emergency

Pomeroy, OH March 2004

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

landslide area.

Project: Lewis Landslide Emergency

Pomeroy, OH

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

to stabilize an emergency landslide area, and provided

construction monitoring.

Project: Moran Subsidence

Clinton, OH

Year: January 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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

subsidence area.

Project: Ron Bobar Subsidence

Flushing, OH

Year: January 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

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



Project: Gooney Otter Refuse

Wyoming County, WV

Year: January 2004 Client: WVDEP-AML

**Description:** Performed surveying, drilling and site design for refuse

regarding project.

Project: Chapmanville (Gorby) Mine Blowout

Logan County, WV

Year: December 2003
Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide regrading

and retaining wall design.

Project: Tuppers Creek (Layne) Landslide

Kanawha County, WV

Year: July 2003 Client: WVDEP-AML

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

Project: Maidsville (Tennant) Landslide

Monongalia County, WV

Year: February 2003 Client: WVDEP-AML

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

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

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

landslide.



Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001 Client: WVDEP-AML

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

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001 Client: WVDEP-AML

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

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000
Client: WVDEP-AML

Charleston, WV

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

Project: Bull Run #27

Preston County, WV

Year: October 2000 Client: WVDEP-AML

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

Project: Rich Fork (Thaxton) Landslide

Kanawha County, WV

Year: July 2003 Client: WVDEP-AML

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

Project: Maidsville (Tennant) Landslide

Monongalia County, WV

Year: February 2003
Client: WVDEP-AML

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



## 12A Abandoned Mine Land Reclamation Experience

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

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

landslide.

Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001 Client: WVDEP-AML

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

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001 Client: WVDEP-AML

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

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000 Client: WVDEP-AML

Charleston, WV

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

Project: Bull Run #27

Preston County, WV

Year: October 2000 Client: WVDEP-AML

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



## 12A Abandoned Mine Land Reclamation Experience

Project: Riffe Branch Impoundment

Fayette County, WV

Year: June 2000 Client: WVDEP-AML

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

drainage control.

Project: Ven's Run Landslide

Harrison County, WV

Year: September 1999 Client: WVDEP-AML

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

Project: Fickey Run

Year: Preston County, WV
Year: September 1999
Client: WVDEP-AML

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

and drainage control.

Project: Bull Run #35
Year: July 1999
Client: WVDEP-AML

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

Project: Securro Mine Drainage Site 1 & 2

Fairmont, WV

Year: July 1998 Client: WVDEP-AML

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

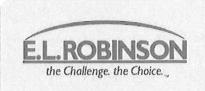
Project: Brown's Creek #10 Reclamation Project

Year: 1997

Client: WVDEP-AML

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

mine seal installation.



## 12B Soil Analysis Geotechnical Experience

## **US-52 Kermit By-Pass**

Solicited Bids from core boring contractors and performed core borings for highway and bridges for a planned four-lane highway in Mingo County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a total of six bridges.

## Meadowbrook Road

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Harrison County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

## **US 60 Coal River Bridge**

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge, which spans the Coal River in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

## US 60 CSX-Overpass Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans mainline tracks of the CSX Railroad in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

### Indian Creek Bridge Boone County West Virginia

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

## Camp Creek Bridge - Lavalette

Layout and directed core boring operations using WVDOH forces for a replacement bridge on US 152 in Wayne County West Virginia. Prepared Geotechnical report with recommended foundation alternatives.



## 12B Soil Analysis Geotechnical Experience

## **Jackson Bridge**

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

## Tallman Bridge

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

## Corridor H-Section 7 (Foreman to Moorefield)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Hardy County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the South Branch of Potomac River.

## Corridor H-Section 12 Section 01(Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant Counties West Virginia.

### Corridor H-Section 12 Section 03 (Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

### I-79 Lodgeville Bridge

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



## 12B Soil Analysis Geotechnical Experience

## I-79 Simpson Creek Bridge

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

## I-79 Meadowbrook Road Over Pass

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

## Ripley Town Bridge

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

## Ripley Route 21 Road Widening

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

### I-64 Cross Roads Overpass Bridge

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

## I-79 Left Hand Fork Bridge

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



Project:

Blennerhassett Island Bridge Over Ohio River

Year:

1999-2003

Client:

Michael Baker Jr., Inc.

5088 Washington Street, West

Charleston, WV 25313

Contact:

Pi Amin, P.E.

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

304-769-0821

**Description:** 

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

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

Project:

**US 52 Mainline Bridge** 

KY 40 Bridge/Kermit Bypass over Marrowbone Creek

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

**Building 5** 

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

Description:

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

using the USACE 1-D HEC-RAS program.



Project: Bridge No. 2922.1 NB & SB

I-79 Over Left Hand Creek & US 119

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

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

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the placement of a

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

program.

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

projects.

Project: Bridge No. 2448.1 – Simpson Creek Bridge

I-79 Over Simpson Creek

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

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

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the widening of the

Simpson Creek Bridge over Simpson Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-RAS program.

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

the projects.



Project:

Bridge No. 10059 - Ripley Town Bridge

US 33 Over Mill Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

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

304-558-0501

**Description:** 

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

Project:

Bridge No. 4732 – Jackson Bridge WV 18 Over Point Pleasant Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

903 3rd Street

Moundsville, WV 26041

Contact:

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

304-843-4008

Description:

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

D HEC-RAS program.



Project:

Bridge No. 4636 - Indian Creek Bridge

CR 3/25 Over Big Coal River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 1

1334 Smith Street Charleston, WV 25301

Contact:

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

304-558-3001

**Description:** 

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

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

Project:

Bridge No. 4769 – Tallman Bridge

CR 24 Over Middle Island Creek

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

904 3rd Street

Moundsville, WV 26041

Client:

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

304-843-4008

**Description:** 

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

program.



Project: Bridge No. 10058 - Meadowbrook Road Bridge

CR 24 Over West Fork River

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

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

304-558-0501

**Description:** Prepared an analysis of the hydraulic impact of the new Meadowbrook

Road Bridge over the West Fork River and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process and the Harrison County Flood Insurance Study model of the West Fork River was also used. Computer modeling was prepared

using the USACE 1-D HEC-RAS program.

Prepared Section 404 permitting documents outlining the effects temporary sheet piling, which would be used during the construction

phase, would have on the outlying areas upstream of the projects.

Project: Bridge No. 4426 – Lower Gassaway Bridge

WV 4 Over Elk River

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

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

304-558-0501

**Description:** Prepared an analysis of the hydraulic impact of the Lower Gassaway

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

D HEC-2 program and the FHWA WSPRO program.



Project: Bridge No. 4574 - Camp Creek Bridge

WV 52 Over Camp Creek

Year: 1998

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 2

P.O. Box 880

Huntington, WV 25712

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

304-528-5625

**Description:** Prepared analyses of the hydraulic impact of the Camp Creek Bridge

over Camp Creek and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross

sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-2

program and the FHWA WSPRO program.



# 12D Aerial Photography and Contour Mapping Experience

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

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



# 12D Aerial Photography and Contour Mapping Experience

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

## 2003-Present

All ELR AML Projects WV and OH

## 2002

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

## 2001

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

## 2000

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

## 1999

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

## 1998

Bull Run #35 Fickey Run

#### 1997

Browns Creek Marrowbone Matewan Pigeon Creek



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

#### Education

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

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

#### Registrations

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

Registered Professional Surveyor in West Virginia.

### **Professional Memberships**

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

### Professional Experience

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

Under his leadership, E. L. Robinson has entered the new millennium as a multidisciplined professional services firm that



utilizes the latest technology in the design of highways, bridges, structures, environmental, civil, and geotechnical projects as well as global position satellite surveying, right-ofway, construction inspection and architectural services.

The firm now employs more than 90 engineers, architects, surveyors and support personnel and has been converted to an employee owned company through an Employee Stock Ownership Plan (ESOP).

### Representative Projects

Engineering Review of the following projects:

- US Route 52 Kermit Bypass: This project consisted of 2.5 miles of four-lane divided highway, 3,000 LF of four-lane access road design, two 4-ramp intersections, one set of twin structures, one single bridge, and 2,900 LF of stream relocation, all of which resulted in 10 million cubic yards of excavation and an estimated total construction cost of \$88 million.
- Corridor H Davis to Bismark: This project consisted of 1.75 miles of four-lane divided highway, one bridge, two at-





grade intersections, and a 6' x 6' concrete box culvert. This project has an estimated total construction cost of \$9 million.

- Corridor H Foreman to Moorefield:
   This project consisted of 5 miles of four-lane divided highway, almost 3 miles of access road design, a truck escape ramp, one set of twin structures, one single bridge, a box culvert, and naturalized stream design. This project resulted in 10 million cubic yards of excavation and an estimated construction cost of \$75 million.
- CAMC 33<sup>rd</sup> Street Relocation: Engineering design and construction management for the relocation of 33<sup>rd</sup> street and site development for a five story clinical teaching facility in Charleston, WV.

## Offices Held

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

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

## **Honors Awarded**

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





## Timothy B. Cart, P.E., P.S.

Project Engineer

### Education

B.S. Civil Engineering
West Virginia University, 1981

#### Registrations

Registered Professional Engineer in West Virginia and Ohio

Registered Professional Surveyor in West Virginia

#### Professional Memberships

· American Society of Civil Engineers

#### Professional Experience

Mr. Cart has over 25 years of experience in providing consulting engineering services. Clients served have included Industrial, Public and Private Institutions and State and Federal Agencies.

Mr. Cart has served as Project Engineer on numerous geotechnical investigations over the years. These projects have included highways, bridges, industrial sites and private development.

He has designed numerous waterline extensions and sewer collection systems. These extensions have included providing service to many residential as well as industrial customers. The sewer collection systems have included design of systems to collect sewage from residential and industrial sites. Mr. Cart served as a project



engineer on several major waste water treatment plant upgrades for industrial clients in the Kanawha Valley. He has designed several plants to serve industrial as well.

Mr. Cart has performed over 100 Abandoned Mine Land Reclamations projects throughout Appalachia. These projects have been mainly in Ohio, West Virginia and Eastern Kentucky. These projects have involved draining flooded mine workings, support of ground experiencing or subject to Mine subsidence and the stabilization of landslides.

Mr. Cart has designed numerous retention and retaining ponds for sites. These designs have involved the determination of storm runoff and design of structures to safely retain and pass the required storm peak flows.

His experience includes permitting activities for projects which have included:

- · Railroad Occupancy Permits for Utilities
- NPDES Permits for Industrial and Public Wastewater Facilities
- Highway Permits for Utility Occupancy and Access Road Tie Ins
- Health Department Permits for Water and Sewer Projects





- US Corps of Engineers Permits -Nationwide and Individual
- West Virginia Public Lands Permits

Mr. Cart has recently been involved in the design of a 100 acre Industrial Site and 8 acre Industrial/Commercial Site in Mingo County. These projects are currently under construction and are located near Appalachian US 119 Corridor G.





## Richard W. Watts

Project Manager/Geologist

### **Education**

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

## Professional Registrations

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

### Professional Memberships

Geological Society of America Association of Engineering Geologists

#### **Teaching Experience**

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

#### Professional Experience

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

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



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

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

#### AML and Coal Industry Projects:

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

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





## John R. Kelly, III Engineer Intern

----

## Education

B.S. Civil Engineering West Virginia University, 1998

## Computer Skills

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

## **Professional Memberships**

· American Society of Civil Engineers

## Professional Experience

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

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



## Representative Projects

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

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





## James T. Rayburn, P.S. Chief Surveyor

## Education

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

### Registrations

Registered Professional Surveyor in West Virginia

## **Professional Memberships**

American Congress on Surveying and Mapping

The American Association for Geodetic Surveying (AAGS)

Member Organization of ACSM.

Cartography and Geographic Information Society (CaGIS)

Geographic and Land Information Society (GLIS)

National Society of Professional Surveyors (NSPS)

West Virginia Association of Land Surveyors, Inc.



## Professional Experience

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





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

## Representative Projects

#### Design Surveys

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

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

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





#### **Construction Surveys**

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





## Randall L. Lackey, P.E.

Project Engineer

## Education

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

## Registrations

Registered Professional Engineer in West Virginia, Ohio and Kentucky

## Professional Memberships

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

## Computer Skills

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

#### Professional Experience

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



## Representative Projects

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

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





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

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

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

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





## Mark Allen McGettigan, PE, Project Engineer

## Education

M.S.E. Engineering Management/Environmental Engineering,

Marshall University December 2007

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

## Registrations

Registered Professional Engineer in West Virginia

## **Professional Memberships**

· American Society of Civil Engineers

## **Professional Experience**

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

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



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

### Representative Projects

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

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



ব	
0	
-	
0	
O	
G	
a.	

Mine/Refuse Fire Abatement Subsidence Investigation Mitigation Hazardous Waste Disposal	X × × Hydrological/Hydraulic Design/Eval.  Remining Evaluation	X   X   Portal/Shaft Closure	××× Abandoned Deep Mine Reclamation
		×××	×××
		××	××
		<	*
			_
	Ш		
		×	+
			×
		+	× >
		× × ×	< >
		+	×
		× >	× >
	J	1	< >
		+	<>
	Т	> < >	< >
		< <×	< ×
		×	×
		. >	: >
		<>	<>>

		Gary A. Workman, CADD				П	П	T	Ţ			T	П	П	T	Γ			T	Τ	П	T		П	T	T		П	T		T		T				Ţ	T	Г	Γ
tion		Scott A. Pratt, Geologist												П							П	T			1	T		П		T		T	T	Г		П		T	T	T
icipa		John Kelly. E.I.	۵	۵		۵	۵	2 0	. α.	۵	۵. ۵	0	۵	۵.	2 0	. a.	۵	۵.	2 0	<u>a</u>	۵	a a	. a.	۵	۵ ۵	10	۵.													
Primary Staff Participation	M-Mngmt	Mark McGettigan, P.E.	۵	۵		۵	۵	a. 0	۵.	Ф	a. a	L a	۵	۵. ا	2 0	۵.	۵	۵	a a	<u>a</u>	۵			Д			۵		Ī				Ī						T	
iry Sta	2	Richard W. Watts, P.G.						T							Ī	T																0		۵	۵	۵	۵.	1 0		۵
Prima	Ì	Tim Cart, P.E.	۵	۵	۵	۵	۵	2 0	. a	а	م م		۵	۵	2 0	_	۵.	۵	2 0	a	а	T	T	۵	1		۵			T	۵	. 0	۵	۵	П	П	$\neg$	10	$\top$	Т
		Ed Robinson, P.E.	Σ	Σ	M	×	M	2 2	Σ	Σ	2 2	2 2	Σ	M	2 2	Σ	Σ	Σ	2 2	Σ	Σ	ΣΣ	Σ	Σ	≥ :	2 2	Σ													
		Geotechnical/Stability			×	×	×	×	×		××	×		×	××	×	×	,	×	×	×										×	: >	×	×	×	×	××	××	<	×
		Stream Restoration						1			1	Ī						-		T					1		l				×		T					Ī	Ī	Ī
	İ	Equipment/Structure Removal																	1	Ī		Ī				T			1				Ī			Ì	İ	T	T	Ī
		Water Treatment										Ī			Ī							T			Ī						Ī	Ī	T					Ī	T	Ī
		Construction Inspection/Management										Ì		×	×							×	×		×	×								×						Ī
		Water Quality Evaluation/Mitigation/Replacement	×	×				>	<																			×	×	××										
		Project Specifications	×	×	×	×	×	××	×		×	×	×	×	××	×			>	×	×	×	×	×	×	××	×											×	•	
1	JE	Hazardous Waste Disposal																																						
	PERIEN	Subsidence Investigation Mitigation											×					×				×			,	××												×	:	
	CT EX	Mine/Refuse Fire Abatement																			$\ $	×	×		×	ŀ					×						1			
	PROJECT EXPERIENCE	Remining Evaluation							×																						×	:							Ī	Ī
		Hydrological/Hydraulic Design/Eval.	×	×	×			>	×		×	×		×	××	×			×	×	×			×			×				×	,	×	×		×	××	××	<×	,
		Portal/Shaft Closure			×				×		×	×																				>	<					×		
		Abandoned Deep Mine Reclamation			×		×	×	×		××	<×	×	×	××	×	×	×	××	×	×	××	×	×	×	<×	×				×	; >	×	×	×	×	××	××	×	,
		Abandoned Surface Mine Reclamation				×	×	×	×							×	×		×		×											,	<							
		Additional Information in Section	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	ON	OZ :	ON CO	2									
		Experience Basis Corporate-C Personal-P	υ	υ	υ		O				O			O	U	0	ပ	O	ی د	0	ပ	υc	O	ပ	O	ی د	O	۵	۵	۵. ۵			۵		Ь	А	۵.	a a	۵.	
		PROJECT	Coopers Rock, Pisgah, and Laurel Run Waterline	Davis Water Tank	Whittington Hill (Walker)Slide	Maidsville Landslide	Fork Landslide	Popers Creek Landslide	hey Otter Refuse	manville Mine Blowout	Charleston Romeo Landslide	Matewan Single	n Subsidence	Lewis Landslide	Roush Landslide	Titus Road Landslide	mboden Landslide	Baisden Subsidence	Parsons Landslide	Phalen Landslide	Adkins Landslide	Goetz Subsidence	Cox Refus Fire	Toney Fork Landslide	is Rt. 13 Refuse Fire	MicAdams Subsidenc Ermer Rodoers Subsidence	Brown Landslide	Town Run	Witcher Creek	Pond Gap, Hitop & Spangler Filk City	Little Fork Refuse Dile	Tookot Cod	Ironton	-Williamson LS	OSM-Ray Landslide	OSM-Spence Landslide	-Ratliff Landslide	OSM-Pigeon Roost LS	OSM-Little Prater Creek	11-11-11-11-11-11-11-11-11-11-11-11-11-

		Gary A. Workman, CADD	Γ	۵			۵	۵			a.	۵			۵.	10	a.	۵	۵.		۵	a 6	_ a	۵	۵	م م		П	T	T	۵	۵	۵	2 0	۵	۵			۵	ما	a.
	tion	Scott A. Pratt, Geologist	Γ	0			۵	0.0				۵		۵												م م		П								П		Ī			
	icipa	John Kelly. E.I.	Ī																				Ī	Ī																	
	M-Mngmt	Mark McGettigan, P.E.	Γ																																						
d	Primary Staff Participation M-Mngmt	Richard W. Watts, P.G.	۵	۵	2 0	۵	۵	а.	2 0	La	۵	۵	1 0	۵	م د	2 0	۵.	۵	۵.	10	Д	۵.	2 0	۵	Ь	۵ ۵	۵	۵	۵. ۵	. a	۵	Д	۵	a a	۵	۵	٥٥		۵	۵	a. a.
	E	Tim Cart, P.E.	۵																										0. 0	. 0									Ш		
		Ed Robinson, P.E.																																							
		Geotechnical/Stability	×				×	×	××	××		×	××	×	×	××	×	×		×	×	,	×		×					×	×	×		×		×	×	<	×	×	×
1		Stream Restoration							×	×		×			,	×						,	×		×	Ī	×											×			×
		Equipment/Structure Removal			>	<			×			×			×	×	×	×	,	<	×	,	×		×		×	×		×					×		×	×			
		Water Treatment																				,	×										×	>	×	×			×		
		Construction Inspection/Management		×					>	<		×	×																												
		Water Quality Evaluation/Mitigation/Replacement		×	×	×	×			×	×				×			×	×			×	××	×	×	××	4		×	<×	4		×	>		×	>	<	×	×	×
nent "C		Project Specifications		×	×	<		×	×	<×		×	×	×	××	××	×	×	,	×	×	×	××		×		×	×	×	××	×	×	×	××	×	×	××	×	×	×	××
Attachment	CE	Hazardous Waste Disposal			×	<									>	×			,	<																					
	ERIEN	Subsidence Investigation Mitigation					×						×																	×	4	100									×
	CT EXF	Mine/Refuse Fire Abatement															×		,	×								×										×			×
	PROJECT EXPERIENCE	Remining Evaluation		×	×	<				×		×			,	×	×	×	,	×	×				×				,	<				×			×	×	×		×
		Hydrological/Hydraulic Design/Eval.	×	×	>	<		×	×	<×		×	×		×	××	×	×	,	×	×	×	××		×		×	×	×	××	×	×	×	××	×	×	××	×	×	×	××
		Portal/Shaff Closure		×	*	<		×	,	<×	×				×	××		×	,	×	×	×	×		×		×		×	<×	×	×	×	,	×	×	××	<	×	×	××
		Abandoned Deep Mine Reclamation	×	×	×	<		×	>	<	×			×	××	××	4	×	>	×	×	×	××		×		×		×	××	×	×	×	>	×	×	××	<	×	×	××
۷		Abandoned Surface Mine Reclamation		×	×				×		×	Ш				××					×				×			×						×		×		×			×
ENCEMAIR		Additional Information in Section		2002	2002	2002	2002	2003	2003	2004	2004	2004	2004	2007	1995	1995	1996	1996	1996	1997	1997	1997	1998	1999	2000	2001	2001	1987	1988	1988	1989	1989	1990	1991	1991	1991	1992	1993	1994	1994	1983
טבני בארבאו		Experience Basis Corporate-C Personal-P	۵	۵	2 0	L 0.	А	۵	a. 0	L a	. a	۵	a a	. Ы	٥	a. a	. a.	a.	a.	1 a	. А	۵	a. a	۵.	Ф	0. 0	۵.	ď	٥	1 a	۵.	Ь	۵	۵. ۵	۵.	<b>a</b> .	<u>م</u>	La	А	۵	a. a.
AML and RELATED PROJECT EXPERIENCE MATRIX		PROJECT	Big Sandy Refuse	.eslie (Nelson)	Swiss Drennan	Weston	Parkette	East Dupont Avenue Landslide	Skin Creek Phase II	Vilicher Creek	Yoursco	Carswell	Craigmoor	Ames (Clare) Landslide	Lorado	Madeline Refuse	Vahoo	Aeadowbrook	Jumping Branch	Deard's Fork	Otsego	Miller	Whitby	Sauley River Road	Skin Creek	Jolo	Turkey Gap	Big Sandy	Marfrance	lopes Rin	Chapmanville Landslide	Wharncliff Landslide	Joyce Sturm	Marianna Refuse	Eskdale	Hodgesville	Newsome Branch	Snake Island	Orchard Branch	Seckley Layne	Ouinwood Booth

																				100		
						T.	PROJECT EXPERIENCE	T EXPE	RIENC	ĮU.									M-Mngmt	M-Mngmt	t cha	5
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	InemetedA eni3 ezuteR\eniM	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.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.l.	Scott A. Pratt, Geologist
Elkridge Refuse	۵	1984	×	×	×	×	×	×	-		×	-	+	H	×		×	<u>a</u>	۵		T	t
Lando Mines	۵	1984	×	×	×	×					×						×	Q.	۵			П
West Varney	Ф	1984		×	×	×					×		-		-		×	۵	۵			1
Bethel Portals	۵	1986		×	×	×	1	+	+	+	×	×	+	+			×.	۵.	۵.			1
mmoth Landslide	۵. ۵	198	,			×	1	1		1	×	,	1	-	×,		×,	2 0	2 0			1
Cheyenne		1990	<,		,	<>		1	+		<>>	<>	+	<	+	+			. 0			t
Motor   codelide	L 0	1006		,	<	<	1		+	+	<>	<	+	+	+	<		-	۵			t
Midlick B Refine		1986	×	×	×	×	×	$\dagger$	-	+	<×	1	+	1	ŀ	×	( ×	۵	. a			t
Bluff Mountain	Δ.	1986		×	×	×	×	t			×	×			××	-	     	۵	<u>a</u>		İ	t
Montcomery Drainage	. a.	1986		×	×	×					×						×	۵	۵			t
Mayoros Drainage	a.	1986		×	×	×					×	×		×				۵	۵.			
Ridgeview A & B	۵	1987	×	×	×	×	×	×	H		×	×		×	×		×	۵	۵			
Tupper Valley	ď	1987	×	×	×	×			+	1	×	×	+	×	+		×	-	۵			1
Airport Bottom	۵.	1987		×	×	×		+		1	×	×	+	-	-	1	+	۵. ا				1
illa Creek	۵.	198,	×	×	×	×	×	1	1	1	×	×	1	×	×		×;	2 0	1 0			ľ
McAlpin	a. 1	2005	1	,	1	1		+	+	1	×		1				×	1	1		1	
Kopey	2 0	2002	×	×	×	× ;	1	1	+	+	<>>	+	+	+	+	1		1	1			
Close East		2002	<			<	t	+	+	1	<	>	+		-	+	T	۵	۵		. 0	<u> </u>
Mountain	2	2000					T					< >	+	+		+	2	۵	. 0		0	u
Namostrok/East Kormit	0	2000						1	-		+	×	+	+	-	-	Σ	۵	0		T	
ter ter	٥	2005				T	T	$\dagger$	+		+	×				-	-	L	<u>a</u>		Г	ľ
Hanover	a	2005					T	-	-		-	×	-				-	۵	۵		u.	
Lower Dempsey	ď	2005		×	×	×		-			×						×	۵	۵			1
Island Creek #18	ပ	2005		×	×	×			-		×	×	H		×		×	۵	Ь			
Brownton Landslide	U	2005		×	×	×					×	×					×	۵	۵		Ь	
Bank Emergency	O	2005					1	1	1	+	+	+	-	-	+	+	+	۵	۵		1	
Dunloup Creek	O	2010	×	×	×	×		1	1	1	×	×	+		×	×	×	۵	۵			
Otsego/Pierpoint/Maben	O	2010							+		+	×	+	1	+	+	1	۵	۵			
ers Ridge/Basin	0	2010						1	+	1	+	× ;	+	1	1		1	1	1		Ï	
don/Covel/Garwood	ی در	2010				1	1		1		+	< ;	+	+	+	+	+	-	1			1
/Alpoca/Mill Branch	0	2010				1	1	+	+		+	×	+	+	+	+	+	4	1		Т	
Keystone (Avery)	اد	1102				1	1	+	+	1	+			1	+	+	1					1
stone (Emergency)	0	2010									1	,		1		+	+	1	1 0			1
Cane Branch	O)	2010				1			1	1	+	×	+	+	1	+	+	1	1			1
Spy Rock/Edmond/ Flanagan	O	2010										×	_			_						
Mountain Bon		2010								-			+	+	-	+	+	1	L			t
Wilderliess FSD	ی د	2010				T			+				+	-	-	+	+	-				T
ton Branch	0	2010						-	+		+		-			-						T
Verner Grimmett Burning	,					1		-	t		+		H	-	-	-	-	-	L			T
Refuse	O	2010											_				_	-	_			1
Shinnston-Lumberport	O	201:				T			-		-			-		-	_					l
Adown-Kinder	0	201							-		-		-	-	-	-	-	L				l
n's Branch Emergency	0	201.				T		T	T		-		-	-		-	-	-				T
tricht Branch	0	201												-		-	-	-				İ
Thomas Defines Dile		2011				1			1		+			+		-	+	-				İ
the vernse Life	)	107					1	1														
													L			-						

DEA 11	DEP15605
REO No.	DEL 19009

## STATE OF WEST VIRGINIA Purchasing Division

## PURCHASING AFFIDAVIT

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

#### **DEFINITIONS:**

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

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

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

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

## WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: E.L. Robinson Engineering Co.	
Authorized Signature: Karlell Lus	Date: 3/5 //2
State of Wast Virginia	
County of Kananha, to-wit:	
Taken, subscribed, and sworn to before me this 5 day of March	~
My Commission expires October 5 , 2016.	
AFFIX SEAL HERE NOTARY PUB	LIC BS/ 1147

