



E.L. ROBINSON
ENGINEERING

T: 304.776.7473
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5088 Washington St. West
Charleston, WV 25313

elrobinsonengineering.com



west virginia department of environmental protection
Abandoned Mine Lands and Reclamation

MAPPING SERVICES FOR SOUTHERN COUNTIES OF WEST VIRGINIA

OPEN END CONTRACT

RFQ NUMBER DEP15938

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CHARLESTON, WEST VIRGINIA

E. L. ROBINSON ENGINEERING CO.

CHARLESTON, WEST VIRGINIA

RECEIVED

2012 SEP -6 PM 1:01

WV PURCHASING
DIVISION



September 5, 2012

West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands and Reclamation
601 57th Street
Charleston, WV 25304

Re: Mapping Services for Southern Counties of West Virginia – RFQ DEP15938

Gentlemen:

E.L. Robinson is pleased to have the opportunity to submit our Proposal to the WVDEP's Office of Abandoned Mine Lands and Reclamation, for the Mapping Services for Southern Counties of West Virginia. This proposal is in accordance with the guidelines outlined in the RFQ No. DEP15938 by the State of West Virginia, Department of Administration Purchasing Division Document dated Aug. 23, 2012.

E.L. Robinson is the leading multi-disciplined engineering/architectural/planning firm providing consulting engineering services in West Virginia. Our offices in West Virginia are located in Charleston, Beckley and Chapmanville, making our firm geographically positioned to handle your northern WV mapping needs both efficiently and economically.

You will see that teamwork is the spirit and foundation of our organization. We acknowledge the importance of a quick turn-around and excellent quality service, which our administrative procedures, overall organization, and depth of experience provides you. We are very proud of our performance under past contracts with the Office of Abandoned Mine Lands and Reclamation, as well as other contracts we have held with the WVDEP. We value our working relationship with all AML personnel, and will continue to strive to provide for excellence in all work we do.

E.L. Robinson has provided consulting engineering services in West Virginia for over twenty-five (25) years, allowing us to have a complete understanding of mapping services required by the Office of Abandoned Mine Lands and Reclamation. Our past experience in providing mapping services for the WV Abandoned Mine Lands Program has spanned over the past 20 years. Mapping services provided has included setting aerial photography control points, performing planimetric and topographic field surveys, performing surveys to supplement or enhance existing aerial photography and/or aerial Lidar mapping. We have also performed many quality assurance/quality check surveys to verify new and existing mapping prior to its use for design of reclamation projects, to insure accuracy to mapping standards.

We welcome the opportunity to continue our working relationship with the WVDEP's Office of Abandoned Mine Lands and Reclamation look forward to providing mapping services for all of their projects. We feel our track record indicates that mapping services can be provide on both "Planned Reclamation Projects" and "Emergency Reclamation Projects" utilizing the latest technologically advanced surveying equipment and software. We believe no other company can match the quality of our work, and experience. Our experience and office locations should allow us to be more efficient and therefore very cost competitive.

We trust that the selection of E.L. Robinson Engineering Co. will allow our firm to continue to meet the surveying/mapping needs of the WVDEP's Office of Abandoned Mine Lands and Reclamation.

Thank you for the invitation to answer this RFQ, and if you have any questions or require any additional information for either the WVDEP's Office of Abandoned Mine Lands and Reclamation or the State of West Virginia, Department of Administration Purchasing Division, please contact me anytime at (304) 541-2917 or (304) 855-4546. If I should be unavailable, please contact Mr. Ed Robinson at (304) 776-7473.

Respectfully submitted,

E. L. Robinson Engineering Co.

A handwritten signature in black ink, appearing to read "J. T. Rayburn", with a long horizontal flourish extending to the right.

James T. Rayburn, PS
Manager of Surveying/Geomatics

Tel: (304) 541-2917

Fax: (304) 855-4561

trayburn@elrobinson.com



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E.L. Robinson Engineering
Surveying/Geomatics Division
5088 Washington Street West
Charleston, WV 25313
304.776.7473

Introduction

E.L. Robinson Engineering is an employee-owned, multi-disciplined engineering /surveying / planning firm with a staff of over 100 full-time professionals and support personnel located in ten offices throughout West Virginia, Ohio and Kentucky. Over the last 30 years, E.L. Robinson has grown to one of the largest firms in the region, offering a diverse scope of services. Since 1978, E.L. Robinson has provided a full range of quality engineering services, from planning and analysis to design and implementation.

Named for its founder and president, Edward L. Robinson, P.E., P.S., the firm has based its success on a commitment to quality projects with superior client service. Finding new and creative ways to address challenges has brought the firm's vision of excellence into reality. The firm has grown to understand the ingredients of a professional service firm include not only brick and mortar, but also leading edge technology and a talented, motivated staff that is continually growing and advancing their skills.

The use of technology has allowed the firm to expand engineering capabilities and make use of new resources such as High Definition Laser Scanning, Mobile Scanning and Mapping, GPS Control Surveys, Real-time Kinematic (RTK) Surveys and conventional surveying. In addition to the use of technology, E.L. Robinson continues to strive to invent new and more effective ways to serve our clients. One way we accomplish this task is by providing a thorough pre-analysis of every project, saving the client time, money, and legal exposure. When the client is informed on every phase of the job and every challenge, the reputation of the firm grows stronger and the relationship with client strengthens.

Experience and Technical Capabilities - E.L. Robinson Engineering Co.

Surveying

- ELR has extensive surveying/mapping experience
- ELR provides these services with in-house personnel led by Tom Rayburn, P.S.
- ELR uses the most current survey technology and software available
- ELR Will utilize existing mapping resources where available to reduce costs

CADD Drafting

- CADD technicians, with the firm since its creation over 25 years ago, still with ELR providing wealth of experience.
- All CADD Software is the current release, however mapping can be save to backward compatible software releases.
- Added numerous CADD technicians over the years.

Subcontractors

- ELR typically utilizes Photo Science, Inc. for Aerial Photography and Lidar services on mapping projects. We intend to utilize their services for the projects where Aerial Photography and Lidar may be needed. We have previously worked with this firm on numerous AML and other Mapping projects throughout the State of West Virginia.

WVDEP AML Experience - E. L. Robinson Engineering Co.

- Awarded Northern Counties Mapping Services Contract RFQ DEP15704
- 80 AML Projects completed in WV since the mid 1980's.
- E. L. Robinson has been completing AML Designs since 1996.
- 10 AML Emergency Design Projects completed in WV.
- 2 Geotechnical Investigations for Subsidence completed in WV
- 14 ODNR Emergency Project Designs
- 6 ODNR Investigations (4 Subsidence; 2 Landslides)
- 100+ AML mapping projects completed for various clients since 1980
- Most personnel that completed work on these projects - still with the firm. Ed Robinson, Wendell Williams, Tom Rayburn, and Tim Cart have been involved in mapping projects since the early 1980's.

Communication - E. L. Robinson Engineering Co.

- ELR Project Manager will provide phone or e-mail status to DEP Project Manager on a weekly or as needed basis
- DEP and ELR will jointly review project prior to aerial photography acquisition and prior to mapping from photography.
- ELR will provide completed plan sheets for Preliminary Review
- ELR will advise DEP of any significant issues if they are encountered in the Design Phase
- ELR welcomes DEP input at any point in the process

Why Select E.L. Robinson?

- Provided AML related services for over twenty (20) years.
- Staff that worked on these projects is still with the firm.
- High willingness to commit staff and resources to the successful completion of AML Mapping Projects.
- High willingness to invest in human resources and equipment to enhance our AML capabilities.
- High willingness to produce high quality - cost efficient mapping for use in project designs.
- Capability to provide all Surveying and Design in-house.
- Commitment of Senior-Level Project Managers in addition to large engineering support staff.
- Understand the requirements of the Project.
- Understand the needs of the Client.
- High willingness to do whatever it takes to identify and take care of AML concerns.

**Please allow us to continue to work with you
on the successful completion of AML Mapping Projects.**

E. L. Robinson Engineering Co.

Surveying/Geomatics Division Team Leaders

Ed Robinson, PE, PS

President and CEO

304.776.7473

ed@elrobinson.com

Tom Rayburn, PS

Manager of Surveying/Geomatics
Division

304.541.2917

trayburn@elrobinson.com

Tim Cart, PE, PS

Senior Engineer / Project Manager

304.776.7473

tim@elrobinson.com

Jack Worstell, LSIT

3D Technologies and Geomatics –
Survey Party Chief

304.552.8408

jack@elrobinson.com

Robert K. Fuller, PS

3D Technologies and Geomatics –
Survey Party Chief

304.776.7473

rfuller@elrobinson.com

John Cruikshank

Senior Technician

304.776.7473 ext. 234

johnc@elrobinson.com

Russell Hill

Survey Party Chief

304.541.2922

rhill@elrobinson.com

Richard Mays

Senior Technician

304.855.4546

rmays@elrobinson.com

Frank Ellison

Survey Party Chief

304.541.0717

fellison@elrobinson.com

Wendell Williams, LSIT

Senior Technician

304-776-7473

wendell@elrobinson.com

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State of West Virginia

Board of Professional Surveyors
JAMES THOMAS RAYBURN

License # 2024

Is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, *Code of West Virginia*, and has met the requirements for license renewal for the period ending June 30, 2013

Issued: July 1, 2012
Expires: June 30, 2013

West Virginia Board of Professional Surveyors
The attached cards certify that you are a licensed Professional Surveyor in the State of West Virginia until June 30, 2013.

416 Airport Road, Suite 1
Sutton, West Virginia 26601

Phone (304) 765-0315 Fax (304) 765-0316

E-mail: wvbps@wv.gov Website: www.wvbps.wv.gov

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State of West Virginia
Board of Professional Surveyors
ANNUAL LICENSE RENEWAL



This license certifies that the individual listed below is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, *Code of West Virginia*, and has met the requirements for license renewal for the period ending June 30, 2013. This license must be displayed at the licensee's principal place of practice. (*West Virginia Code* §30-13A-19)

Board Members

Roy E. Shrewsbury, II, PS
Nelson B. Douglass, PS
Mark H. Hornish, PS
R. Michael Shepp, PS
Anthony J. Sparacino, Jr.

Board Administrator

Dennis D. Jarrell



JAMES THOMAS RAYBURN

License #: 2024

Issued: July 1, 2012

Expires: June 30, 2013

Chairman

Secretary

APPENDIX A

DEP15938 RFQ Signature Sheets, Affidavit, Bid Schedule and Vendor Preference Certificate

MAPPING SERVICES FOR SOUTHERN COUNTIES OF WEST VIRGINIA

OPEN END CONTRACT

RFQ NUMBER DEP15938

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CHARLESTON, WEST VIRGINIA

E. L. ROBINSON ENGINEERING CO.

CHARLESTON, WEST VIRGINIA



**E.L. ROBINSON
ENGINEERING**

ESTABLISHED EXPERIENCE. PROVEN PERFORMANCE.



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

Solicitation

NUMBER
DEP15938

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
GUY NISBET 304-558-8802

VENDOR
*709045940 304-776-7473 E L ROBINSON ENGINEERING CO 5088 WASHINGTON ST WEST CROSS LANES WV 25313

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

DATE PRINTED
08/23/2012

BID OPENING DATE: 09/06/2012 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		962-52		
MAPPING SERVICES FOR SOUTHERN COUNTIES OF WV REQUEST FOR SOLICITATION THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY WEST VIRGINIA DEPARTMENT OF ENVIROMENTAL PROTECTION'S OFFICE OF ABANDONED MINE LANDS AND RECLAMATION IS SOLICITING BIDS FROM QUALIFIED CONTRACTOR FOR AN OPEN-END CONTRACT TO PROVIDE MAPPING SERVICES IN THE SOUTHERN COUNTIES OF WEST VIRGINIA PER THE FOLLOWING SPECIFICATIONS, TERMS & CONDITIONS, BID REQUIREMENTS. THESE MAPPING SERVICES WILL RESULT IN THE DEVELOPMENT OF CONTRACT DOCUMENTS FOR DESIGN/CONSTRUCTION PROJECTS.						
***** THIS IS THE END OF RFQ DEP15938 ***** TOTAL:						<u>\$ 202,136.00</u>

SIGNATURE 	TELEPHONE 304-541-2917	DATE September 5, 2012
TITLE Manager of Surveying	FEIN 55-059-4633	ADDRESS CHANGES TO BE NOTED ABOVE

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

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. **REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
2. **MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.
3. **PREBID MEETING:** The item identified below shall apply to this Solicitation.

| A pre-bid meeting will not be held prior to bid opening.

| A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

| A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required

information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. **VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline:

August 30, 2012 at 1:00 PM EST.

Submit Questions to:

Guy Nisbet, Senior Buyer

2019 Washington Street, East

P.O. Box 50130

Charleston, WV 25305

Fax: 304.558.4115

Email: guy.l.nisbet@wv.gov

5. **VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
6. **BID SUBMISSION:** All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The bid delivery address is:

Department of Administration, Purchasing Division
2019 Washington Street East
P.O. Box 50130,
Charleston, WV 25305-0130

The bid should contain the information listed below on the face of the envelope or the bid may not be considered:

SEALED BID

BUYER: _____
SOLICITATION NO.: _____
BID OPENING DATE: _____
BID OPENING TIME: _____
FAX NUMBER: _____

In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: | | Technical
 | | Cost

- 7. **BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock.

Bid Opening Date and Time:

September 06, 2012	1:30 PM
--------------------	---------

Bid Opening Location:

Department of Administration, Purchasing Division
2019 Washington Street East
P.O. Box 50130,
Charleston, WV 25305-0130

- 8. **ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.
- 9. **BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

GENERAL TERMS AND CONDITIONS:

1. **CONTRACTUAL AGREEMENT:** Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. **DEFINITIONS:** As used in this Solicitation / Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation / Contract.
 - 2.1 "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

 - 2.2 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.

 - 2.3 "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

 - 2.4 "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

 - 2.5 "Purchase Order" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.

 - 2.6 "Solicitation" means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.

 - 2.7 "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

 - 2.8 "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. **CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

Term Contract

Initial Contract Term: This Contract becomes effective on

 and extends for a period of year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

- Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within days.
- One Time Purchase:** The term of this Contract shall run for one year from the date the Purchase Order is issued or from the date the Purchase Order is issued until all of the goods contracted for have been delivered, whichever is shorter.
- Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Purchase Order will be considered notice to proceed
5. **QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.
- Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
- Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.
- Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
- One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
7. **EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.
- BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

| **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of . The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

| **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.

| **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

| **WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.

| **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award:

| **Commercial General Liability Insurance:**

or more.

| **Builders Risk Insurance:** builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

- | | **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

✓	Licensed Land Surveyor

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

9. **LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

10. **ALTERNATES:** Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

11. **EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount

	for	

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

13. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.

14. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee if applicable.

15. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

16. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

17. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."

18. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

19. DELIVERY: All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.

20. INTEREST: Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.

21. PREFERENCE: Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

- 22. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.
- 23. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 24. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 25. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 26. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.
- 27. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 28. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.
- 29. PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at <http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx>. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

- 30. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 31. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). **No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.**
- 32. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 33. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 34. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
- 35. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 36. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 37. BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

- 38. HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at <http://www.state.wv.us/admin/purchase/vrc/hipaa.html> and is hereby made part of the agreement provided that the Agency meets the definition of a Covered entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the Vendor.
- 39. CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.
- 40. DISCLOSURE:** Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- 41. LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

42. **ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.
43. **VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

44. **PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

45. **VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, *etc.* and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the

State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 46. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 47. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 50. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
- Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

- [| Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

51. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

- b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

53. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**MAPPING SERVICES IN SOUTHERN COUNTIES OF WEST VIRGINIA
OPEN-END CONTRACT
DEP15938**

Section A – Scope of Services

Background

DEP is mandated by the Surface Mining Control and Reclamation Act of 1977, Public Law 95-87, to reclaim lands and water affected by coal mining that impose social and economic costs on residents, impair environmental quality, prevent or damage the beneficial use of land or water resources or endanger the health and safety of the public.

Scope of Work

The scope of work shall include the development of detailed topographical mapping from field survey data, as well as aerial photography, design data surveys, the development of field survey information suitable and adequate for the development of detailed plans and specifications.

The vendor shall meet and shall provide the following:

I. Surveying and Mapping

A. Topographical Survey

- 1) Location of the physical features of the terrain and the various objects and obstructions both natural and man-made on and in the vicinity of the project site as directed in the project Work Directive.
- 2) Benchmarks and horizontal control shall be established outside of the anticipated limits of construction. The minimum requirements for installation of control shall be specified in the project Work Directive.
- 3) Field Surveys for Topographic Mapping – Field surveys will be conducted as needed to establish horizontal and vertical control data for preparation of the topographic map(s). The following specifications and stipulations will apply to field survey.
 - a. Horizontal traverses shall be closed. All angles shall be doubled and checked by comparing computed bearings with observed bearings. The difference between the deflection and angle and half of the double deflection angle shall not exceed 20 seconds. Horizontal direction shall be established from magnetic north.
 - b. A baseline shall be established across or in close proximity to the site with permanent objects or hubs as directed in Item (e) below. Baselines may be

established on pre-existing jeep trails, roads or utility rights of way on or in close proximity to the site. The maximum distance between baseline stations shall be located in such a way that at least two stations can be seen with an ordinary transit. This baseline can be worked in conjunction with the vertical and horizontal control.

- c. All field survey work shall be conducted on the public right of way where possible, however, the DEP shall obtain right of way on private property where needed.
- d. During the field survey, traverse stations shall be marked and referenced so that they can be readily re-established. A minimum of two reference points should be set and each horizontal change in the baseline. Traverse stations shall be marked by steel hubs flush with the ground surface and referenced by guard stakes or natural or identifiable permanent objects at the ground surface. The location and description of all traverse stations shall be accurately recorded in the notes. The markings on the guard stakes shall include the distance to the traverse stations, the line to the traverse station, and the station of the traverse station.
- e. Bench level traverses shall be of such precision that the error of closure (in feet) shall not exceed plus or minus 0.05 times the square root of the length of the traverse (in miles). The locations, description, and elevation of benchmarks shall be accurately recorded in the notes. The datum plane shall be that of the U. S. Coast Geodetic Survey or Geological Survey or West Virginia Coordinates Plan.

B. Topographic Mapping Using Aerial Photography

- 1) Aerial Photography – The photographs shall be made with a calibrated precision-type aerial camera in a vertical position. The successful bidder or their sub-contractor shall supply a copy of a current calibration certificate, issued by the National Bureau of Standards (USGS) or other competent testing organization, which is dated within the past twenty-four (24) months upon demand by the DEP. Any commercial aerial film with a fine-grain emulsion may be used. Altitude shall be the height above average ground required to achieve the accuracy listed in these specifications, not to exceed 4,800 feet.

The time for taking the photographs shall be such that the sky is clear of clouds and haze, streams are within their normal banks, deciduous trees and other vegetation are without leaves, and the ground is free from snow cover. The time for taking of photographs shall be further confined to that portion of the day when the sun is at its highest angle.

Contact prints shall be clean and free from chemical or other stains, blemishes, uneven spots, fog, and finger marks and shall be thoroughly washed to remove any chemical materials which would impair their permanency.

The entire project area shall have stereoscopic coverage within the usable distortion-free portion of the field of the lens. The overlap in the line of flight shall be no less than 45 percent nor more than 65 percent. Side overlap shall be no less than 25 percent.

At the completion of the work, the following shall be provided the contracting officer:

- a. Two sets of black and white 9" x 9" aerial photographs properly identified by site name and photo index number.
 - b. Three sets of color 9" x 9" aerial photographs (contact prints) properly identified by site name and photo index number without any additional manual markings.
 - c. All negatives of the aerial photograph.
 - d. Copies of cross-sections taken every 300 feet along the baseline to be plotted on cross-section paper and overlaid on cross-sections plotted from the mapping to verify the mapping accuracy.
 - e. Two computer disks containing all survey mapping and data compatible with a computer aided design system in AutoCAD (Version Release 17 or Engineer approved alternate).
- 2) Field Surveys – Field surveys will be conducted as needed to establish horizontal and vertical control data for preparation of the topographic map.
- 3) Topographic Mapping – Topographic drawings shall be on 24" x 36" standard map sheets. Every fifth contour line shall be accentuated with elevations noted. The topographic contour map(s) shall be prepared using stereo methods. The basic map shall be stereo plotted and mechanically transcribed to a scale of 1" = 100' with a contour interval of 2 feet unless otherwise specified by the DEP based on particular needs established due to the site specific circumstances.

The topographic drawings shall have included on them (lower right part of map) the following:

- o The name of the project.
- o Inserts showing location of all reference points.
- o The location of the project (county map).
- o Legend.
- o Title block for approval signatures.
- o Map Scale.

The various views required to be presented on the drawings shall be oriented in the following manner:

- a. If the mapping requires the use of two sheets or more, match lines will be used to relate the sheets together. If the use of more than two sheets is necessary, an additional sheet will be required with a reduced scale enabling the placement of the entire area on one sheet indicating how the sheets relate to each other.
- b. Each topographic sheet shall be oriented, whenever possible so the direction of stream flow is from the left to the right or from the top to the bottom of the sheet. Arrows indicating the direction of stream flow will be included. Spot elevations shall be shown to assist in determination of hilltops, saddles and road intersections. Each sheet shall contain a bar scale and a geodetic or polar north arrow.
- c. Physical Features – All physical features situated on the ground such as vegetation, rivers, ponds, lakes, small streams, rock outcrops, and other unusual features will be located and identified on the topographic map.
- d. Cultural Features – All cultural features such as houses, barns, buildings, commercial businesses, highways, railroads, bridges, pipelines, farm ponds, fences, electric power lines, telephone lines, utility lines, gas wells, and any other cultural features shall be located and identified on the topographic map. Specific features dealing with mining such as the limits of coal refuse, landslides if determinable, the location of strip mine highwalls and overburden, deep mine openings, both draining and dry and any other mining related feature must be located and identified on the topographic map. This requirement should be accomplished to the best degree possible without an actual detailed survey.
- e. All horizontal and vertical control points – to include permanent or temporary benchmarks, will be located and identified on the map. There shall be a minimum of four vertical points and three horizontal points.
- f. The precision of the topographic map for all areas within the actual project area shall not be less than the following:
 - o Average error shall not exceed $0.025 \times$ the scale of the map expressed in feet per inch.
 - o Percentage error in scaled areas shall not exceed $0.05 \times$ scale of the map expressed in feet per inch.
 - o Of points chosen at random, the percentage whose error in elevation exceeds one-half the specified contour interval shall not exceed 10 percent.
 - o All maps shall be drawn to the limits as shown on the mapping outline for the individual areas.

Note: Areas outside the actual project limits are to be as precise as conditions allow but will not be held to these limits.

- g. Symbols and abbreviations shall be in accordance with "Standard Map Symbols" published by the Soil Conservation Service, U. S. Department of Agriculture, January 1965.

Section B – Contractual Information & Requirements

I. Statement of Work

The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services for all of the scope of work required in this contract.

II. Location of Work

The area of work shall include the entire State of West Virginia. The counties listed below are the coal producing counties and those in parentheses represent where most of the work required in the contract is located.

"Southern" counties

1. Cabell
2. Putnam
3. (Kanawha)
4. (Clay)
5. (Nicholas)
6. Greenbrier
7. (Fayette)
8. Summers
9. (Mercer)
10. (Raleigh)
11. (Wyoming)
12. (McDowell)
13. (Mingo)
14. (Logan)
15. (Boone)
16. (Lincoln)
17. Wayne
18. (Roane)
19. Jackson
20. (Mason)

III. Ordering Procedure

- A. This is an indefinite quantity contract for the services specified in the Statement of Work and for the period set forth herein. Delivery or performance shall be made in accordance with the provisions of this contract.
- B. Work will be ordered by the Chief or his representative for the Office of Abandoned Mine Lands & Reclamation, Department of Environmental Protection, by issuance of a Notice to Proceed/Work Directive, which shall specify the location of the project site, the specified problem, the work to be performed, and the time frame during which the work must be completed. The Contractor will then be responsible for contacting DEP to arrange an on-site meeting. Upon completion of a field reconnaissance with a DEP representative, the Contractor will submit a cost proposal for the work requested, signed by a principal of the firm. The individual project cost proposal which contains the quantity estimates shall be in accordance with the unit prices set in the contract.

IV. Delivery

- A. The Offeror shall prepare, submit and deliver all original survey notes, mapping and additional drawings, etc. or calculations as may be requested by the specific Work Directive within the time frame established for the project. The submission of all preliminary documents or required revisions must also be accomplished within said time frame. Additional time will be given for completion of any revisions and to provide time for billings. Such time to be defined as the performance period. If these time frames are not met, the DEP may refrain from issuing further Work Directives and if a Contractor persists in being late with submittals, the DEP may refuse to renew the Contractor's contract.
- B. The DEP will be responsible for obtaining any necessary rights of entry for purposes of performing field surveys to provide ground control for topographic mapping from aerial photography. The majority of this work should be done in public access areas such as highway right of way, etc. Additionally, any ground surveys will require the Contractor to identify to the DEP any areas requiring access so that the DEP may obtain Right of Entry for those areas.
- C. The work and services to be performed under this contract shall be subject to continuous monitoring and inspection by the State's authorized representatives. Such inspection will, among other things, ensure compliance. Final inspection and acceptance will be made by the DEP (Project Manager) or authorized representative(s).
- D. In accomplishing services to fulfill the requirements of Work Directives, neither the Contractor nor his Subcontractor shall create any adverse environmental effects, and shall be responsible for compliance with all applicable local, state and federal environmental and occupational health and safety laws and regulations pertinent to the work.

- E. Any Contractor shall be ineligible to bid on any aspect of the construction phase of a project if it prepared any part or aided in the preparation of any part of the contract documents for construction.
- F. DEP may retain ten percent (10%) of the Offeror's invoices until such time as the Assistant Director is satisfied that all of the conditions of the contract have been met. The Offeror must be responsible for taking any and all such measures as are necessary to correct any defect(s) arising out of the contract which are proven to be as a result of error(s) in the mapping. Such corrective action(s) shall be performed to the satisfaction of the Assistant Director.

V. Cost and Payments

- A. Payment to the contractor will be made on the basis of the items and unit prices outlined in the Purchase Order.
- B. The Offeror shall invoice after the completion of work specified in the Work Directive and after submission of all required work when the performance period is less than thirty (30) days. Invoices may be submitted monthly when the performance period exceeds 30 days. The State may retain 10 percent of each invoice to guarantee that all of the conditions of the contract have been met. This retainage may be held for a period of six (6) months and shall run from the date that construction on a project commences. However, final payment (except for any retainage which may be held) will only be made after all work and reports specified in a Work Directive and this contract are delivered and accepted by the State. All invoices shall show labor, travel, other expenses incurred during the billing period and the work yet to be accomplished. Invoices showing costs not clearly identifiable will not be paid. No payment(s) will be authorized for any work incurred as a result of any error on the part of the Contractor.

Section C – Qualification Requirements & Evaluation Factors

I. Offeror Qualification Requirements

The Offeror shall possess the capability of providing topographical, design data and construction surveys in accordance with U.S. National Map Standards, and shall have a minimum experience of two (2) years. To the extent possible the Offeror will utilize available aerial photography, aerial topographic maps or enlarged U.S.G.S. topographic maps and the information contained thereon, in lieu of developing maps from field surveys. All survey work described below shall be performed under the direction of a Licensed Land Surveyor, licensed or registered in the State of West Virginia, who will provide certified maps and/or drawings as directed in the specific project Work Directive.

During the performance of this contract, the Contractor agrees to follow and obey all Federal and State Laws and Regulations, etc.

The Offeror must meet the requirements listed below in order to be considered qualified to perform the work designated by this RFQ. Successful Offerors should have the following professional capabilities or staff available at the time of the bid:

- Licensed Land Surveyor;
- Competent Field Staff and Survey Crew;
- Professional Drafting Capabilities;
- Adequate Computer Aided Design Capabilities (AutoCAD Version Release 17 or Engineer approved alternate);
- Capacity to process and complete multiple projects within the designated time frames

These requirements will be confirmed by the following, which the Vendors must submit at the time of bid:

1. Names of individuals performing work including registration/licensing numbers.
2. List of similar projects completed by your firm (included past five (5)).
3. List of similar projects currently working on.
4. Name of Project Manager anticipated for this project.
5. Number of years your company has performed this type of work.

II. The Contractor will be required to have knowledge or experience in the following areas:

- A. Development of Topographic Mapping from Field Survey as well as from Aerial Photographs; the use of Subcontractors will be permitted under this contract for aerial photography work.
- B. Boundary and Property Surveys.

III. All work prepared under this contract must be performed under the direction and reviewed by a Licensed Land Surveyor and his or her stamp and signature must be affixed to the cover sheet of all contract documents.

**MAPPING SERVICES IN SOUTHERN COUNTIES OF WEST VIRGINIA
OPEN-END CONTRACT
DEP15938
BID SCHEDULE**

The DEP reserves the right to request additional and supporting documentation regarding unit prices when the unit price appears to be unreasonable.


Item No.	Quantity	Description	Unit Price	Amount
1.0	700	2 - Man Surveying Crew (per hour)	\$75.00	\$52,500.00
2.0	225	3 - Man Surveying Crew (per hour)	\$93.00	\$20,925.00
3.0	280	Aerial Photograph Production (per sheet)	\$118.00	\$33,040.00
4.0		Topographic Mapping from Aerial Photography (per acre)		
		(List only one rate for each category)		
	500	0 - 50 Acres	\$15.00	\$ 7,500.00
	280	51 - 100 Acres	\$14.00	\$ 3,920.00
	202	101 and up Acres	\$13.00	\$ 2,626.00
5.0		Professional Rates (Listed Disciplines Only) (per hour)		
	250	Licensed Land Surveyor	\$80.00	\$20,000.00
	1100	CAD Operator	\$47.50	\$52,250.00
	200	Draftsperson	\$ 0.00	\$ 0.00
	125	Secretary	\$ 0.00	\$ 0.00
	150	Word Processor	\$ 0.00	\$ 0.00
6.0		Travel and Per Diem		
	125	Per Diem (Rate/Person/Day)	\$75.00	\$ 9,375.00
				\$202,136.00

* These are estimated quantities for bidding purposes only

CERTIFICATION AND SIGNATURE PAGE

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

E. L. Robinson Engineering Co.
(Company)


(Authorized Signature)

James T. Rayburn, Manager of Surveying
(Representative Name, Title)

304-541-2917 304-855-4561
(Phone Number) (Fax Number)

September 5, 2012
(Date)

ADDENDUM ACKNOWLEDGEMENT FORM**SOLICITATION NO.:** DEP15938

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

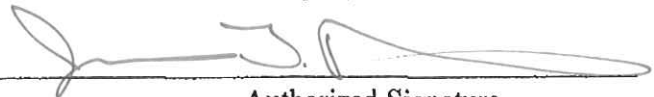
(Check the box next to each addendum received)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

E. L. Robinson Engineering Co.

Company



Authorized Signature

September 5, 2012

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

State of West Virginia VENDOR PREFERENCE CERTIFICATE


Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. **Application is made for 5% resident vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.**
 Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: E. L. Robinson Engineering Co. Signed: 
Date: September 05, 2012 Title: Manager of Surveying

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 exceeds 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: [Signature] Date: September 5, 2012

State of West Virginia

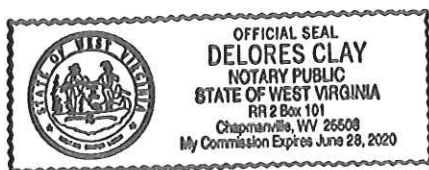
County of Logan, to-wit:

Taken, subscribed, and sworn to before me this 5 day of September, 2012.

My Commission expires June 28, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature: Delores Clay]



APPENDIX B

Insurance and Workers Compensation Certificate

MAPPING SERVICES FOR SOUTHERN COUNTIES OF WEST VIRGINIA

OPEN END CONTRACT

RFQ NUMBER DEP15938

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CHARLESTON, WEST VIRGINIA

E. L. ROBINSON ENGINEERING CO.

CHARLESTON, WEST VIRGINIA

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
1/27/2012

PRODUCER
BB&T-Carson Insurance Services
 601 Tennessee Avenue
 Charleston, WV 25302
 304 346-0806

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
E L Robnson Engineering Company
 5088 Washington Street, West
 Charleston, WV 25313

INSURERS AFFORDING COVERAGE		NAIC #
INSURER A:	Cincinnati Insurance Company	10677
INSURER B:	Brickstreet Mutual Insurance Co	12372
INSURER C:		
INSURER D:		
INSURER E:		

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
A		GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> XCU GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	EPP0103191	10/01/2011	10/01/2012	EACH OCCURRENCE	\$1,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$500,000
						MED EXP (Any one person)	\$10,000
						PERSONAL & ADV INJURY	\$1,000,000
						GENERAL AGGREGATE	\$2,000,000
						PRODUCTS - COMP/OP AGG	\$2,000,000
A		AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	EPP0103191	10/01/2011	10/01/2012	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
		GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT	\$
						OTHER THAN AUTO ONLY: EA ACC	\$
						AGG	\$
A		EXCESS / UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 0	EPP0103191	10/01/2011	10/01/2012	EACH OCCURRENCE	\$2,000,000
						AGGREGATE	\$2,000,000
							\$
							\$
							\$
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below	WC1001657109 Includes Employers 23-4-2(d)(2)(ii)	10/01/2011	10/01/2012	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER	
						E.L. EACH ACCIDENT	\$1,000,000
						E.L. DISEASE - EA EMPLOYEE	\$1,000,000
						E.L. DISEASE - POLICY LIMIT	\$1,000,000
		OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

**** Workers Comp Information ****

Proprietors/Partners/Executive Officers/Members Excluded:
 Edward Robnson, Officer
 Ralph Allison, Officer

CERTIFICATE HOLDER

SAMPLE CERTIFICATE

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Larry D. Kern

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

APPENDIX C

Surveying Equipment List

MAPPING SERVICES FOR SOUTHERN COUNTIES OF WEST VIRGINIA

OPEN END CONTRACT

RFQ NUMBER DEP15938

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CHARLESTON, WEST VIRGINIA

E. L. ROBINSON ENGINEERING CO.

CHARLESTON, WEST VIRGINIA

E.L. Robinson Engineering Co. - Surveying and Mapping Equipment List

# Units	Brand	Instrument Model & Type	Age (by year)	Serial Number	Technical Specifications		Mechanical Condition
					Compliant with NGS Standards for 2nd Order (Yes / No)	Compliant with NGS Standards for 3rd Order (Yes / No)	
E.L. Robinson Engineering Co.							
1	Leica	HDS C10 Laser Scanner	2010	1260075	Yes	Yes	Excellent
1	Leica	HDS 7000 Phase Scanner	2011	3121	Yes	Yes	Excellent
1	Trimble	R7 GPS / GNSS Receivers	2008	4726K30346	Yes	Yes	Excellent
1	Trimble	R7 GPS / GNSS Receivers	2008	4821K32120	Yes	Yes	Excellent
1	Trimble	R7 GPS / GNSS Receivers	2008	4821K32124	Yes	Yes	Excellent
1	Trimble	R7 GPS / GNSS Receivers	2008	4821K32125	Yes	Yes	Excellent
1	Trimble	R8 GPS / GNSS System	2008	4607108382	Yes	Yes	Excellent
1	Trimble	R8 GPS / GNSS System	2008	4607108433	Yes	Yes	Excellent
1	Trimble	R8 GPS / GNSS System	2008	4829155908	Yes	Yes	Excellent
1	Trimble	R8 GPS / GNSS System	2008	4831156136	Yes	Yes	Excellent
1	Trimble	S6 1 Sec. Robotic Total Station	2006	92110028	Yes	Yes	Excellent
1	Trimble	S6 3 Sec. Robotic Total Station	2007	92710076	Yes	Yes	Excellent
1	Trimble	S8 1 Sec. Robotic Total Station	2008	98110141	Yes	Yes	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS21A12477	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS21A12613	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS21A13370	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS21A13385	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS21A13431	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS78C30901	N/A	N/A	Excellent
1	Trimble	TSC2 Survey Controller	2008	SS80C32070	N/A	N/A	Excellent
1	Trimble	Trimble DINI 12 Digital Level, 360 degrees	2004	701640A	Yes	Yes	Excellent
1	Topcon	DL-102C Digital Level	2001	UH0283	No	Yes	Excellent
1	Leica	TCRP 1205 5 Sec. Robotic Total Station	2006	214301	Yes	Yes	Good
1	Allegro	Data Collector/Carlson	2006	32265	N/A	N/A	Good
1	Trimble	HPB450 Radio 35w	2005	6188635	N/A	N/A	Excellent
1	Trimble	HPB450 Radio 35w	2006	6188636	N/A	N/A	Excellent
1	Trimble	HPB450 Radio 35w	2007	6426784	N/A	N/A	Excellent
1	Trimble	HPB450 Radio 35w	2007	6188653	N/A	N/A	Excellent
1	Pacific Crest	PDL Radio	2005	1334515	N/A	N/A	Excellent

* All ELR Survey equipment is maintained with yearly firmware/software agreements with original manufacturers.

APPENDIX D

Key Resumes

MAPPING SERVICES FOR SOUTHERN COUNTIES OF WEST VIRGINIA

OPEN END CONTRACT

RFQ NUMBER DEP15938

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CHARLESTON, WEST VIRGINIA

E. L. ROBINSON ENGINEERING CO.

CHARLESTON, WEST VIRGINIA

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

Education

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

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

Registrations

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

Registered Professional Surveyor in West Virginia.

Professional Memberships

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

Professional Experience

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

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



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

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

Representative Projects

Engineering Review of the following projects:

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

- **Corridor H - Davis to Bismark:** This project consisted of 1.75 miles of four-lane divided highway, one bridge, two at-grade intersections, and a 6' x 6' concrete box culvert. This project has an estimated total construction cost of \$9 million.
- **Corridor H - Foreman to Moorefield:** This project consisted of 5 miles of four-lane divided highway, almost 3 miles of access road design, a truck escape ramp, one set of twin structures, one single bridge, a box culvert, and naturalized stream design. This project resulted in 10 million cubic yards of excavation and an estimated construction cost of \$75 million.
- **CAMC 33rd Street Relocation:** Engineering design and construction management for the relocation of 33rd street and site development for a five story clinical teaching facility in Charleston, WV.

Offices Held

- Current 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

James T. Rayburn, P.S.

Manager of Surveying

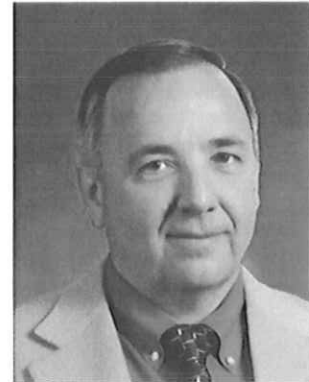
Education:

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

Registration:

Registered Professional Surveyor in West Virginia and North Carolina

Professional Experience with E.L. Robinson Engineering:



Mr. Rayburn currently serves as Manager of Surveying for E.L. Robinson Engineering (ELR) and has more than 31 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.

Project Experience with E.L. Robinson Engineering:

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 approximately five mile 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 Rumsey Bridge (WVDOT) Potomac River, Shepardstown, WV:** Lead Surveyor for Design Surveys for this Bridge Project which is now completed at an estimated cost \$15.5 million dollars. This project involved working in an environmentally historic area, which adjoined a National Park.
- **US Route 35 (WVDOT) Mason County, WV:** Lead Surveyor for Design Surveys for two Design Sections each approximately 2.5 miles in length from Lower Five Mile Road to Upper Nine Mile Road. Also provided control surveying for the entire US 35 design project length of approximately 22 miles.
- **I64/US35 (WVDOT) I64 to US 34 Crooked Creek, Putnam County, WV:** Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately four miles of US 35 including Interstate 64 Ramps

and Flyovers in Putnam County, WV. This included the I-64 Bridges and Flyovers, which is now under construction.

- **ATB-Parrish Road (ODOT) Ashtabula County, Ohio:** Project Design Surveyor for rail grade separation project. Project involved roadway realignment, 900' new bridge, new waterline, storm and sanitary sewers. Project is currently under construction. Estimated construction cost: \$8.6 million.
- **PIC-23-3.21 and Various (ODOT) Pickaway County, Ohio:** Project Design Surveyor for ODOT Project PIC-23-3.21 and Various. Project involves deck replacements along 11 miles of US 23 in Pickaway County. Project includes large diameter culvert liner, interchange upgrade that includes mainline profile correction, ramp reconstruction, and addition of barrier wall and storm drainage. Project is currently under design (90%). Project scheduled for construction in 2007. Estimated construction cost: \$12 million.
- **ATB-90-22.06 (ODOT) Ashtabula County, Ohio:** Project Design Surveyor for Interstate Reconstruction Project. Project includes total pavement replacement, bridge widening, and contra - crossover maintenance of traffic, culvert replacements and storm sewer rehabilitation and sign replacements. Project is currently under design (50%) and scheduled for construction in 2011. Estimated construction cost: \$36 million.

Construction Surveys

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

Other Professional Experience:

Cardinal Engineering Co.

Mr. Rayburn was the President and principal in charge of a small (15 employee) mining engineering and surveying firm. Mr. Rayburn supervised and directed underground and surface mine surveying for many of the larger WV Mining Companies and/or their subcontractors. Also the firm did environmental permitting for mining and construction projects, along with construction management of these projects. Mr. Rayburn performed all types of surface and underground control and check surveys, as well as daily mine spad and take-up surveys. Mr. Rayburn also did mapping of both surface and underground operations. Duties as President included business and financial management, as well as day to day operation and scheduling of operations for the firm.

James T. Rayburn, P.S.
Chief Surveyor

Zapata Coal Corporation

Duties included surface and deep mine layout and design, responsible charge of survey crews for both underground and surface mine surveys, Underground Check Surveys, manage new construction projects, and aid in preparation of yearly budgets. Mr. Rayburn served one year as Chief Mining Engineer for the entire property (\pm 27,000 Acres).

Lester Construction Co., Inc and Black Rock Contracting, Inc.

Mr. Rayburn was a Construction Forman/Surveyor for steel erection, concrete box culverts and bridges, highway construction, mining related construction, conveyor construction and various excavation projects.

Various Mechanical Contracting Firms

Mr. Rayburn was Engineering Technician/Estimator in charge of Estimating Mechanical Construction Projects for competitive bidding, HVAC Design work, Air Systems Balancing Surveys, Contract negotiations, As-built drawings and Maintenance Manual preparation.

Professional Memberships:

- American Congress on Surveying and Mapping
- National Society of Professional Surveyors (NSPS)
- West Virginia Association of Land Surveyors, Inc.
- American Society of Civil Engineers
- WV ACEC
- Chair of WV ACEC/WVDOT Surveying Committee
- Governor's Appointment - West Virginia Boundary Commission 2009

John W. Cruikshank

Senior Technician

Education

A.S. Survey Technology, West Virginia University
Institute of Technology, 1977

Professional Experience

Mr. Cruikshank is responsible for information pertaining to right-of-way acquisition for highway and infrastructure projects, which includes deed research and correspondence with private and commercial property owners for purpose of development of right-of-way plans associated with property maps. Duties also include preparation of legal descriptions for properties to be purchased for the purpose of highway and infrastructure construction.



He is responsible for coordinating utility activities for highway and infrastructure projects, which includes determination of utilities affected by proposed highway and infrastructure projects, as well as the field location of these utilities. He maintains correspondence with utility owners for the purpose of developing plans for relocation of utilities affected by highway and infrastructure construction.

He has completed survey assignments for waterline, sanitary sewer, highway, infrastructure, gas line, electrical line, railroad layout, boundary surveys, and other engineering projects.

He has supervised the construction layout of the Charleston Town Center Shopping Mall, as well as a \$4.7 million bridge project on the West Virginia Turnpike. He has designed and performed layouts of subdivisions, underground utility relocations, Mt. Olive State Penitentiary, additions to CAMC Hospital, Thomas Memorial Hospital as well as the Shell Plant in Apple Grove, WV.

Mr. Cruikshank has been the inspector on the Greater St. Albans PSD Sanitary Sewer Project, and has supervised five monitoring studies for movement of the East Huntington Cable Bridge as well as performed field surveys for mapping of numerous DEP Reclamation Projects. Mr. Cruikshank has performed earthwork calculations on

John W. Cruikshank

Senior Technician

several site development, highway and infrastructure projects. He has extensive experience in performing courthouse research.

Mr. Cruikshank has completed the West Virginia Division of Highway "Right of Way Plans - Courthouse to Statehouse" workshop and the West Virginia Division of Highway "Property Description" workshop. He has also completed the Ohio Department of Transportation "Right of Way Plan Development Training Course" and worked on the development of right of way plans and preparation of legal descriptions for LAW-93C-0.00, Ironton-Russell bridge replacement project, Lawrence County, Ohio and ATB-Parrish Road, Ashtabula County, Ohio.

Wendell L. Williams
Project Coordinator/Designer

Education

A.A.S. CAD Technology
West Virginia State University, 1997

B.A. Board of Regents
West Virginia University Institute of
Technology, 1999

Registrations

Surveyor in Training Certification, West
Virginia, 2003

Professional Memberships

West Virginia Society of Professional
Surveyors

Computer Skills

AutoCADD, MicroStation, MS Word

Professional Experience

Mr. Williams has been with E.L. Robinson since 1978, drawing from over 28 years of engineering and design experience to bring to your project. Mr. Williams has been utilizing CAD software since 1990 and has attended supplementary training courses and seminars dealing with third party engineering software programs on a regular basis since then. Recently he earned his Surveyor in Training (SIT/FLS) Certification and will sit for his Professional Surveyors



exam very soon. Mr. Williams' project experience includes numerous highway construction projects for the WVDOH, including highway plans, right-of-way plans and bridge construction documents. Also included in his experience is utility design, residential subdivision layout, survey boundary map preparation, parking lot layout and site development documents.

Other administrative responsibilities include reviewing contract plans, scheduling of survey crews, cost estimate proposals and general project coordination. Mr. Williams has also spent a considerable amount of time providing construction administration and observation services for a large dichotomy of representative projects. He has served as construction inspector on various water, sanitary sewer, storm sewer, roadway construction projects. In assisting the Surveying and Right-of-Ways Departments, he often performs survey office calculations, note reduction, plat plotting and courthouse research.

Representative Projects

Throughout his extended career, both in the field and the office, Mr. Williams has been involved in the design, construction and coordination of over 15 single- and multi-family residential subdivision projects. A few of his subdivision and gated community projects include Centre Court, South Hills; South Gate, South Hills; Quail Pointe, Mink Shoals; Bedford Glen, Charleston; Briar Meadow, Cross Lanes; and Sherwood Forest, South Hills.

Mr. Williams has designed and coordinated the development of commercial property. Some of his projects are Saturn of Hurricane/Charleston, Pizzeria Uno's in Bridgeport, Hurricane Chevrolet, Sleep-Inn, Charleston and WV Air National Guard in Bridgeport.

Among his many responsibilities for these projects were acquiring permits from public and private agencies for new or extended utilities, development of site plans, profiles and construction details, estimation of quantities, coordination with owners and contractors and cost estimates.

Richard W. Mays

Senior Technician



Education

West Virginia Institute of Technology, Montgomery, WV,
(1992-1994) pursued Civil Engineering Degree

Southern West Virginia Community and Technical
College, Logan, WV, (1991-1992) pursued general studies

Professional Experience

Mr. Mays has been an Engineering/CAD technician for E.L. Robinson Engineering Co. in Cross Lanes, WV, since January 2000. His duties include:

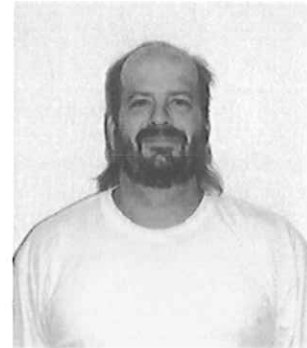
- Performing 3D-laser scans for highway projects,
- Creating CAD models from 3D-laser scan data,
- Reducing survey field notes,
- CAD drafting for highway and bridge design projects,
- Plotting and adjusting of deeds in Microstation and AutoCAD formats,
- Preparing right of way plans,
- Performing as GPS survey technician and GIS technician,
- Creating realistic photo renderings for various projects,
- Computer repair and maintenance, and
- Performing as a computer network technician for Cross Lanes and Chapmanville offices.

He also has experience in layout/ design of valley fills and surface mine reclamation as well as maintaining surface mine pit maps.

Jack L. Worstell, LSIT Survey Party Chief

Education

A.S. Survey Technology, Glenville State College, 1983



Professional Experience

Mr. Worstell has been employed at ELR since 1983. He has primarily served as a survey crew party chief, but also has experience as a CAD technician, survey rodman and GPS technician.

His work experience includes operating various conventional and GPS surveying equipment including robotic total stations, digital levels and RTK GPS receivers.

Mr. Worstell has also performed extensive courthouse research on numerous survey projects and has been responsible for the field work associated with AML projects.

Russell Hill

Survey Party Chief



Education

High School, 1978

Professional Experience

Mr. Hill has vast experience in all facets of surface and underground surveying. He has many years experience surveying for surface coal mines for production and reclamation. He also has worked on many of ELR's highway and bridge projects.

Employment History

Guyan Machine Company, Draftsman, 1976-1980

Appalachian Surveying, Draftsman and Survey Rodman, 1978-1981

Westmorland Coal Company, Underground Coal Miner, 1981-1983

Appalachian Surveying, Permit Technician, Survey Technician and Survey Rodman, 1983-1990

Island Creek Coal Company, Coal Mine Permitting, 1989-1990

Cardinal Engineering, Chapmanville, WV, GPS Survey Technician, Survey Party Chief and Survey Transit Man, 1990-1999

E.L. Robinson Engineering Co., Chapmanville, WV, GPS Survey Technician, Survey Party Chief and Survey Transit Man, 1999-Present

Frank Ellison

Survey Party Chief

Education

Pineville High School, 1981

Professional Experience

Mr. Ellison has vast experience in all facets of surface and underground surveying. He has many years experience surveying for surface coal mines for production and reclamation. He also has worked on many of ELR's highway and bridge projects.

Employment

Cardinal Engineering, Chapmanville, WV, GPS Survey Technician, Survey Party Chief and Survey Transit Man, 1985-1999

E.L. Robinson Engineering Co., Chapmanville, WV, GPS Survey Technician, Survey Party Chief and Survey Transit Man, 1999-Present

