

PRICE HILL TOWN DISTRICT

Near Price Hill, Town District  
Raleigh County, West Virginia

DEPARTMENT OF ENVIRONMENTAL AFFAIRS  
Division of Land Restoration  
OFFICE OF ABANDONED MINE SITES  
1601 YUN Street SE, Box 10  
MARTINSBURG, WEST VIRGINIA 26154

August 07, 2007

R.D.Zande & Associates

1 MOORE AVENUE  
BUCKHANNON, WEST VIRGINIA 26038  
1-888-830-1272

# *R.D. Zande & Associates, Inc.*

August 7, 2207

Mr. Cliff D. Whyte, P.E., Design Administrator  
West Virginia Department of Environmental Protection  
Office of Abandoned Mine Lands  
601 57<sup>th</sup> Street, SE – Box 20  
Charleston, West Virginia 25304-2345

Re: Price Hill Complex, P.O. No. DEP14131

Dear Mr. Whyte:

Please find enclosed a completed "AML Consultant Confidential Qualification Questionnaire" for R. D. Zande and Associates, Inc. (RDZ) to perform engineering services for Price Hill Complex, P.O. Number DEP 14131. RDZ is a 410-member engineering firm with offices in five states, including two offices in West Virginia at Charleston and Buckhannon. RDZ recently hired Mr. Will Thornton, P.E., who will be working from our Charleston Office. Mr. Thornton has AML experience while employed at DLZ and Woolpert. RDZ has Project specific experience and successfully completed fourteen (14) Projects for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) Program; one (1) Project for the West Virginia Department of Environmental Protection, Office of Special Reclamation; and six (6) similar Projects for the Ohio Department of Natural Resources (ODNR) AML Program; and five (5) similar Projects for the West Virginia Conservation Agency. In addition, RDZ has employee project-specific experience completing thirteen Projects for the WVAML Program. These Projects included concrete structural design; surveying and mapping; subsurface investigations; groundwater and surface water testing and analyses; site drainage design including hydrologic and hydraulic studies for bridges, channels, ditches, pipes and a box culvert; civil site design; sediment control; and revegetation plans as well as construction plans and specifications. Fifteen of these thirty-nine Projects involved passive acid mine drainage designs ranging from simple limestone beds to complex interactive systems that boost AMD pH to precipitate metals, settle and filter dissolved metals, and polish effluent water with alkalinity prior to release of near neutral waters from the Project area. In addition, RDZ designed the first

## **Corporate Headquarters**

1500 Lake Shore Drive  
Suite 100

**Columbus, OH 43204**

614/486-4383

FAX: 614/486-4387

11500 Northlake Drive  
Suite 150

**Cincinnati, OH 45249**

513/769-5009

FAX: 513/769-5030

10534 Success Lane  
Suite C

**Centerville, OH 45458**

937/885-2640

FAX: 937/885-2721

5555 Airport Highway  
Suite 210

**Toledo, OH 43615**

419/867-6666

FAX: 419/867-6654

1311 West Hunter Street  
**Logan, OH 43138**

740/380-2828

FAX: 740/380-3535

839 Southwestern Run  
Suite B

**Youngstown, OH 44514**

330/758-2139

FAX: 330/758-2136

3240 Office Pointe Place  
Suite 101

**Louisville, KY 40220**

502/493-0242

FAX: 502/493-0262

1 Moore Avenue  
**Buckhannon, WV 26201**

304/472-7140

FAX: 304/472-6239

424 Second Street  
**St. Albans, WV 25177**

304/722-7251

FAX: 304/722-7252

767 Coleman Boulevard  
Suite 2

**Mt. Pleasant, SC 29464**

843/884-6415

FAX: 843/884-4026

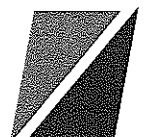
4953 Presidents Way  
**Tucker, GA 30084**

770/934-9855

FAX: 770/934-9852

1-800-340-2743

[www.zande.com](http://www.zande.com)



active alkaline treatment system for the State of West Virginia (Special Reclamation), which is nearing construction completion.

Project-Specific experience competed for the WVDEP includes:

1.	Glady Fork Mining D-35-82 Bond Forfeiture \$3.0M Active Alkaline Treatment Plant;		
\$3,100,000 Bid Estimate	Active Alkaline Treatment Plant - Single Train to Treat 1,000 GPM	Concrete Aeration Basin Concrete Flocculator Concrete Settling Basin Concrete Sludge Thickener Concrete Geo-Tube Slab Bridge over Stonecoal Creek	Construction Plans and Specifications Project Mapping Hydrologic Investigation Construction Observation
2.	Sauls Run Strip and Landslide;		
\$980,000 Bid Estiamte	59,350 C.Y. Earthwork 2,483 L.Ft. "V" Ditches 281 L.Ft. Flt Btm Ditches 285 L.Ft. Culverts 500 L.Ft. Subsurface Drain	Concrete Slab to Protect Existing Stream Crossing from Construction Vehicles	Construction Plans and Specifications Project Mapping Hydrologic Investigation Construction Observation
3.	Weaver Portals and Mine Drainage, Phase I and Phase II;		
\$2,200,000 Eng. Estimate	162,821 C.Y. Earthwork 6,543 L.Ft. "V" Ditches 1,947 L.Ft. Flt Btm Ditches 321 L.Ft. Culverts	14 Wet Mine Seals 1,170 L.Ft. Subs. Drain Debris Removal De-watering Plan Six Limestone Beds w/Aluminators and Flush Ponds	Construction Plans and Specifications Project Mapping Hydrologic Investigation Construction Observation
4.	WVCA Fisher-Mill Creek Bank Stabilization;		
\$284,000 Eng. Est.	148 L.Ft. Drilled Pile and Lag Wall	Ground Water and Surface Water Diversions	Construction Plans and Specifications Project Mapping Hydrologic Investigation Construction Observation

The above Projects demonstrate some of our Project-Specific experience involving structural analyses and design and mine reclamation. In addition, I have completed several bridge designs for the West Virginia Department of Transportation and the Pennsylvania Department of Transportation. Projects detailed in our attached AMLCCQQ provide more details on the above Projects as well as other Projects completed by RDZ and employees for the West Virginia Department of Environmental Protection AML and Special Reclamation Programs; the Ohio Department of Natural Resources AML Program; and the West Virginia Conservation Agency. RDZ also has employee experience with numerous Small Operators Assistance Program Applications for surface and deep mine applications in West Virginia and Maryland, as well as over 435 hydrologic investigations for Special Reclamation on bond forfeited sites, all involving hydrologic and geologic investigations and Probable Consequences of Mining in different geologic and hydrologic settings across the State.

RDZ employees have extensive experience in field water and soil sampling protocol for mine impacted sites, mine impacted site subsurface investigations, HAZMAT impacted sites, and septic or sewer investigations. RDZ also has experience with other AML type work including elimination of highwalls (earthwork), design of wet mine seals, design of drainage facilities and conveyances, design of passive and active AMD treatment systems, design of failed slopes by retaining structures or objectionable material removal, design of sediment control plans, and design of revegetation plans associated with drastically disturbed mine lands.

We are very excited about the opportunity to continue our working relationship with the West Virginia Department of Environmental Protection and look forward to providing engineering services on this most important Project. We believe no other company can meet our quality of work, which coupled with our experience allows us to be more efficient and therefore very cost competitive. If chosen, our primary objective will be to address WVAML needs and because we are located in Buckhannon and St. Albans we can respond quickly, effectively, and in the most economical way. Work will be conducted from our Buckhannon, West Virginia Office with numerous professionals in varying fields available from our Columbus and Charleston Offices on an "as needed" basis. Should any questions arise, or if we can supply additional information or be of further service to you, the Purchasing Division, or the West Virginia Department of Environmental Protection, please contact me anytime at (304) 472-7140.

Respectfully Submitted,  
**R. D. ZANDE AND ASSOCIATES, INC.**



Gregory Linder, P.E., Project Manager



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

# Request for Quotation

RFQ NUMBER  
**DEP14131**

PAGE  
**1**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**CHUCK BOWMAN  
 304-558-2157**

RFQ COPY  
 TYPE NAME/ADDRESS HERE

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

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
07/26/2007				
BID OPENING DATE: 08/07/2007		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		968-77		
<p><b>PRICE HILL COMPLEX</b></p> <p>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL DESIGN SERVICES FOR THE SEALING OF A VERTICAL MINE SHAFT AND CONVEYANCE OF WATER TO THE NATURAL WATERWAY AT THE PRICE HILL COMPLEX SITE NEAR MT. HOPE, (FAYETTE CO.) WV, PER THE FOLLOWING BID REQUIREMENTS AND THE ATTACHED SPECIFICATIONS.</p> <p><b>BANKRUPTCY:</b> IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p> <p>***** THIS IS THE END OF RFQ DEP14131 ***** TOTAL:</p>						

RECEIVED

2007 AUG -7 A 10:05

PURCHASING DIVISION  
 STATE OF WV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE: *[Signature]* TELEPHONE: (304) 472-7140 DATE: August 7, 2007  
 TITLE: Senior Associate Partner FERN: 311395123  
 ADDRESS CHANGES TO BE NOTED ABOVE

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

**GENERAL TERMS & CONDITIONS  
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee.
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this contract is automatically null and void, and is terminated without further order.
14. **HIPAA Business Associate Addendum** - The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) 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.

---

**INSTRUCTIONS TO BIDDERS**

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications.

**SIGNED BID TO:**

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

**EXPRESSION OF INTEREST**  
**Price Hill Air Shaft and Buildings**  
**Requisition #DEP14131**

002

**Part 1**

**GENERAL INFORMATION**

**1.1 Purpose:**

The Acquisition and Contract Administration Section of the Purchasing Division (State) for the agency, the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands & Reclamation (AML), is soliciting Expression(s) of Interest (EOI) from qualified firms to provide engineering services as defined in Section Two (2) and Three (3), and construction monitoring services during the construction phase of the project as defined by the **Scope of Work**. Construction Inspection by the firm will be at the option of WVDEP/AML.

**1.2 Project:**

The mission or purpose of the project described in Sections 2 & 3 is as follows:

- 1) Provide for the design of backfilling and sealing one (1) vertical mine shaft seal and conveyance of water to the natural drainway.
- 2) Provide for demolition of concrete structures and the removal and disposal of the remains of these structures and other old mining related buildings.
- 3) Provide for the regrade and revegetation of the area.

**1.3 Format:**

All responses should be submitted in a loose-leaf, three-ring binder. The response should be presented in concise format which defines the corporate history and the experience, qualifications, and performance data of the firm's staff as requested by the AML Consultant Confidential Qualification Questionnaire (CCQQ), Attachment "B" and the AML and Related Project Experience Matrix (RPEM), Attachment "C". Electronic copies of the CCQQ document is available online for registered vendors at: <http://www.state.wv.us/admin/purchase/newbul.htm>

**1.4 Inquiries:**

Additional information regarding the submission of proposal for this EOI can be obtained by contacting the following Buyer:

Chuck Bowman, Buyer  
Purchasing Division  
2019 Washington Street, East  
P.O. Box 50130  
Charleston, WV 25305-0130  
Ph: (304) 558-0492 Fax: (304) 558-4115  
[cbowman@wvadmin.gov](mailto:cbowman@wvadmin.gov)

**Absolutely NO contact shall be made by the firm with any member of AML or the evaluation the sole contact for any and all inquiries after this EOI has been released.**

1.5 **Vendor Registration:**

Firms participating in this process should complete and file a **Vendor Registration and Disclosure Statement** (Form WV-1) and remit the registration fee. A firm is not required to be a registered vendor in order to submit an EOI, but the **successful firm must** register and pay the registration fee prior to the award of an actual purchase order/contract.

1.6 **Oral Statements and Commitments:**

Firm must clearly understand that any verbal representations made or assumed to be made during any oral discussions held between firm's representatives and any State personnel is **not** binding. Only the information issued in writing and added to the EOI specifications file by an official written addendum are binding.

1.7 **Economy of Preparation:**

The EOI should be prepared simply and economically, providing a straightforward, concise description of firm's abilities to satisfy the requirements of the EOI. Emphasis should be placed on completeness and clarity of content. Example projects referred to in a firm's EOI submittal should address projects that are similar in scope to that of the EOI. **Firms must complete the CCOO and RPEM as included in Section 4.2 of this EOI.**

1.8 **Labeling of EOI Sections:**

The response sections should be labeled.

1.9 **Submission:**

1.9.1 State law requires that the original EOI shall be submitted to the State. All copies to the State must be submitted **prior** to the date and time stipulated as the opening date. All EOI's will be dated and time stamped on the State's official time clock to verify time and date of receipt.

1.9.2 Firms mailing EOI's must allow sufficient time for mail delivery to ensure timely arrival. The State **CANNOT** waive or excuse late receipt of an EOI which is delayed or late for any reason (West Virginia State Code §5A-3-11). Any EOI received after the bid opening time and date will be disqualified in accordance with Legislative Rule 148-CSR-1.

**Submit:**

One original plus one copy to:

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

The outside of the envelope or package(s) should be clearly marked:

Buyer: 23  
Req#: DEP14131  
Opening Date: 08/07/2007  
Opening Time: 1:30 pm



**1.10 Rejection of EOI:**

The State will select the best value solution according to §5G-1-3 of the West Virginia State Code. However, the State reserves the right to accept or reject any or all EOI's and to reserve the right to withdraw at any time and for any reason. Submission of, or receipt by the State of EOI's confers no rights upon the bidder nor obligates the State in any manner.

**1.11 Incurring Costs:**

The State and any of its employees or officers shall not be held liable for any expenses incurred by any bidder responding to this EOI for expenses to prepare, deliver, or to attend the short list interviews.

**1.12 Addenda:**

If it becomes necessary to revise any part of this EOI, an official written addendum will be issued by the State to all potential bidders of record.

**1.13 Independent Price Determination:**

A contract will not be considered for award if the negotiated price was not arrived at independently without collusion, consultation, communication, or agreement as to any matter relating to prices with any competitor.

**1.14 Price Quotations:**

No "price" or "fee" quotation is permitted in the response.

**1.15 Public Record:****1.15.1 Submissions are Public Record.**

All documents submitted to the State related to purchase orders/contracts are considered public records after the submittals have been opened. All responses or offers submitted by firms shall become public information and are available for inspection during normal official business hours in the State Records and Distribution center after the documents have been microfilmed.

**1.15.2 Written Release of Information.**

All public information may be released with or without a Freedom of Information request, however, only a written request will be acted upon with duplication fees paid in advance. Duplication fees shall apply to all requests for copies of any document. Currently the fees are \$0.50/page, or a minimum of \$10.00 per request which ever is greatest.

**1.15.3 Risk of Disclosure.**

The only exemptions to disclosure of information are listed in West Virginia Code §29B-1-4. Primarily, only trade secrets as submitted by a bidder are the only exemption to public disclosure. The submission of any information to the State by a firm puts the risk of disclosure on the firm. The State will make a reasonable effort not to disclose information that is within the guidelines of §29B-1-4 and is properly labeled "proprietary information not for public disclosure". The State does not guarantee non-disclosure of any information to the public.

**1.16 Schedule of Events:**

Release of the EOI	07/26/2007
Expression of Interest Opening Date	08/07/2007
Approximate Short Listing Due Date	08/08/2007
Estimated Date for Interviews (wk of?)	08/13/2007
Final Ranking Due Date	08/17/2007
Approximate Award Date	08/21/2007

**Design Must Be Completed by September 21, 2007.****1.17 Mandatory Prebid Conference:**

Not Applicable

**1.18 Bond Requirements:**

Not Applicable

**1.19 No Debt Affidavit:**

West Virginia State Code §5A-3-10a(3)(d) requires that all firms submit an affidavit regarding any debt owed to the State. The affidavit **must** be signed and submitted prior to award. It is preferred that the affidavit be submitted with the proposal.

**Part 2****OPERATING ENVIRONMENT****2.1 Location:**

The Problem Area is located off State Route 19 near Mt. Hope in Fayette County, WV. The Price Hill Complex site is located along the west side of Dunloup Creek near Price Hill.

Directions to the site: Traveling south on St. Rt. 19 to the Maple Fork road exit, turn left unto County Route 1 and travel .2 mile to the intersection of State Route 16. Turn left (North) onto State Route 16 and travel 5 miles. Turn right at the Backroads Bar & Grill. Proceed .2 mile and turn right onto the gravel road. This is Tutwiler Lane. The site is located behind the light green building on the left side of the road approximately 50 yards beyond the chain link fence over the hill.

Location Map is attached (Attachment A1).

**2.2 Background**

Firms are to be licensed Architectural/Engineering Firms (A/E) and should be familiar with, and have a successful track record of design of similar projects. The anticipated contract will be for "full-service" A/E design. Aspects of the design are to include, but not be limited to, Civil, Structural, Geological and Hydrological.

*The successful A/E will be responsible for Mapping and Design of the following:*

- 1) Provide for the design of backfilling and sealing one (1) vertical mine shaft seal and conveyance of the mine water to the natural drainway.

2) Provide for demolition of concrete structures and the removal and disposal of the remains of these structures and other old mining related buildings.

3) Provide for the regrade and revegetation the area.

Preliminary design documents will be due 30 days from the issuance of the Purchase Order.

**Part 3**

**PROCUREMENT SPECIFICATIONS**

**3.1 General Requirements:**

Firm must submit a completed CCQQ (Attachment "B") and RFEM (Attachment "C") in Section 4.2

**3.2 Scope of Work:**

The scope of the project described in Sections 2 & 3 is as follows:

- 1) Provide for the design of backfilling and sealing one (1) vertical mine shaft seal and conveyance of mine water to the natural drainway.
- 2) Provide for demolition of concrete structures and the removal and disposal of the remains of these structures and other old mining related buildings.
- 3) Provide for the regrade and revegetation the area.

**3.3 Special Terms and Conditions:**

3.3.1 *Bid and Performance Bonds:* Not Applicable

3.3.2 *Insurance Requirements:* \$1,000,000 Professional Liability with the WVDEP listed as additional insured. #DEP14125 must be listed on Insurance Certificate.

3.3.3 *License Requirements:* Workers Compensation Certificate upon award.

3.3.4 *Litigation Bond:* Not Applicable

**3.4 General Terms and Conditions:**

By signing and submitting the EOI, the successful firm agrees to be bound by all the terms contained in Section Three (3) of this EOI.

**3.4.1 Conflict of Interest:**

Firm affirms that it, its officers or members or employees presently have no interest and shall not acquire any interest, direct or indirect which would conflict or compromise in any manner or degree with the performance or its services hereunder. The firm further covenants that in the performance of the contract, the firm shall periodically inquire of its officers, members and employees concerning such interests. Any such interests discovered shall be promptly presented in detail to the Department of Environmental Protection.

3.4.2 *Prohibition Against Gratuities:*

Firm warrants that it has not employed any company or person other than a bona fide employee working solely for the firm or a company regularly employed as its marketing agent to solicit or secure the contract and that it has not paid or agreed to pay any company or person any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award of the contract. For breach or violation of this warranty, the State shall have the right to annul this contract without liability at its discretion, and/or to pursue any other remedies available under this contract or by law.

3.4.3 *Certifications Related to Lobbying:*

Firm certifies that no federal appropriated funds have been paid or will be paid, by or on behalf of the company or an employee thereof, to any person for purposes of influencing or attempting to influence an officer or employee of any Federal entity, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the firm shall complete and submit a disclosure form to report the lobbying.

Firm agrees that this language of certification shall be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this contract was made and entered into.

3.4.4 *Firm Relationship:*

The relationship of the firm to the State will be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by the parties to this contract. The firm as an independent contractor is solely liable for the acts and omissions of its employees and agents.

Firm shall be responsible for selecting, supervising and compensating any and all individuals employed pursuant to the terms of this EOI and resulting contract. Neither the firm nor any employees or contractors of the firm shall be deemed to be employees of the State for any purposes whatsoever.

Firm shall be exclusively responsible for the payment to his/her employees and subcontractors 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, and licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing.

Firm shall hold harmless the State, and shall provide the State and AML 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.

The firm shall not assign, convey, transfer or delegate any of its responsibilities and obligations under this contract to any person, corporation, partnership, association or entity without expressed written consent of the Department of Environmental Protection./AML.

#### 3.4.5 *Indemnification:*

The firm agrees to indemnify, defend and hold harmless the State and AML, 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 firm, 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; (3) Any failure of the firm, its officers, employees or subcontractors to observe State and Federal laws, including but not limited to labor and wage laws.

#### 3.4.6 *Contract Provisions:*

After the most qualified firm is identified, and fee negotiations are concluded, a formal contract document will be executed between the State and the firm. The order of precedence is the contract, the EOI and the firm's response to the EOI.

#### 3.4.7 *Governing Laws & Compliance:*

This contract shall be governed by the laws of the State of West Virginia. The firm further agrees to comply with the Civil Rights Act of 1964 and all other applicable (Federal, State or local Government) regulations.

#### 3.4.8 *Compliance with Laws and Regulations:*

The firm shall procure all necessary permits and licenses to comply with all applicable laws, Federal, State or municipal, along with all regulations, and ordinances of any regulating body.

The firm shall pay any applicable sales, use, or personal property taxes arising out of this contract and the transactions contemplated thereby. Any other taxes levied upon this contract, the transaction, or the equipment, or services delivered pursuant here to shall be borne by the firm. It is clearly understood that the State of West Virginia is exempt from any taxes regarding performance of the scope of work of this contract.

#### 3.4.9 *Subcontracts/Joint Ventures:*

The State will consider the firm to be the sole point of contact with regard to all contractual matters. The firm may, with the prior written consent of the State, enter into written subcontracts for performance of work under this contract; however, the firm is totally responsible for payment of all subcontractors.

3.4.10 *Term of Contract:*

This contract will be effective (date set upon award) and shall extend until the scope of work is complete or for one (1) consecutive twelve (12) month period. The contract may be renewed upon mutual consent for two (2) consecutive years one (1) year periods or until such reasonable time as may be necessary to obtain a new contract. Such reasonable time shall not exceed twelve (12) consecutive months.

3.4.11 *Non-Appropriation of Funds:*

If the Department of Environmental Protection/AML is not allotted funds in any succeeding fiscal year for the continued use of the service covered by this contract by the West Virginia Legislature, the Department of Environmental Protection/AML may terminate the contract at the end of the affected current fiscal period without further charge or penalty. AML shall give the firm written notice of such non-allocation of funds as soon as possible after AML receives notice. No penalty shall accrue to AML in the event this provision is exercised.

3.4.12 *Contract Termination:*

The State may terminate any contract resulting from this EOI immediately at any time the firm fails to carry out its responsibilities or to make substantial progress under the terms of this EOI and resulting contract. The State shall provide the firm with advance notice of performance conditions, which are endangering the contract's continuation. If after such notice the firm fails to remedy the conditions contained in the notice, within the time period contained in the notice, the State shall issue the firm an order to cease and desist any and all work immediately.

The State shall be obligated only for services rendered and accepted prior to the date of the notice of termination. The contract may also be terminated upon mutual agreement of the parties with thirty (30) days prior notice.

3.4.13 *Changes:*

If changes to the original contract become necessary, a formal contract change order will be required. Prior to any work being performed, the change must be negotiated and approved by the State, AML, and the firm. An approved contract change order is defined as one approved by the State and approved as to form by the West Virginia Attorney General's Office prior to the effective date of such amendment. **NO CHANGES SHALL BE IMPLEMENTED BY THE FIRM UNTIL SUCH TIME AS THE FIRM RECEIVES AN APPROVED WRITTEN CHANGE ORDER.**

3.4.14 *Invoices, Progress Payments, & Retainage:*

The firm shall submit invoices, in arrears, to the WVDEP/AML at the address on the face of the purchase order labeled "Invoice To" pursuant to the terms of the contract. Progress payments may be made at the option of the AML on the basis of percentage of work completed if so defined in the final contract. Any provision for progress payments must also include language for a minimum 10% retainage until the final deliverable is accepted.

If progress payments are permitted, firm is required to identify points in the work plan at which compensation would be appropriate. Progress reports must be submitted to the AML with the invoice detailing progress completed or any deliverables identified. Payment will be made only upon approval of acceptable progress or deliverables as documented in the firm's report. Invoices may not be submitted more than once monthly and State law forbids payment of invoices prior to receipt of services.

### 3.4.15 *Liquidated Damages:*

According to West Virginia State Code §5A-3-4(8), firm agrees that liquidated damages shall be imposed at the rate of \$100.00 per day, for failure to provide deliverables at the agreed upon date identified in the final contract. This clause shall in no way be considered exclusive and shall not limit the State or AML's right to pursue to any other additional remedy to which the State or AML may have legal cause for action including further damages against the firm.

### 3.4.16 *Record Retention (Access & Confidentiality):*

Firm shall comply with all applicable Federal and State of West Virginia rules and regulations, and requirements governing the maintenance of documentation to verify any cost of services or commodities rendered under this contract by firm. The firm shall maintain such records a minimum of five (5) years and make available all records to AML personnel at firm's location during normal business hours upon written request by AML within 10 days after receipt of the request.

Firm shall have access to private and confidential data maintained by AML to the extent required for firm to carry out the duties and responsibilities defined in this contract. Firm agrees to maintain confidentiality and security of the data made available and shall indemnify and hold harmless the State and AML against any and all claims brought by any party attributed to actions of breach of confidentiality by the firm, sub-contractors, or individuals permitted access by the firm.

## Part 4

## EVALUATION & AWARD

### 4.1 **Evaluation and Award Process:**

(a) EOI will be evaluated and awarded in accordance with §5G-1-3 "**Contracts for architectural and engineering services; selection process where total project costs are estimated to cost two hundred fifty thousand dollars or more**".

"In the procurement of architectural and engineering services for projects estimated to cost two hundred and fifty thousand dollars or more, the director of purchasing shall encourage such Firms engaged in the lawful practice of the profession to submit an Expression of Interest (EOI), which shall include a statement of qualifications, and performance data, and may include anticipated concepts and proposed methods of approach to the project. All such jobs shall be announced by public notice published as a Class II legal advertisement in compliance with the provisions of Article Three, Chapter Fifty-nine of this code. A committee comprised of three to five representatives of the agency initiating the request shall evaluate the statements of qualifications and performance data and other material submitted by the interested firms and select three firms which, in their opinion, are best qualified to perform the desired service: **Provided**, that on projects funded wholly or in part by school building authority monies, in accordance with Sections 15 and 16, Article 9-D, Chapter 18 of this Code, two of said three firms shall have had offices within this state for a period of at least one year prior to submitting an EOI regarding a project funded by school building authority monies. Interviews with each firm selected shall be conducted and the committee shall conduct discussions regarding anticipated concepts and the proposed methods of approach to the assignment. The committee shall rank, in order of preference, no less than three professional firms deemed to be the most highly qualified to provide the services required, and shall commence scope of service and price negotiations with the highest qualified professional firm for architectural or engineering services or both. Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified, at a fee determined to be fair and

reasonable, price negotiations with the firm of second choice shall commence. Failing accord with the second most qualified professional firm, the committee shall undertake price negotiations with the third most qualified professional firm. Should the agency be unable to negotiate a satisfactory contract with any of the selected professional firms, it shall select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached: **Provided, however**, that county boards of education may either elect or start the selection process over in the original order preference or it may select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached.

(b) Expressions of Interest submitted will be evaluated by a committee of three (3) to five (5) representatives of the agency in accordance with §5G-1-3.

The committee as stated will evaluate all submittals and by consensus select three (3) firms, in their opinion, are best qualified to perform the desired service. These selections will be based from the statements of qualifications and performance data and other material submitted by the interested firms.

The committee shall rank, in order of preference, each of the three (3) selected firms. Each of the three (3) firms shall begin with a score of one hundred.

The criteria and assigned point values are as follows:

- A. WV Registered Professional Engineers (Civil or Mining)  
In the Primary Office 20 points
- B. Reclamation Engineering design experience of the Primary office's  
WVRPE as it relates to the specific project problem areas 25 points
- C. Available WV-AML Design Teams within the Primary office  
(A Design team should consist of one Project Engineer (Civil or Mining),  
one CAD person and availability of other support personnel a required by the  
particular project) 20 points
- D. The Oral Interview (See Section 4.3 of this EOI) 35 points

4.2 (a) AML Consultant Confidential Qualification Questionnaire (CCQQ) must be completed to be eligible (See Attachment "B").

(b) AML and Related Project Experience Matrix (RP EM) must also be completed to be eligible (See Attachment "C").

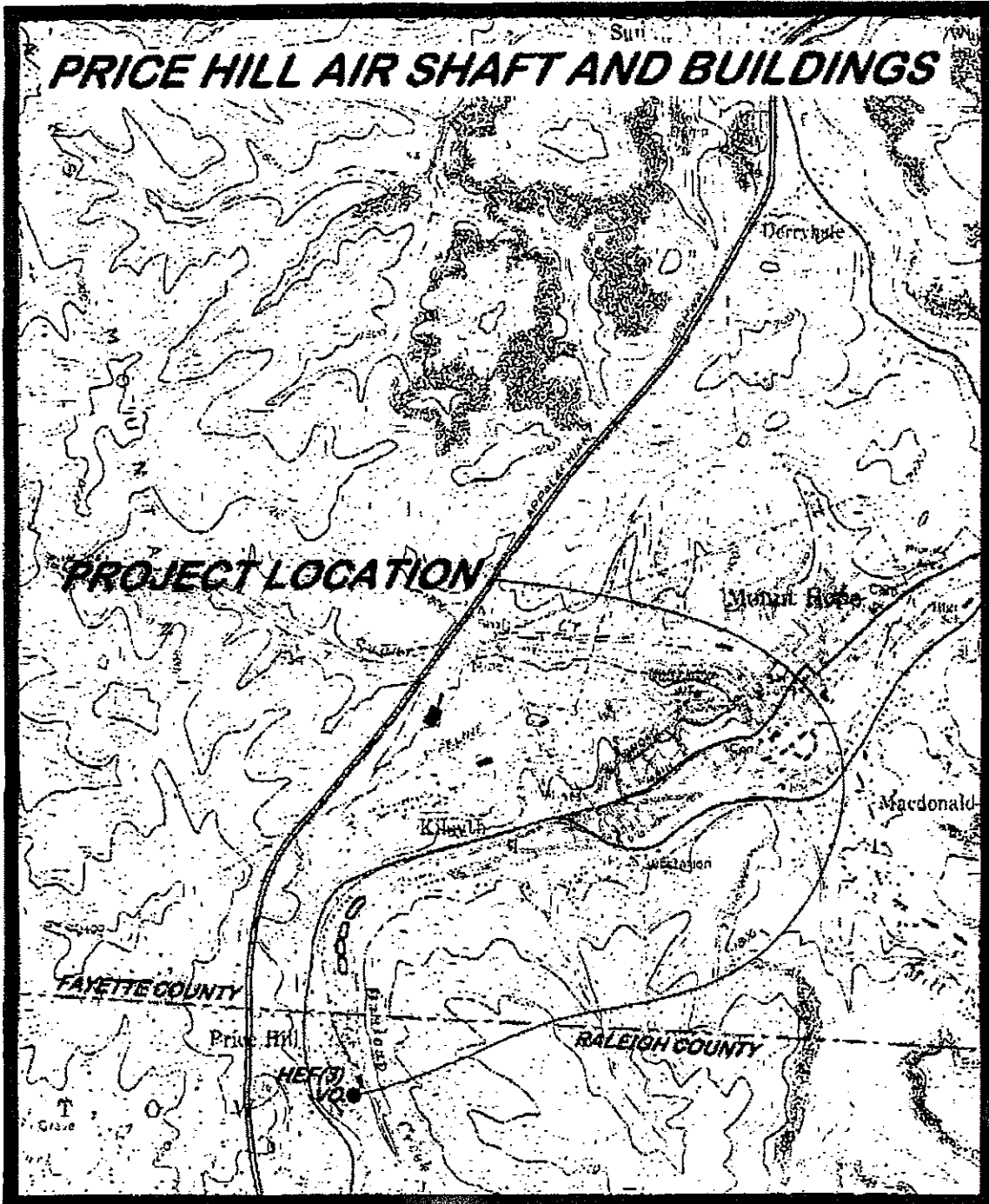
4.3 Interviews as stated in 4.1 "Evaluation and Award Process" will be conducted with the three firms selected as the most qualified by the WVDEP Selection Committee. The Committee will schedule the interviews.



The format for the interviews will be a 15-30 minute PowerPoint presentation consisting, at a minimum, of the following:

- Corporate/personnel experience as it relates to the project or projects
- Proposed project management plan
- Key personnel available for the proposed work
- Proposed subcontractors (mapping, geotechnical, etc.)
- Product quality control
- Project cost control

# PROJECT LOCATION MAP



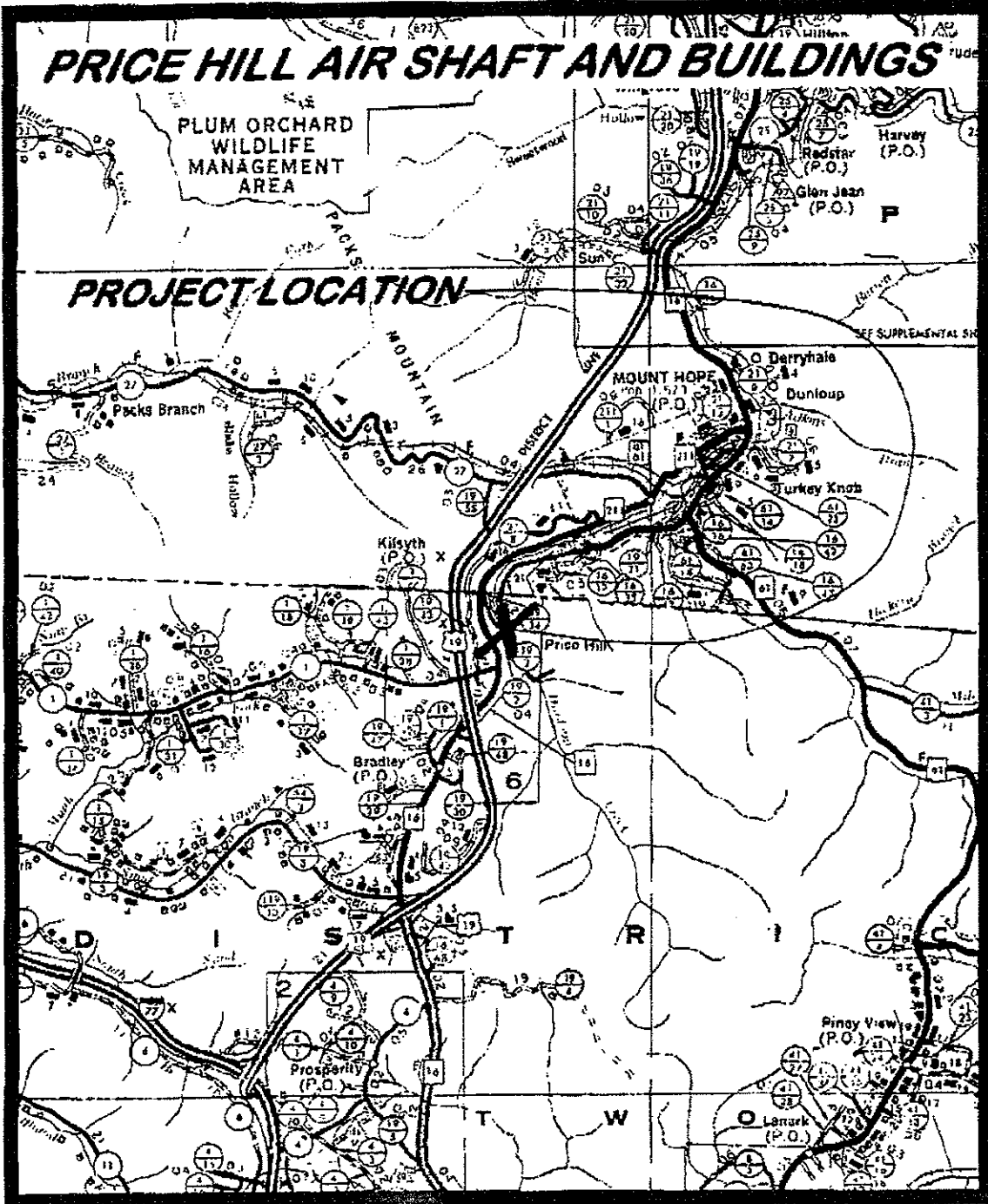
**SCALE: 1"=2000'**  
**OAK HILL QUAD.**

**RALEIGH COUNTY**

**LATITUDE 37°52'47"**  
**LONGITUDE 81°11'12"**

**DASHED LINE IS POTENTIAL PROJECT LIMITS FOR OFF SITE BORROW AND DISPOSAL AREAS.**

# HIGHWAY LOCATION MAP



1"=1 MILE

RALEIGH, FAYETTE COUNTY HIGHWAY MAPS

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE**

Attachment "B"

<b>PROJECT NAME:</b> Price Hill Complex		<b>DATE (DAY, MONTH, YEAR):</b> 07 August 2007		<b>FEIN:</b> 31-1395123	
<b>1. FIRM NAME:</b> R.D. Zande & Associates, Inc.		<b>3. FORMER FIRM NAME</b> N/A			
<b>4. HOME OFFICE TELEPHONE:</b> (304) 472-7140		<b>5. ESTABLISHED (YEAR)</b> 1999		<b>6. TYPE OWNERSHIP</b>	
		<input type="checkbox"/> Individual <input type="checkbox"/> Partnership		<input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Joint-Venture	
<b>7. CORPORATE DESIGN OFFICE: ADDRESS / TELEPHONE / PERSON IN CHARGE / NO. DESIGN PERSONNEL EACH OFFICE:</b>		<b>6a. WV REGISTERED DBE</b>			
1500 Lakeshore Drive, Suite 100 Columbus, Ohio 43204		Mr. Perry Morgan, P.E. (614) 486-4383		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 25 Columbus, OH Office 10 Buckhannon, WV Office 2 St. Albans, WV Office	
<b>8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM:</b>		<b>8a. NAME, TITLE, &amp; TELEPHONE NUMBER - OTHER PRINCIPALS</b>			
Matt B. Tin, P.E. Joseph E. Sullivan, P.E. Perry J. Morgan, P.E.		Dennis E. Miller, P.S., Senior Associate Partner, (304) 472-7140			
<b>9. PERSONNEL BY DISCIPLINE (Bold Lettering Indicates Minimum Design Team Members)</b>					
39 ADMINISTRATIVE	3 ECOLOGISTS	7 LANDSCAPE ARCHITECTS	5 STRUCTURAL ENGINEERS		
2 ARCHITECTS	0 ECONOMISTS	0 MECHANICAL ENGINEERS	66 SURVEYORS		
4 BIOLOGIST	0 ELECTRICAL ENGINEERS	1 MINING ENGINEERS	4 TRAFFIC ENGINEERS		
51 CADD OPERATORS	12 ENVIRONMENTALISTS	0 PHOTOGRAMMETRISTS	8 OTHER		
0 CHEMICAL ENGINEERS	1 ESTIMATORS	2 PLANNERS: URBAN/REGIONAL	1 LABORATORY MANAGER		
81 CIVIL ENGINEERS	2 GEOLOGISTS	10 SANITARY ENGINEERS	5 CHEMISTS / LAB TECHS.		
32 CONSTRUCTION INSPECTORS	0 HISTORIANS	1 SOILS ENGINEERS (Civil Eng.)			
52 DESIGNERS (Eng. Techs)	4 HYDROLOGISTS (Civil Eng.)	1 SPECIFICATION WRITERS			
4 DRAFTSPERSONS			399 TOTAL PERSONNEL		
<b>TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE:</b> 6					
* RPE's other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.					
<b>10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?</b> YES <input type="checkbox"/> NO <input type="checkbox"/>					

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

<p><b>NAME AND ADDRESS:</b> Aerocon Photogrammetric Services, Inc. 4515 Glenbrook Road Willoughby, OH 44094</p>	<p><b>SPECIALTY:</b> Aerial Photography Developing mapping from aerial photography</p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="196 415 293 478"> <tr><td><input checked="" type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b> Novel Geo-Environmental 806 B Street, St Albans, WV 25177</p>	<p><b>SPECIALTY:</b> Subsurface drilling investigation-geotechnical engineering -- soil, rock, coal physical property testing</p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="365 415 462 478"> <tr><td><input checked="" type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b> Sturm Environmental Services P.O. Box 650 Bridgeport, WV 26330</p>	<p><b>SPECIALTY:</b> Chemical analysis of soil, rock, and coal</p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="557 415 654 478"> <tr><td><input checked="" type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b></p>	<p><b>SPECIALTY:</b></p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="722 415 820 478"> <tr><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b></p>	<p><b>SPECIALTY:</b></p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="901 415 998 478"> <tr><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b></p>	<p><b>SPECIALTY:</b></p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="1079 415 1177 478"> <tr><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				
<input type="checkbox"/>				
<p><b>NAME AND ADDRESS:</b></p>	<p><b>SPECIALTY:</b></p>	<p><b>WORKED WITH BEFORE:</b></p> <table border="1" data-bbox="1258 415 1356 478"> <tr><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td></tr> </table> <p>YES NO</p>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				
<input type="checkbox"/>				

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

Yes  
 No

Description and Number of Projects: Corporate Experience... Twenty Seven (27) Projects

**CORPORATE EXPERIENCE:**

<p>1. James &amp; Amanda Taylor Waterline Feasibility Study - I.D. No. 309:</p>	<p>Waterline Extension Feasibility Study - I.D. No. 309, involving eight (8) Residences and two (2) Businesses. Currently awaiting processing of engineering fees; Services may include the following: Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation; Soil Sampling; Project Mapping; Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Executive Summary, Monthly Reports, and Invoicing.</p>
<p>2. Gladly Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture</p>	<p>Wastewater Treatment Facility - Involved the design of a \$3,000,000.00 wastewater plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved a bridge over Stonecoal Creek, relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment (concrete) and re-treatment capabilities.</p>
<p>3. Poplar Ridge / Morrison Ridge Waterline Feasibility Study - I.D. No. 298:</p>	<p>Waterline Extension Feasibility Study - I.D. No. 298, involving 21 Residences. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water; On-Site Meeting and interviews, Monthly Reports, and Invoicing.</p>
<p>4. Nixon Run AMD:</p>	<p>The site consists of one (1) open portal into the abandoned Consol 32 Mine that is discharging acid mine drainage (AMD). Preliminary average estimates of AMD flow from the open portal is 235 gallons per minute exhibiting a pH of 3.2 with acidity concentrations around 150 mg/l, iron concentrations around 11 mg/l, aluminum concentrations around 8 mg/l, and manganese concentrations less than 2 mg/l. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine 905 L.Ft. Ditches, four (4) Pipes, one (1) Subsurface Drain, Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>
<p>5. Summit Park PSD Waterline Feasibility Study - I.D. No. 288:</p>	<p>2.75 Mile Waterline Extension Feasibility Study - I.D. No. 288, involving 167 Residences and Businesses. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation; Soil Sampling; Project Mapping; Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Executive Summary, Monthly Reports, and Invoicing.</p>
<p>6. Hodgesville PSD Waterline Feasibility Study - I.D. No. 275:</p>	<p>1.2 Mile Waterline Extension Feasibility Study - I.D. No. 275, involving Seventeen (17) Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.</p>
<p>7. McElwain Waterline Feasibility Study - I.D. No. 271:</p>	<p>0.64 Mile Waterline Extension Feasibility Study - I.D. No. 271, involving One (1) Resident. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.</p>
<p>8-9. Weaver Portals and Highwall Phase I and Phase II:</p>	<p>Reclamation design of 4,200 linear feet of highwall with 97,000 yards of earthwork; twenty (20) wet mine seals; six AMD treatment limestone beds with "Aluminators", and 35 acres of revegetation. Topographic Surveying; Subsurface Geological Investigation (six (6) piezometers installed); Surface and Groundwater Testing and Reporting; Supplement and Generation of Mapping; Hydrologic and Hydraulic Studies and design for twenty five (25) Ditches and ten (10) Pipes; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>

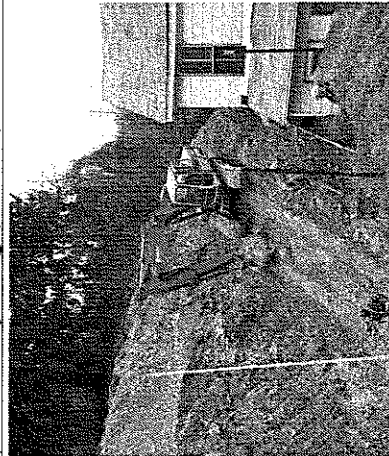
12. **Is your firm experienced in Abandoned Mine Lands Reclamation / Mine Reclamation Engineering?**

**Yes**  
 **No**

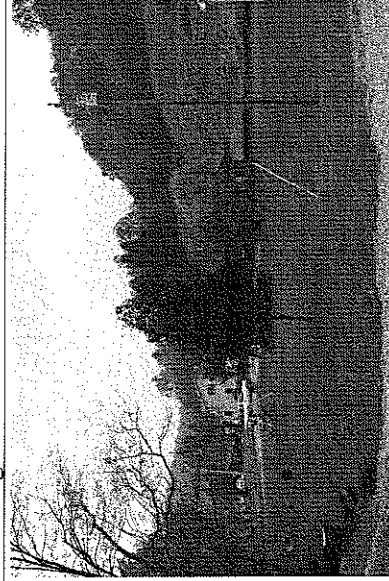
Description and Number of Projects: **Corporate Experience (Cont.): Twenty (25) Projects**

**CORPORATE EXPERIENCE:**

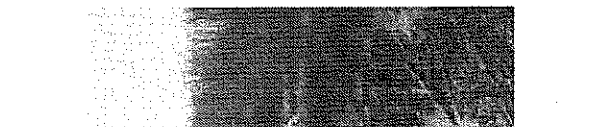
<p>10. <i>Fairmont (Hendrickson) Subsidence:</i></p>	<p>Subsidence investigation of Hendrickson Residence involving Geologic Subsurface Investigation; review and compilation of three previous reports; Field Surveying; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Structure and Support Area Mitigation Alternatives; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.</p>
<p>11. <i>Old Bridgeport Hill Mine Drainage, Phase II:</i></p>	<p>Reclamation design including four (4) Wet Mine Seals and Drainage Facilities to capture and convey mine drainage around businesses and residents along a half-mile stretch of Old Bridgeport Hill Road. Topographic Surveying; Subsurface Geologic Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine (9) Ditches, eight (8) Pipes, one (1) Subsurface Drain, and four (4) Inlets; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>
<p>12. <i>Tunnelton (Dillsworth) Landslide:</i></p>	<p>Reclamation of a landslide behind Dillsworth Residence by design of an 84 foot long by 18 foot high Gabion Basket Retaining Wall; Hydrologic and Hydraulic Studies and design for 214 feet of Subsurface Drains, two (2) Pipes, Manhole, and Drop Inlet; Traffic Control and Pavement Repair Plan; Sediment Control Design; and Revegetation Plan Topographic Surveying and Generation of Mapping; Subsurface Geological Investigation (two (2) piezometers installed); Surface and Groundwater Testing and Reporting; Reclamation Design with Earthwork Quantities; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>
<p>13. <i>Sauls Run Strip and Landslide:</i></p>	<p>Reclamation design of AML related slip behind the Love, Lee, Rohrbaugh, and Gregory Residences with 59,350 Yards of Balanced Earthwork; Hydrologic and Hydraulic Studies and design for 2,764 feet of Ditches, 500 feet of Subsurface Drains, five (5) Pipes, and two (2) Headwalls; Traffic Control and Pavement Repair Plan; Sediment Control; and 6.7 acres of Revegetation. Topographic Surveying and supplementation and generation of Mapping; Subsurface Geological Investigation (ten (10) piezometers installed); Surface and Groundwater Testing and Reporting; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>



**Tunnelton (Dillsworth) Landslide**  
 Gabion Basket Wall Installation behind Dillsworth Residence



**Sauls Run Strip and Landslide**  
 AML related slip threatening residences along Sauls Run

12.	Cont.) Yes No	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering? Description and Number of Projects:	Corporate Experience (Cont.): Various AML, Mine Reclamation Engineering Projects
X		<p>14. <i>Old Bridgeport Hill Mine Drainage, Phase II:</i></p> <p>Reclamation design including four (4) Wet Mine Seals and Drainage Facilities to capture and convey mine drainage around businesses and residents along a half-mile stretch of Old Bridgeport Hill Road. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Generation of Mapping; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine (9) Ditches, eight (8) Pipes, one (1) Subsurface Drain, and four (4) Inlets; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>	
		<p>153. <i>Danehart Acid Mine Drainage Reclamation:</i></p> <p>Reclamation design on a 2.0 Acre Slope Failure Five (5) Feet from a Residence; Surveying (Property and Topographic); Geotechnical (Slope Failure) Investigation; Surface and Ground Water Testing; Mapping; Reclamation Design with Pier and Lag Retaining Wall Design; Design and Hydrologic and Hydraulic Studies for a Ditch, a Subsurface Drain, Culvert Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.</p>	
		<p>16. <i>Arlington (Cox) Drainage:</i></p> <p>Reclamation design to alleviate ground water impacts to the Cox Residence involving Two (2) Wet Mine Seals; Hydrologic and Hydraulic Studies and design for 198 feet of Subsurface Drains, two (2) Ditches, and one (1) Pipe; Mine Dewatering and AMD Treatment Plan; Sediment Control Plan; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>	
			
		<p>Lake Milton Embankment Piping Leak LAKE MILTON - near Jackson, Jackson County, OH</p>	<p>Lake Milton Geotechnical Investigation LAKE MILTON - near Jackson, Jackson County, OH</p>



12. (Cont.) Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?

Yes  
 No

Description and Number of Projects: Corporate Experience (Cont.): Various AML, Mine Reclamation Engineering Projects

<p>17. <i>Flint Run East Acid Mine Drainage Reclamation:</i></p>	<p>Phase I Reclamation design of a 171-Acre Coal Refuse Area, design reclamation of spoil piles, treatment and discharge plan for ponds and lakes filled with AMD, passive AMD treatment design, including a SAPS, Wetland, Limestone Bed, Steel Slag Leach Beds, and Open Limestone Channels. GPS, Topographic Surveying; supplement of available aerial mapping; Design and Hydrologic and Hydraulic Studies for four (4) Channels, three (3) Ditches, and seven (7) Spillways, Design of eight (8) Impoundments (Three Flush Ponds, Sediment Pond, SAPS Pond, Fresh Water Pond, and Steel Slag Pond); Sediment Control Design; Revegetation Design; Environmental Permits; Construction Plans and Specifications, Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.</p>			
<p>18. <i>Lake Milton Investigation:</i></p>	<p>220 Acre-foot Impoundment Investigation; GPS, Hydrographic and Topographic Surveying; Geotechnical (Pending Embankment Failure) Investigation; Surface and Ground Water Testing; Impounded Water and Sediment Investigation; Mapping; Aerial Photography (Control and Mapping); Reclamation Design Alternatives Report; Hydrologic and Hydraulic Studies for Ditch, Channel, Spillway Design; Sediment Control Design; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.</p>			
<p>19. <i>Linden Acid Mine Drainage Bioremediation</i></p>	<p>20. <i>GlenCastle Reclamation</i></p>	<p>21. <i>Misco Burning Gob</i></p>	<p>22. <i>Ferris Forfeiture</i></p>	<p>23. <i>Brown Subsidence</i></p> <p>GPS and Topographic Surveying; Aerial Photography (Control and Mapping); Mapping.</p>
<p>24. <i>Murray City AMD and Art Project:</i></p>	<p>Reclamation design for abandoned portals discharging Acid Mine Drainage. Topographical Surveying; Mapping; Subsurface Investigation (Piezometer Installation and Soils Testing); Passive Acid Mine Drainage Treatment System including two (2) SAPS, two (2) Precipitate Ponds, One (1) Flush Pond, Mine Pool Stabilization Pond and Overflow Treatment Pond; Design and Hydrologic and Hydraulic Studies for Construction in Floodway (Local Flood Plain Coordination and Permit), thirteen (13) Ditches and six (6) Spillways; Design of a Wet Mine Seal; Incorporation of Art Component to Satisfy Fundings; Interim Grading Plan to allow relocation of a high pressure gas line; Sediment Control Plan; Revegetation Design; Environmental Permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.</p>			
<p>25. <i>Flint Run Acid Mine Drainage Reclamation:</i></p>	<p>Investigation and three (3) volume report on an abandoned 171-Acre Coal Refuse pile, including highwalls, ponds, and lakes. GPS, Hydrographic and Topographic Surveying; Aerial Photography (Control and Mapping); Subsurface Geological Investigation; Surface and Ground Water Testing; Impounded Water and Sediment Investigation; Overburden and Coal Analysis; Ground Water Contamination Study; HazMat Material Investigation; Mapping; Reclamation Design Alternatives Report; Passive AMD Alternatives Report; Reclamation and AMD Treatment Cost/Benefit Analysis; Hydrologic and Hydraulic Studies for Ditches, Channels, and Spillways; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.</p>			
<p>26. <i>Nutters Tipple D-716:</i></p>	<p>Reclamation design of a 7.2 Acre Bond Forfeiture Coal Tipple Site; Surveying; Geotechnical (Slope Stability) Investigation; Coal Analysis; HazMat Materials (2 UST's, 8 AST's, 8 R-R Ties, 55-Gallon Drums, Refrigerators, Stained Soil); Debris Removal Plan; Design and Hydrologic and Hydraulic Studies for Subsurface Drain; two (2) Ditches, and a Channel Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.</p>			
<p>27. <i>Midvale Coal Number 7:</i></p>	<p>35 Acre Coal Tipple and Coal Refuse Disposal Fill Area; GPS and Topographic Surveying; Subsurface Investigation; Coal Analysis; Soil Borrow Analysis; HazMat Investigation (PCB's, Drums, Pails, Stained Soils); Mapping; Calculation Brief with Quantity Computations; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.</p>			

12. (Cont.) Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?

Yes  
 No

Description and Number of Projects: Employee Experience: Various AML, Mine Reclamation Engineering Projects

**AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:**

*Greg Linder, P.E., Project Engineer – Seven(7) Completed Projects*

- 1. James Taylor Waterline, I.D. No. 309; 2. Gladly Fork Mining Inc. Forfeiture; 3. Nixon Run AMD; 4. Poplar Ridge Waterline I.D. No. 298; 5,6. Weaver Portals and Highwall Phase I and Phase II; 7. Sauls Run Strip and Landslide

*Randy Calkins, Project Manager, WVAML Design - Twenty (27) Completed Projects – Three (3) Preliminary Design Projects; Mine Reclamation Engineering:*

- WVAML – Completed Designs** – 1. James Taylor Waterline, I.D. No. 309; 2. Gladly Fork Mining Inc. Forfeiture; 3. Nixon Run AMD; 4. Poplar Ridge Waterline I.D. No. 298; 5. Summit Park Waterline I.D. No. 288; 6,7. Weaver Portals and Highwall Phase I and Phase II; 8. Fairmont (Hendrickson) Subsidence; 9. Tunnelton (Dillsworth) Landslide; 10. Arlington (Cox) Drainage; 11. Sauls Run Strip and Landslide; 12. Hodgesville PSD Waterline Extension-I.D. No. 275; 13. McElwain Waterline Feasibility Study-I.D. No. 271; 14. Old Bridgeport Hill Mine Drainage, Phase II; 15. Adaland Tipple and Refuse; 16. Bismark Strip Drainage and Refuse; 17. Brownnton School Refuse; 18. Burdock Highwall; 19. Clarksburg (Ryder Avenue) Drainage; 20. Conners Highwall; 21. Francis Drainage and Refuse; 22. Muddy Creek Tipple Complex; 23. Pringle Drainage; 24. Superior Hydraulics; 25. Thomas (Euclid Avenue) Subsidence; 26. Zebs Creek Highwall. – **Preliminary Designs:** 1. Amigo Smokeless Refuse; 2. Austin Highwall; 3. Slab Fork Mine Dump. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271.

- Ohio AML – Completed Designs** - 1. Flint Run East; 2. Murray City AMD and Art, 3. Flint Run Acid Mine Drainage, 4. Danehart Acid Mine Drainage, 5. Nutters Tipple D-716, 6. Lake Milton Investigation, 7. Midvale Coal Number 7, 8. Linden Acid Mine Drainage Bioremediation, 9. Glen Castle Reclamation, 10. Misco Burning Gob, 11. Ferris Forfeiture, 12. Brown Subsidence



**Reclaimed Highwall**  
**ZEBBS CREEK HIGHWALL** - near Elkins, Randolph County, WV



**Stabilized Refuse Pile**  
**MUDDY CREEK TIPPLE COMPLEX** - near Mt. Storm, Grant County, WV

12. **Is your firm experienced in Soil Analysis?**

X	Yes
	No

Description and Number of Projects: **Numerous Projects Involving Physical Properties of Soil Including Soil Stability Investigations, Design of Soil Fill Slopes, as well as Chemical Properties of Soils including Revegetation Plans.**

**CORPORATE EXPERIENCE:**

**AML** – Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Nutters Tipple D-716; Danehart Acid Mine Drainage; Lake Milton Investigation. **WVCA** – Fisher Mill Creek Bank Stabilization; Berger –Harmon Creek Bank Stabilization. **Landfills** – Franklin County Sanitary Landfill Capping and Closure Plan; Bobmeyer Landfill Capping and Closure Plan; Fayette County Sanitary Landfill #3 Capping and Closure Plan; Hardin County Sanitary Landfill Capping and Closure Plan; Allied Sanitary Landfill Capping and Closure Plan; Triangle Landfill Capping and Closure Plan; Coshocton Landfill Capping and Closure Plan; B & E Landfill Capping and Closure Plan; Westerville Landfill Capping and Closure Plan; Fairfield Landfill Capping and Closure Plan. **Road Design** – Lawrence County Route 7; Corridor H, Section 6 Davis to Bismark; Williams Road Widening; Journal Street Extension; Frantz Road; Maxtown Road; Alum Creek Drive. **Quality Control / Quality Assurance Projects** – Hazelton Federal Prison; Clifford Hollow Bridge; Corridor H Job 123; Corridor H Job 125; Corridor H at Baker; Mon-Fayette Bridge; Glenville Federal Prison.

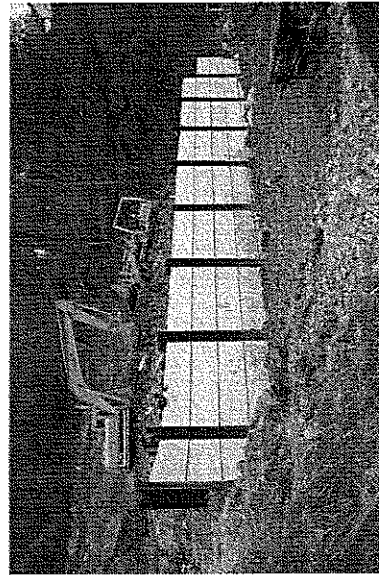
**AML** – Weaver Portals and Highway; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Midvale Coal Number 7; Nutters Tipple D-716; Lake Milton Investigation. **Landscape Architecture Projects (with soil and vegetation designs)** – Willowbrook Linear Parkway; Willowbrook Conceptual Park Plan; Northgate Commercial Development; Montgomery Park; Tartan Fields Golf Course; Hoff Woods Park; Meri-Mac Park; Bridlewood Park; Friendship Park.

**AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:**

*Randy Calkins, Project Manager, WVAML Design - Seventeen (17) Completed Projects; Numerous Mine Reclamation Engineering Projects:*

- WVAML – Completed Designs** - 1. Weaver Portals and Highway; 2. Tunnelton (Dillsworth) Landslide; 3. Arlington (Cox) Drainage; 4. Sauls Run Strip and Landslide; 5. Old Bridgeport Hill Mine Drainage, Phase II; 6. Adaland Tipple and Refuse; 7. Bismark Strip Drainage and Refuse; 8. Brownston School Refuse; 9. Burdock Highway; 10. Clarksburg (Ryder Avenue) Drainage; 11. Conners Highway; 12. Francis Drainage and Refuse; 13. Muddy Creek Tipple Complex; 14. Pringle Drainage; 15. Superior Hydraulics; 16. Thomas (Euclid Avenue) Subsidence; 17. Zebs Creek Highway. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271.

Revegetation Plans



Installation of retaining wall designed to provide slope stability.

**DANEHART ACID MINE DRAINAGE RECLAMATION PROJECT**

Near York, Belmont County, OH

12. **Is your firm experienced in hydrology and hydraulics?**

<b>X</b>	<b>Yes</b>
	<b>No</b>

Description and Number of Projects: **Major H & H Studies for Impoundments, Road Bridges, Pipes, Culverts, L. Culverts, Ditches, Channels, and Channel Relocations and Restoration using Natural Stream Design Techniques.**

**CORPORATE EXPERIENCE:**

**AML** – Weaver Portals and Highway; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation. **NPDES and Waste Permits (Sediment Control Structures)** – C.J. Martin Enterprises; A.F. Wendling Inc.; Pope Properties; Deer Park Development; Fairfax Trucking (Corridor H); Mountaineer Grading (Upper Tract to Petersburg Road); Allwood Construction (Philippi Bypass); Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **Others** – Lake Margaret Dam; O’Shaughnessy Dam.

**Route 35** (Mason County); Mile Branch Bridge; Upper Tract bridge; Buffalo Creek Bridge; Sawmill Parkway Pedestrian Crossing; Southwest Dublin Traffic Calming; LAW-7-02.17; LIC-40-44.930; FRA-70-13.12; FRA-315-00.30R; SHE-CR-41-3.14; PER-93-33.26B; MEG-143-11.29; Children’s Home Road Bridge; PIC/FRA-23-12.92/0.00; CR 23 over Elk Fork; HIG-138-24.36; Ranger Road over Georges Creek; CR24A over the Hocking River; CR24 over the Hocking River; HIG-28-2.80; PER-93-12.40; GUE-209-5.73; CR 41 over the Miami River; I670(S) over Conrail; B&O and N&W Railroads; 4th Street Connector over Conrail and B&O Railroads; I670 over Alum Creek; I670 over 5<sup>th</sup> Street; 5<sup>th</sup> Street over Alum Creek; UNI-33-0041 L/R; UNI-33-0092; COS-206-0603; ALL-81-19.047; FAI-TR 294-0.13; ERI-2-1.78; Colliers Bridge; MUS-22-26.80

**AML** – Weaver Portals and Highway; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation. **Box Culverts** – FRA-12—2.94; MEG-143-13.77; MEG-143-11.76; COL-30-5.90; FRA-33-11.63; GUE-83-5.56; MUS-146-27.38. **Road Design** – Lawrence County Route 7; Corridor H, Section 6 Davis to Bismark; Williams Road Widening; Journal Street Extension; Frantz Road; Maxtown Road; Alum Creek Drive.

404, 401 Certification and Natural Stream Design of over 72,000 lineal feet of streams; Oxford Mining Company – New Lexington North Mine, Adamsville Mine; Sands Hill Coal Company – Pearce Mine, Mead/Coffen Mine, Circle Drive Mine, 300 Pit Mine, Big Valley Mine; Waterloo Coal Company, Inc – Winchester Mine, Westlake Mine, Mead/Zinn Mine, Allied Wets Mine.

**AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:**

*Randy Calkins, Project Manager, WVAML Design - Seventeen (17) Completed Projects – Three (3) Preliminary Design Projects; Mine Reclamation Eng.:*

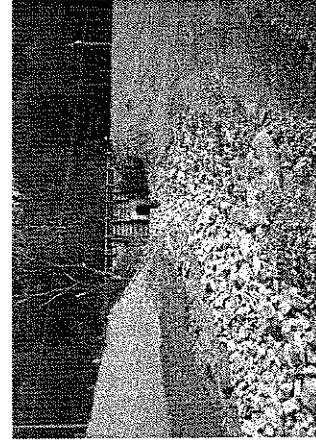
**WVAML** – Completed Designs - 1. Weaver Portals and Highway; 2. Tunnelton (Dillsworth) Landslide; 3. Arlington (Cox) Drainage; 4. Sauls Run Strip and Landslide; 5. Old Bridgeport Hill Mine Drainage, Phase II; 6. Adaland Tipple and Refuse; 7. Bismark Strip Drainage and Refuse; 8. Brownnton School Refuse; 9. Burdock Highway; 10. Clarksburg (Ryder Avenue) Drainage; 11. Conners Highway; 12. Francis Drainage and Refuse; 13. Muddy Creek Tipple Complex; 14. Pringle Drainage; 15. Superior Hydraulics; 16. Thomas (Euclid Avenue) Subsidence; 17. Zebs Creek Highway. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271

H & H Studies for Pipes, Culverts, Box Culverts



**Fabri-form Ditch.**

**BURDOCK HIGHWALL**  
Near Elk Garden,  
Grant County, WV



**Rock riprap channel.**

**NUTTERS TIPPLE, D-716**  
Near New Straitsville,  
Perry County, OH

12. Does your firm produce its own Aerial Photography and Derivative Contour Mapping?  
 Description and Number of Projects: Numerous Projects Developing Contour Mapping from Conventional and GPS Surveying, Aerial Photography and Associated Mapping Subcontracted to Aerocon Photogrammetric Services, Inc. (See Accompanying Letter of Commitment and AML CCQQ).

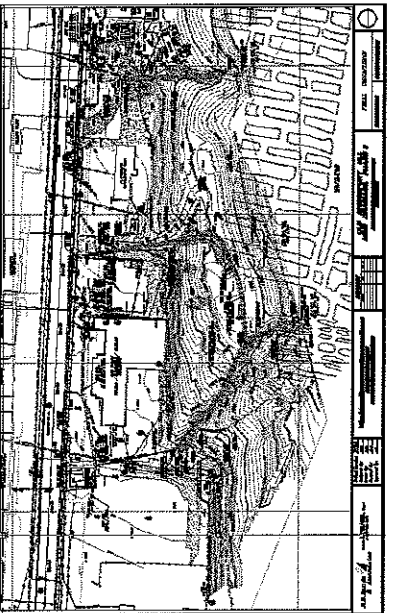
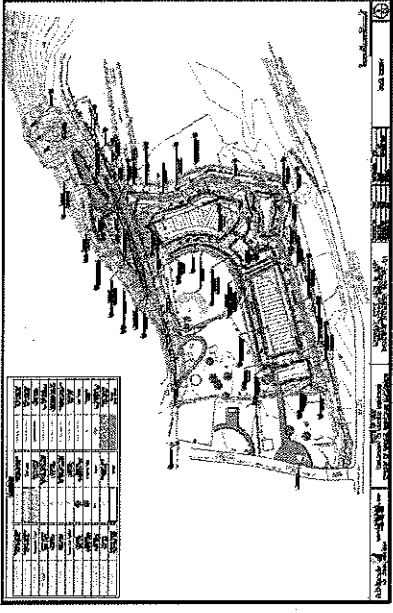
Yes  No

**CORPORATE EXPERIENCE:**  
**AML** - Weaver Portals and Highway; Tunnleton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II, Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation; Midvale Coal Number 7; Linden Acid Mine Drainage Bioremediation; GlenCastle Reclamation; Misco Burning Gob; Ferris Forfeiture; Brown Subsidence. **NPDES and Waste Permits** - C.J. Martin Enterprises; A.F. Wendling Inc.; Pope Properties; Deer Park Development; Fairfax Trucking (Corridor H); Mountaineer Grading (Upper Tract to Petersburg Road); Allwood Construction (Philippi Bypass); Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **Others** - Sun Mountain Resort; Jim Larosa UHC Site; Glenville Federal Prison Pistol Range; BBL Carlton State Office Consolidation Complex Site; City of Shinnston Alley Survey; Chippewa WalMart Site; West Virginia Wesleyan College Site; Unlimited Futures Site; Dollar Tree Site; Jim Waggle Site; John Jenkins Site.

**AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:**  
*Randy Calkins, Project Manager, WVAML Design - Seventeen (17) Completed Projects - Three (3) Preliminary Design Projects; Mine Reclamation Engineering:*

**WVAML** - Completed Designs - 1. Adaland Tipple and Refuse; 2. Bismark Strip Drainage and Refuse; 3. Brownton School Refuse; 4. Burdock Highway; 5. Clarksburg (Ryder Avenue) Drainage; 6. Conners Highway; 7. Francis Drainage and Refuse; 8. Muddy Creek Tipple Complex; 9. Pringle Drainage; 10. Superior Hydraulics; 11. Thomas (Euclid Avenue) Subsidence; 12. Zebs Creek Highway; 13. Old Bridgeport Hill Mine Drainage, Phase II; 14. Weaver Portals and Highway; 15. Tunnleton (Dillsworth) Landslide; 16. Arlington (Cox) Drainage; 17. Sauls Run Strip and Landslide - Preliminary Designs: 1. Amigo Smokeless Refuse; 2. Austin Highway; 3. Slab Fork Mine Dump. **Mine Reclamation Engineering** - Surface Mine Applications (WV - S.O.A.P. Applications) - S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV - S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271.

*Dennis Miller, Survey Manager, Twenty-One (21) Projects:*  
**WVAML** - 1. Adaland Tipple and Refuse; 2. Barkers Ridge Highway; 3. Bismark Strip Drainage and Refuse; 4. Bridge Run; 5. Brownton School Refuse; 6. Camp Run; 7. Conners Highway; 8. Dawmont AML; 9. Francis Drainage and Refuse; 10. Muddy Creek Tipple Complex; 11. Pine Bluff Tipple Site; 12. Philip Thorn Highway; 13. Rainelle AML; 14. SCS Reclamation; 15. Shegon Refuse Pile; 16. Shoemaker Landslide; 17. Superior Hydraulics; 18. Taylor Creek Impoundment; 19. Taylor Creek Tipple Complex; 20. Tibbs Run Portal; 21. Masontown No. 4 AML

	<p>Mapping generated from conventional surveying</p> <p><b>OLD BRIDGEPORT HILL MINE DRAINAGE</b></p> <p>Near Bridgeport, Harrison County, WV</p>		<p>Mapping generated from conventional and GPS survey techniques.</p> <p><b>Murray City AMD and Art Project</b></p> <p>Near Murray City, Hocking County, OH</p>
---	--	--	---

12.  Yes  No  
 Is your firm experienced in domestic waterline experience? (Provide experience your firm has in evaluation of aquifer degradation as a result of mining.)  
 Description and Number of Projects: **Numerous Domestic Waterline Extension Projects with Evaluation of Aquifers.**

**CORPORATE EXPERIENCE:**

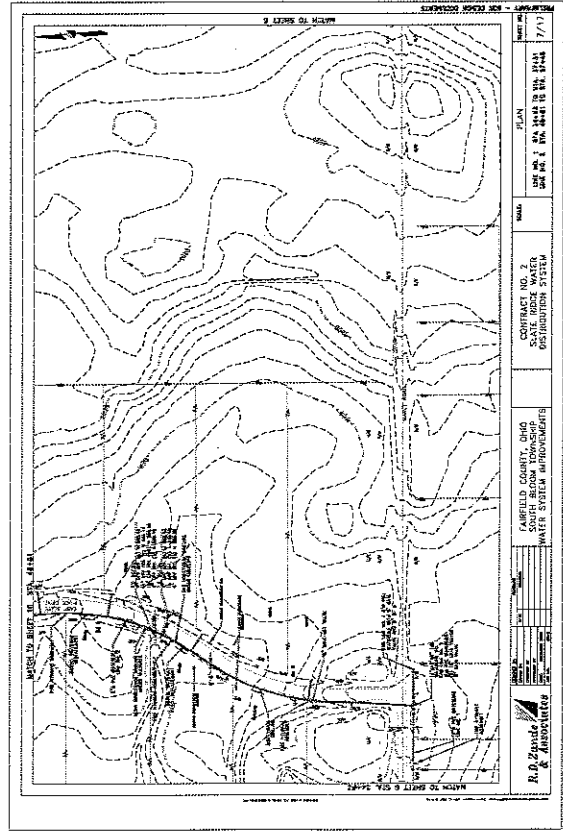
**Waterline Extension Feasibility Studies**  
 AML - 1. James and Amanda Taylor Waterline Extension Feasibility Study - I.D. No. 309; 2. Poplar Ridge/Morrison Ridge Waterline Feasibility Study - I.D. No. 298; 3. Summit Park PSD Waterline Extension Feasibility Study - I.D. No. 288; 4. Hodgesville PSD Waterline Extension Feasibility Study - I.D. No. 275; 5. Charles L. and Donice J. McElwain Waterline Feasibility Study - I.D. No. 271.

**Aquifer Degradation Investigation**  
 AML (Mining Related) - Weaver Portals and Highwall; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Danehart Acid Mine Drainage; Other - Remining in Ohio: Hydrologic Background Sampling Options; New Wellfield Development, Village of Frazeyburg; Wellfield Expansion, Village of Commercial Point; Groundwater Observation Well Network Evaluation and Improvements Statewide; Installation of Monitoring Wells, Columbus South Wellfield Improvements: RI/FS, Eau Claire Municipal Well Field.

**Domestic Waterline Experience**  
 Private - Pope Properties Cross Lanes; Odom Construction Corridor H Job 123. **Public** - Southwest Bloom Township Water Line Improvements; Alum Creek Pump Station; Lithopolis Water Treatment Plant; Kenton Water Treatment Plant; Frazeyburg Water Treatment Plant; Cedar Hill Road Waterline Study; Logan Water System Modeling; James Road Waterline; Dublin Road Waterline; Seeds-Zuber Road Waterline Extension; Young Road Waterline Extension; McKinley Avenue 48" Water Main Design; Madeira-Riverside Drive Waterline; U.S. Route 33 Water System Improvements-12" Waterline Extension; West Logan Lift Station Upgrade; Zahn's Corner Industrial Park Water System Improvements; Elevated Water Storage Tanks for various municipalities

**EMPLOYEE EXPERIENCE:**

**Domestic Waterline Experience**  
 Jay Hollen, Waterline Design Project Manager, Numerous Projects:  
 Southwest Bloom Township Water Line Improvements; Elkins Road PSD, Upshur County, WV; Water System Upgrade, Upshur County Airport, WV; Water System Upgrade, Phillippi, WV; Water System Upgrade, Clay County, WV; Water System Upgrade, Ivydale and Clay, WV; Water System Upgrade, Belington, WV; Water System Upgrade, Thomas, WV; Water storage Facility, WV American Water Co., Gassaway, WV; Reservoir Replacement, Davis, WV; Water System Upgrade, Davis, WV; Water and Wastewater System Upgrade, Petersburg, WV



**Waterline distribution system design.**  
**SOUTH BLOOM TOWNSHIP WATERLINE EXTENSION**  
 Near South Bloom, Fairfield County, OH

12. Is your firm experienced in Acid Mine Drainage?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

Description and Number of Projects: Corporate Experience – See (3) WVDEP AML Projects, Six (6) Ohio AML Projects; One (1) C. Watershed Organization – Employee Experience – Three (3) WVAML Projects – Thirteen (13) Bond Forfeiture Projects.

**CORPORATE EXPERIENCE:**

<p>1. Weaver Portals and Highway:</p>	<p><b>WVDEP AML</b> – Twenty (20) collapsed portals contribute approximately 95 gpm of pH 3.2, 200 mg/l acidity, 10 mg/l iron, 20 mg/l aluminum, and 2 mg/l manganese to Beaver Creek. Designed passive acid mine drainage treatment systems consisting of Open Limestone Channels and six (6) Limestone Beds with engineered “Aluminator” piping systems. The project also included 97,000 Yards Earthwork, 20 Wet Mine Seals, 25 Ditches, 10 Pipes, Sediment Control Plan, and 35 acre Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.</p>
<p>2. Old Bridgeport Hill and Arlington (Cox) Drainage</p>	<p><b>WVDEP AML</b> – Designed Mine Dewatering and AMD Discharge Treatment Plans.</p>
<p>3. Flint Run East Acid Mine Drainage Reclamation:</p>	<p><b>Ohio AML – Phase I</b> – Designed passive acid mine drainage treatment system for “worst” acid mine drainage in the State of Ohio. Water Quality was pH 3.0, acidity from 1,600 to 6,000 mg/l, iron from 200 to 600 mg/l, aluminum from 30 to 250 mg/l, and manganese from 5 to 55 mg/l. Designs include Open Limestone Channels; Sediment Pond, SAPS Pond, Wetland, Horizontal Limestone Bed, Fresh Water Pond, Steel Slag Leach Bed, and three (3) Flush Ponds; up-gradient diversion of ground water around refuse fills; cover high infiltration areas, alkaline amendment for coal refuse cover and vegetation; sediment control design; vegetation design; environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.</p>
<p>4. Danehart Acid Mine Drainage Reclamation:</p>	<p><b>Ohio AML</b> – Report and Investigation with cost/benefit analysis to mitigate “worst” acid mine drainage in Ohio. Project included two (2) month hydrologic investigation; impounded water and sediment investigation; chemical treatment (AquaFix or hydrated lime) for AMD discharges; passive treatment options for AMD discharges: eliminating AMD discharge sites by backfilling operations; reducing AMD flows by diverting up-gradient ground waters; cover high infiltration areas; alkaline amendment for coal refuse cover and to support vegetation; open limestone channels; steel slag leach beds; aerobic wetlands; limestone filter beds; limestone polishing leach bed; open limestone drainage ditches and channels; and vegetation plan.</p>
<p>5. Lake Milton Investigation:</p>	<p><b>Ohio AML</b> – Acid mine drainage caused a failed slope in close proximity to Danehart residence. Design included earthwork mass balance, 75 foot long by 10 foot high pier and lag retaining wall design; subsurface drain to treat AMD; ditch and channel design; and vegetation plan.</p>
<p>6. Nutters Tipple D-716:</p>	<p><b>Ohio AML</b> – 220 Ac.Ft. Impoundment Investigation to mitigate embankment “piping” leak. Impounded water is lightly buffered AMD that required design of limestone embankment (leach bed) to mitigate impounded and discharged waters. Design included “pump and treat” and “gravity discharge and treat” options while repairing embankment and constructing limestone embankment (leach bed). After repair, discharged waters were used to drive steel slag leach bed for additional alkaline addition to the watershed.</p>
<p>7. Linden AMD Bioremediation:</p>	<p><b>Ohio AML</b> – Alkaline amendment for coal refuse cover and vegetation; encapsulation of coal refuse by subsurface drains and surface diversions to reduce water contact and reaction with coal refuse and eliminate generation of AMD.</p>
<p>8. Murray City AMD and Art Project:</p>	<p><b>Ohio AML</b> – Developed mapping for design of AMD treatment systems.</p> <p><b>Monday Creek Restoration Watershed Group</b> – Geologic and hydrologic and hydraulic investigation to seat AMD passive treatment systems within and next to a floodplain. Water Quality was pH 2.8, acidity 608 mg/l, iron 106 mg/l, aluminum 47 mg/l, manganese 7 mg/l, and flow of 163 gpm. Design, construction plans, specifications, operating manuals for the Murray City AMD and Art Project including Wet Mine Seals, a Mine Pool Stabilization Pond, Overflow Treatment Pond, two stage SAPS Pond or Vertical Flow Wetland, two Precipitate Ponds, and a Flush Pond to passively treat AMD from two nearby deep mine portals, site drainage ditches and channels, cut/fill grading design, vegetation plan, environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.</p>

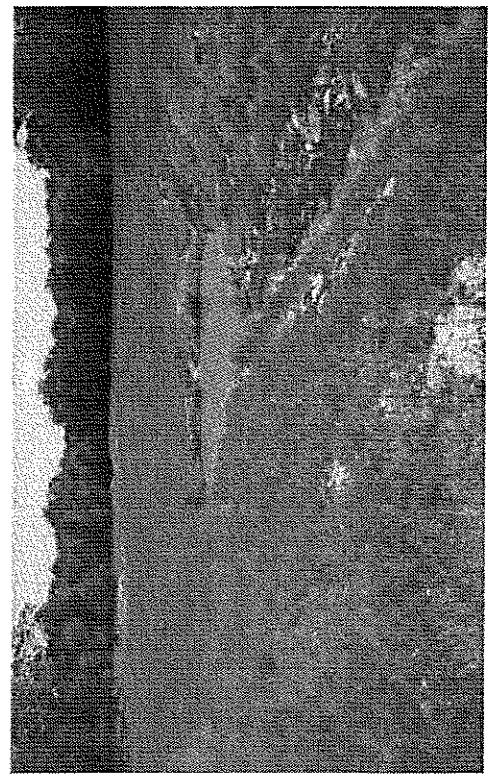
12. (Cont.) Is your firm experienced in Acid Mine Drainage?

Yes	X
No	

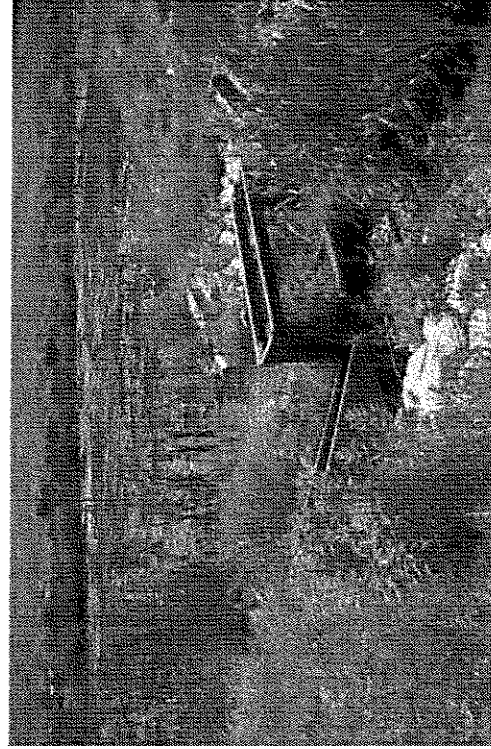
Description and Number of Projects: Corporate Experience – Six (6) Ohio AML Projects; One (1) Ohio Watershed Organization – Employee Experience – Three (3) WVAML Projects – Thirteen (13) Bond Forfeiture Projects.

**EMPLOYEE EXPERIENCE**

<p><i>Randy Calkins, Project Manager – Three (3) WVAML Projects; Thirteen (13) WV Bond Forfeiture Projects (Cont.)</i></p>	
<p>1. <i>Bismark Strip Drainage and Refuse:</i></p>	<p><b>WVAML</b> – Geotechnical investigation, surveying, mapping, six (6) month hydrologic investigation, construction plans, specifications, calculation brief, WVAML meetings, engineering cost estimate and scope of work, pre-bid and pre-construction conferences. Design included Wet Mine Seals, two Anoxic Limestone Drains, two Iron Precipitate Ponds, three Aerobic Wetlands, site drainage ditches and channels, cut/fill grading design, vegetation plan.</p>
<p>2. <i>Francis Drainage and Refuse:</i></p>	<p><b>WVAML</b> – Geotechnical investigation, surveying, mapping, six (6) month hydrologic investigation, construction plans, specifications, calculation brief, WVAML meetings, engineering cost estimate and scope of work, pre-bid and pre-construction conferences. Design included construction chemical water treatment and controlled release plan, 14 Wet Mine Seals, two Subsurface Drains, stream bank protection (COE Permit), an Anoxic Limestone Drain, a Reverse Alkaline Producing System, a SAPS Pond, one Iron Precipitate Pond, four Aerobic Wetlands, site drainage pipes, ditches and channels, cut/fill grading design, vegetation plan.</p>
<p>3. <i>Zebs Creek Highway:</i></p>	<p><b>WVAML</b> – Geotechnical investigation, surveying, mapping, hydrologic investigation, construction plans, specification, calculation brief, WVAML meetings, engineering cost estimate and scope of work, pre-bid and pre-construction conferences. Design included Open Limestone Channels, Aerobic Wetlands, site drainage ditches and channels, cut/fill grading design, vegetation plan.</p>
<p><i>West Virginia Bond Forfeiture Projects:</i></p>	<p><b>Aerobic Wetland Design:</b> S. Kelly Industries, Allison Engineering, Phase I, Z &amp; F Development Company, Peter Rosati complaint, Kodiak Land Company, Greendale Coal Company, Claytex Coal Company, Kittle Flats, and Pierce Coal and Construction.</p> <p><b>Anaerobic Wetland Design:</b> Pierce Coal and Construction, Z &amp; F Development Company, Keister Coal Company, and Lobo Capitol, Inc.</p> <p><b>Anoxic Limestone Drain:</b> Z &amp; F Development Company, Lobo Capitol, Inc., Kittle Flats, Pierce Coal and Construction, and Greendale Coal Company</p>



**Outlet from Anoxic Drain One.**  
**BISMARK STRIP DRAINAGE AND REFUSE**  
 Near Mt. Storm, Grant County, WV



**Final Outlet at downstream wetland.**  
**BISMARK STRIP DRAINAGE AND REFUSE**  
 Near Mt. Storm, Grant County, WV



**PERSON: HISTORY STATEMENT FOR KEY INDIVIDUALS**

**NAME & TITLE (Last, First, Middle Int.)**

Linder, Gregory, P.E.  
Buckhannon, WV Office

**YEARS OF AML DESIGN EXPERIENCE:**

3

**YEARS OF EXPERIENCE**

**YEARS OF EOI RELATED DESIGN EXPERIENCE:**

7

**Brief Explanation of Responsibilities:** Project Engineer and Signatory - expression of interest response, Project scope of work document and associated engineering cost estimate, invoicing, and monthly progress reports. Designer - MicroStation, AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

**EOI Experience:** Mr. Linder has been involved with the engineering design on seven West Virginia AML Projects including: 1. James Taylor Waterline, I.D. No. 309; 2. Gladly Fork Mining Inc. Forfeiture; 3. Nixon Run AMD; 4. Poplar Ridge Waterline I.D. No. 298; 5,6. Weaver Portals and Highwall Phase I and Phase II; and 7. Sauls Run Strip and Landslide. Mr. Linder has been involved with engineering design including structural engineering, channel restoration, geotechnical analysis, site reclamation, and utility relocation of over 24 bridges, including highway, railway, and pedestrian bridges. Mr. Linder is also experienced with environmental studies including endangered bat studies, watershed management plans, and environmental assessments. Mr. Linder's projects include: **Fisher - Mill Creek Bank Stabilization (Western Conservation District); Berger - Harmon Creek Bank Stabilization Project (Northern Panhandle Conservation District); Laurel Lake Dredging (Guyan Conservation District); Weaver Highwall and Mine Drainage; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide;** North Shore Connector, Allegheny County, PA; Headsville Bridge Replacement, Mineral Co., WV; NJ Route 18 Extension; S.R. 836 Extension, Miami-Dade County, FL; Bridge Design Group B, Allegheny Co., PA; Sharon Heights Connector, Mingo Co., WV; PA Rout 28 Galleria Mall Interchange; Bridge Design Group H, Allegheny Co., PA; Star City Bridge, Monongalia Co., WV; S.R. 0022 over Stoney Run, Westmreland Co., PA; S.R. 0309 over Church Road, Montgomery Co., PA; S.R. 0056 over Stony Creek, Cambria Co., PA; Rail Rehabilitation Akron and Canton, OH; Cranberry Interchange, Butler Co., PA; Mon/Fayette Expressway, Washington Co., PA; U.S. Route 33, Hocking and Athens Co., OH.

**Related EOI Experience:** Environmental projects include: Enterprise/Interstate 79 Connector Environmental Assessment, including Indiana Bat survey and assessment ; Southern Beltway, Allegheny and Washington Co., PA. Short-eared Owl observation; Meldahis Undercut, Wood Co., WV. Soil contamination survey; C&O Flats, Staunton, VA. Propane tank and railroad tie removal; Nelsonville Bat Survey, Nelsonville, OH; North Fork Watershed Management Plan, Pendleton and Grant Cos., WV. Water resources, forest management, wetland documentation, sedimentation and flood prevention; Deegan Lake Dam and Hinkle Lake Dam, Harrison Co., WV. Environmental permit work for dam rehabilitation.

**Education (Degree, Year, Specialization):**

Fairmont State College, B.S. Biology  
West Virginia University, B.S. Civil Engineering  
Level One Natural Stream Design, August 2002  
Level Two Natural Stream Design, May 2003  
Level Three Natural Stream Design, June 2003  
Level Four Natural Stream Design, July 2003

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

American Society of Highway Engineers, Vice-President, North Central WV Chapter

**Registration (Type, Year, State):**

Registered Professional Engineer, 2003, West Virginia

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
0	25	25	
<p><b>NAME &amp; TITLE (Last, First, Middle Int.):</b> Tin, Mat B., P.E. Columbus, OH Office</p>			
<p><b>Brief Explanation of Responsibilities:</b> Principal and Technical Advisor – Regulatory requirements and permitting. Mr. Tin has over 25 years of experience in all facets of environmental programs and a demonstrated understanding of ever-changing regulations. He participates extensively on Ohio EPA's program and administrative task forces while maintaining close contact with all levels of staff in Director's and Program Offices, including all five (5) district offices. As Principal, Mr. Tin oversees all projects handled by the project managers in the Environmental Department. He takes the lead position on complex and high profile projects where alternative and innovative solutions are required. In addition, he has extensive experience in providing expert testimony in water and wastewater related cases for PFI's and NPDES permits including public hearings, Environmental Board of Review hearings, and court cases. Mr. Tin served the Ohio Environmental Protection Agency in the following positions:</p> <ul style="list-style-type: none"> <li>• Chief of the Division of Water Pollution Control</li> <li>• Coordinator of the Clean Water Act</li> <li>• Manager of the Public Wastewater Section</li> <li>• Chief of the Division of Construction Grants</li> </ul> <p>During his tenure as Chief of the Division of Water Pollution Control, he was responsible for the state's NPDES permits, compliance tracking, enforcement, pretreatment, operator certification, engineering plan review, federal construction grants, and state revolving loan fund programs. Mr. Tin also gained considerable experience in the formulation and implementation of public involvement programs as they pertain to civil works projects. In addition, he was appointed coordinator of the Clean Water Act for Ohio EPA's water programs and was Ohio's representative to the Technical Committee of the Ohio River Valley Sanitation Commission (ORSANCO). Mr. Tin finalized Ohio's standards for package treatment plants (Greenbook), Land Application of Sludge Manual, Compost Policy, and the state's Pretreatment Program. Mr. Tin also assisted the EPA Groundwater Division and the Division of Solid and Hazardous Waste during their establishment, and provided guidance for the development and implementation of both the rule-making process (policy-setting process) and the programs themselves.</p>			
<p><b>Education (Degree, Year, Specialization):</b> B.S., Civil Engineering, The Ohio State University, 1973</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b></p> <ul style="list-style-type: none"> <li>• Water Environmental Federation</li> <li>• Ohio EPA-PAG</li> <li>• Surface Water Task Force</li> <li>• Infrastructure Task Force</li> <li>• American Water Works Association</li> <li>• National Society for Professional Engineers</li> <li>• Ohio Society for Professional Engineers</li> <li>• Petroleum Underground Storage Tank Release Compensation Board</li> <li>• Ohio Chamber of Commerce</li> <li>• Columbus Chamber of Commerce</li> <li>• OACE</li> <li>• Chairman, Environmental Committee</li> <li>• Eastern Vocational Schools</li> <li>• Chairman, Environmental Management Curriculum</li> </ul>			
		<p><b>Registration (Type, Year, State):</b> Professional Engineer, Ohio (#43034)</p>	

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:
Calkins, Randolph M., P.S. Buckhannon, WV Office	19	30

**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:** 0

**Brief Explanation of Responsibilities:** Project Manager and Principal Designer – **ALL FIELD AND OFFICE RELATED WORK**, including expression of interest response, Project scope of work document and associated engineering cost estimate, invoicing, and monthly progress reports. Designer - AutoCAD, SurVCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

**WV AML experience: PROJECTS COMPLETED** – Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Old Bridgeport Hill Mine Drainage, Phase II, Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Brownnton School Refuse; Burdock Highway; Clarksburg (Ryder) Avenue Drainage; Conners Highway; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Pringle Drainage; Superior Hydraulics; Thomas (Euclid Avenue) Subsidence; Zebs Creek Highway; **PRELIMINARY DESIGN WORK** – Amigo Smokeless Refuse; Austin Highway; Slab Fork Mine Dump.

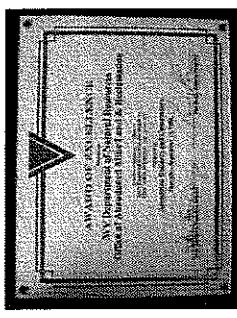
**Ohio AML Experience:** Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

**Project Specific AML Experience:** *Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II, Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Nutters Tipple D-716; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Brownnton School Refuse; Burdock Highway; Clarksburg (Ryder) Avenue Drainage; Conners Highway; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Pringle Drainage; Superior Hydraulics; Thomas (Euclid Avenue) Subsidence; Zebs Creek Highway.*

**Related AML Design:** WV Small Operators Assistance Program (25 applications), Maryland Small Operators assistance Program (1 application), WV Bond Forfeiture Program (438 sites), various waste permits for Corridor H (15 permits), Grafton Coal Company (11 years experience with surface and deep mines)

**Education (Degree, Year, Specialization):** A.S. Surveying Technology, 1970, Surveying  
Level One Natural Stream Design, September 2002  
Level Two Natural Stream Design, May 2003  
401 / 404 Permit Training, WVDOH, January 2003

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:** **Registration (Type, Year, State):** Registered Professional Surveyor, 1979, West Virginia



*1998 Associated Builders and Contractors Award of Excellence for Zebs Creek Highway AML Design.*

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Steele, Garland W., P.E., P.S. Buckhannon, WV Office	YEARS OF AML DESIGN EXPERIENCE: 7	YEARS OF AML RELATED DESIGN EXPERIENCE: 32	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 5
<p><b>Brief Explanation of Responsibilities:</b> Engineer of Record and Geotechnical Manager - Design and implement subsurface investigation work. In-field testing of physical properties of soil, rock, coal materials, and soil, rock, and coal samples for laboratory physical testing. Data entry and review slope stability analysis results, review physical testing laboratory results.</p> <p><b>WVAML experience:</b> Weaver Portals and Highwall; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Hodgesville Waterline Extension Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271). As Director of the Materials Control and Soil and Testing Division of the WV Department of Highways, he coordinated several WVAML projects with WVDOH projects and goals.</p> <p><b>Related AML Design:</b> Director, Materials Control, Soil and Testing Division (1965 - 1977), WV Department of Highways, For 12 years, Mr. Steele managed this Division which had six major sections - Structural Steel, Concrete, Bituminous, Soils, Aggregates, and Administrative. The Division was responsible for all physical and chemical materials testing performed by the Department as needed by the Department's Construction, Maintenance, Traffic, Design, and Geotechnical Units. At its peak, Mr. Steele supervised a staff of 275, which included approximately 250 technical and professional personnel. Mr. Steele has made significant contributions to many professional organizations (ASTM, AASHTO, TRB) involved with developing materials criteria.</p> <p><b>Project Specific AML Experience:</b> <i>Weaver Portals and Highwall; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Hodgesville Waterline Extension Feasibility Study (I.D. No. 271)</i></p>			
<p><b>Education (Degree, Year, Specialization):</b> B.A., 1956, Engineering</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b>                      Member, American Society for Testing and Materials (Board of Director (1992 - 1994), Committee on Standards (Past Chairman), Concrete and Concrete Aggregates (Past Chairman), Road and Paving Materials (Chairman 1982-1983)                      American Association of State Highway and Transportation Officials - Subcommittee on Materials (Past Vice-Chairman), Material Reference Laboratory Council (AMRL) (Past Chairman), Pipe, Culverts, Conduits, and Drains (Past Chairman)                      Member, American Concrete Institute                      Member, West Virginia Society of Professional Engineers                      Member, National Society of Professional Engineers                      Member, West Virginia Society of Civil Engineers                      Member, American Society of Civil Engineers</p>			
<p><b>Registration (Type, Year, State):</b>                      Registered Professional Engineer, 1960, West Virginia                      Registered Professional Engineer, 1960, Virginia                      Licensed Professional Surveyor, 1999, West Virginia</p>			

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Espy, John W., P.E. Columbus, OH Office	2	23	5

**Brief Explanation of Responsibilities:** Hydrologist – Channel, Ditch, and Culvert design.

**Ohio AML Experience:** Murray City AMD and Art Project; Flint Run East Acid Mine Drainage Reclamation; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Danehart Acid Mine Drainage Reclamation.

**Project Specific AML Experience:** *Murray City AMD and Art Project; Flint Run East Acid Mine Drainage Reclamation; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Danehart Acid Mine Drainage Reclamation.*

**Related AML Design:** Mr. Espy designed and completed hydrologic and hydraulic calculations on several bridges including: Sawmill Parkway Pedestrian Crossing, Southwest Dublin Traffic Calming, LA W-7-02.17, LIC-40-44.930, FRA-70-13.12, FRA-315-00.30R, SHE-CR-41-3.14, FRA-12-2.94, PER-93-33.26B, MEG-143-13.77, MEG-143-11.76, MEG-143-11.29, Children's Home Road Bridge, PIC/FRA-23-12.92/0.00, CR 23 over Elk Fork, HIG-138-24.36, Rager Road over Georges Creek, COL-30-5.90, CR24A over the Hocking River, CR24 over the Hocking River, HIG-28-2.80, PER-93-12.40, GUE-209-5.73, CR 41 over the Miami River, I670(S) over Conrail, B&O and N&W Railroads, 4th Street Connector over Conrail and B&O Railroads, I670 over Alum Creek, I670 over 5<sup>th</sup> Street, 5<sup>th</sup> Street over Alum Creek, UNI-33-0041 L/R, UNI-33-0092, COS-206-0603, Southwest Licking Wastewater Treatment Plant, Frazeysburg Water Treatment Tank, Fisher District Water Tank, Wellington Estates Elevated Water Tank, Southwest Licking Wastewater Treatment Plant, Sanitary Sewer System Improvements, Columbus Zoo, 6 Million Gallon Water Treatment Plant

**Education (Degree, Year, Specialization):** M.S., 1976, Civil Engineering - B.S., 1970, Civil Engineering

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:** Registration (Type, Year, State): Professional Engineer, 1977, Ohio

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:		YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Schnell, Michael, P.E. Columbus, OH Office		0	13
<p><b>Brief Explanation of Responsibilities:</b> Design Engineer and Technical Advisor</p> <p><b>Related AML Design:</b> Mr. Schnell has 13 years of experience in the field of environmental and mining engineering. He has an additional 12 years of highway and civil engineering design experience that encompasses roadways, drainage structured, waterlines, catch basins, etc. Mr. Schnell was extensively involved in all facets of coal mine operations and reclamation in the State of Kentucky. His reclamation duties involved the design and reclamation of surface and deep mines, which included the design of dams, large earth moving projects, surveying of underground mines, and dealing with several government agencies regulating the mining industries, including OSM, MSHA, AML, and KY DNR. He served as Chief Engineer for five coal companies in Southeastern Kentucky with one of his primary responsibilities being to ensure that each company complied with all applicable regulations.</p> <p>His project experience and responsibilities included the following:</p> <ul style="list-style-type: none"> <li>• Mine structures</li> <li>• Tipple</li> <li>• Processing (cleaning) plants</li> <li>• Deep and strip mine permits</li> <li>• In charge of all surveying</li> <li>• Underground surveys</li> <li>• Maintained mine maps</li> <li>• Dealing with all regulatory authorities</li> <li>• Using and writing industry-specific computer programs</li> <li>• Strip mines – largest was 500 acres. Mr. Schnell was responsible for all the reclamation design, sediment control ponds, hollow fills, mountaintop removals</li> </ul> <p><b>King Coal Company, Arjay KY:</b> As Chief Engineer, Mr. Schnell coordinated all permitting and mapping activities associated with surface and underground coal mining operations.</p> <p><b>Design of Coal Mining Operations, Kentucky:</b> As Associate Engineer, Mr. Schnell was extensively involved in all technical designs of surface and underground mining operations for various clients in Kentucky.</p>			
<b>Education (Degree, Year, Specialization):</b>		A.S., 1967, Southern Technical Institute, Civil Engineering	
<b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b>		Registration (Type, Year, State): Registered Professional Engineer, 1975 Kentucky (#11705)	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep 100% confidential)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
<p>Miller, Dennis E., P.S. Buckhannon, WV Office</p>	7	8	0
<p><b>Brief Explanation of Responsibilities:</b> Survey Manger – ALL FIELD RELATED WORK, including field survey of topographic and planimetric project information. Generate or supplement mapping for the Project area. Designer - AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.</p>			
<p><b>WV AML experience:</b> Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Adaland Tipple and Refuse, Bismark Strip Drainage and Refuse, Bridge Run, Brownnton School Refuse, Burdock Highway, Camp Run, Conners Highway, Francis Drainage and Refuse, Muddy Creek Tipple Complex, Philip Thorn Highway, Rainelle AML, SCS Reclamation, Shegon Refuse Pile, Superior Hydraulics, Taylor Creek Tipple Complex, Tibbs Run Portal, Masonstown.</p>			
<p><b>Ohio AML Experience:</b> Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation, Ferris Forfeiture, Flint Run Acid Mine Drainage Reclamation, GlenCastle Reclamation, Lake Milton Investigation, Linden Acid Mine Drainage Bioremediation, Midvale Coal Number 7, Misco Burning Gob, Nutters Tipple D-716.</p>			
<p><b>Project Specific AML Experience:</b> Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Bridge Run; Brownnton School Refuse; Burdock Highway; Camp Run; Conners Highway; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Philip Thorn Highway; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Superior Hydraulics; Taylor Creek Tipple Complex; Tibbs Run Portal; Masonstown; Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob, Nutters Tipple D-716.</p>			
<p><b>Related AML Design:</b> WV Bond Forfeiture Program (438 sites), various waste permits for Corridor H (15 permits), Clarksburg U.S. Postal Facility, Grant Town Power Plant, U.S. Route 19 Bridge Layout, Salem Bridge Layout, Webster Bridge Layout, Corridor H (4 Sections), Project Impact Bench Marks, numerous property and topographic mapping projects.</p>			
<p><b>Education (Degree, Year, Specialization):</b> B.S., 2001, Civil Engineering Technology - A.S., 1989, Surveying</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b> West Virginia Contractor's Association West Virginia Association of Land Surveyors West Virginia Associated Builders Upshur County Chamber of Commerce</p>			
<p><b>Registration (Type, Year, State):</b> Registered Professional Surveyor, 1994, West Virginia</p>			

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Silcott, Gary D., P.E. Logan, OH Office	0	0
<b>Brief Explanation of Responsibilities:</b> Senior Associate and Project Engineer – Water and Wastewater Design		
<b>Related AML Design:</b> Not Applicable.		
<b>Related Waterline Design:</b> Mr. Silcott has experience in numerous water system improvements, including water distribution system design, hydraulic design, construction administration/observation services, and obtaining and/or administering of funding and grant monies. In addition, Mr. Silcott is also responsible for storm sewer design, wastewater treatment plant and collection design, hydraulic design for roadways and culverts, well field analysis, and landfill design.		
<b>US 33 Water System Improvements, Logan, Ohio</b> This project included the design of 11,100 LF of 12-inch C-900 water line, a 750 GPM booster station, and the 244,000-gallon standpipe.		
<b>West Logan Lift Station Upgrade, Logan, Ohio</b> The City of Logan acquired a 350 GPM lift station from the county commissioners that was 30 years old and failing. The project consisted of using the existing wet well of the wet well/dry well station, and placing a new submersible station in the wet well. The project was designed and administered by R.D. Zande and required electrical upgrade, new station, bypass pumping, and close coordination between the contractor, electric company, lift station supplier, and the lift station manufacturer.		
<b>Zahn's Corner Industrial Park, SODI</b> The project involved the construction of a 250,000-gallon double ellipsoidal elevated water tank, 9,900 LF of 8 in d12 inch water line, 6,840 LF of 8 inch sanitary sewer, lift station and 1,420 LF of 4 inch force main.		
<b>Waterline Relocation, Talcott Bridge, C.R. 17, Summers County, West Virginia</b> Design of the relocation of two water lines for Big Bend Water District in conjunction with the replacement of Talcott Bridge.		
<b>Elevated Water Tank, Milford Center, Ohio</b> R.D. Zande designed a 200,000-gallon, double ellipsoidal elevated water tank for the Village of Milford Center.		
<b>Education (Degree, Year, Specialization):</b> B.S., 1995, Ohio University, Civil Engineering		
<b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b> American Society of Civil Engineers Ohio Society of Professional Engineers National Society of Professional Engineers  <b>Registration (Type, Year, State):</b> Registered Professional Engineer, West Virginia (#16416) Registered Professional Engineer, Kentucky (#23674) Registered Professional Engineer, Ohio (#E-63906)		



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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Hollen, James S. III, E.I. Buckhannon, WV Office	3	YEARS OF AML RELATED DESIGN EXPERIENCE: 14	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 14
<p><b>Brief Explanation of Responsibilities:</b> Waterline Design Engineer</p> <p><b>WV AML experience:</b> James and Amanda Taylor Waterline Feasibility Study – I.D. No. 298; Summit Park Waterline Extension Feasibility Study – I.D. No. 288; Hodgesville Waterline Extension Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Extension feasibility Study (I.D. No. 271)</p> <p><b>Related AML Design:</b> Southwest Bloom Township Water Line Improvements; Pope Properties Cross Lanes; Odom Construction Corridor H Job 123; Elkins Road PSD, Upshur County, WV; Water System Upgrade, Upshur County Airport, WV; Water System Upgrade, Philippi, WV; Water System Upgrade, Clay County, WV; Water System Upgrade, Ivydale and Clay, WV; Water System Upgrade, Belington, WV; Water System Upgrade, Thomas, WV; Water Storage Facility, WV American Water Co., Gassaway, WV; Reservoir Replacement, Davis, WV; Water System Upgrade, Davis, WV; Water and Wastewater System Upgrade, Petersburg, WV</p>			
<p><b>Education (Degree, Year, Specialization):</b> B.S., 2000, Civil Engineering Technology; B.S., 1991, Architectural Engineering Technology</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b></p> <p><b>Registration (Type, Year, State):</b> Engineer-In-Training, 2001, West Virginia</p>			

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Tonkery, Aaron P., E.I. Buckhannon, WV Office	4	4	0

**Brief Explanation of Responsibilities:** Staff Engineer – Develop and perform quantity calculations; Develop Hydrologic and Hydraulic design data; Water, soil, coal, and hazmat sampling; Technical report and calculation brief preparation; Develop data for engineers estimate.

**Ohio AML Experience:** Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation, Flint Run Acid Mine Drainage Reclamation, Lake Milton Investigation, Nutters Tipple D-716.

**WV AML experience:** Old Bridgeport Hill Mine Drainage; Hodgesville Waterline Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271)

**Project Specific AML Experience:** *Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation, Flint Run Acid Mine Drainage Reclamation, Lake Milton Investigation, Nutters Tipple D-716.*

**Related AML Design:** West Virginia State College – Institute, WV - Economic Assessment of an Anaerobic Digester Pilot Plant. Deer Creek Development – Buckhannon, WV - NPDES permit for this new housing development. Consolidated State Office Building – Huntington, WV - NPDES permit for this new state office building. Lease Offices of Bunker Hill – Bunker Hill, WV - sediment control plan for the office site. Pope Properties – Cross Lanes, WV - sanitary sewer for this apartment complex system. Port Columbus International Airport – Columbus, OH - proposed gravity sewer, allocated to existing and proposed facilities. Also assisted in the design of the pump required to meet the demands of the project

**Education (Degree, Year, Specialization):** B.S., 2000, Civil Engineering

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:** Registration (Type, Year, State): E.I.T., 2003, WV

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	
5	4	Varies	1
<p><b>Brief Explanation of Responsibilities:</b> CADD Draftsperson including generation of topographic mapping or supplementation of existing mapping, cross sections, detail sheets, tax map overlays, Project Manager or Staff Engineer design compilation. AutoCAD, SurvCAD, and Haestads Operator. Calculation Brief Details and Drawings, Microsoft Word and Excel Operator.</p> <p><b>WV AML experience:</b> Weaver Portals and Highwall; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Hodgesville Waterline Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271); Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown AML.</p> <p><b>Ohio AML Experience:</b> Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.</p> <p><b>Project Specific AML Experience:</b> Weaver Portals and Highwall; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Hodgesville Waterline Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271); Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown AML; Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.</p> <p><b>Related AML Design:</b> Fisher - Mill Creek Bank Stabilization; Berger - Harmon Creek Bank Stabilization; Laurel Lake Sediment; Various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV</p>			
<p><b>Education (Degree, Year, Specialization):</b> 3 Operators - B.S., varies, Civil Engineering Technology, 1 Operator - B.S. 1996, Engineering Technology, Others - Experience</p>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:		Registration (Type, Year, State):	
		N/A	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep 100% confidential)

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
12 CADD Operators Columbus, OH Office	0	Varies	30+
<p><b>Brief Explanation of Responsibilities:</b> CADD Draftsperson including generation of topographic mapping or supplementation of existing mapping, cross sections, detail sheets, tax map overlays, Project Manager or Staff Engineer design compilation. AutoCAD, SurvCAD, and Haestads Operator. Calculation Brief Details and Drawings, Microsoft Word and Excel Operator.</p> <p><b>Ohio AML Experience:</b> Ferris Forfeiture; GlenCastle Reclamation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob.</p> <p><b>Project Specific AML Experience:</b> <i>Ferris Forfeiture; GlenCastle Reclamation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob.</i></p> <p><b>Related AML Design:</b> <i>Bridges - Sawmill Parkway Pedestrian Crossing, Southwest Dublin Traffic Calming, LAW-7-02.17, LIC-40-44.930, FRA-70-13.12, FRA-315-00.30R, SHE-CR-41-3.14, FRA-12-2.94, PER-93-33.26B, MEG-143-13.77, MEG-143-11.76, MEG-143-11.29, Children's Home Road Bridge, PIC/FRA-23-12.92/0.00, CR 23 over Elk Fork, HIG-138-24.36, Rager Road over Georges Creek, COL-30-5.90, CR24A over the Hocking River, CR24 over the Hocking River, HIG-28-2.80, PER-93-12.40, GUE-209-5.73, CR 41 over the Miami River, I670(S) over Conrail, B&amp;O and N&amp;W Railroads, 4th Street Connector over Conrail and B&amp;O Railroads, I670 over Alum Creek, I670 over 5<sup>th</sup> Street, 5<sup>th</sup> Street over Alum Creek, UNI-33-0041 L/R, UNI-33-0092, COS-206-0603, Southwest Licking Wastewater Treatment Plant, Frazeysburg Water Treatment Tank, Fisher District Water Tank, Wellington Estates Elevated Water Tank, Southwest Licking Wastewater Treatment Plant, Sanitary Sewer System Improvements, Columbus Zoo, 6 Million Gallon Water Treatment Plant. <i>Water Systems - Franklin County Sanitary Engineer Liaison; Wastewater Collection and Treatment System Kenton, OH; Beechwood Trails Water System, Licking Co., OH; Regional Water Treatment Plant, Pikeville, KY; New Water System, Albright, WV; New Water System, Tunnelton, WV; Wastewater System, Albright, WV; New Water System, Unionville-Kenwood, OH; New Water System, Village of Thurston, OH; Water System Upgrade, Village of Amanda, OH; Water System Upgrade, Bryan, OH; Wastewater Collection System, Village of Thurston, OH. <i>Roads - LAW-007-02.28; Edgewood Avenue Extension - Urbana, Ohio; State Route 38 Relocation and Widening Project - Marysville, Ohio; Port Columbus, Southwest Ramp; Port Columbus, East Ramp; Port Columbus, Southeast Ramp; ATH-50-27.21, Athens County, Ohio; DEL-37-23.08, Delaware County, Ohio; HOC-78-1.91, Hocking County, Ohio; HOC-93-10.26, Hocking County, Ohio; Galloway Road, Franklin County, Ohio; FRA-33-0.00, Franklin County, Ohio; ROS-35-25.32, Ross County, Ohio; GUE-658-5.51, Guernsey County, Ohio; GLTE-658-9.31, Guernsey County, Ohio; Dublin Historic District Streetscape, City of Dublin; Southwest Dublin Traffic Calming, City of Dublin; Parsons Avenue Revitalization, City of Columbus; Williams Road Widening, Franklin County Engineer; Alum Creek Drive and Toy Road Intersection Improvements, Obetz, Ohio; Journal Street Extension, Columbus, Ohio; Tara Hill Drive and Muirfield Drive Intersection Improvements, Dublin, Ohio; Frantz Road and Metro Place South Intersection Improvements, Dublin, Ohio; Maxtown Road Widening, City of Westerville; Bridgeway Avenue Extension, Port Columbus International Airport; ERI-2-2.866 Pavement and Bridge Rehabilitation, ODOT District 3.</i></i></i></p> <p><b>Education (Degree, Year, Specialization):</b> Varies</p>			
<b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b>		<b>Registration (Type, Year, State):</b> N/A	

**13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep 100% confidential)**

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
3 Survey Crews Buckhannon, WV Office	6	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: Varies
<p><b>Brief Explanation of Responsibilities:</b> Three (3) fully equipped survey crews can obtain field data to develop topographic mapping or to supplement available aerial mapping. These crews can also use GPS survey techniques to bring horizontal and vertical control to the Project site or control for aerial photography operations. All field data is electronically gathered, to eliminate errors and blunders, and can be directly downloaded into our computer workstations. Field to finish modules of our SurvCADD software recognize field entered codes that control line work ensuring proper points are connected, proper break lines area established prior to contour generation, and greatly reduces CADD time.</p> <p><b>WV AML experience:</b> Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Bridge Run; Camp Run; Philip Thorn Highway; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Superior Hydraulics; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown.</p> <p><b>Ohio AML Experience:</b> Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Missco Burning Gob; Nutters Tipple D-716.</p> <p><b>Project Specific AML Experience:</b> <i>Weaver Portals and Highway; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Bridge Run; Brownston School Refuse; Burdock Highway; Camp Run; Conners Highway; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Philip Thorn Highway; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Superior Hydraulics; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown; Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; GlenCastle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Missco Burning Gob; Nutters Tipple D-716.</i></p> <p><b>Related AML Design:</b> Fisher – Mill Creek Bank Stabilization; Berger – Harmon Creek Bank Stabilization; Laurel Lake Sediment; various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV</p>		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:	1
<p><b>Education (Degree, Year, Specialization):</b> 3 Party Chiefs – Associate Degrees Civil Engineering or Surveying Technology.</p> <p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b></p> <p style="text-align: right;"><b>Registration (Type, Year, State):</b> N/A</p>			

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep 1000 characters)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
<p>19 Survey Crews Columbus, OH Office</p>	<p>3</p>	<p>30+</p>	<p>30+</p>
<p><b>Brief Explanation of Responsibilities:</b> Nineteen (19) fully equipped survey crews can obtain field data to develop topographic mapping or to supplement available aerial mapping. These crews can also use GPS survey techniques to bring horizontal and vertical control to the Project site or control for aerial photography operations. All field data is electronically gathered, to eliminate errors and blunders, and can be directly downloaded into our computer workstations. Field to finish modules of our SurvCADD software recognize field entered codes that control line work ensuring proper points are connected, proper break lines area established prior to contour generation, and greatly reduces CADD time.</p>			
<p><b>Ohio AML Experience:</b> Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Ferris Forfeiture; GlenCastle Reclamation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob.</p>			
<p><b>Project Specific AML Experience:</b> <i>Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Ferris Forfeiture; GlenCastle Reclamation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob.</i></p>			
<p><b>Related AML Design:</b> <i>Bridges - Sawmill Parkway Pedestrian Crossing, Southwest Dublin Traffic Calming, LAW-7-02.17, LIC-40-44.930, FRA-70-13.12, FRA-315-00.30R, SHE-CR-41-3.14, FRA-12-2.94, PER-93-33.26B, MEG-143-13.77, MEG-143-11.29, Children's Home Road Bridge, PIC/FRA-23-12.92/0.00, CR 23 over Elk Fork, HIG-138-24.36, Rager Road over Georges Creek, COL-30-5.90, CR24A over the Hocking River, CR24 over the Hocking River, HIG-28-2.80, PER-93-12.40, GUE-209-5.73, CR 41 over the Miami River, I670(S) over Conrail, B&amp;O and N&amp;W Railroads, 4th Street Connector over Conrail and B&amp;O Railroads, I670 over Alum Creek, I670 over 5th Street, 5th Street over Alum Creek, UNI-33-0041 L/R, UNI-33-0092, COS-206-0603, Southwest Licking Wastewater Treatment Plant, Sanitary Sewer System Improvements, Columbus Zoo, 6 Million Gallon Water Treatment Plant. <i>Water Systems -</i> Franklin County Sanitary Engineer Liaison; Wastewater Collection and Treatment System Kenton, OH; Beechwood Trails Water System, Licking Co., OH; Regional Water Treatment Plant, Pikeville, KY; New Water System, Tunnelton, WV; New Water System, Village of Thurston, OH; Wastewater System, Albright, WV; New Water System, Unionville-Kenwood, OH; New Water System, Village of Thurston, OH; Water System Upgrade, Village of Amanda, OH; Water System Upgrade, Village of Thurston, OH; Water System Upgrade - Urbana, Ohio; State Route 38 Relocation and Widening Project - Marysville, Ohio; Port Columbus, Southeast Ramp; ATH-50-27.21, Athens County, Ohio; DEL-37-23.08, Delaware County, Ohio; HOC-78-1.91, Hocking County, Ohio; Galloway Road, Franklin County, Ohio; FRA-33-0.00, Franklin County, Ohio; ROS-35-25.32, Ross County, Ohio; GUE-658-9.31, Guernsey County, Ohio; Dublin Historic District Streetscape, City of Dublin; Southwest Dublin Traffic Calming, City of Dublin; Parsons Avenue Revitalization, City of Columbus; Williams Road Widening, Franklin County Engineer; Alum Creek Drive and Toy Road Intersection Improvements, Obetz, Ohio; Journal Street Extension, Columbus, Ohio; Tara Hill Drive and Muirfield Drive Intersection Improvements, Dublin, Ohio; Frantz Road and Metro Place South Intersection Improvements, Dublin, Ohio; Maxtown Road Widening, City of Westerville; Bridgeway Avenue Extension, Port Columbus International Airport; ERI-2-2.866 Pavement and Bridge Rehabilitation, ODOT District 3.</i></p>			
<p><b>Education (Degree, Year, Specialization):</b> 19 Party Chiefs – Various Degrees or Experience.</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b></p>			
			<p><b>Registration (Type, Year, State):</b> N/A</p>

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep 100% confidential)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Ioninides, Gerry Columbus, OH Office	3	16	10
<p><b>Brief Explanation of Responsibilities:</b> Laboratory Manager including organic and inorganic soil, rock, and water analysis.</p> <p><b>Ohio AML Experience:</b> Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Midvale Coal Number 7; Nutters Tipple D-716.</p> <p><b>WV AML experience:</b> Old Bridgeport Hill Mine Drainage; Hodgesville Waterline Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271).</p> <p><b>Project Specific AML Experience:</b> <i>Old Bridgeport Hill Mine Drainage; Hodgesville Waterline Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271); Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Midvale Coal Number 7; Nutters Tipple D-716.</i></p> <p><b>Related AML Design:</b> Laboratory Chief of Ohio EPA, Interim Director Ohio EPA, Assistant Director Ohio EPA, Ohio EPA Division of Environmental Services Chief, Ohio EPA Environmental Manager IV, Environmental Scientist III, Chemist II and Environmental Scientist II</p>			
<p><b>Education (Degree, Year, Specialization):</b> MBA, 1995, Business - M.S., 1975, Ohio State University - B.S., 1970, Ohio State University</p>			
<p><b>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:</b> Registration (Type, Year, State): N/A</p>			

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

275 Computer Workstations

18 Surveying Electronic Total Stations

18 Field Survey Data Collectors

4 Survey Grade GPS Survey Instruments (complete with base and 2 rovers each)

AutoCAD Versions 2006, 2002, 2000i, Map 4.0, Map 5.0, version 14.0

SurvCADD versions 2006, XML2, CES, 98

Eagle Point Engineering Software

AutoCAD Land Development

Bentley Microstation with InRoads

ESRI ArcView GIS version 3.2 and version 8.3 Mapping Software

KY Pipe Water and Sewer Line Software

Haestads Water CAD Water and Sewer Line Software

Haestads Culvert Master, Flow Master, Storm CAD

Terrain Navigator with seamless WV 7.5' USGS Quads and Sure Maps by Titan Systems

North American Green Erosion Control Blanket Software

Microsoft Word and Excel

Microsoft Project

Primavera P3 Scheduling Software

Corel 98 Suite

Numerous HP Ink Plotters and Printers

XSTABL version 5.2 Slope Stability Software



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

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture Near Buckhannon, Upshur and Lewis Counties, WV	Mr. Charles Miller West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Philippi, WV 26416	Wastewater Treatment Facility – Involved the design of a \$3,000,000.00 wastewater plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities.	\$ 3,000,000.00	80%
Weaver Portals and Highwall WVAML Near Junior, Randolph County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Philippi, WV 26416	Surveying and Mapping; 97,000 Yards Mass Balance; Design Water Treatment and Controlled Release Plan, H&H Studies for 25 Ditches, and 10 Pipes; Design Twenty Wet Mine Seals, Sediment Control Design; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 1,750,000.00	0% (Design 90% Complete)
Summit Park PSD Waterline Extension Feasibility Study (I.D. No. 288) WVAML Bridgeport, Harrison County, WV Fairmont (Hendrickson) Subsidece WVAML Fairmont, Marion County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Philippi, WV 26416  Mr. Michael Richardson, P.M. West Virginia Department of Environmental Protection 601 57 <sup>th</sup> Street, SE – Box 20 Charleston, WV 25304	Groundwater and Surface Water Investigation; Pre and Post SMRCA Mining Investigation; Resident Interviews, Mapping; Preliminary Investigation and Report; AML & R Grant Supporting Documents; Mapping and CADD  Surveying and Mapping; Subsurface Investigation; Previous Reports Compilation; Pre and Post SMRCA Mining Investigation; Resident Interviews, Report of Findings; Mitigation Alternatives; Updates and Invoicing.	\$250,000.00 to \$1,100,000.00 (Estimated)  UNK.	0% (Design 0% Complete)  100%
Tunnelton (Dillsworth) Landslide WVAML Tunnelton, Preston County, WV	Mr. Michael Richardson, P.M. West Virginia Department of Environmental Protection 601 57 <sup>th</sup> Street, SE – Box 20 Charleston, WV 25304	Surveying and Mapping; 84 foot long by 18 foot high Gabion Basket Retaining Wall Design; Groundwater and Surface Water Investigation; H&H Studies for 214 feet of Subsurface Drains, 2 Pipes, Manhole, and Drop Inlet; Traffic Control and Pavement Repair Plan, Sediment Control Design; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 323,000.00	100%

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

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Arlington (Cox) Drainage Clarksburg, Harrison County, WV	Mr. Michael Richardson, P.M. West Virginia Department of Environmental Protection 601 57 <sup>th</sup> Street, SE - Box 20 Charleston, WV 25304	Surveying and Mapping; Two (2) Wet Mine Seal Designs; Groundwater and Surface Water Investigation; H&H Studies for 198 feet of Subsurface Drains, 2 Ditches, and 1 Pipe; Mine Dewatering and AMD Treatment Plan, Sediment Control Design; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$294,000.00	100%
Sauls Run Strip and Landslide Near Weston, Lewis County, WV	Mr. Michael Richardson, P.M. West Virginia Department of Environmental Protection 601 57 <sup>th</sup> Street, SE - Box 20 Charleston, WV 25304	Surveying and Mapping; Subsurface Investigation; 59,350 Yards of Balanced Earthwork; H&H studies and design for 2,764 feet of Ditches, 500 feet of Subsurface Drains, five (5) Pipes, and two (2) Headwalls; Traffic Control and Pavement Repair Plan; Sediment Control Design; and Vegetation design. Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 980,000.00	100%
Charles and Donice McElwain Waterline Extension Feasibility Study (I.D. No. 271) WVAML Cowen, Webster County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Phillippi, WV 26416	Groundwater and Surface Water Investigation; Pre and Post SMRCA Mining Investigation; Resident Interviews, Mapping; Preliminary Investigation and Report; AML & R Grant Supporting Documents; Mapping and CADD	\$ 104,000.00	0% (Design 100% Complete)
Hodgesville PSD Waterline Extension Feasibility Study (I.D. No. 275) WVAML Buckhannon, Upshur County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Phillippi, WV 26416	Groundwater and Surface Water Investigation; Pre and Post SMRCA Mining Investigation; Resident Interviews, Mapping; Preliminary Investigation and Report; AML & R Grant Supporting Documents; Mapping and CADD	\$ 237,000.00	0% (Design 100% Complete)
Old Bridgeport Hill Mine Drainage, Phase II; WVAML Bridgeport, Harrison County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 105 South Railroad Street, Suite 310 Phillippi, WV 26416	Surveying and Mapping; Construction Water Treatment and Controlled Release Plan, H&H Studies for Ditch, Pipe, and Drop Inlet Designs; design four Wet Mine Seals, Sediment Control Design; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 311,500.00	100% (Design 100% Complete)
Flint Run East Acid Mine Drainage Reclamation Project; Ohio AML; Wellston, Jackson County, Ohio	Ms. Nancy Seger, P.E. Ohio Department of Natural Resources Division of Mineral Resources Management 1855 Fountain Square Court, Building H-2 Columbus, OH 43224	Mapping; Passive Acid Mine Drainage Treatment Design; H&H Studies for Impoundments, Channels, Ditch Designs; Sediment Control Design; Environmental Permits; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 2,041,000.00	100%

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

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Murray City AMD and Art Project; Watershed AML Project; Murray City, Hocking County, Ohio	Mr. Mike Steinmaus, Director Monday Creek Restoration Project P.O. Box 129 New Straitsville, OH 43766	Mapping; Passive Acid Mine Drainage Treatment Design; H&H Studies for Impoundments, Channels, Ditch Designs; Sediment Control Design; Environmental Permits; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 650,000.00	0% (Design 100% Complete)
Flint Run Acid Mine Drainage Reclamation Project; Ohio AML; Wellston, Jackson County, Ohio	Ms. Nancy Seger, P.E. Ohio Department of Natural Resources Division of Mineral Resources Management 1855 Fountain Square Court, Building H-2 Columbus, OH 43224	Mapping; Passive Acid Mine Drainage Treatment Design options based on cost/benefit analysis; H&H Studies for Impoundments, Channels, Ditch Designs; Sediment Control Design; Environmental Permits; Vegetation Design; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 4,710,000.00	100%
Fisher - Mill Creek Bank Stabilization Project Ripley, Jackson County, WV	Mr. Gene Saurborn, P.M. West Virginia Conservation Agency 4720 Brenda Lane Charleston, WV 25305	Surveying and Mapping; Subsurface Investigation Plan; Geotechnical Testing; Construction Plans and Specifications for 148-foot long Drilled Pile and Lag Wall; Bid Schedule; Engineers Estimate; Pre-Bid and Pre-Construction; Construction Inspection.	\$ 284,000.00	100%
Laurel Lake Sediment Project Lenore, Mingo County, WV	Mr. Gene Saurborn, P.M. West Virginia Conservation Agency 4720 Brenda Lane Charleston, WV 25305	Surveying and Mapping; Subsurface Investigation Plan; Hydrographic Surveying; Geotechnical Testing; Construction Plans and Specifications for dredging 50,000 C.Y.; Park Access Road; Bid Schedule; Engineers Estimate	\$ 1,000,000.00	100%
Berger - Harmon Creek Bank Stabilization Project Near Weirton, WV	Mr. Gene Saurborn, P.M. West Virginia Conservation Agency 4720 Brenda Lane, Building Five Charleston, WV 25305	Surveying and Mapping; Subsurface Investigation and Report of Findings; Alternatives for Mitigation including Buy-Out and 45-foot long by 12-foot high Gabion Basket Wall Design; Engineers Estimate	N/A	100%
Danehart Acid Mine Drainage Reclamation Project; Ohio AML; Yorkville, Belmont County, Ohio	Mr. Scott McDiffitt, E.I. Ohio Department of Natural Resources Division of Mineral Resources Management 2050 East Wheeling Avenue Cambridge, OH 43725	Mapping; Subsurface Investigation; Geotechnical Testing; H&H studies for Channels, Ditch, Subsurface Drain Designs; Retaining Wall Design; Sediment Control Design; Environmental Permits; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 50,950.00	100%
Nutters Tipple D-716; Bond Forfeiture Reclamation Project; New Straitsville, Perry County, Ohio	Mr. Ron Trivisonno, P.E. Ohio Department of Natural Resources Division of Mineral Resources Management 1855 Fountain Square Court, Building H-2 Columbus, OH 43224	Mapping; Subsurface Investigation; Geotechnical Testing; H&H studies for Channels, Ditch, Subsurface Drain Designs; Sediment Control Design; Environmental Permits; Vegetation Design; Construction Plans and Specifications; Calculation Brief; Engineers Estimate; Reports and Invoicing.	\$ 96,247.73	100%

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

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Mile Branch Truss Bridge WVDOH Bridge Project leager, McDowell County, WV	Mr. Chad Lowther, P.E. West Virginia Division of Highways Building 5, Room A317 1900 Kanawha Boulevard Charleston, WV 25305	Surveying and Mapping, H & H Study on Dry Fork, Road Approach and Bridge Design, Construction Plans and Specifications, Calculation Brief, Engineers estimate, Reporting and Invoicing	\$ 500,000.00	100%
Upper Tract Bridge WVDOH Bridge Project Upper Tract, Pendleton County, County, WV	Mr. Chad Lowther, P.E. West Virginia Division of Highways Building 5, Room A317 1900 Kanawha Boulevard Charleston, WV 25305	Surveying and Mapping, H & H Study on South Branch of Potomac River, Road Approach and Bridge Design, Construction Plans and Specifications, Calculation Brief, Engineers estimate, Reporting and Invoicing	\$ 1,400,000.00	100%
Buffalo Bridge WVDOH Bridge Project Buffalo, Putnam County, WV	Mr. Steve Campbell West Virginia Division of Highways District One 1334 Smith Street Charleston, WV 25305	Surveying and Mapping, H & H Study on Cross Creek, Road Approach and Bridge Design, Construction Plans and Specifications, Calculation Brief, Engineers estimate, Reporting and Invoicing	\$ 1,770,000.00	100%
Route 35 Project No. U327-35-12.02 WVDOH Road Project Couch to Coast Guard Road Mason County, WV	Mr. Chad Lowther, P.E. West Virginia Division of Highways Building 5, Room A317 1900 Kanawha Boulevard Charleston, WV 25305	Surveying and Mapping, H & H Study Box Culverts, Pipes, Road Design, Construction Plans and Specifications, Calculation Brief, Engineers estimate, Reporting and Invoicing	\$ 14,000,000.00	0% (Design 85% Complete)
Appalachian Corridor H, Section 6, Davis to Bismark, Four Lane Roadway; Grant County, WV	WVDOT, Division of Highways 1900 Kanawha Boulevard, East Charleston, WV 25305	Surveying, Subsurface Investigation, Slope Stability, H&H Studies for Box Culverts, Pipes, Construction Plans and Specifications for Four Lane Roadway	\$ 14,000,000.00	0% (Design 75% Complete)
Mile Branch Truss Bridge WVDOH Bridge Project leager, McDowell County, WV	Mr. Chad Lowther, P.E. West Virginia Division of Highways Building 5, Room A317 1900 Kanawha Boulevard Charleston, WV 25305	Surveying and Mapping, H & H Study on Dry Fork, Road Approach and Bridge Design, Construction Plans and Specifications, Calculation Brief, Engineers estimate, Reporting and Invoicing	\$ 500,000.00	100%
<b>TOTAL NUMBER OF PROJECTS: 24 (Others available upon request)</b>			<b>TOTAL ESTIMATED CONSTRUCTION COSTS: \$ 54,704,697.73</b>	

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

PROJECT NAME, TYPE, AND LOCATION	NATURE OF YOUR FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRM'S RESPONSIBILITY
Christopher Hall Science Building Expansion; Buckhannon, West Virginia	Surveying, Subsurface and Geotechnical Investigation, Site design, Balanced Earthwork Grading, Utility Hook-ups, Drainage	West Virginia Wesleyan College c/o Zimmer Gunsul Frasca 1800 K Street Suite 200 Washington, DC 20006	2003	\$ 7,000,000.00	\$ 24,000.00

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
A. F. Wendling, Inc. Relocation Project; Building and Site Design Buckhannon, WV	A. F. Wendling, Inc. Relocation c/o Upshur County Development Authority Buckhannon, WV 26201	\$ 2,100,000.00	2003	No
State Office Consolidation Building; Site Design Huntington, WV	State Office Consolidation Building c/o BBL Carlton, LLC P O Box 1153 Charleston, WV 25301	\$ 14,000,000.00	2003	In Progress
Source Water Assessment Program; Aquifer delineation and potential significant contaminant source identification WVAWC-Bluestone Watershed Area	West Virginia Bureau for Public Health Environmental Engineering Division Source Water Assessment Unit 815 Quarrier Street Charleston, WV 25301-2616	\$ 7,500.00	2003	Yes
Source Water Assessment Program; Aquifer delineation and potential significant contaminant source identification New River Watershed Area	West Virginia Bureau for Public Health Environmental Engineering Division Source Water Assessment Unit 815 Quarrier Street Charleston, WV 25301-2616	\$ 6,500.00	2003	Yes
Source Water Assessment Program; Aquifer delineation and potential significant contaminant source identification Williamson Watershed Area	West Virginia Bureau for Public Health Environmental Engineering Division Source Water Assessment Unit 815 Quarrier Street Charleston, WV 25301-2616	\$ 5,000.00	2003	Yes
Marion County Risk Assessment; County-wide risk assessment of natural, technological, and man-made disasters Marion County, West Virginia	Marion County Commission 200 Jackson Street Fairmont, West Virginia 26554	\$ 10,500.00	2003	Yes
Marshall County Risk Assessment; County-wide risk assessment of natural, technological, and man-made disasters Marshall County, West Virginia	Marshall County Office of Emergency Services P O Drawer B Moundsville, West Virginia 26041	\$ 13,500.00	2003	Yes
West Virginia Division of Highway Statewide General Engineering Services Contract Transportation Engineering Services West Virginia Statewide	West Virginia Department of Transportation, Division of Highways Engineering Division 1900 Kanawha Boulevard, East Charleston, West Virginia 25305	\$ 750,000.00	2003	In Progress

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
Ceramic Drive Improvements Columbus, Ohio	City of Columbus 109 N. Front Street Columbus, Ohio 43215	\$250,000	1997	Yes
Merchant Grain Street Improvements Columbus, Ohio	City of Columbus 109 N. Front Street Columbus, Ohio 43215	\$600,000	1997	Yes
ST Project U206-64-19.72000 164/Huntington Mall Interchange Charleston, W VA	W VA Dept of Transportation Division of Highways 1900 Kanawha Blvd	\$4,000,000	1997	Yes
ALL-81-11.81 Bridge Replacement Allen County, Ohio	Ohio DOT District 1 1885 N. McCullough Street Lima, Ohio 45801	\$500,000	1997	Yes
ERI-2-1.78 Bridge and Highway Rehabilitation Erie County, Ohio	Ohio DOT District 3 906 N. Clark Street Ashland, Ohio 44805	\$6,000,000	1997	Yes
Black Road Bridge Replacement Erie County, Ohio	Ohio Turnpike Commission 682 Prospect Road Berea, Ohio 44017	\$1,000,000	1997	Yes
Bridgewood Avenue Extension Columbus, Ohio	Columbus Municipal Airport Authority 4600 International Gateway Columbus, Ohio	\$1,100,000	1997	Yes
Williams Road Corridor Study Obetz, Ohio	Village of Obetz 1611 Chillicothe St. Obetz, Ohio 43207	NA	1997	No
Main Street Improvements Columbus, Ohio	City of Columbus 109 N. Front Street Columbus, Ohio 43215	\$1,000,000	1997	Yes
Mound Street Improvements Columbus, Ohio	City of Columbus 109 N. Front Street Columbus, Ohio 43215	\$900,000	1997	Yes
Advance Avenue Improvements Columbus, Ohio	City of Columbus 109 N. Front Street Columbus, Ohio 43215	\$400,000	1997	Yes
Preliminary Study, Edgewood Avenue Street Extension	City of Urbana 205 South Main Street Urbana, Ohio 43078	\$1,820,000	1997	No

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
FAI-204-14.82 Bridge Replacement	Ohio DOT District 5 9600 Jacksontown Road SE Jacksontown, Ohio 43030	\$600,000	1998	Yes
Vault Rehabilitation	AEP Power Nationwide Square Columbus, Ohio	\$55,000	1998	Yes
ATH-50-27.21 Highway Construction	Ohio DOT District 10 Muskingum Drive Marietta, Ohio 45750	\$14,000,000	1998	Yes
Maxtown Road Extension State Street to Polaris Parkway Highway Construction	City of Westerville 28 S. State Street Westerville, Ohio 43081	\$13,000,000	1998	Yes
MAD-142-0.49 Road Widening & Reconstruction	City of London 10 East First Street London, Ohio 43140	\$3,000,000	1998	No
Old 3C Highway Bridge Replacement	Delaware County Engineer 50 Channing Street Delaware, OH 43015	\$300,000	1998	No
GRE/FAY-35-26.20/0.00, 4.5 Miles of New 4-Lane Roadway and Bridges	Ohio DOT District 6 400 E William Street Delaware, OH 43015	\$16,000,000	1999	Yes
Toy Road/Alum Creek Drive Intersection Improvement	Franklin County Engineer 970 Dublin Road Columbus, OH 43215	\$800,000	1999	Yes
Parsons Avenue Revitalization Curb & Sidewalk Improvements	City of Columbus 109 N Front St Columbus, OH 43215	\$1,600,000	1999	Yes
Colliers Bridge Bridge Replacement	WVDDOT	\$1,600,000	1999	Yes
State Street/Shrock Road Signal Plans	City of Westerville 64 E Walnut St Westerville, OH 43081	\$310,000	1999	Yes
State Route 3 Widening and Resurfacing from 2 to 5 Lanes	City of Westerville 64 E Walnut St Westerville, OH 43081	\$600,000	1999	Yes



17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
Wilmer Avenue Street Reconstruction	Village of Williamsburg 107 W Main St Williamsburg, OH 45176	\$160,000	1999	Yes
Porter Central Road Roadway Widening and Resurfacing Delaware County, OH	Delaware County Engineer 50 Channing St Delaware, OH 43015	\$190,000	1999	Yes
Home Road Roadway Improvements, Widening from 2 to 3 Lanes	Charles Vince 1515 Lakeshore Drive Columbus OH 43215	\$500,000	1999	Yes
Home Road Traffic Study Delaware County, Ohio	MTB Corporation	Unknown (fee \$6,500)	1999	Yes
Maxtown Road Intersection Improvement and Signaling Studies	City of Westerville 64 E Walnut St Westerville, OH 43081	Unknown (fee \$5,000)	1999	Yes
Swartzmill Road Bridge Replacement	Fairfield County Engineer 210 E Main Street Lancaster, OH 43130	\$400,000	2000	No
Polaris Parkway, 3000 LF Resurfacing and Widening from 4 to 6 Lanes	City of Columbus 109 N. Front Street Columbus, OH 43215	\$1,100,000	2000	No
Coshocton Road, 6000 LF Reconstruction to Provide 5 Lanes	City of Mt. Vernon 40 Public Square Mt. Vernon, OH 43050	\$3,500,000	2000	No
County Line Road, 4800 LF New Roadway, 3 Lanes	City of Westerville 28 S. State St. Westerville, OH 43081	\$1,500,000	2000	No
Calumet Farms	Calumet Farms Assoc 2546 Timlico Crt Powell, OH 43065	\$50,000	2001	Yes
Southwest Dublin Traffic Calming	City of Dublin 5800 Shier-Rings Road Dublin OH 43017	\$3,867,000	2001	2 of 6 Phases Complete
Goodale Blvd & Olentangy River Road Intersection Improvements	City of Columbus 109 N Front St Columbus OH 43215	\$186,000	2001	Yes
Olentangy Glade	City of Columbus 109 N Front St Columbus, OH 43215	\$245,000	2001	Yes

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Darby Street Parking Lot	City of Dublin 5800 Shier Rings Road Dublin OH 43017	\$319,000	2001	No
Alum Creek Drive Widening, Preliminary Development Phase	Village of Obetz 1611 Chillicothe St Obetz OH 43207	N/A	2001	No
Houk Road/US Route 36 Widening, Delaware County OH	T&R Properties 6563 Worthington Galena Road Worthington OH 43085	\$350,000	2001	No
2001 Street Improvements	Village of Obetz 1611 Chillicothe Street Obetz, OH	\$155,000	2001	Yes
Houk Road/S 37 Widening, Delaware County	Dominion Homes 5500 Frantz Road Dublin OH 43017	\$750,000	2001	Yes
ERI-2-2,866, Erie County OH	ODOT District 3 906 N Clark St. Ashland, OH 44805	\$6,000,000	2001	Yes
Coshocton Avenue (US Route 36) Widening and Reconstruction	City of Mt Vernon 40 Public Square Mt Vernon OH 43050	\$4,100,000	2001	No
Sawmill Parkway Roadway, Franklin County Ohio	Charlie Vince	\$6,000,000	2001	Yes
County Line Road Construction Support	City of Westerville 64 E Walnut Street Westerville OH 43081	N/A	2001	Yes
Worthington Road Electric Duct Bank	City of Westerville 64 E Walnut Street Westerville OH 43081	\$350,000	2001	Yes
State Route 3 Widening, Delaware County OH	City of Westerville 64 E Walnut Street Westerville OH 43081	\$1,200,000	2001	No
Africa Road Right of Way Acquisition	City of Westerville 64 E Walnut Street Westerville OH 43081	N/A	2001	N/A
Coshocton Avenue Right of Way	City of Mt Vernon 40 Public Square Mt Vernon OH 43050	N/A	2001	N/A

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
Aircenter Park Drive/Stelzer Road Signal Design	City of Columbus 109 N Front St Columbus OH 43215	\$89,000	2001	Yes
Otterbein/Walnut Signal Design	City of Westerville 64 E Walnut Street Westerville OH 43081	\$55,000	2001	No
State Street/Shrock Road Traffic Signal	City of Westerville 64 E Walnut Street Westerville OH 43081	\$135,000	2001	Yes
Greenlawn Avenue Traffic Study	Mr. Tom Lawson 256 Downing Rd Delaware, OH 43015	N/A	2001	N/A
Scioto Pointe/SR 104 Signal, Franklin County	ODOT District 6 400 E William Street Delaware OH 43015	\$67,000	2001	No
Sawmill Parkway Traffic Signals, Delaware County OH		\$155,000	2001	Yes
Columbus Health Center Traffic Study	OVS Associates 471 E Broad St, Suite 1520 Columbus OH 43205	N/A	2001	N/A
Circleville General Engineering Services - Review Construction Plans	City of Circleville	N/A	2001	N/A
Waverly Schools Traffic Study	Waverly City School District 500 E. Second St. Waverly, OH 45690	N/A	2001	N/A
Hibbs Road Traffic Study Review, Grove City OH	Land Network 39 E Whittier St Columbus OH 43206	N/A	2001	N/A
Kingsdale/Tremont Traffic Study Review, Franklin County OH	Vorys Sater Seymour & Pease LLP 52 E Gay St Columbus OH 43216	N/A	2001	N/A
Farm Market Traffic Study and Access Permit, Delaware County OH	Dr Earl Grimm 5334 Redwood Rd Columbus OH 43229	N/A	2001	N/A
Waverly City Schools Traffic Study	Waverly City Schools 500 E Second St Waverly OH 45690	N/A	2001	N/A
Circleville Signal Plan Review	City of Circleville 127 S Court St Circleville OH 43113	N/A	2001	N/A

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
Hebron Business Center Traffic Study	Hebron Business Ctr Ltd. 100 Galway Drive N Granville OH 43023	N/A	2001	N/A
BP Amoco Company Traffic County Program, Franklin County	BP Amoco 6500 Busch Blvd Suite 100 Columbus OH 43229	N/A	2001	N/A
North High Street Pedestrian Crosswalk Enhancement	City of Dublin 5200 Emerald Parkway Dublin OH 43017	\$60,000	2001	No
NCR No. 1 - Fifth Avenue Improvements	City of Columbus 109 N Front St Columbus OH	\$175,000	2001	No
LAW-607-0.25 Final Design, Phase 1A, Lawrence County OH	ODOT District 9 650 Eastern Ave Chillicothe OH 45601	\$5,200,00	2001	No
Southwest Licking WWTP Structural Design, Licking County OH	Southwest Licking Water & Sewer District	\$800,000	2001	No
Jardin Manor WWTP Structural Design, Licking County OH	Licking County Commissioners	\$550,000	2001	No
Cramer Ditch	City of Dublin 5800 Shier Rings Rd Dublin OH 43017	\$3,900,000	2001	Phases 1 and 2 Complete
Frazzysburg Water Treatment Plant, Structural Design	Village of Frazzysburg 7 Second Street Frazzysburg OH 43	\$2,000,000	2001	No
Golf Village Generator Building Design, Delaware, OH	Charles Vince	\$50,000	2001	Yes
Columbus Zoo Sanitary Pump Station Structural Design, Powell OH	Columbus Zoo & Aquarium 9990 Riverside Drive Powell, Ohio 43065-0400	\$2,100,000	2001	Yes
IBM Substation, Columbus OH	IBM Corporation	\$1,000,000	2001	No
IBM Power Module Pad, Columbus OH	IBM Corporation	\$50,000	2001	Yes
Marysville Bridge Inspection	City of Marysville 125 E Sixth St Marysville OH 43040	N/A	2001	N/A
Rickenbacker Sanitary Receiving Station Building Design, Franklin County OH	Rickenbacker Port Authority 2365 Fred Haise Avenue Columbus, Ohio 43215	\$100,000	2001	Yes
Low Service Pump Station Structural Inspection	City of Toledo	N/A	2001	N/A

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
High Service Pump Station Structural Inspection	City of Toledo	N/A	2001	N/A
Pickerington Road Bridge, Pickerington OH	Fairfield County Engineer 210 E Main St Lancaster OH 43130	N/A	2001	Yes
Rock Mill Road Bridge, Fairfield County OH	Fairfield County Engineer 210 E Main St Lancaster OH 43130	N/A	2001	In Progress
Africa Road	City of Westerville 64 E Walnut Street Westerville OH 43081	N/A	2001	In Progress
Tinnapple Road	City of Hilliard 3000 Municipal Way Hilliard OH 43026	N/A	2001	Yes
Davidson Road Sanitary Sewer	City of Hilliard 3000 Municipal Way Hilliard OH 43026	N/A	2001	Yes
Hill Road/Diley Road Interchange, Canal Winchester	ODOT 1980 W Broad St Columbus OH 43226	N/A	2001	No
US Route 36	City of Mount Vernon 40 Public Square Mt Vernon OH 43050	N/A	2001	In Progress
Quarry Point, Franklin County OH	M/I Homes 3 Easton Oval Columbus OH 43219	\$350,000	2002	Yes
Fairwood Avenue Maintenance of Traffic	City of Columbus 109 N Front St Columbus OH 43215	N/A	2002	Yes
Muirfield Glick Study and Design	City of Dublin 5800 Shier-Rings Road Dublin OH 43017	\$1,400,000	2002	Yes
Adams Run Drainage Improvement, Knox County OH	City of Mt. Vernon 40 Public Square Mt. Vernon OH 43050	\$1,500,000	2002	Yes
Carson Farms Turn Lane Improvements, Delaware County OH	Dominion Homes 5501 Frantz Road Dublin OH 43017	\$350,000	2002	No

17. (Cont.) COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU OR YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Springer-Woods Turn Lane Improvements, Franklin County OH	Homewood Corporation 750 Northlawn Drive Columbus OH 43214	\$350,000	2002	No
Holt Road/Holt Run Signal, Worthington OH	T&R Properties 6563 Worthington Galena Road Worthington OH 43085	\$90,000	2002	Yes
SR 31 Traffic Signals	City of Marysville 125 E Sixth Street Marysville OH 43040	\$225,000	2002	Yes
Muirfield Glick Roadway	City of Dublin 5800 Shier-Rings Road Dublin OH 43017	\$1,355,000	2002	No

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

PROJECT NAME, TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONTRACTED (YES OR NO)	FIRM ASSOCIATED WITH
Group Nine Intersection Improvements Traffic Design	City of Columbus 109 N. Front Street Columbus, Ohio 43015	\$45	1997	Yes	Dynotec Engineering
Morse Bethel Road Connector Right-of-Way Studies	City of Columbus 109 N. Front Street Columbus, Ohio 43015	N/A	1998	N/A	Burgess & Niple

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

R. D. Zande and Associates, Inc. (RDZ) can provide one-stop shopping for the West Virginia Abandoned Mine Lands Program. Work, including surveying, development of mapping from field surveys, site design, CADD operations, water testing, hazmat testing, calculations, plans, and specifications associated with this task order contract will be completed in-house. RDZ carefully selected sub-contractors, successfully used in the past, to perform drilling and chemical testing of soils, rock, and coal that have worked on and are extremely familiar with WVAML Projects. RDZ has EOI-specific corporate and employee experience with slope stability, highwall reclamation engineering, drainage control structures and facilities, passive treatment of AMD, debris and waste handling and disposal plan, and revegetation of drastically disturbed areas; including surveying, subsurface investigations, H & H studies, construction plans and specifications, calculations, conducting associated bid meetings, and necessary reports and invoicing procedures. RDZ has corporate experience on twenty (20) WVAML Projects, twelve (12) ODNR AML projects, and employee experience on eighteen (18) WVAML Projects. RDZ personnel stay abreast of current developments and technological advances in Abandoned Mine Lands reclamation and acid mine drainage by attending seminars and symposiums on the subjects. In the past year, RDZ has attended the WV Surface Mining Task Force Symposium in Morgantown, WV; the National Association of Abandoned Mine Lands Symposium in Athens, OH; West Virginia University Natural Stream Restoration Program in Morgantown, WV; 404/401 Permit Training in Charleston, WV; and State and Local Mitigation Planning in Buckhannon, sponsored by FEMA and WVOES.

20. The foregoing is a statement of facts.

Signature:  TITLE: Office Manager, Senior Associate Partner DATE: 07 August 2007

Printed Name: Dennis E. Miller, P.S., Office Manager, Senior Associate Partner

