

***Statement of Qualifications for Engineering Services***

***To the West Virginia Department of Environmental Protection***

***Greystone Mine Drainage Project***



RECEIVED

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REGULATORY DIVISION  
STATE OF WV



30 Columbia Boulevard  
P.O. Box 1532  
Clarksburg, WV 26301

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www.thrashereng.com

November 3, 2009

West Virginia Department of Environmental Protection  
Office of Abandoned Mine Lands and Reclamation  
c/o State of West Virginia Department of Administration  
Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305

**RE: *Expression of Interest – Greystone Mine Drainage Project***  
***RFQ #DEP14801***

To Whom It May Concern:

Thrasher Engineering, Inc. is pleased to have the opportunity to submit this expression of interest and qualifications to provide engineering design services for the Greystone Mine Drainage design project in Monongalia County, West Virginia. Our qualifications, along with our close proximity to the site, will provide the Department of Environmental Protection's Office of Abandoned Mine Lands and Reclamation with the highest level service and technical proficiency in a timely and cost efficient manner.

Following our review of the information provided for the project, we have developed a thorough understanding of the project needs. With that understanding, we offer the following qualifications that the selection of Thrasher Engineering for this project will bring to the DEP and the Office of Abandoned Mine Lands:

***Experience to Meet the Scope of Services:*** Through our site development department, Thrasher Engineering has provided survey, design and construction management services. We have mapped and designed numerous drainage systems, and provided design for roadway access. As demonstrated in our qualifications, Thrasher Engineering has surveyed, mapped, designed and provided construction management services for more site projects than any other West Virginia engineering firm.

***Successful Project Experience with AML:*** We provided engineering design services for AML DEP projects in Barbour County at Anglin's Run and in Randolph County at the Roaring Creek Stream project site. Additionally, in 2005, we were selected by the DEP to provide engineering design and mapping services for the Amherstdale and Ragland Road AML water line projects in Mingo and Logan Counties. As you are aware, each of these projects was completed on time. Thrasher Engineering also has extensive experience with water line projects in areas that are partially affected by AML; we recently provided engineering services for two partial AML projects for the Town of Masontown in Preston County.

**Project Team:** The qualifications of professionals on the team we have assembled to provide design services for this project are unmatched for this type of work. We have 25 engineers on staff, 14 of who are Registered Professional Engineers. Our Environmental Manager, Sheirl Fletcher, has over 20 years of environmental experience with a major coal company, with specific experience in acid mine drainage reclamation. Thrasher Engineering offers 13 fully staffed survey crews with experience in mining survey including pre and post subsidence and acid mine drainage. Our construction management team currently employs nearly 30 construction managers and inspectors, many with experience in site development and remediation projects. Our depth of personnel will allow us to start this project immediately.

**Location and Area Knowledge:** For more than years, Thrasher Engineering, Inc. has provided top quality engineering services throughout West Virginia, including clients in Monongalia County where this AML project is located.

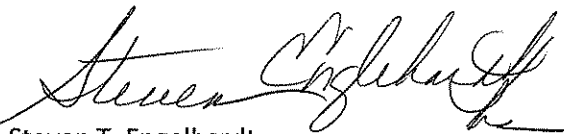
With our experience with AML and drainage projects, our qualified personnel and our expertise and experience in Monongalia County, Thrasher Engineering is the right choice for this AML project.

Following the instructions outlined in the RFQ, this proposal contains information regarding Thrasher Engineering's history, qualifications and management and staffing capabilities along with the required DEP /AML Consultant's Confidential Qualifications Questionnaire and Matrix and an affidavit stating Thrasher Engineering has no debt owed to the State of West Virginia.

We thank you for your consideration of our qualifications and look forward to the opportunity to present our qualifications and project methodology to you in person.

Sincerely,

THRASHER ENGINEERING, INC.



Steven T. Engelhardt  
Business Development 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  
**DEP148D1**

PAGE  
**1**

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

RFQ COPY  
 TYPE NAME/ADDRESS HERE  
**THRASHER ENGINEERING, INC.  
 30 COLUMBIA BLVD.  
 CLARKSBURG, WV 26301**

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	FOB	FREIGHT TERMS
10/06/2009				

BID OPENING DATE: **11/04/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001		JB I		906-29	N/A	N/A
<p><b>GREYSTONE MINE DRAINAGE DESIGN</b></p> <p><b>EXPRESSION OF INTEREST</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 ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE GREYSTONE MINE DRAINAGE PROJECT IN MONONGALIA COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.</p> <p><b>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID AND IS TERMINATED WITHOUT FURTHER ORDER.</b></p>						

SIGNATURE			SEE REVERSE SIDE FOR TERMS AND CONDITIONS		TELEPHONE	DATE
TITLE <b>PARTNER</b>			304-624-4108		11/3/2009	
			55-0633-596 6		ADDRESS CHANGES TO BE NOTED ABOVE	

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



## STATEMENT OF QUALIFICATIONS

Thrasher Engineering, Inc. is a civil engineering consulting firm, specializing in public works projects. The majority of Thrasher Engineering's work involves publicly funded water treatment and distribution systems, sewage collection and treatment systems, and industrial and business parks. Over \$600 million in water, sewer, site development, survey and construction management projects have been designed and supervised by the firm

H. Wood Thrasher and Henry A. Thrasher formed the company in 1983 with a commitment to excellence and professionalism in engineering. H. Wood Thrasher, P.E. remains principal of the company; also serving as principals are Kenneth P. Moran, P.E., and Kurt L. Newbrough, P.S.

Providing a full range of professional engineering services, Thrasher Engineering, Inc. currently maintains a staff of nearly 170 full-time employees. Our staff includes registered professional engineers, graduate engineers, registered professional surveyors, and support staffing of surveyors, design technicians, CADD technicians, construction managers, and secretarial/clerical personnel. This professional staff has a wealth of experience and is our greatest asset. This includes not only the principals but also the technicians, surveyors, construction managers, and office support staff. Combining education with experience, the qualified staff of Thrasher Engineering strives to provide service that is second to none and is committed to maintaining a strong reputation for quality work. The company's full and diverse staff has the resources to handle many projects, both large and small, simultaneously.

### RELEVANT SERVICES

The expertise of our company is confirmed in the variety of projects successfully completed. Areas of expertise that we believe are most beneficial to the WV Department of Environmental Protection Office of Abandoned Mine Lands and Reclamation for the DEP AML Greystone Design Project include:

#### SITE DEVELOPMENT

Thrasher Engineering has planned, surveyed, designed and provided construction management services for over 30 site development projects for both public and private clients. Projects ranging from sites for residential housing to business and industrial parks to multi-purpose "live, work and play" communities are included in our range of site development projects.

Our objective in site development engineering is to go beyond just the engineering aspect of the project; we work as a team with our clients to understand their present and future needs.



*Storm water Pond, Canaan Federal  
Prison, Scranton, PA*

Our Site Development Services Include:

**Planning and Conceptual Design**- evaluation of potential sites; recommendation of most functional, most cost-effective alternative; layout of site reflecting best use of land available; design of off-site and on-site (underground) including water service, sanitary sewer service, storm drainage facilities, telephone, electrical service, and television cable service; obtaining all permits necessary to allow construction including State Health Department for extension of water and sewer lines, WV Division of Environmental Protection Sediment and Erosion Control Permit, WV Division of Highways entrance permit, as well as any local permits required; roadway design; layout of industrial lighting; and construction management services to assure compliance with design.

**Grading Plans** - which includes development of cut and fill quantities and construction plans (showing existing and proposed contours, structures, and facilities on site) to allow for the best use of available land.

**Utility Layout/Mapping** - includes design of utility extensions to serve existing and proposed facilities, as well as the complete mapping of existing utilities.

## **STORM WATER DRAINAGE / SEDIMENT AND EROSION CONTROL**

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Our experience includes development of Sediment and Erosion Control measures on all types of construction sites as required by the WV Division of Environmental Protection, design of drainage facilities including piping, intake structures, etc., for site stabilization and flood control.

Our staff members have considerable hydrologic and hydraulic design experience and have successfully obtained local, state, and federal erosion and sediment control permits and National Pollutant Discharge Elimination System (NPDES) permits for point source and storm water discharges.

Capabilities in the evaluation and design storm water drainage include:

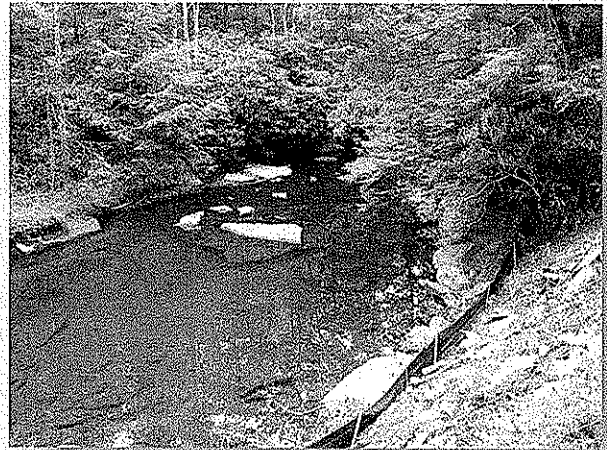
- Hydrology Studies / Hydrographic Mapping
- Storm Water Collection Systems
- Detention Ponds
- Injection Wells
- Underground Storage
- Combined Sewer Overload (CSO) separation



## ENVIRONMENTAL REPORTING SERVICES

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Thrasher Engineering, Inc. provides full environmental assessment and clearance services. We have more than 18 years of experience conducting environmental/natural resource compliance consultation with West Virginia Division of Environmental Protection, (WVDEP), Federal Aviation Administration and Federal Highways Administration, US Department of Agriculture-Rural Development Utility Program, and US Environmental Protection Agency (EPA).



Experience includes:

- Permitting Related Activities (401 and 404)
- NEPA Environmental Document Preparation
- Wetland Delineation and Mitigation
- Rare, Threatened and Endangered Species Section 7 Informal Consultation
- Rare, Threatened and Endangered Species Section 10 Habitat Conservation Plans
- Water Use and Water Quality
- Air and Noise Impacts, Assessments, and Controls
- Soils and Geological Resources
- Cultural Resources –(Sub contracted to a reputable and approved Cultural Resource Consultant)
- Hazardous Materials
- Sediment and Erosion Control
- Consent Orders
- Compliance Schedules
- Site investigations
- SPCC Plans, Contingency Plans, Ground Water Protection Plans and Storm Water Pollution Prevention Plans
- Waste Treatment and Site Remediation
- Waste Disposal
- Channel Restoration
- Stream Bank Stabilization
- Enforcement Actions

## SURVEY

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In addition to a full service professional engineering staff, Thrasher Engineering maintains a complete surveying department which includes four licensed professional land surveyors, ten full-time survey crews, CADD technicians, and office support staff.





We perform our work utilizing the most current methods and equipment available. Our survey work is accomplished using global positioning systems (GPS) and electronic distance measuring (EDM) survey stations with data gathering capabilities.

The type of surveys provided by Thrasher Engineering varies greatly as well and covers virtually all aspects of land surveying, such as:

**Pre- and Post-Mining Surveys** - vertical and horizontal control, inspector's report of protected structures, interior and exterior photographs, and videos. Thrasher Engineering provides these survey services for numerous coal companies, including Eastern and Martinka. Additional services performed for Eastern includes construction layout for impoundments, shaft site boundary and topographic surveys, map editing, and collection of well inventory data

**Boundary Surveys** - verification of land owners, traverse and location of existing monuments, computations of closure, establishment of property corners, actual field stakeout, and preparation of plats and legal descriptions for property owners.

**Topographic Surveys** - location of existing features and determination of contours used in engineering layout of water distribution systems, sewer collection systems, and industrial park layouts, etc.

**Construction Layout** - providing horizontal and vertical control for contractor's use and using this information to establish construction controls.

**GPS Surveys** - horizontal and vertical control networks

## **CONSTRUCTION MANAGEMENT AND INSPECTION**

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Thrasher Engineering knows how projects should be built. We can provide the knowledgeable and experienced personnel necessary to manage the construction phase of your project. Our project managers and inspectors are experienced in all types of construction activities. From utilities, site development and storm water management to roads, bridges and airports, we apply our construction management and inspection expertise to ensure successful projects. Our construction managers and our inspectors have years of experience; many of our inspectors are certified by the West Virginia Department of Transportation / Division of Highways for roadwork and materials testing.



## **MATERIALS TESTING**

Thrasher Engineering's Materials Testing Department is capable of performing a wide range of field and laboratory tests. Our laboratory at our Clarksburg, WV office is one of only three nationally certified facilities in the State of West Virginia. Additionally, our engineers and technicians who perform tests both in the field and in the lab are also certified by the State.



Services Include:

- Concrete Testing and Inspection
- Soil Testing and Inspection
- Aggregate Testing and Inspection
- Mortar and Grout
- Asphalt
- Paint Coatings
- Sprayed-on Fireproofing
- Subsidence Inspecting
- Caisson and Piling Inspection

## **GEO-TECHNICAL SERVICES**

For our State of West Virginia DEP projects, we will utilize Novell Geo-Environmental, a Certified Minority/ Women Business Enterprise (MBE/WBE).

## **EQUIPMENT AND SOFTWARE**

Thrasher Engineering, Incorporated provides one of the largest networks of computer aided design (CAD) equipment, software and trained personnel in the State of West Virginia.

AutoCAD Landdesktop 2009 and Microstation V8 software is utilized at 48 CAD stations within the Group. Additionally, equipment includes 10 large format (size E) plotters and 5 large format plotter / scanners.

CAD plans are prepared by both dedicated CAD employees and by staff engineers and engineering technicians in each of the firm's offices. This equipment allows our design department to perform accurate work quickly and efficiently. All departments have the capability to electronically transmit data to clients requesting this service. This blend of experienced personnel utilizing modern equipment results in successful projects and satisfied clients.

## FIRM MANAGEMENT AND PROJECT STAFFING

Thrasher Engineering offers the largest engineering staff in the State of West Virginia. The expertise of the Thrasher Engineering staff is a combination of education and experience; it is reflected in all aspects of our services. The firm is led by a talented group of principals and partners who are dedicated to the success of our projects and the satisfaction of our clients.

## FIRM OFFICERS AND PARTNERS

H. Wood Thrasher, P.E. - President  
Kenneth P. Moran, P.E. - Vice-President  
Kurt L. Newbrough, P.S.  
Wm. Randy Watson  
Chadwick Biller, P.E.

Chad Riley, P.E.  
Clay P. Riley, P.E.  
Daniel E. Ferrell, P.E.  
Aaron Denham

Administration  
Chief Engineer  
Survey  
Public Utilities  
Site Development / Highways  
/Airports  
Site Development  
Public Utilities  
Public Utilities  
Inspection and Testing

**H. Wood "Woody" Thrasher, P.E.** President of Thrasher Engineering, Inc. graduated from West Virginia University in 1977 with a degree in Civil Engineering. Since that time, he has utilized his engineering skills and entrepreneurial spirit to build Thrasher Engineering, Inc. into West Virginia's largest civil and consulting engineering firm. Mr. Thrasher has extensive experience in all aspects of the engineering process, with emphasis on management and administration of multi-million dollar projects including funding and regulatory issues. Mr. Thrasher forms and supervises multi-project design teams and conducts client needs assessments.

**Kenneth P. Moran, P.E.** is Vice-President and Chief Engineer. Mr. Moran has 24 years of experience in civil engineering. He provides project management and technical review for both site development and public utilities projects. A graduate of Fairmont State University, Mr. Moran is a registered Professional Engineer (P.E.) in addition to a registered Professional Land Surveyor (P.S).

Also a partner and principal of Thrasher Engineering is **Kurt L. Newbrough, P.S.** Mr. Newbrough provides supervision of all survey activities for the firm performed by ten full-time survey teams. Mr. Newbrough is a licensed Professional Surveyor and has specialized training in OSHA Hazardous Waste Operations and Emergency Response Center in Addition to the US Department of Labor / Mine Safety and Health Administration. He also serves in the elected position as Harrison County (WV) Surveyor.

Public utilities system projects are the responsibility of **Wm. Randall Watson**. A graduate of Fairmont State University, Mr. Watson joined Thrasher Engineering in 1984 and is a firm partner. **Clay P. Riley, P.E.**, also a firm partner, is involved in both water and sanitary sewer utilities projects. He is a graduate of the West Virginia University College of Engineering. **Daniel E. Ferrell, P.E.** is a graduate of West Virginia University and received his Master of Science Degree in Civil Engineering from Old Dominion University. He also is responsible for public utilities projects.

**Chadwick Biller, P.E., Chad M. Riley P.E., and Aaron Denham** round out the senior managers of the company. Mr. Riley is a graduate engineer from Fairmont State University and supervises site development projects. Mr. Biller received his engineering degree from West Virginia University. He is responsible for mine reclamation, highways, roads, bridges and airport projects, in addition to site development. Mr. Denham serves as General Manager for Inspection and Materials Testing services. He received his Bachelor of Science degree in Civil Engineering from Fairmont State University.

#### **PROJECT TEAM**

Thrasher Engineering has assigned a team of experienced professionals to the Greystone Mine Drainage project.

**Kenneth P. Moran, P.E.** will serve as **Principal-In-Charge and Chief Engineer** for the project. Mr. Moran is Vice-President of Thrasher Engineering, Inc. and oversees all engineering services provided by the firm.

**Chadwick D. Biller, P.E.** will be the **Project Manager**. His role in this project will be to oversee all design aspects of the project and work closely with the DEP/ AML office to ensure timeliness client satisfaction and oversee budgetary aspects. Mr. Biller is a Partner in Thrasher Engineering, Inc. and manages site development and survey projects, many of which include remediation, soil and erosion control and drainage aspects.

**Mike Nestor** will serve as **Project Engineer** and be responsible for design of the project. Mr. Nestor's experience includes drainage and sediment control design projects for site development projects. He recently served as design engineer for the Roaring Creek and Anglin AML projects in Barbour County.

**Jeff Pine** will be responsible for CAD design for the project. Mr. Pine provides design infrastructure projects including street and lot layout, street profiles, extension of the public sewer and water systems including utility plans and profiles, storm water drainage, storm water management, erosion and sediment control plans and NPDES permitting.

Environmental services will be managed by **Sheirl Fletcher**, Environmental Manager for Thrasher Engineering, Inc. Ms. Fletcher joined Thrasher Engineering, Inc. after serving 23 years as a geologist, hydrologist and environmental specialist with Consol Energy, Corporation. In that position, she participated in the engineering and final reclamation of five Consol Energy mines in Monongalia County.

The survey aspects of the project will be under the direction of **Kurt Newbrough, P.S.**

Mr. Newbrough has over 20 years of experience in survey projects and significant project experience in pre and post mine subsidence surveys. These surveys have been conducted for numerous coal companies at sites throughout the state. Mr. Newbrough will assign and oversee the work of the experienced survey crew.

**Geo-technical services** will be under the direction of **Larry Nottingham** of **Novel Geo-Environmental, a Certified DBE business.**

Should the DEP choose to retain Thrasher Engineering, Inc. for the construction monitoring aspect of the project, Thrasher Engineering, Inc. has one of the largest construction inspection teams in the State. Nearly 30 inspectors are available to provide services for the project. **Aaron Denham** serves as supervisor of Construction Management and Materials Testing. He is a graduate of Fairmont State University and is a Level V Certified Inspector by the WV DOH.

Resumes of the project team members follow as additions to the information included in the AML Consultant's Confidential Qualifications Questionnaire.

***Vice President / Chief Operating Officer/ Chief Engineer***

SUMMARY OF EXPERIENCE

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Mr. Moran joined Thrasher Engineering in 1991 and currently serves as Vice President and Chief Operations Officer and Chief Engineer.

Mr. Moran is responsible for management feasibility studies and design of public utility and site development projects for local state, federal and private clients. Additionally, Mr. Moran has extensive experience in all aspects of engineering and with funding and regulatory agencies in conjunction with projects.

EDUCATION

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- B.S., Civil Engineering Technology, 1983 – Fairmont State University***

CERTIFICATIONS

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- Registered Professional Engineer (PE), State of West Virginia #11309***
- Registered Professional Engineer (PE), State of Virginia#0102021855***
- Registered Professional Engineer (PE), State of Ohio #64412***
- Professional Land Surveyor (PS), State of West Virginia#1333***

REPRESENTATIVE PROJECT EXPERIENCE

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- City of Belmont, Sanitary Sewer Project – Project Manager and Project Engineer.*** Mr. Moran was involved in the Wastewater Treatment Plant Expansion and inflow filtration improvements. Mr. Moran negotiated with the West Virginia Department of Environmental Protection for the removal of the sludge blanket for French Creek. Improvements for the Plant included designs for new clarifiers, sludge thickening, sludge processing and the relocation of the outfall to the Ohio River.
- Brooke County PSD, Sanitary Sewer Project – Principle in Charge and Chief Engineer.*** The project entailed planning and design, new sanitary sewer collection systems in and around Wellsburg and Follansbee. The project negotiations with the West Virginia Department of Environmental Protection and various municipalities to determine the sanitary sewer treatment provider.
- Town of Tunnelton Sanitary Sewer Project - Project Manager and Project Engineer.*** Mr. Moran designed a sanitary sewer collection system for the Town of Tunnelton and a new 40,000 gallons per day (gpd) Wastewater Treatment Plant.
- Greater Harrison County PSD, Sanitary Sewer Project –Project Manager and Project Engineer.*** This project included Wastewater Collection System Extensions in the areas of Lost Creek, Good Hope and Mount Clare. We were involved in the upgrade of the existing West Milford Wastewater Treatment Facility from 300,000 gpd to 600,000 gpd. The improvements included a new pre system upgrade of the aeration system and disinfection systems.
- Huttonsville PSD, WWTP, Sanitary Sewer, Collection System, Extensions - Project Manager.*** The inflow filtration improvement project removed and replaced the gravity part collection system in the areas of Valley Bin, Daley and East Daly in Randolph County. The project included upgrading the District's existing Wastewater Treatment Facility. The improvements included head works facility, aeration system, filtering system improvements and disinfection system improvements.

- ❑ **Pea Ridge PSD, WWTP, Sanitary Sewer, Collection System, Extensions – Project Manager.** This project included extensions in the existing system, inflow infiltration collection system improvements, upgrades of two (2) Wastewater Treatment Facilities, and abandonment of an existing lagoon system which was converted to wetlands.
- ❑ **Scott's Run PSD, Sanitary Sewer, Collection System Extensions – Project Manager.** Mr. Moran was involved in the extension of a new gravity sewer collection system in the areas of Osage, Cassville, Wade's Run, Chaplin Hill of Monongalia County. The project removed the existing Wastewater Treatment Facility in the area of New Hill. The project negotiations with the Morgantown Utility Board for the wastewater treatment, operation and maintenance and system boundary.
- ❑ **Canaan Valley Public Service District Waste Water Treatment System – Project Manager.** This project entailed analyzing the Canaan Valley area for implementation of a public sanitary sewer system. There were multiple tasks involved with this project from working with the Environmental Protection Agency and the West Virginia Department of Environmental Protection with regards to the TMDL on the Blackwater River. The project solution provided a managed stream point discharge solution for the Valley.
- ❑ **Pocahontas County PSD, WWTP, Sanitary Sewer, Collection System, Extensions – Project Manager.** The project involved designing a new sanitary sewer collection and treatment system to serve the areas of Snowshoe, Linwood, and Slatyfork of Pocahontas County. The project involved multiple alternative analyses due to the varied environmental and social interest of the county.
- ❑ **City of Bridgeport, Sanitary Sewer Lift Station Improvements, WWTP Upgrades – Project Engineer, Project Manager and Principal in Charge.** Mr. Moran has managed multiple projects for the City of Bridgeport for over 17 years. He has designed multiple pumps station and collection system for the City of Bridgeport. He also designed the City's 2.5 million gpd Wastewater Treatment Facility and has worked with the City of Bridgeport to establish their GIS and Long Term Control Plan solutions.
- ❑ **City of Clarksburg, WWTP Upgrades, Inflow and Sanitary Sewer System Improvements, Colonial Village Line Replacement – Project Engineer, Project Manager and Principal in Charge.** Mr. Moran has managed multiple projects for the City of Clarksburg for over 17 years. He has designed multiple pump stations and collection system for the City. Mr. Moran also worked on various pump station systems and collection systems throughout the City of Clarksburg and as Engineer in Charge management upgrades of their existing Wastewater Treatment Facility. This facility was a 6 million to 8 million gpd facility. Mr. Moran worked with the City to establish their GIS and Long Term Control Plan solutions.
- ❑ **Town of Terra Alta, Sanitary Sewer Collection Improvements and WWTP – Project Engineer and Project Manager.** Mr. Moran designed a new collection system for the Town of Terra Alta and a 250,000 gpd expandable Sequencing Batch Reaction (SBR) Wastewater Treatment Facility.
- ❑ **Hundred-Littleton PSD, New Sanitary Sewer Collection and Treatment System Water System – Project Manager, Project Engineer and Principal in Charge.** Mr. Moran was involved in the Sanitary Sewer Collection System project in and around the Town of Hundred. This was a 50,000 gpd Wastewater Treatment Facility. As Principle in Charge, Mr. Moran was involved with multiple tank replacements and water line replacements throughout the district.
- ❑ **Preston EDA, Chief Engineer for Water Extension to Prison and Project Manager.** This project entailed the design of an eight (8) mile water distribution system to provide service to the Hazelton Federal Bureau of Prisons. This system included development of well fields for water supply and a new water treatment facility, multiple booster stations, and a 1 million gallon elevated storage tank.
- ❑ **Preston EDA, Chief Engineer for Park Utilities at Northpointe Industrial Park – Chief Engineer.** Mr. Moran designed the water, storm sewer, sanitary sewer improvements for a new Industrial Park. This Industrial Park is located in the Hazelton area in Preston County. He also designed a 50,000 gpd Sanitary Sewer Treatment Facility to serve the park.
- ❑ **Food Lion, Clarksburg, Nutter Fort, Sabraton – Project Engineer and Project Manager.** Mr. Moran was involved in the site development for Food Lion in the areas of Clarksburg, Nutter Fort, and Sabraton. His designs included grading, sighting of the buildings, storm water management systems, water, and sewer.

- ❑ **US Army Reserve Center, Clarksburg and Jane Lew – Project Engineer.** This project was a Design/Build. The project team consisted of Mr. Moran and members of March Westin. Designs included grading, drainage, storm water management, water and sewer.
- ❑ **Mineral County High School – Project Engineer.** Mr. Moran provided site drainage, design services including grading, drainage, storm water management, water and sewer.
- ❑ **Calhoun County High School – Project Engineer.** Mr. Moran designed the wastewater treatment facility for the package plant. He also provided site drainage, design services including grading, drainage, storm water management, water and sewer.
- ❑ **Harrison County Bank – Project Engineer.** Mr. Moran was involved in the design of site grading, storm water management, site drainage, design services, water and sewer.
- ❑ **Peoples State Bank – Project Engineer.** Mr. Moran designed the site grading, storm water management, site drainage, all design services, water and sewer.
- ❑ **Big Elm Elementary School – Project Engineer.** Mr. Moran was primarily involved with the Department of Highway's road widening of Route 19 and turning lanes for the entrance of the Big Elm Elementary School.
- ❑ **Robert C. Byrd High School Access Road – Project Engineer.** This project included road widening and turning lanes of the intersection of Route 98 and Robert C. Byrd Drive. Mr. Moran designed the complete roadway of Robert C. Byrd Drive including pavement, alignment, drainage, relocation of all utilities and he was involved in all aspects of the project.
- ❑ **Lincoln High School, Widening of US Route 19 and Turning Lanes - Project Engineer.** Mr. Moran's involvement with this project was the widening of US Route 19 and turning lanes. Mr. Moran was involved in the design of the pavement, alignment, drainage, relocation of all utilities and was involved in every aspect of the project.
- ❑ **Hardy County EDA – Robert C. Byrd Industrial Park – Project Engineer and Project Manager.** Mr. Moran worked on the design for the road widening of Route 58, new roads through the industrial park, storm water management pond facility, water, sewer, communication, utilities, lighting, and a 20,000 gpd expandable Wastewater Treatment Facility.
- ❑ **City of Kingwood - Project Engineer and Principal in Charge.** Over the last 15 years Mr. Moran was involved in multiple water projects and sanitary sewer projects for the City of Kingwood. He also worked on various sewer pump station systems, sewer collection systems throughout the City of Kingwood sanitary sewer and water system. As Principal in Charge, he was involved with the upgrades of their existing Wastewater Treatment Facility.
- ❑ **Preston County Sewer PSD WWTP- Project Manager-** Project included design of a 0.5 MGD expandable (SBR) wastewater treatment plant.
- ❑ **City of Weston. Sanitary Sewer Project, Project Engineer/Project Manager.** Mr. Moran designed a new 2.5 million gallon wastewater treatment plant.



**Partner / Project Manager****SUMMARY OF EXPERIENCE**

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Mr. Biller has experience in all aspects of engineering with specific emphasis on site development, highways, roads, bridges, and airports. Mr. Biller joined Thrasher Engineering in 1999 and is a partner of Thrasher Engineering. For Thrasher Engineering, Mr. Biller is responsible for WV DEP AML project and public and private site development projects, specializing in airports, highways, roads and bridges. As Project Manager for all of the firm's WVDOT/DOH projects, he has extensive knowledge of state and federal building standards.

**EDUCATION**

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- B.S., Civil Engineering, 1992 – West Virginia University*

**CERTIFICATIONS**

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- Registered Professional Engineer (PE), State of West Virginia #13620*
- Registered Professional Engineer (PE), State of Pennsylvania #PE056012E*
- Registered Professional Engineer (PE), State of Ohio #64594*

**REPRESENTATIVE PROJECT EXPERIENCE**

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**SITE DEVELOPMENT PROJECTS**

- WV DEP Anglin's Run and Roaring Creek Projects*
- Taylor County Commission, Re-roofing of Courthouse and Jail*
- Fairmont State University Aerospace Center*
- Raleigh County Memorial Airport Industrial Park*
- Putnam Business Park*
- Wood Products Business Park*
- Aurora Flight Sciences*
- Various Subdivision in Berkeley County Ranging From 12 to 420 Lots*
- Site Plan for Hi-Tech Consortium Expansion, Fairmont, WV*
- Site Plans for Nippon Thermostat, Green Metals and Schwans, Putnam County*
- Pendleton County Courthouse Annex*
- Wingate Hotel, Charles Pointe, Bridgeport, WV*
- Daycare Center and USDA Parking Lot, Hardy County*
- City of Pleasant Valley, Sidewalks*
- Snowshoe Mountain Resort / Intrawest – The Seneca*
- Wetland Replacement Project, Putnam County*
- Hurricane Business Park*
- Shinnston City Park, Including Pool and Bathhouse*
- City of Bridgeport, Walking Trail and Bridge*

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**AIRPORTS**

- Harrison Marion Regional Airport – Improvement Master Plan*
- Raleigh County Airport – Business Park and Master Plan*
- Grafton Hospital, Helipad Relocation*

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**HIGHWAY/ROAD/BRIDGE PROJECTS**

- Old Bridgeport Hill New Storm Drainage System*
- Snowshoe Drive Upgrade*
- King Coal Highway*
- Terra Alta Curve*
- Lodgeville Road*
- North Bridgeport Bypass*
- Corridor H*
- Upgrade of US Route 19*
- East Street and US Route 50, Parkersburg*
- Merrick Creek Connector*
- City of Bridgeport, Valley Drive, Chenoweth Drive, Village Drive and Meadowbrook Mall Road*
- Lodgeville Bridge*
- Indian Fork Bridge*
- Jakes Run Bridge*
- Littleton and Watersnake Bridges*
- Verner Bridge*
- Rehabilitation of the 5<sup>th</sup> Street Bridge, Parkersburg*
- Rehabilitation of the 35<sup>th</sup> and 36<sup>th</sup> Street Bridges, Charleston*
- Kittonsville Bridge Replacement, Lewis Co.*
- Water Street Bridge Replacement, Logan Co.*
- Wayne County High School Bridge Replacement*
- David Morgan Memorial Bridge, Marion County*

***Project Manager / Engineer***

**EXPERIENCE**

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*Mr. Nestor joined Thrasher Engineering in 2005 and serves as Project Manager and Engineer. Mr. Nestor has a wide range of experience in residential and commercial site development projects, utilizing all aspects of infrastructure design including street and lot layout, street profiles, extensions of public sewer and water systems, storm water drainage, storm water management, erosion and sediment control plans, and NPDES permitting. In addition, Mr. Nestor oversees all general operations within The Berkeley Associates, directing administrative staff, CAD technicians, and staff engineers to ensure successful completion of projects covering site development, surveying, material testing, and environmental services.*

**EDUCATION**

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- B.S. Civil Engineering Technology – Fairmont State University, 2003*

**CERTIFICATIONS**

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- Engineer Intern, State of West Virginia*

**AFFILIATIONS**

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- American Society of Civil Engineers*
- Eastern Panhandle Home Builders Association*

**REPRESENTATIVE PROJECT EXPERIENCE**

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- WV DEP AML PORTAL AND DRAINAGE DESIGN- Design for access roads, drainage control channels, re-grading and wet-seal of deep mine portals for Anglin's Run and Roaring Creek sites in Barbour County.*
- MILLARDSVILLE VILLAGE – 26 townhouse lots on approximately 3.15 acres. Completed sketch plat, storm water management design, and street profiles.*
- FAIRFAX FARM Section 2 – 15 single family residential lots on approximately 36.73 acres. Completed development of drainage areas, grading plan, erosion and sediment control plan, layout of lots, and Preliminary Plat design.*
- PIKESIDE MEADOWS Section E – 63 townhouse lots on approximately 17.51 acres. Prepared drawings for Public Service Districts.*
- LITTLE GEORGETOWN ESTATES Sections 1 and 2 – 64 single family residential lots on approximately 127 acres. Completed lot layout, septic layout, design of sediment basin, turning lane, erosion and sediment control, and Preliminary Plat.*
- WEBBER SPRINGS Section 3 – 119 single family residential lots on approximately 32.81 acres. Completed design of turning lane on WV Route 51.*
- BROOKSIDE ESTATES Section 1 – 60 single family residential lots on approximately 101.86 acres. Completed Sketch Plat design along with septic reserve layout and initial grading and profiles.*

- ❑ **CREEKSIDE MEADOWS** – 95 single family residential lots on approximately 101.86 acres. Completed lot layout, Sketch Plat design, water and sewer extensions, and design of storm water management facilities.
- ❑ **MULLBERRY KNOLL** – 10 townhouse lots on approximately 1.5 acres. Completed Sketch Plat design, water and sewer extension, grading plan, erosion and sediment control plan, and design of storm water management facilities.
- ❑ **SHENANDOAH OFFICE PARK** – Two commercial buildings totaling 50,000 sf. Sketch Plat design.
- ❑ **SPRING HILL Section 6** – 15 single family residential lots on approximately 10 acres. Completed design of storm water management, grading plan, and preparation of drawings for Preliminary Plat submittal.
- ❑ **MAIDSTONE ON THE POTOMAC** – 108 single family residential lots on approximately 40.5 acres. Completed Sketch Plat design, water and sewer extensions, grading plan, erosion and sediment control plan, drainage plan, design of storm water management facilities, and Preliminary Plat design.
- ❑ **NATIONAL PROPANE** – Bulk Propane Storage Facility and office space on approximately 5.5 acres. Completed Sketch Plat, water and sewer extensions, grading plan, erosion and sediment control plan, drainage plan, design of storm water management facility, and Preliminary Plat design.
- ❑ **BACK CREEK ACRES** – 3 single family residential lots on approximately 6 acres. Completed Preliminary Plat, grading plan, and erosion and sediment control plan.
- ❑ **MARTINSBURG INTERNAL MEDICINE** – Completed Site Plan for city approval of 800 sf office addition.
- ❑ **CHESTNUT HILL ESTATES** – 29 single family residential lots on approximately 66 acres. Completed Sketch Plat design, lot and street layout, grading plan, and profiles.
- ❑ **MVB BANK ADDITION** – Completed Site Plan for approval of 900 sf bank addition.
- ❑ **SPRING HILL Section 7** – 7 single family residential lots on approximately 7 acres. Completed lot layout, water and sewer extensions, grading plan, erosion and sediment control plan, profiles, grading plan, drainage plan, storm water management, and Preliminary Plat design.
- ❑ **WILLIAMSPORT PARK ROAD EXTENSION** – 650 foot road extension in Williamsport, MD. Completed design of road, including grading, drainage, storm water management, profiles, permitting, and specifications.
- ❑ **INWOOD AND BAKER HEIGHTS WASTE WATER TREATMENT PLANTS** – Completed Site Plans for county approval of facility upgrades.
- ❑ **LEISURE LIVING ESTATES Section 4** – 10 single family residential lots on approximately 7 acres. Completed Sketch Plat design, water and sewer extensions, grading plan, profiles, erosion and sediment control plan, drainage plan, storm water management, and Preliminary Plat design.
- ❑ **CHUCK'S PIZZA** – Completed Site Plan for 1,200 sf pizza shop on approximately 1.67 acres. Design included site layout, grading plan, erosion and sediment control plan, drainage and storm water management.
- ❑ **FEDEX SMARTPOST** – Upgrades to existing FedEx SmartPost location, including the addition of a guard shack and extension of gravity sewer system. Proposed work was granted approval with county building permit.
- ❑ **OAK HILL, WV DRAINAGE PROJECT** – Design of storm sewer upgrades for the town of Oak Hill. Project included the addition of a 2' x 6' box culvert under Trump Avenue, construction drawings, and specifications.
- ❑ **TBA OFFICE SITE** – Construction of two new office buildings totaling 6,200 sf on approximately 1.6 acres. Completed Sketch Plat, grading plan, and erosion and sediment control plan.

***Environmental Manager***

**SUMMARY OF EXPERIENCE**

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*Sheirl Fletcher joined Thrasher Engineering, Inc. in 2007 and serves as Environmental Manager for the firm. Prior to joining Thrasher, Sheirl served as Environmental Manager for a major coal firm. She has more than 20 years experience and brings comprehensive knowledge of environmental regulatory programs and reporting requirements in multiple states to our clients' projects, along with technical expertise in environmental engineering, geology and hydrology*

**EDUCATION**

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- West Virginia University, Morgantown, WV - Bachelor of Science- Geology*

**Additional Training**

- Contemporary Supervision*
- Conflict Management*
- Influence Management*

**CERTIFICATIONS**

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- Licensed Professional Geologist (LPG), Commonwealth of Pennsylvania*
- Certified Professional Geologist (COG), State of West Virginia*

**EXPERIENCE:**

**ENVIRONMENTAL MANAGEMENT AND SAFETY COMPLIANCE**

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- Preparations of applications for required operating permits and licenses regarding air quality, wastewater and construction projects ensuring compliance with all state and federal regulatory requirements.*
- Responsible for compliance with all environmental regulations, including interface with environmental regulators, in a manner consistent with company's policies and procedures.*
- Assure full compliance with OSHA (Occupational Safety and Health Administration) regulations*
- Responsible for the preparation of NEPA documents including Environmental Impact Statements and Environmental Assessments.*
- Developed Probable Hydrologic Impact Studies and provided technical report of findings.*
- Prepare, organize, and maintain inspection reports and records, assuring on-time and accurate filings.*
- Compiled and reported environmental statistics and remedial initiatives to Corporate Environmental Quality Control.*
- Monitored projects to ensure that they were on task in reaching goals and objectives while staying within budgetary limits.*

- Inspected construction sites, and waste water treatment and disposal facilities and systems for conformance with federal, state, or local regulations.*
- Informed company personnel of inspection findings and explained how problems were prevented or corrected.*
- Contributed to the development of company policies, goals, objectives, and procedures, with respect to compliance of environmental regulations.*
- Oversaw activities of outside consultants providing necessary services.*
- Managed staff, prepared work schedules and assigned specific duties.*

## **GEOLOGY**

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- Analyzed and interpreted geological, geochemical, and geophysical information from sources such as survey data, well logs, bore holes, and aerial photos.*
- Planned and conducted geological field studies and surveys by: development of drilling pad sites, soils and subsurface drilling to collect data for interpretation*
- Prepared geological maps, cross-sectional diagrams, charts, and reports concerning mineral extraction, land use, and resource management, using results of field work and laboratory research.*

## **HYDROLOGY**

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- Studied and documented quantities, distribution, disposition, and development of underground and surface waters.*
- Designed and conducted scientific hydro-geologic investigations to ensure that accurate and appropriate information was available for use in water resource management decisions.*
- Coordinated and supervised the work of professional and technical staff, including consultants, engineers, technologists, and technicians.*
- Drafted final reports describing research results, including illustrations, appendices, maps, and other attachments.*
- Studied wastewater and storm water issues, including flood and drought risks, water quality, wastewater, and impacts on wetland habitats.*
- Assessed ground and surface water movement to provide advice regarding issues such as waste management, route and site selection, and the restoration of contaminated sites.*
- Applied research findings to help minimize the environmental impacts of pollution, water-borne diseases, erosion, and sedimentation.*
- Investigated complaints or conflicts related to the alteration of public waters, gathering information, recommending alternatives, informing participants of progress, and preparing draft orders.*
- Determined sampling locations and methods, and collected water or wastewater samples for analysis, preserving samples with appropriate containers and preservation methods.*

## **Larry C. Nottingham, PhD, PE**

Mr. Nottingham served as a Principal Engineer at Triad Engineering, Inc. for over 25 years before joining the professional staff at NGE. During that time he has accumulated a broad range of experience in the numerous disciplines of geotechnical engineering. Mr. Nottingham also served as a professor and department chair of the Civil Engineering Department at the West Virginia University Institute of Technology in Montgomery, West Virginia. Mr. Nottingham was involved with consultation and review of many subsidence-related projects performed for BRIM as well as the WVDEP.



### **Fields of Competence**

- Foundation Investigations
- Landslide Analysis & Remedial Design
- Mine Subsidence Investigations
- Highway & Airport Geotechnical Design
- Pavement Analysis & Design
- Retaining Wall Design
- Forensic & Insurance Investigations
- Expert Witness Consultation
- Ground Water and Seepage Analysis & Design
- Dam Analysis & Design
- Personnel Management
- Project Management
- Project Estimating

### **Education**

- B.S.C.E., Civil Engineering, West Virginia Institute of Technology, 1965
- M.S.C.E., Civil Engineering, University of Pittsburgh, 1966
- Ph.D., Civil Engineering, University of Florida, 1975

### **Registration/Certifications**

Registered Professional Engineer in West Virginia, Kentucky, and Ohio

### **Employment History**

- May 2005 – Present  
Senior Engineer, Novel Geo-Environmental, PLLC
- 1979 – May, 2005  
Principal Engineer, Triad Engineering, Inc.
- 1989 - 1994  
Professor and Department of Civil Engineering  
Chair, West Virginia Institute of Technology
- 1975 - 1979  
Senior Engineer, Fugro Gulf, Inc., Houston, Texas
- 1970 - 1974  
Project Engineer, Florida Department of  
Transportation
- 1967 – 1970  
Project Engineer – Ackenhell & Associates, Inc.

**SUMMARY OF EXPERIENCE**

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Mr. Newbrough serves as Secretary of Thrasher Engineering, in addition to being a Principal of Resource Engineering Group. He serves as General Manager for Survey Services for the firm as well as providing oversight for the survey departments of all Resource Engineering Group companies.

Mr. Newbrough has extensive knowledge in all aspects of surveys and is responsible for the assignment and review of all survey activities of his ten fully staffed survey teams. He is experienced in various types of surveys including, but not limited to boundary, topographical, construction layout and GPS for both public and private clientele. Survey projects are performed for each of the Resource Engineering Group companies' public and private clientele, as well as on an independent contract basis.

**REPRESENTATIVE PROJECTS**

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**Construction Layout**

- Fairmont State University; Various Projects  
Associated with the 10-Year Infrastructure  
Improvement Master Plan
- City of Bridgeport; Charles Pointe Development
- Harman Construction, Incorporated
- Calvert Excavating and Paving, Incorporated
- Howard Concrete
- Dodd Corporation
- Mid-Atlantic Storage System, Incorporated

**Topographical Surveys**

- Dominion Transmission
- West Virginia Department of  
Transportation/Division of Highways
- Harrison County Board of Education
- Gandee and Partners; Huntington Summit High  
School
- William A. Bruce, AIA; Food Lion Stores

**EDUCATION**

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Surveying - John Tyler Community College, Chester, Virginia  
United Career Center, Clarksburg, West Virginia

**REGISTRATIONS**

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Professional Land Surveyor, State of West Virginia  
Certification, OSHA Hazardous Waste Operations and Emergency Response Center  
Certification, U.S. Department of Labor/Mine Safety and Health Administration

**AFFILIATIONS**

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West Virginia Association of Land Surveyors  
American Congress on Surveying and Mapping



***Partner / General Manager – Construction Mgt. and Materials Testing***

Mr. Denham joined Thrasher Engineering in 2000 and serves as a Partner in the firm. Mr. Denham is responsible for construction management, inspection and materials testing for highway, airport, site development, structural and public utilities projects.

**EDUCATION**

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B.S. Civil Engineering Technology, 1999 – Fairmont State University

**CERTIFICATIONS**

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Fairmont State University Level V Certification – Transportation Engineering Technologist – Engineering Specialization  
WVDOH Compaction Inspector  
WVDOH Concrete Inspector/Technician  
WVDOH Aggregate Sampling Inspector  
WVDOH Aggregate Technician/Inspector  
WVDOH Bituminous Inspector/Technician  
WVDOH Radiation Safety  
Troxler Basic Safety – Nuclear Compaction Gauge

**REPRESENTATIVE PROJECT EXPERIENCE**

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White Oaks Business Park	Baker Dam Site 10
Charles Pointe Business Park	City of Bridgeport 279 By-Pass
Army Corp of Engineers, Tygart Dam	Mon-Fayette Expressway
Jackson County Airport	WVDOH Meadowbrook Road
Benedum Airport Authority 2001 Master Plan	Fetterman Bridge
Benedum Airport Authority 2002 Master Plan	Fairmont State University Renovation; Testing
Benedum Airport Authority 2003 Master Plan	City of Pleasant Valley Sidewalk Project; Lead
Benedum Airport Authority, 2004 Master Plan	Inspector & Testing
Ruby Memorial Hospital NE Addition	WVDOH South High Street Bridge
Health Science Learning Center	
WV National Cemetery Expansion	
Fairmont State University	
Institute for Scientific Research	
I-68 Welcome Center	
Stockmeier Urethanes	
Fairmont State University Squibb Wilson Boulevard Demolition and Parking Lots; Lead Inspector & Testing	

## REPRESENTATIVE EXPERIENCE

Thrasher Engineering offers significant experience in open drainage and sediment and erosion projects in addition to abandoned mine lands projects, covering a broad range of expertise. In the following section are examples of our experience in each of these areas related to the Greystone Mine Drainage design project:

### ABANDONED MINE LAND PROJECTS

#### WV DEP ABANDONED MINE LANDS – ANGLIN'S RUN #1 AND ROARING CREEK STREAM RESTORATION PROJECTS

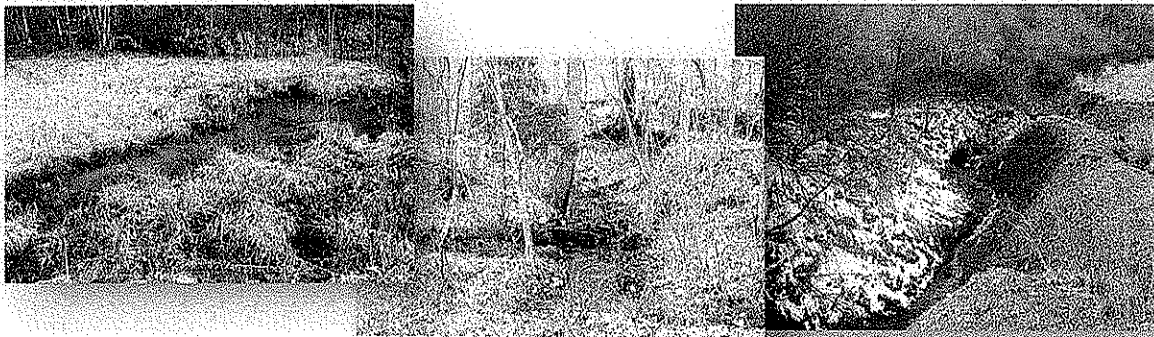
CLIENT: WV DEP  
Office of Abandoned Mine Lands and Reclamation  
304-926-0485

#### ANGLIN'S RUN #1 BARBOUR COUNTY

This area includes a total of eight (8) collapsed mine portals with at least 5 of them having discharges ranging from 1 to 10 gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher Engineering's preferred scope and preliminary plans for this project include construction of an access road into the site, excavation and wet seal of at least eight (8) deep mine portals and the re-grade and fill of subsidence sinkholes. To carry water safely off site, drainage control channels, conveyance pipe and under drain will be constructed. All areas disturbed by construction will be soil covered, conditioned and re-vegetated.

#### ROARING CREEK STREAM BARBOUR COUNTY

This project involves the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consists of 3 open and 3 closed portals discharging AMD, AMD seeps along the unnamed tributary and an area of subsidence, which drains surface water into the mine workings. AMD flow from the deep mine portals ranges from 10 gpm to 100 gpm with PH ranging from 3.1 to 5.0. The seeps along the UNT showed an average PH of 3.3. Construct and rehabilitate access roads to the sites. Install wet seals at the portal locations (4 Portals total). Thrasher Engineering's preliminary plans include re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond which will be designed to handle the additional flow.



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**DEP ABANDONED MINE LANDS – AMHERSTDALE (LOGAN COUNTY)  
PRE-SETTLING BASIN AND PRE-TREATMENT FACILITY PROJECT**

**Client:** WV DEP  
Office of Abandoned Mine Lands and Reclamation  
304-926-0485

**Project Description:** The AML affected area is located in Logan County on CR 16, west of the city limits of Man, a distance of approximately 12.6 Miles.

The scope of the project is the design and construction of a pre-settling basin and pre-treatment system to remove metals and turbidity from the existing water sources, allowing the water existing treatment facility to utilize the surface and groundwater.

The scope of services Thrasher Engineering provided for this project included:

Survey, supervision of subsurface investigation, environmental review, preparation of design, drawings, development of construction documents. .

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**WV DEP ABANDONED MINE LANDS – RAGLAND (MINGO COUNTY) WATER LINE EXTENSION PROJECT**

**Client:** WV DEP  
Office of Abandoned Mine Lands and Reclamation  
304-926-0485

**Project Description:** The AML affected area is located in the Midwestern portion of Mingo County. The area is approximately 2.6 square miles The scope of services Thrasher Engineering provided for this project included: survey, supervision of subsurface investigation, environmental review, design, development of construction documents. Upon construction, Thrasher will provide construction management services.

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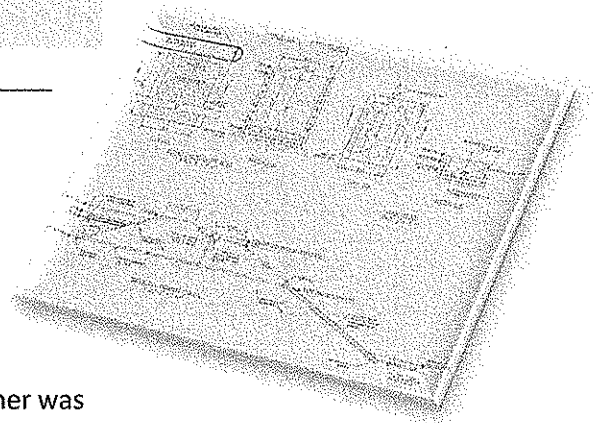
**ACID MINE DRAINAGE EXPERIENCE**

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**LAMBERTS RUN PASSIVE TREATMENT PLANT**

**Client:** High Tech Corridor Development, LLC  
Mr. Jack Keeley  
304-622-2400

**Project Description:** As a component of the site development project for White Oaks Business Park in Harrison County, Thrasher was responsible for the study, design and construction oversight for a passive water treatment plant to handle runoff from acreage included in the overall White Oaks property.



A portion of the White Oaks area was abandoned mine lands; therefore the Thrasher team and developer worked with the WVDEP to handle the acid mine drainage

## MARTINKA WATER TREATMENT PLANT

**Client:** Martinka Coal  
Mr. Gary Timms  
Water Treatment Plant Supervisor  
Fairmont, WV  
304-366-5516

### Project Cost: \$6.5 Million

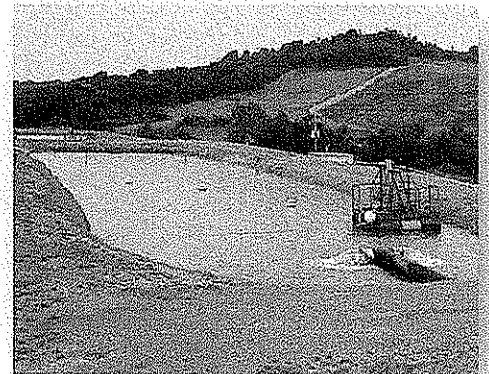
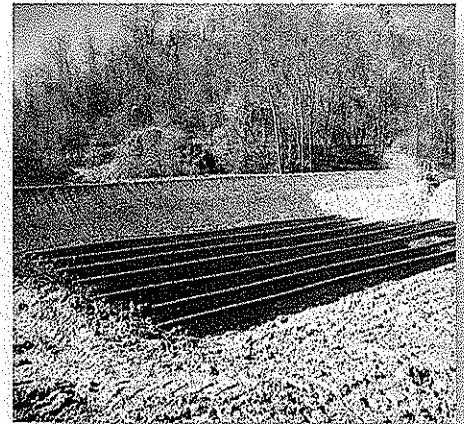
This project consisted of the design of a 17.3 MGD Water Treatment Plant to blend mine borehole water with acid mine drainage; the plan removes iron (1000 mg/l (ferric hydroxide) to less than 1 mg/l.

The plant design included:

- ❑ Aeration – Blending and Stripping Carbon Dioxide
- ❑ Feed Hydrogen Peroxide – Shifts chemical equilibrium for utilization of naturally calcium carbonate for neutralization
- ❑ Coagulation/Flocculation – Three (3) stage tapered flocculation with axial flow propeller mixers and variable frequency drives
- ❑ Sedimentation – Six (6) settling ponds with **ferric hydroxide** sludge removal and underground injection wells
- ❑ Polishing Pond – Sodium hexamataphosphate for calcium stabilization.

Dayton Carpenter, P.E., DEE, Project Engineer was rewarded the following for the project:

- ❑ **2002 WV ACEC Gold Award – Engineering Excellence**
- ❑ **2002 WV Manufacturer's Association Environmental Leadership Award for Innovative Technology**



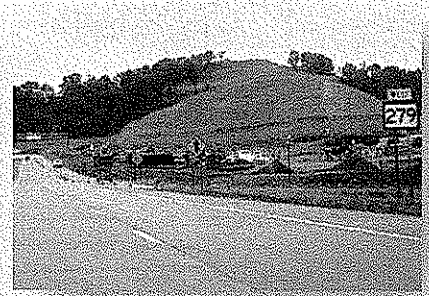
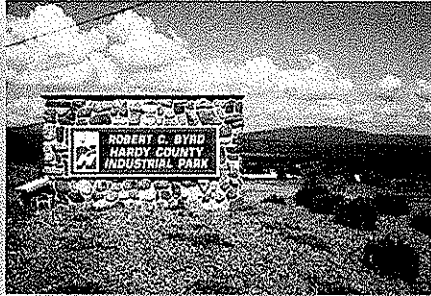
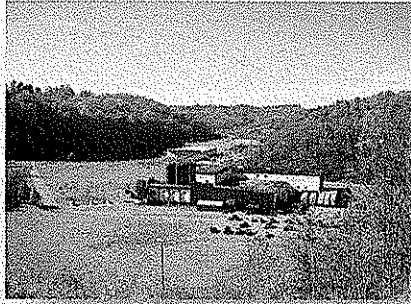
## SITE DEVELOPMENT PROJECTS – SEDIMENT AND EROSION MEASURES

Harrison County Business and Technology Park

Robert C. Byrd Industrial Park – Hardy County

White Oaks Business Park – Harrison County

Thrasher Engineering provided survey, site planning, and engineering design services for each of these business/industrial parks which were developed on abandoned mine lands. The design of each project included plans for landslide / erosion and sediment control within grading plans.



## MINGO COUNTY WOOD PRODUCTS INDUSTRIAL PARK, MINGO COUNTY, WEST VIRGINIA

**Client:** Mingo County Redevelopment Authority  
Mike Whitt, Executive Director  
304-235-0042

**Project Description:** This project consisted of the development of conceptual layout and final design drawings for the park. The work consisted of drainage, sediment, erosion measures, and on-site utilities including water and sanitary sewer, along with the design and permitting of a 12,000 gpd wastewater treatment plant. Also included in this project was a roadway design conforming to WV Department of Highways specifications and criteria. Construction management services were also provided.



## INDIAN RIDGE INDUSTRIAL PARK / MCDOWELL COUNTY PRISON

**Client:** Federal Bureau of Prisons  
202-514-6461  
McDowell County Commission  
304-436-8548



**Project Description:** The objective of this project was to push back an existing highwall and enlarge the flat area on the McDowell County's Indian Ridge Industrial Park, a portion of which is being used to accommodate a Federal Prison. Thrasher Engineering is now providing the site development engineering services for that facility. This project consisted of the design, bidding, and construction management for the preparation of an industrial park/federal prison site. **The construction involved moving 20,000,000 CY of earth to create approximately 250 relatively flat acres for development. Inclusive in our scope of work was site grading, sediment and erosion control, stream relocations, and wetland mitigation.** This work involved laying back an existing highwall and placing the excavated material into a nearby valley to increase the developable acreage of the site. The valley fill serves as a buffer and will be used for non-structural uses.

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## BELINGTON INDUSTRIAL PARK

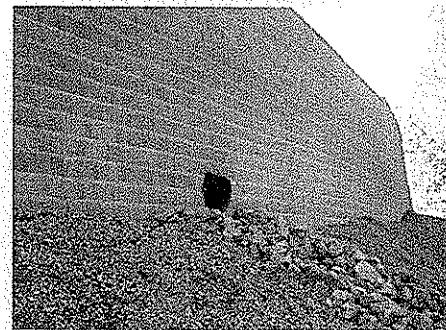
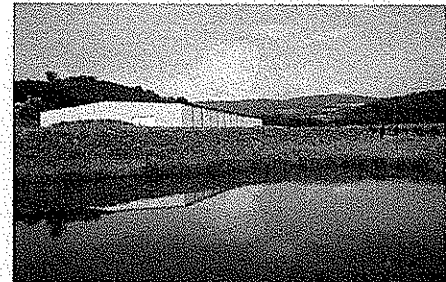
**Client:** Barbour County  
Office for Economic Development  
304-456-1225

This project consisted of the development and conceptual layout and final design drawings for the park. The work consisted of on-site utilities including water and sanitary sewer.

Specifically, this project included:

- 8,000 LF of water line,
- 2,700 LF of gravity sewer line,
- Manholes and Fire hydrants.

Additionally, this project included an access road conforming to WV DOT/Department of Highways specifications and criteria, earthwork for building site preparation and storm water detention. Construction management services were also provided.



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## WEST VIRGINIA NATIONAL CEMETERY

**Client:** U.S. Department of Veterans Affairs  
  
Peter Fernandez, National Cemetery Administration  
Carter VanDyke Associates  
215-345-5053

**Project Description:** The project consisted of the planning, design and bidding for the expansion of the WV National Cemetery. The scope of the work included site utilities, storm sewers, roads, sidewalks, retaining walls, pre-cast concrete crypt burial areas, site grading and sediment and erosion control. Construction management and survey services were also provided.

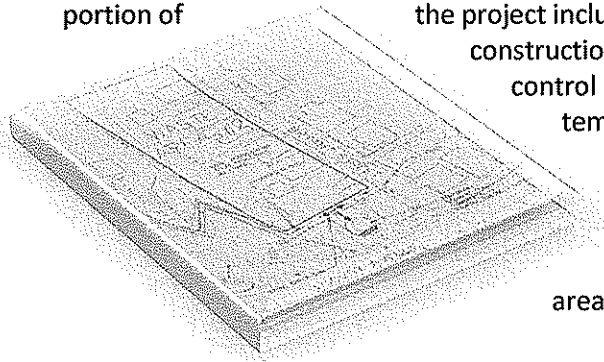
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**FAIRMONT STATE UNIVERSITY**

**Client:** Mr. Jim Decker, V.P. Facilities  
304-367-4000

Thrasher Engineering is providing civil engineering services throughout the Fairmont State University campus within the scope of FSU's 10-year \$10 million master plan for infrastructure improvements. This portion of

the project included storm water management during and after construction. During the construction phase erosion and sediment control was contained by installing silt fence, water barriers, temporary sediment traps, inlet protection, diversion ditches and utility matting. The final site improvements contain swales, ditches, vegetation, landscaping and culverts to control the storm water and limit the pollution from the site. Ditches are protected from erosion and all unpaved areas are stabilized with vegetation.

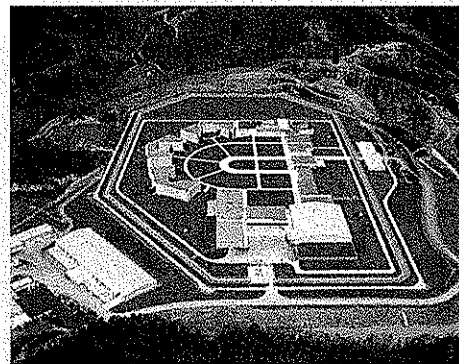


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**GLENVILLE CORRECTIONAL INSTITUTION, GILMER COUNTY, WEST VIRGINIA**

**Client:** Federal Bureau of Prisons  
202-514-6461

**Project Description:** This project consisted of the design/build of a U.S. Correctional Facility. Inclusive in our scope of work were the site utilities (sewer, water, storm water management gas) site grading, sediment & erosion control, layout of facilities, on site roads and parking, various site elements and oversight during the construction phase.



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**CANAAN FEDERAL PRISON, SCRANTON, PENNSYLVANIA**

**Client:** Federal Bureau of Prisons  
202-514-6461.

**Project Description:** Thrasher Engineering served as a Team Member on this design-build project of US Penitentiary and Federal Prison Camp. The scope of services included sewer,





water, storm water management and gas utilities, site grading, sediment and erosion control, relocation of a township road, layout of the facility and oversight during construction. The drainage of this project required the design of a storm water detention pond.

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**WEST VIRGINIA DIVISION OF HIGHWAYS, HARRISON COUNTY, WEST VIRGINIA**

**Client:** West Virginia Division of Highways  
304-558-2830

**Total Project Cost:** \$1,200,000

**Project Description:** This project consisted of developing construction drawings and right-of-way documents for a new storm drain system along Old Bridgeport Hill. The existing storm drain system was 25 to 30 feet deep and was collapsing in several areas; therefore, a new system of inlets and pipes were designed to collect surface water.

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**EXPERIENCE OF SHEIRL FLETCHER, ENVIRONMENTAL MANAGER**

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**CONSOL COAL COMPANY: ABANDONED MINE LANDS REMEDIATION / MINE RECLAMATION**

The projects included engineering and final reclamation of the following Consol Energy mines in Monongalia County, West Virginia: Blacksville No. 1, Pursglove Mine, Arkwright Mine, Osage Mine and Humphrey Mine.

Final reclamation included AMD and site remediation of the following types of surface support facilities:

- Refuse / slurry impoundments
- AMD treatment plants including impoundments and sludge lagoons
- Preparation plants and coal stockpile areas
- Shaft and drift openings
- Boreholes.

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**CONSOL COAL COMPANY – HYDROLOGY AND HYDRAULICS**

During the final abandonment of the Morgantown operations of Consolidation Coal Company, performed geologic hydrologic study of the Arkwright, Osage, Pursglove and Humphrey Mine pools and their inter-relationship to one another and to adjacent mining operations.



## MINING RELATED SURVEY PROJECT EXPERIENCE

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### EASTERN ASSOCIATED COAL CORPORATION

**Client:** Eastern Associated Coal Corporation  
Allen Moore, Project Manager  
304-449-1911

**Project Description:** This ongoing project consists of performing pre and post-mining subsidence surveys on structures and dwellings located within and surrounding the permit boundaries of the Federal No. 2 Mine.

A typical project of this nature consists of establishing horizontal and vertical control, preservation of control points, elevations on critical structure points, baseline establishment and profile, collection of water samples for springs and wells, inspectors report of protected structures, interior and exterior digital photography, and digital CADD mapping of the field survey.

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### EASTERN ASSOCIATED COAL CORPORATION

**Client:** Eastern Associated Coal Corporation  
Allen Moore, Project Manager  
304-449-1911

**Project Description:** Past and ongoing projects have been performed at the Federal No. 2 Mine which includes:

- Water line surveys and design for replacement of existing water sources
- Structure identification surveys, water well inventories, and stream monitoring surveys
- Ground control for aerial mapping
- Gas well locations for down-hole surveys
- Subsidence stream locations and profiles
- Permit boundary staking
- Construction layout for refuse impoundments
- Scott's Run Railroad Bypass project design survey, design, and construction layout
- Boundary surveys for fee purchase property acquisitions
- Construction layout for new shaft sites
- Power line profiles and construction layout
- Topographic design surveys and soundings for impoundment ponds
- Drainage control surveys and design for surface water runoff

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**MARTINKA COAL COMPANY**

**Client:** Martinka Coal Company  
Gary Timms, Project Manager  
304-366-5516

**Project Description:** This project consisted of the collection of data to be used in conjunction with the design of an acid mine drainage facility, designed by Thrasher Engineering, Located at the Tygart River Mine.

Critical land survey components consisted of the following:

- Topographic surveys and digital mapping of approximately 50 acres
- Dewatering borehole layout
- Downstream cross-section surveys for volume computations
- Protected structures identification and mapping
- Pre-blasting surveys on nearly 200 structures
- Construction layout of the entire facility

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**MARTINKA COAL COMPANY – FAIRMONT, WV**

**Client:** Martinka Coal Company  
Gary Timms, Project Manager  
304-366-5516

**Project Description:** Past and ongoing projects have been performed at the Tygart River Mine including:

- Dewatering borehole computations and layout
- Stockpile surveys
- Certification of drainage system, ponds 5, 6, and 7 Permit No. 1001-87
- Topographic survey and construction layout of the existing Guyses Run AMD Facility
- Boundary surveys for fee purchase property acquisitions
- Subsidence stream locations and profiles
- Construction layout for refuse impoundment
- Ground control for aerial mapping
- Scanned mapping digital overlays
- Conceptual site plan for recreational facilities

## PROJECT APPROACH

In order to develop a full understanding of the WV DEP's needs for this project, Thrasher Engineering, Inc. studied the information provided in the RFQ and visited the Greystone site. Based upon our findings, we have developed the following project approach to demonstrate our technical abilities and straight forward method of design and construction.

This project approach is a general approach that will be used on any WVDEP reclamation project and may need to be modified depending on the existing information that is available for the specific project. Also, some steps may not be needed on every project.

**Step #1 Obtain adequate mapping.** The limits of construction will be flown and digitally mapped or, if the area is small enough, survey crews will field survey the area. Thrasher will then provide 1"=50' scale mapping with 2' contours. Spot elevations and critical cross sections may be completed in the field if necessary to make tie-ins.

**Step #2 Design the project.** Thrasher will work closely with the WVDEP in designing the project. Field reviews will be conducted to determine the most cost effective method to be used to reclaim the area. A preliminary design based on the field reviews will be submitted to the WVDEP. After receiving comments or corrections, Thrasher will submit the final plans, specifications and design report. The design report will consist of the bore logs, piezometer elevations, quantity calculations, right of entry forms and any other assumptions that were made during the design.

**Step #3 Prepare for construction.** Thrasher will also set up reference points, benchmarks and control points outside of the construction limits so the contractor will be able to construct the project in the future. Thrasher will complete any permits, right of ways, and easements that are necessary to construct the project. The project manager and engineer will attend the pre-bid meetings to answer any questions that contractors may have about the design.

**Step # 4 Construct the project.** The project manager will be available during construction to answer any questions the contractor or inspector may have. Thrasher inspectors that are certified by the State of WV are available to be used if the WVDEP requests this service.

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

PROJECT NAME: GREYSTONE MINE DRAINAGE PROJECT  
 DATE (DAY, MONTH, YEAR): NOVEMBER 3, 2009  
 FEIN: 55-0633596-6

1. FIRM NAME: THRASHER ENGINEERING, INC.  
 2. HOME OFFICE BUSINESS ADDRESS: 30 COLUMBIA BLVD., CLARKSBURG, WV 26301  
 3. FORMER FIRM NAME: NOT APPLICABLE  
 6a. WV REGISTERED DBE (Disadvantaged Business Enterprise): YES NO X

4. HOME OFFICE TELEPHONE: 304-624-4108  
 5. ESTABLISHED (YEAR): 1983  
 6. TYPE OWNERSHIP: Individual Corporation X Partnership Joint-Venture  
 7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE  
 30 COLUMBIA BLVD, CLARKSBURG, WV / 304-624-4108 / KENNETH P. MORAN, P.E., VICE PRESIDENT / 12  
 300 ASSOCIATION DRIVE, CHARLESTON, WV / 304-343-7601 / JONATHAN CARPENTER, MANAGING PARTNER / 2  
 8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS  
 H. WOOD THRASHER, P.E. - PRESIDENT  
 KENNETH P. MORAN, P.E. - VICE PRESIDENT  
 KURT NEWBROUGH, P.S. - SECRETARY  
 WM. RANDY WATSON -304-624-4108 - PARTNER  
 CHAD BILLER, P.E.-304-624-4108 -PARTNER  
 CHAD M. RILEY, P.E.-304-624-4108 - PARTNER  
 CLAY P. RILEY, P.E.-304-624-4108 -PARTNER  
 DANIEL E. FERRELL, P.E. -304-324-4108 -PARTNER

9. PERSONNEL BY DISCIPLINE

24 ADMINISTRATIVE	—	ECOLOGISTS	—	LANDSCAPE ARCHITECTS	—	STRUCTURAL ENGINEERS
3 ARCHITECTS	—	ECONOMISTS	—	MECHANICAL ENGINEERS	—	38 SURVEYORS
— BIOLOGIST	—	ELECTRICAL ENGINEERS	—	MINING ENGINEERS	—	— TRAFFIC ENGINEERS
18 CADD OPERATORS	2	ENVIRONMENTALISTS	3	PHOTOGRAMMETRISTS	10	OTHER
— CHEMICAL ENGINEERS	—	ESTIMATORS	—	PLANNERS: URBAN/REGIONAL	—	—
27 CIVIL ENGINEERS	1	GEOLOGISTS	—	SANITARY ENGINEERS	—	—
41 CONSTRUCTION INSPECTORS	—	HISTORIANS	—	SOILS ENGINEERS	—	—
2 DESIGNERS	—	HYDROLOGISTS	2	SPECIFICATION WRITERS	—	171 TOTAL PERSONNEL
— DRAFTSMEN	—					

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 12  
 \*RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?  YES  NO NOT APPLICABLE

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Questionnaire".

NAME AND ADDRESS: NOVEL GEO-ENVIRONMENTAL	SPECIALTY: GEO-TECHNICAL SERVICES	WORKED WITH BEFORE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE <input type="checkbox"/> Yes <input type="checkbox"/> No

12. A. Is your firm experienced in Abandoned Mine Land Remediation/Mine Reclamation Engineering?  
YES Description and Number of Project: THRASHER ENGINEERING HAS PERFORMED ENGINEERING DESIGN SERVICES TO THE WV DEP FOR BOTH DRAINAGE AND PORTAL AML PROJECTS AS WELL AS FOR WATER LINE PROJECTS RELATED TO AML. NUMEROUS PROJECTS INVOLVING LAND REMEDIATION, STORM WATER DRAINAGE, SLIP REPAIR AND MASS GRADING IN RELATION TO SITE DEVELOPMENT, WATER LINE AND SANITARY SEWER PROJECTS RELATED TO ABANDONED MINE LANDS HAVE ALSO BEEN ENGINEERED. OUR DESIGN TEAM ENVIRONMENTAL MANAGER HAS 23 YEARS OF EXPERIENCE AS GEOLOGIST, HYDROLOGIST AND ENVIRONMENTAL SPECIALIST WITH CONSOL ENERGY. PROJECTS INCLUDED THE ENGINEERING AND FINAL RECLAMATION OF THE BLACKSVILLE NO.1D, PURSGLOVE, ARKWRIGHT, OSAGE AND HUMPHREY MINES IN MONONGALIA COUNTY THE THRASHER ENGINEERING SURVEY DEPARTMENT HAS PERFORMED SERVICES FOR PRE AND POST MINE SUBSIDENCE FOR MAJOR COAL COMPANIES.

B. Is your firm experienced in Soil Analysis?  
YES Description and Number of Projects: THRASHER ENGINEERING MAINTAINS A MATERIALS TESTING AND ANALYSIS LAB AT ITS CLARKSBURG, WV OFFICE. SOIL ANALYSIS EXPERIENCE IS SPECIFICALLY IN GRADATIONS AND CLASSIFICATION WE PERFORM THESE SOIL ANALYSES ON ALL OUR PRIVATELY FUNDED SITE DEVELOPMENT PROJECTS.

C. Is your firm experienced in hydrology and hydraulics?  
YES Description and Number of Projects: OUR TEAM ENVIRONMENTAL MANAGER PARTICIPATED IN THE ENGINEERING AND ENVIRONMENTAL PERMITTING OF THE FINAL ABANDONMENT OF THE MORGANTOWN OPERATIONS OF CONSOL COAL COMPANY. THIS INCLUDED THE GEOLOGIC HYDROLOGY STUDY OF THE ARKWRIGHT, OSAGE PURSGLOVE AND HUMPHREY MINE POOLS AND THEIR INTER-RELATIONSHIP TO ONE ANOTHER AND TO ADJACENT MINING OPERATIONS. SHE ALSO WAS INVOLVED IN THE STRATEGIC PLACEMENT OF A ACID MINE DRAINAGE TREATMENT FACILITIES AND PLANT DESIGN. THROUGH OUR WORK IN THE PLANNING AND DESIGN OF BRIDGES FOR THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS AND WATER LINE EXTENSION PROJECTS, THRASHER ENGINEERING HAS EXTENSIVE EXPERIENCE IN HYDROLOGY. WE ALSO HAVE EXTENSION EXPERIENCE IN HYDRAULIC MODELING FOR WATER AND WASTEWATER PROJECTS THROUGHOUT WEST VIRGINIA.

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?  
YES Description and Number of Projects:  
NO WE UTILIZE THE SERVICES OF NUMEROUS FIRMS, INCLUDING PENTREE, INC. WHICH IS AN AFFILIATE COMPANY OF THRASHER ENGINEERING INC. THROUGH THE RESOURCE ENGINEERING GROUP HOLDING COMPANY.

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)  
YES Description and Number of Projects: THRASHER ENGINEERING HAS DESIGNED OVER 100 WATER LINE EXTENSION PROJECTS IN THE PAST 20 YEARS OF BUSINESS. PROJECTS INCLUDE LINES, BOOSTER STATIONS, WATER TREATMENT PLANTS, AND STORAGE FACILITIES. MANY OF THESE PROJECTS ARE IN AREAS WITH AML AFFECTED WATER

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?  
YES Description and Number of Projects: TEI IS CURRENTLY DESIGNING TWO RECLAMATION PROJECTS FOR THE WV DEP RELATED SPECIFICALLY TO ACID MINE DRAINAGE AND ABATEMENT, BOTH OF WHICH ARE LOCATED IN BARBOUR COUNTY, WEST VIRGINIA. OUR TEAM ENVIRONMENTAL MANAGER PARTICIPATED IN THE ENGINEERING AND ENVIRONMENTAL PERMITTING OF THE FINAL ABANDONMENT OF THE MORGANTOWN OPERATIONS OF CONSOL COAL COMPANY. THIS INCLUDED THE GEOLOGIC HYDROLOGY STUDY OF THE ARKWRIGHT, OSAGE PURSGLOVE AND HUMPHREY MINE POOLS AND THEIR INTER-RELATIONSHIP TO ONE ANOTHER AND TO ADJACENT MINING OPERATIONS. SHE ALSO WAS INVOLVED IN THE STRATEGIC PLACEMENT OF ACID MINE DRAINAGE TREATMENT FACILITIES AND PLANT DESIGN. IN ADDITION, THRASHER ENVIRONMENTAL, THE CHARLESTON WV BRANCH OF OUR COMPANY DESIGNED AN AWARD WINNING WATER TREATMENT PLANT FOR MARTINKA MINES IN MARION COUNTY, WEST VIRGINIA TO TREAT DRAINAGE.

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
MORAN, KENNETH P.	6	16	23
<p>Mr. Moran joined Thrasher Engineering in 1991 and currently serves as Vice President and Chief Operations Officer and Chief Engineer.</p> <p>Mr. Moran is responsible for management feasibility studies and design of public utility and site development projects for local state, federal and private clients. Additionally, Mr. Moran has extensive experience in all aspects of engineering and with funding and regulatory agencies in conjunction with projects.</p> <p>EDUCATION (Degree, Year, Specialization) B.S., Civil Engineering Technology, 1983 - Fairmont State University</p> <p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Friendship Lodge No.56 A.F. &amp; A.M.</li> <li><input type="checkbox"/> WV Society of Professional Engineers</li> <li><input type="checkbox"/> Member of American Society of Civil Engineers</li> </ul> <p>REGISTRATION (Type, Year, State)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of West Virginia #11309</li> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of Virginia #0102021855</li> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of Ohio #64412</li> <li><input type="checkbox"/> Professional Land Surveyor (PS), State of West Virginia #1333</li> </ul>			

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
BILLER CHADWICK D. P.E.	2	15	15
<p>Brief Explanation of Responsibilities: Mr. Biller has experience in all aspects of engineering with specific emphasis on site development, highways, roads, bridges, and airports. Mr. Biller joined Thrasher Engineering in 1999 and is a partner of Thrasher Engineering. For Thrasher Engineering, Mr. Biller is responsible for WV DEP AML project and public and private site development projects, specializing in airports, highways, roads and bridges. As Project Manager for all of the firm's WVDOT/DOH projects, he has extensive knowledge of state and federal building standards.</p> <p>EDUCATION (Degree, Year, Specialization):</p> <ul style="list-style-type: none"> <li>■ B.S., Civil Engineering, 1992 - West Virginia University</li> </ul> <p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> American Society of Civil Engineers</li> <li><input type="checkbox"/> Society of American Military Engineers</li> <li><input type="checkbox"/> National Society of Professional Engineers</li> </ul> <p>REGISTRATION (Type, Year, State)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of West Virginia #13620</li> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of Pennsylvania #PE056012E</li> <li><input type="checkbox"/> Registered Professional Engineer (PE), State of Ohio #64594</li> </ul>			

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

NAME & TITLE (Last, First, Middle Int.)  <b>NESTOR, MICHAEL - PROJECT ENGINEER</b>	YEARS OF AML DESIGN EXPERIENCE: 1  AGE:  YEARS OF AML RELATED DESIGN EXPERIENCE: 6	YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE: 6  YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 6
Brief Explanation of Responsibilities Mr. Nestor joined Thrasher Engineering in 2005 and serves as Project Manager and Engineer. Mr. Nestor has a wide range of experience in residential and commercial site developments of public sewer and all aspects of infrastructure design including street and lot layout, street profiles, extensions of public sewer and water systems, storm water drainage, storm water management, erosion and sediment control plans, and NPDES permitting. In addition, Mr. Nestor oversees all general operations within The Berkeley Associates, directing administrative staff, CAD technicians, and staff engineers to ensure successful completion of projects covering site development, surveying, material testing, and environmental services.		
EDUCATION (Degree, Year, Specialization)  <input type="checkbox"/> B.S. Civil Engineering Technology - Fairmont State University, 2003		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  <input type="checkbox"/> American Society of Civil Engineers <input type="checkbox"/> Eastern Panhandle Home Builders Association	REGISTRATION (Type, Year, State)  <input type="checkbox"/> ENGINEERING INTERN (EIT), State of West Virginia	13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)
NAME & TITLE (Last, First, Middle Int.)  <b>FLETCHER, SHEIRL</b>	YEARS OF AML DESIGN EXPERIENCE: -23  YEARS OF AML RELATED DESIGN EXPERIENCE: 23	YEARS OF EXPERIENCE  YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: -
Brief Explanation of Responsibilities Sheirl Fletcher joined Thrasher Engineering, Inc. in 2007 and serves as Environmental Manager for the firm. Prior to joining Thrasher, Sheirl served as Environmental Manager for a major coal firm. She has more than 20 years experience and brings comprehensive knowledge of environmental regulatory programs and reporting requirements in multiple states to our clients' projects, along with technical expertise in environmental engineering, geology and hydrology		
EDUCATION (Degree, Year, Specialization)  <input type="checkbox"/> B.S., West Virginia University, Morgantown, WV - Bachelor of Science- Geology		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  <input type="checkbox"/> Licensed Professional Geologist (LPG), Commonwealth of Pennsylvania <input type="checkbox"/> Certified Professional Geologist (CPG), State of West Virginia		



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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
PINE, JEFF - CADD TECHNICIAN		YEARS OF AML DESIGN EXPERIENCE: 1	YEARS OF AML RELATED DESIGN EXPERIENCE: 5
		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 5	

Brief Explanation of Responsibilities Mr. Pine joined Thrasher Engineering in 2005 and serves as CADD Operator for the firm. His duties entail all aspects of infrastructure design including street and log layout, street profiles, extension of the public sewer and water systems including utility plans and profiles, storm water drainage, storm water management, erosion and sediment control plans and NPDES permitting

EDUCATION (Degree, Year, Specialization)  
 Certificate, Computer Aided Design - Hagerstown Community College  
 Diploma - Clear Spring High School

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NEWBROUGH, KURT		YEARS OF AML DESIGN EXPERIENCE: 23	YEARS OF AML RELATED DESIGN EXPERIENCE: 23
		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 23	

Brief Explanation of Responsibilities Mr. Newbrough joined Thrasher Engineering in 1990 and is Principal and Partner in the firm. Mr. Newbrough serves as Survey Supervisor and is responsible for assignment and review of all survey activities. Mr. Newbrough has extensive experience in all aspects of surveys, including but not limited to boundary and easement surveys and the preparation of plats and legal descriptions. Mr. Newbrough also performs courthouse research, computes field data for construction layout, and processes GPS raw data for both public and private clientele in conjunction with Thrasher Engineering projects as well as separate contracts. He also serves in the elected position of Harrison County (WV) Surveyor.

EDUCATION (Degree, Year, Specialization)  
 Surveying - John Tyler Community College, Chester, VA  
 United Career Center, Clarksburg, WV

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 West Virginia Association of Land Surveyors  
 American Congress on Surveying and Mapping  
 Member Strathmore's Who's Who

REGISTRATION (Type, Year, State)  
 Professional Land Surveyor (PS), West Virginia #1618 - 1995  
 OSHA Hazardous Waste Operations and Emergency Response Center 29 CFR 1910.120  
 US Department of Labor/Mine Safety and Health Administration

Thrasher Engineering, Inc. will design work for AML utilizing one of the largest networks of computer aided design (CAD) equipment, software and trained personnel in the State of West Virginia.

Connected through a Virtual Private Network, our CAD staff has the ability to share necessary plans among our locations. This will allow work designed for AML to be prepared and updated at the office location that best meets the needs of the scope of services. AutoCAD Landdesktop 2008 and Microstation V8 software is utilized at 48 CAD stations throughout our locations. Additionally, equipment includes 10 large format (size E) plotters and 5 large format plotter / scanners. CAD plans are prepared by both dedicated CAD employees and by staff engineers and engineering technicians in each of the firm's offices.

Thrasher Engineering, Inc. also utilized top-of-the line survey equipment. Our survey work is accomplished with global positioning systems (GPS) and electronic distance measuring (EDM) survey stations with data gathering capabilities. This equipment includes: The equipment used to complete survey services for AML projects includes:

- Leica Geosystem System 500 GPS
- Leica Ski Post Processing Software
- Topcon G600 Total Station Instrument
- Leica 303 Total Station Instrument
- Leica 307 Total Station Instrument
- Leica 403 Total Station Instrument
- Leica 405 Total Station Instrument
- Leica 407 Total Station Instrument
- Leica 703 Total Station Instrument
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15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: SITE DEVELOPMENT PROJECTS

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
ANGLIN'S RUN AND ROARING CREEK STREAM AML RECLAMATION BARBOUR AND RANDOLPH COUNTIES, WV	WV DEP - DEPARTMENT OF AML 601 57th Street, SE Charleston, WV 25304	ENGINEERING DESIGN FOR PORTAL SEALING, DRAINAGE AND RECLAMATION	\$700,000.00	30%
WHITE OAKS BUSINESS PARK SITE DEVELOPMENT AND UTILITIES HARRISON COUNTY, WV	HIGH TECH CORRIDOR DEVELOPMENT, LLC MR. JACK KEELEY PO BOX 1532 CLARKSBURG, WV 26302	SITE DEVELOPMENT DESIGN (LAND PLANNING, GRADING, UTILITIES) SURVEY, CONST. MGT, MATERIALS TESTING	\$12,100,000.00	80%
MCHENRY BUSINESS PARK SITE DEVELOPMENT AND UTILITIES GARRETT COUNTY, MD	GARRETT COUNTY EDA 203 SOUTH 4TH STREET COURTHOUSE ROOM 208 OAKLAND, MD 21550 301-334-1921	SITE DEVELOPMENT DESIGN (LAND PLANNING, GRADING, UTILITIES) SURVEY, CONST. MGT, MATERIALS TESTING	\$3,500,000.00	65%
RITCHIE COUNTY BUSINESS PARK SITE DEVELOPMENT RITCHIE COUNTY	RITCHIE COUNTY ECONOMIC DEVELOPMENT AUTHORITY 217 WEST MAIN STREET HARRISVILLE, WV 26362	SITE DEVELOPMENT DESIGN (LAND PLANNING, GRADING, UTILITIES) SURVEY, CONST. MGT, MATERIALS TESTING	\$2,000,000.00	50%
CITY OF PLEASANT VALLEY SIDEWALKS PROJECT MARION COUNTY, WV	CITY OF PLEASANT VALLEY, 2340 KINGMONT ROAD PLEASANT VALLEY, WV 26554	DESIGN, SURVEY, CONSTRUCTION MGT, INSP AND TESTING - SIDEWALKS PHASE III	\$250,000.	60%
NORTH CENTRAL WV AIRPORT HARRISON COUNTY, WV VARIOUS - HANGERS /STORM WATER	BENEDUM AIRPORT AUTHORITY JAMES R. GRIFFITH, AIRPORT MGR. 2000 AVIATION WAY BRIDGEPORT, WV	SITE DEVELOPMENT DESIGN (LAND PLANNING, GRADING, UTILITIES) SURVEY, CONST. MGT, MATERIALS TESTING	\$500,000 to \$1,000,000.00	ON-GOING

TOTAL NUMBER OF PROJECTS: 6 (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT - APPROXIMATELY 40 MILLION)	TOTAL ESTIMATED CONSTRUCTION COSTS: \$18,600,000.00 +
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15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: WATER TREATMENT AND DISTRIBUTION PROJECTS

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
CHESTNUT RIDGE PSD BARBOUR/PRESTON EXTENSION BARBOUR COUNTY, WV	CHESTNUT RIDGE PSD 209 S MAIN STREET P.O. BOX 386 PHILIPPI, WV 26416	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION.	\$9,500,000	30%
JESSICA LYNCH WATER LINE EXTENSION WIRT COUNTY, WV	TOWN OF ELIZABETH 200 BEVERLY STREET P.O. BOX 478 ELIZABETH, WV 26143	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$3,600,000	80%
SOUTHWESTERN PSD WATER LINE EXTENSION / REPLACEMENT	SOUTHWESTERN WATER PUBLIC SERVICE DISTRICT P. O. BOX 98 FLEMINGTON, WV 26347	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,430,000.	30%
HAMRICK PSD MOORE/PORTERWOOD EXTENSION TUCKER COUNTY, WV	HAMRICK PSD PO BOX 228 HENDRICKS, WV 26271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,100,000.	25%
LINCOLN COUNTY PSD WATER LINE EXTENSION PROJECTS	LINCOLN PSD P.O. BOX 38 240 LITTLE COAL RIVER RD. ALUM CREEK, WV 25003	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,920,000.	25%
POCAHONTAS COUNTY PSD WATER LINE REPLACEMENT DURBIN / BARTOW/FRANK	POCAHONTAS COUNTY PSD HC 63 BOX 122 FRANK, WV 24920	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,456,000.	25%
CITY OF SALEM, WEST VIRGINIA WATER LINE REPLACEMENT	SALEM, CITY OF P.O. BOX 352 229 W. MAIN SALEM, WV 26426	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,500,000.	80%
TOTAL NUMBER OF PROJECTS: 7 REPRESENTED (APPROXIMATELY 20 ADDITIONAL CURRENTLY IN PRELIMINARY / DESIGN OR CONSTRUCTION PHASES)		TOTAL ESTIMATED CONSTRUCTION COSTS: \$32,830,000.00 REPRESENTED ESTIMATED COST OF ALL JOBS APPROXIMATELY \$150,000,000.00		

15. CUP IT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATE NGINEER OF RECORD: SANITARY SEWER PROJECTS

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
BROOKE COUNTY PSD REPLACEMENT AND EXTENSION BROOKE COUNTY, WV	BROOKE CO. PSD 711 CHARLES ST. P. O. BOX 150 WELLSBURG, WV 26070	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$22,000,000	65%
GREATER HARRISON COUNTY PSD PHASE II HARRISON COUNTY, WV	GREATER HARRISON COUNTY PSD P.O. BOX 190 WEST MILFORD, WV 26451	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$11,600,000	60%
TENNERTON PSD SANITARY SEWER EXTENSION UPSHUR COUNTY, WV	TENNERTON PSD 188 FAYETTE ST. BUCKHANNON, WV 26201	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,675,000.	75%
POCAHONTAS COUNTY PSD WTP AND COLLECTION SYSTEM POCAHONTAS COUNTY, WV	POCAHONTAS COUNTY PSD HC 63 BOX 122 FRANK, WV 24920	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$11,600,000	30%
HEPZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH DRAWER H HEPZIBAH, WV 26369	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$3,400,000	20%
MALDEN PUBLIC SERVICE DISTRICT SANITARY SEWER REHABILITATION KANAWHA COUNTY, WV	MALDEN PUBLIC SERVICE DISTRICT P.O. BOX 350 TAD, WV 25201-0350	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,600,000.	55%
CANYON PUBLIC SERVICE DISTRICT SANITARY SEWER UPGRADE AND EXT MONONGALIA COUNTY, WV	CANYON PSD 12 WICHITA STREET MORGANTOWN, WV 26508	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, FIELD CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,500,000.	50%

TOTAL NUMBER OF PROJECTS: 7 REPRESENTED  
 TOTAL ACTIVE SANITARY SEWER PROJECTS APPROXIMATELY 32  
 TOTAL ESTIMATED CONSTRUCTION COSTS: \$70,300,000.00  
 TOTAL FOR ALL PROJECTS APPROXIMATELY \$150,000,000

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: HIGHWAY, BRIDGE, SIDEWALKS

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
CORRIDOR H GRANT COUNTY, WV	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	\$22,000,000.	75% - NEED FINAL COMMENTS / FINAL FIELD REVIEW
MINERAL WELLS ROUTE 2 WOOD COUNTY	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	TBD - JUST AWARDED	JUST AWARDED

TOTAL NUMBER OF PROJECTS:  
6 (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT - APPROXIMATELY 40 MILLION)

TOTAL ESTIMATED CONSTRUCTION COSTS:  
\$46,300,000. +

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



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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
RALEIGH MEMORIAL AIRPORT RALEIGH COUNTY, WV	RALEIGH CO AIRPORT AUTHORITY 176 AIRPORT CIRCLE, ROOM 115 BEAVER, WV 25813-9475	\$5,000,000.00 - PHASE I	2007	YES
WOLFE CREEK PARK FAYETTE COUNTY, WV	FAYETTE COUNTY COMMISSION FAYETTE COUNTY COURTHOUSE 100 COURT STREET FAYETTE, WV 25840-0307	\$4,500,000. - PHASE 1	2007	YES
PINECREST DEVELOPMENT RALEIGH COUNTY, WV	PINECREST DEV AUTHORITY 200 MAIN STREET BECKLEY, WV 25801-4613	\$1,500,000.00	2007	YES
CITY OF PARSONS SANITARY SEWER LINE EXTENSION TUCKER COUNTY, WV	PARSONS, CITY OF 341 2ND ST. PARSONS, WV 26287	\$ 900,000	2007	YES
TOWN OF FARMINGTON WATER LINE REPLACEMENT PROJECT MARION COUNTY, WV	TOWN OF FARMINGTON 1314 MILL STREET FARMINGTON, WV 26571	\$1,300,000.	2007	YES
CITY OF KINGWOOD WHETSELL SETTLEMENT WATER LINE EXTENSION PRESTON COUNTY, WV	KINGWOOD, CITY OF 313 TUNNELTON ST. KINGWOOD, WV 26537-1462	\$ 420,000.	2007	YES
NORTON-HARDING-JIMTOWN PSD WATER LINE EXTENSION RANDOLPH COUNTY, WV	NORTON-HARDING-JIMTOWN PSD P.O. BOX 87 SCOTT ROAD NORTON, WV 26285	\$1,000,000	2007	YES
TOWN OF BATH - BERKELEY SPRINGS WATER WORKS MORGAN COUNTY, WV	TOWN OF BATH 271 WILKES STREET BERKELEY SPRINGS, WV 25411	\$2,000,000	2007	YES



17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
NICHOLAS COUNTY BUSINESS PARK, NICHOLAS COUNTY, WV SITE DEVELOPMENT	NICHOLAS CO BLDG COMMISSION 700 MAIN STREET, SUITE 1 SUMMERSVILLE, WV 26651	\$2,500,000.00	2008	YES
RALEIGH COUNTY PUBLIC SERVICE DISTRICT 2 WATER LINE EXTENSIONS	RALEIGH COUNTY PSD 224 EAST MAIN PO BOX 1286 SOPHIA, WV	\$3,700,000.	2006	YES
GILMER COUNTY PSD DUSK CAMP WATER LINE EXTENSION GILMER COUNTY, WV	GILMER COUNTY PSD 232 W. MAIN STREET GLENVILLE, WV 26351	\$2,500,000	2008	YES
HODGESVILLE PUBLIC SERVICE DISTRICT; DESIGN AND CONSTRUCTION OF WATER LINE EXTENSION, BOOSTER STATIONS, AND WATER STORAGE TANK	HODGESVILLE PUBLIC SERVICE DISTRICT 188 FAYETTE STREET P.O. BOX 758 BUCKHANNON, WV 26201	\$3,100,000	2004	YES
CITY OF CAMERON WATER STORAGE TANK MARSHALL COUNTY, WV	CITY OF CAMERON 44 MAIN STREET CAMERON, WV 26033	\$2,000,000.00	2008	YES
HAMRICK PUBLIC SERVICE DISTRICT, TUCKER COUNTY, WEST VIRGINIA; DESIGN, PREPARATION AND CONSTRUCTION MANAGEMENT TO UPGRADE THE WATER TREATMENT PLANT	HAMRICK PUBLIC SERVICE DISTRICT P.O. BOX 228 HENDRICKS, WV 26271	\$2,461,000	2004	YES
PUTNAM COUNTY BUSINESS PARK; MITIGATION OF 13 ACRES OF IMPACTED WETLAND	PUTNAM COUNTY DEVELOPMENT AUTHORITY P.O. BOX 167 SCOTT DEPOT, WV 25560	\$1,500,000	2004	YES
TOWN OF ROWLESBURG WATER TREATMENT PLANT/ EXT. PRESTON COUNTY, WV	TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET ROWLESBURG, WV 26425	\$4,500,000.	2008	YES

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
JAKES RUN BRIDGE MONONGALIA COUNTY, WV	WVDOF/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	\$1,300,000.	2008	YES
ICG - THREE FORKS BRIDGE TAYLOR COUNTY	INTERNATIONAL COAL GROUP, INC. 2000 ASHLAND DRIVE ASHLAND, KY 41101	\$1,119,000.00	2008	YES
CITY OF RIPLEY - MAIN STREET REVITALIZATION - JACKSON CO.	CITY OF RIPLEY TIM KING, CITY SUPERINTENDENT 203 SOUTH CHURCH ST. RIPLEY, WV 25271	\$1,200,000.	2008	YES

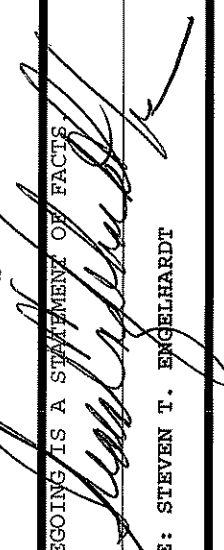
18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE ASSOCIATED (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
GLENNVILLE FEDERAL CORRECTIONAL INST. SITE DEVELOPMENT GILMER COUNTY, WV	FEDERAL BUREAU OF PRISONS 320 1 <sup>ST</sup> STREET NW 500-6 WASHINGTON, DC 20534	\$96,000,000	2003	YES	BELL JUSTICE FACILITIES
FEDERAL BUREAU OF PRISONS -CANAAN FACILITY - SITE DEVELOPMENT - SCRANTON, PA	FEDERAL BUREAU OF PRISONS 320 1 <sup>ST</sup> STREET NW 500-6 WASHINGTON, DC 20534	\$120,000,000	2002	YES	BELL JUSTICE FACILITIES
FAIRMONT STATE COLLEGE - STUDENT DORMITORY - SITE DEVELOPMENT - FAIRMONT, WV	FAIRMONT STATE UNIVERSITY 1201 LOCUST AVENUE FAIRMONT, WV 26554-2491	\$6,000,000	2004	YES	VOA ARCHITECTS
FAIRMONT STATE COLLEGE - PARKING GARAGE- SITE DEVELOPMENT -FAIRMONT, WV	FAIRMONT STATE UNIVERSITY 1201 LOCUST AVENUE FAIRMONT, WV 26554-2491	\$4,000,000	2003	YES	MARCH-WESTIN
FAIRMONT STATE UNIVERSITY FEASTER CENTER SITE DEVELOPMENT - FAIRMONT, WV	FAIRMONT STATE UNIVERSITY 1201 LOCUST AVENUE FAIRMONT, WV 26554-2491	\$400,000.	2005	YES	VOA ARCHITECTS
FAIRMONT STATE UNIVERSITY CREATIVE ARTS AND ENGINEERING TECH BUILDING SITE DEVELOPMENT FAIRMONT, WV	FAIRMONT STATE UNIVERSITY 1201 LOCUST AVENUE FAIRMONT, WV 26554-2491	\$100,000.	2007	YES	DESIGN ALLIANCE OMNI ASSOCIATES

19. USE THIS SPACE TO PROVIDE ANY ADDITIONAL INFORMATION OR DESCRIPTION OF RESOURCES SUPPORTING YOUR FIRM'S QUALIFICATIONS TO PERFORM WORK FOR THE WV ABANDONED MINE LANDS PROGRAM

SEE ATTACHMENT - STATEMENT OF QUALIFICATIONS

20. THE FOREGOING IS A STATEMENT OF FACTS.

SIGNATURE: 

PRINTED NAME: STEVEN T. ENGELHARDT

TITLE: DIRECTOR OF BUSINESS DEVELOPMENT

DATE: NOVEMBER 3, 2009



STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

### VENDOR OWING A DEBT TO THE STATE:

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

### PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code*. The vendor must make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code* and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the *West Virginia Code* may take place before their work on the public improvement is begun.

### ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

### LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

### CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

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

Vendor's Name: THRASHER ENGINEERING, INC.

Authorized Signature: 

Date: NOVEMBER 3, 2009