

*Statement of Qualifications to provide Engineering Services  
To The West Virginia Department of Environmental Protection,  
Office of Abandoned Mine Lands & Reclamation, for  
DEP 15220 HAWKINBERRY HOLLOW DESIGN*



**THRASHER**  
ENGINEERING

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WV PURCHASING  
DIVISION

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**THRASHER**  
ENGINEERING

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December 1, 2010

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: DEP 15220, Hawkinberry Hollow Portals & Subs. Design, Expression of Interest**

Dear AML Chief and Selection Committee:

Thrasher Engineering, Inc. is very interested to provide engineering design services for the Hawkinberry Hollow Portals & Subs. design project in Marion County, West Virginia. We will provide the highest level of service and technical proficiency, in a cost efficient manner, and meet or beat all deadlines.

From the information provided in the RFQ we have developed an understanding of the project needs and approach. Thrasher Engineering has designed remediation of landslides, grading and open channel drainage systems, and other features required by this project. Our previous WVDEP-AML remediation projects: Anglin's Run in Barbour County and Roaring Creek in Randolph County, have recently been constructed. We have included a summary of our qualifications related to the "Selection Criteria" listed in the RFQ, under the first tab.

We would appreciate your consideration to be short listed so that we may present our detailed approach for this project to the selection committee.

Sincerely,

THRASHER ENGINEERING, INC.



Steven T. Engelhardt  
Business Development Manager

## SELECTION CRITERIA

### A. West Virginia Professional Engineers (Civil or Mining) in the Primary Office.

Thrasher Engineering, Inc. has **11 West Virginia registered Professional Engineers** in our Primary Office located in Clarksburg, WV.

Woody Thrasher, PE	Chad Biller, PE
Mike Nestor, PE	Daniel Ferrell, PE
Ken Moran, PE	Clay Riley, PE
Matt Fluharty, PE	Tom Urquhart, PE
Chad Riley, PE	Jeff Gola, PE
Doug Forni, PE	

### B. Reclamation engineering design experience of the Primary Office's WV RPE as it relates to the specific project problem areas.

**Chadwick Biller, PE**, will serve as Project Manager and has over **18 years** of civil engineering experience with specific emphasis on mine reclamation, site development, highways, roads, bridges, and airports. Mr. Biller has managed the design and construction administration for a number of large grading and drainage projects in West Virginia. These projects have included design for mine reclamation, industrial/business parks, highways, and airports. Mr. Biller is also familiar with reclamation of mine portals, using either wet or dry seals.

**Larry Nottingham, PE**, with NGE will serve as our Geotechnical sub-consultant. He has over **30 years** of AML design experience.

### C. Available WV-AML Design Teams within the Primary office (A design team should consist of one Project Engineer (Civil or Mining), one CAD person and available support personnel as required by the particular project)

Thrasher Engineering has **11 WV-AML Design Teams** within the Primary Office, and over 120 additional support personnel that are available if required by the project.

#### Civil Engineer

- 1) Woody Thrasher, PE
- 2) Chad Biller, PE
- 3) Mike Nestor, PE
- 4) Daniel Ferrell, PE
- 5) Ken Moran, PE
- 6) Clay Riley, PE
- 7) Matt Fluharty, PE
- 8) Tom Urquhart, PE
- 9) Chad Riley, PE
- 10) Jeff Gola, PE
- 11) Doug Forni, PE

#### CAD

- Brady Stutler
- Cliff Cleavenger
- April Rohrbaugh
- Jason Heflin,
- Phil Lantz
- Joe Lowther
- John Sirianni
- Jeff Bonaventura
- Mike Oldaker
- Zack Gain
- Trudy Hiel

# STATEMENT OF QUALIFICATIONS

## FIRM OVERVIEW

### THRASHER ENGINEERING, INC.

**Established** 1983

#### Officers

H. Wood Thrasher, P.E.,	President
Kenneth P. Moran, P.E., P.S.	Vice-President
Kurt L. Newbrough, P.S.	Secretary/Treasurer

#### Partners

Wm. Randy Watson	Public Utilities
Chadwick Biller, P.E.	Site Development/Highways/Airports
Chad Riley, P.E.	Site Development
Clay P. Riley, P.E.	Public Utilities
Daniel E. Ferrell, P.E.	Public Utilities
Kenneth P. Moran, P.E., P.S.	Vice-President
Jonathan Carpenter, P.E.	Charleston Branch Manager/ Public Utilities
Aaron Denham	Testing & Inspection

**Scope of Services**

- Public Work – Water / Sewer / Treatment Plants / Facility Plans / Business and Industrial Parks
- Site Development – Industrial/ Business / Commercial / Residential
- General Civil Engineering – Municipal Engineering / Subdivisions / Paving / Highway/ Roadways
- Environmental Engineering
- Architecture
- Landscape Architecture
- Land Surveying, Platting, Legal Description Preparation
- Construction Management / Materials Testing / Inspection
- GIS Mapping and Software Development

#### Offices

- 30 Columbia Boulevard, Clarksburg, WV
- 300 Association Drive, Charleston, WV
- 3000 Thayer Center, Oakland, MD
- 380 Airport Circle, Beckley, WV – Lab & Field Office
- Princeton, WV – Pentree, Incorporated – Affiliate



*Thrasher Engineering, Inc. Office – Clarksburg, WV*



*Thrasher Engineering, Inc. Office – Charleston, WV*

## 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 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.

## 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 **Hawkinberry Hollow Portals & Subs.** design project include:

### SITE DEVELOPMENT

Thrasher Engineering has planned, surveyed, designed and provided construction management services for over 50 site development projects for both public and private clients. Projects ranging from AML remediation projects 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. With that information, we work with them to evaluate site locations that best suit their short and long-term goals.



*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**

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

Thrasher Engineering, Inc. provides full environmental assessment and clearance services. We have more than 19 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:

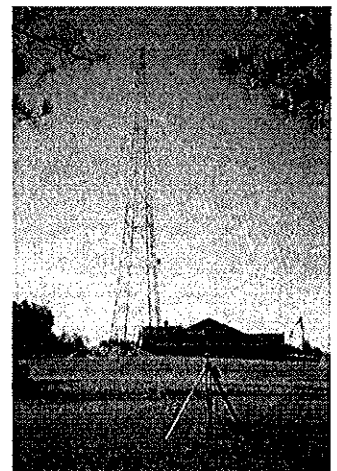
- Permitting Related Activities (401 and 404)
- NEPA Environmental Document Preparation
- Wetland Delineation and Mitigation
- Rare, Threatened and Endangered Species Section 7 Informal Consultation
- Rare, Threatened and Endangered Species Section 10 Habitat Conservation Plans
- Water Use and Water 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

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.



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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, 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



## **GEO-TECHNICAL SERVICES**

For these 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 2008 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.



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## **FIRM MANAGEMENT AND 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.

### **PROJECT TEAM**

Thrasher Engineering has assigned a team of experienced professionals to the **Hawkinberry Hollow Portals & Subs.** design project.

**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, transportation and the survey projects.

**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 served as design engineer for the Roaring Creek and Anglin Run AML projects.

**April Rohrbaugh** will be responsible for CAD design for the project. Ms. Rohrbaugh 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.

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

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

**CHADWICK D. BILLER, P.E.**  
*Partner / Project Manager*



**SUMMARY OF EXPERIENCE**

*Mr. Biller has experience in all aspects of engineering with specific emphasis on mine reclamation, 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**

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

**CERTIFICATIONS**

- 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**

**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*

**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***

**MIKE NESTOR, E.I.T.**  
**Project Manager / Engineer**



**EXPERIENCE**

*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**

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

**CERTIFICATIONS**

- Engineer Intern, State of West Virginia*

**AFFILIATIONS**

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

**REPRESENTATIVE PROJECT EXPERIENCE**

- 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.

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**APRIL E. ROHRBAUGH**  
*Staff Engineer*



**SUMMARY OF EXPERIENCE**

Mrs. Rohrbaugh joined Thrasher Engineering in January of 2006 and serves as a Staff Engineer on site development projects. Mrs. Rohrbaugh has experience in all aspects of site engineering, taking projects from survey to concept to construction. Specialties include geometric layout of sites, subdivisions, and roads, grading, drainage, storm water management, erosion and sediment control, environmentally sensitive design and various regulatory permitting requirements.

**EDUCATION**

*B.S. Civil Engineering – West Virginia University, 2005*

**REPRESENTATIVE PROJECT EXPERIENCE**

***Ashby Crest Estates:*** 54 lot subdivision in Fort Ashby, WV. Responsible for design survey, topographic mapping and road design. Completed plat work for Mineral County Planning and Land Development approval.

***Aspen Woods West:*** 28 lot subdivision. Re-designed lot layout to incorporate more common area to accommodate equestrian use. Complete plat work for the Garrett County Planning and Land Development.

***Crystal Springs Walking Trail:*** ADA compliant paved walking trail. Completed a concept and design, as well as, overcame difficult site constraints which included wetlands, a stream crossing and slope compliance to meet ADA standards.

***G & W Lumber:*** The existing lumber yard was extended to add approximately 1 acre of storage area. The site was graded to removing an excess of 17,000 cy yards of soil from the property. Also, an underground stormwater detention system was designed to maximize the storage area.

***Ginseng Hill:*** 13 lot subdivision on steep terrain, over half of the site had slopes in excess of 30%. On this design grass lined swales and stormwater structures where used to treat run-off. To drastically reduce the volume requirements of the stormwater structures, a clear water diversion swale along with a storm sewer system that carried the "clean water" to an existing outlet was utilized.

***Howard Don:*** Single residential property which is located within the 100 year flood plan. Federal Emergency Management Agency (FEMA) required the submission of a conditional letter of map revision for fill (CLOMR-F) to approve the plans for removing a portion of the property out of the flood plain by placing fill. This project also required a permit from the Maryland Department of the Environment (MDE) for construction in an existing flood plain as well as a sand mound design approval from the Garrett County Health Department. When the grading and house was in place an as-built of the property was completed in order to resubmit to FEMA (LOMR-F) to permanently remove the property from the flood plane.

***McHenry Business Park:*** Provided infrastructure design for a 180 acre Business Park located in McHenry, Maryland. Design responsibilities included: Design survey and various platting requirements for land transfer and utility easements. Access road designs including horizontal and vertical alignments and an entrance off of a county road. The design of erosion and sediment controls for construction activities and swale and culvert conveyances to 5 basins to control stormwater run off from the proposed roadway

infrastructure. Consulted with local utility companies to devise utility plans and sections for cable, electric and telephone extensions and provided a roadway lighting plan. Assisted in the design and layout of a potable water line extension including a site plan for a proposed 250,000 gal water tank. Assisted in the design and layout of sanitary sewer gravity and force main lines including site plans for 2 sewage lift stations. Participated in weekly construction progress meetings and provided updates/reports to owner/developer.

***Mountainside Lakeview Estates:*** Mix-use design including commercial and residential lots as well as utilizing the cluster design option for Garrett County, MD. Responsible for the road design on steep slopes and planting plan for stormwater bioretention treatment sites.

***North Glade Meadows:*** 24 lot subdivision completed in two phases. The subdivision layout consisted of one main road designed to follow along with the natural slope of the land and two spur roads to create access to remote areas of the property. Grass lined swales were utilized to remove the need of multiple stormwater ponds.

***Swan Meadows:*** 7 lot subdivision in Pleasant Valley, Maryland. Responsible for the road design, low impact stormwater management and erosion and sediment controls.

***The Homestead:*** 8 lot subdivision in Oakland, Maryland. Designed access road to minimize construction and utilized grass lined swales and infiltration swales with rock bleeders in lieu of a stormwater pond.

***The Reserve at Holy Cross:*** Completed a useable shoreline and water depth survey to provide the Maryland DNR with a revised dock configuration for the subdivisions common access slips.

***Thousand Acres Development at Deep Creek Lake:*** Responsible for all design surveying and plat work for an 800 acre mix-use property located in McHenry, MD. Also completed a comprehensive design of a 150 unit residential cluster subdivision surrounding a proposed golf course. Provided a redesign of an existing 3 acre irrigation pond to widen the dam to allow for a residential access road. Applied for a dam modification permit from the Maryland Department of Dam Safety and devised an Emergency Action Plan for a pond catastrophic event (breach).

***Timberline Four Season Resort:*** Devised a concept and marketing plat for future expansion of the ski resort. The plan consisted of a mixed-use design including: residential subdivisions, commercial area, lodging, and proposed ski trails.

***Walgreens:*** Completed civil construction plans including grading, storm sewer system & sanitary sewer system plans and profiles, micro-bioretion basin with planting and landscape plans. Provided submittal and RFI review. Prepared ADA sidewalk and Alta as-built plats.

***Whitewater Springs:*** 23 lot subdivision on steep terrain with deep natural swales and required a bridge crossing over an existing stream. Responsibilities included private residential road design that maximized access to buildable lots and minimized grading requirements. A construction permit required from MDE to place a bridge over the existing stream to gain access to the subdivision. Stormwater management was achieved by the design of multiple micro-basins were located along the roadways to provide low impact treatment and not only lower construction costs (based on large basin design) but also lower the future maintenance cost.

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**Kurt Newbrough, P.S.**  
**Professional Surveyor**



*Mr. Newbrough has extensive knowledge in all aspects of surveys. 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 public and private clientele, as well as on an independent contract basis.*

*Mr. Newbrough is a Registered Professional Surveyor and holds the elected position of County Surveyor for Harrison County, West Virginia.*

**EDUCATION**

Surveying

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

**REGISTRATIONS**

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**

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

**REPRESENTATIVE PROJECTS**

**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**

- 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

**Boundary Surveys**

- WV National Cemetery
- Fairmont State University; Various Projects Associated with the 10-Year Infrastructure Improvement Master Plan
- Town of Moorefield; North and South Levee Areas
- US Army Corps of Engineers
- Flood Control
- USARC Sites
- US Department of Justice; FBI Fingerprint Identification Complex
- Hardy County Rural Development Authority

**GPS Surveys**

- US Army Corps of Engineers, Baltimore District
- Benatech Associates
- IDG, Incorporated



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## REPRESENTATIVE EXPERIENCE

Thrasher Engineering offers a significant amount of expertise in projects that involve complex drainage systems, grading, and sediment and erosion control. Thrasher has also completed two projects for West Virginia Office of AML&R. Anglin's Run and Roaring Creek projects have been designed, bid and constructed. Thrasher Engineering has also begun the preliminary design for the Squires Creek and Overfield AML projects. In the following section are examples of our experience in each of these areas related to the **Hawkinberry Hollow Portals & Subs.** design project.

### ABANDONED MINE LAND PROJECTS

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

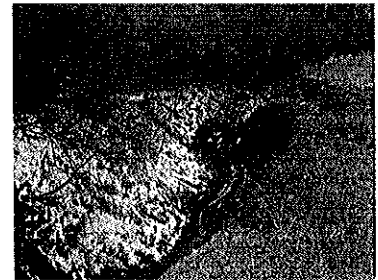
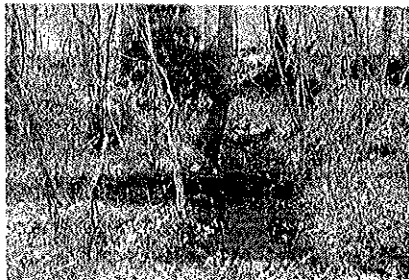
Client: WV DEP Office of Abandoned Mine Lands and Reclamation  
Greg Smith 304-457-3219

This area included 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 designed an access road into the site, excavation and wet seal of eight (8) deep mine portals. To carry water safely off site, drainage control channels, conveyance pipe and under drain were also constructed. All areas disturbed by construction were soil covered, conditioned and re-vegetated. The project has been designed, bid, and constructed.

#### ROARING CREEK, RANDOLPH COUNTY

Client: WV DEP Office of Abandoned Mine Lands and Reclamation  
Greg Smith 304-457-3219

This project involved the elimination of subsidence depressions, the closure of four portals. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consists of 3 open and 1 closed portals discharging AMD. This project also involved regrading of an area with dozens of subsidence depressions. Some of the depressions were so large that the mine shafts were excavated out and backfilled with rock. Surface water had to be rerouted through the site into an existing farm pond. In order to handle the additional flow an emergency spillway had to be designed for the existing pond. This project has been designed, bid, and constructed.



**SQUIRES CREEK, PRESTON COUNTY**

Client: WV DEP Office of Abandoned Mine Lands and Reclamation  
Greg Smith 304-457-3219

Thrasher Engineering has just begun the preliminary engineering on this project for the WV Office of AML&R. The project involves sealing five closed portals and one open portal, reclaiming 200 linear feet of high wall and three acres of refuse piles. Adjacent to this project is a stockpile of fly ash that was used by ICG on another AML project. This fly ash will be moved to this project to help neutralize the existing refuse piles.

**OVERFIELD (LAFFERTY) CS & P PROJECT, BARBOUR COUNTY**

Client: WV DEP Office of Abandoned Mine Lands and Reclamation  
Greg Smith 304-457-3219

Thrasher Engineering has just begun the preliminary engineering on this project for the WV Office of AML&R. The project involves reclaiming a strip pit, determine portal location if any and install a wet seal. Safely convey 50 gallons per minute discharge through the Lafferty property and into a road ditch. The water will then be transferred into a new storm drain system located in a subdivision that empties into an existing valley. A two acre gob pile on the South side of CR 57 will also be reclaimed with soil and vegetated.

**WV 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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## RAGLAND (MINGO COUNTY) WATER LINE EXTENSION PROJECT

**Client:** WV DEP  
Office of Abandoned Mine Lands and Reclamation

**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 / COAL COMPANY EXPERIENCE

### Martinka Water Treatment Plant

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

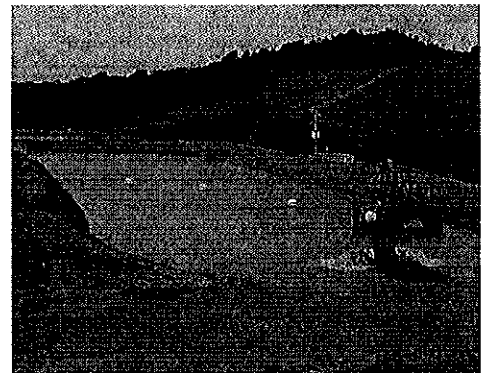


### **Project Cost: \$6.5 Million**

This project consisted of the design of a 17.3 MGD Water Treatment Plan 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.



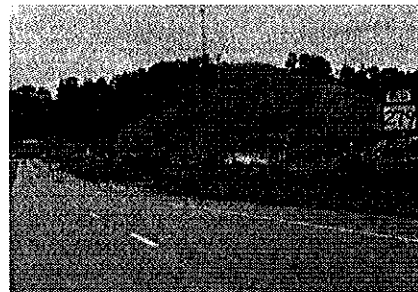
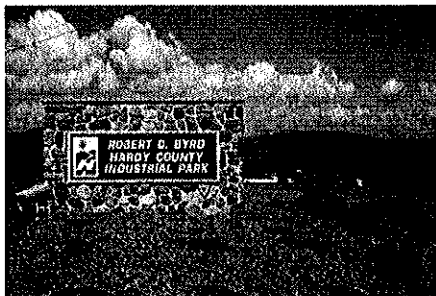
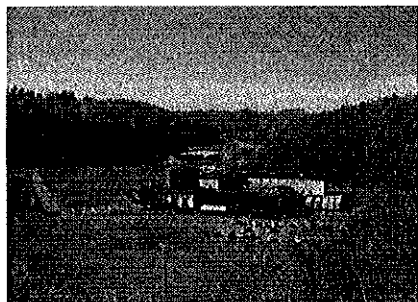
Dayton Carpenter, P.E., DEE, Project Engineer was rewarded the following for the project:

- 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**

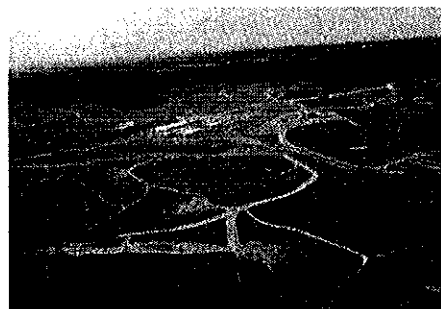
Thrasher Engineering provided survey, site planning, and engineering design services for each of these business/industrial parks which were developed on abandoned mine lands. The design of each project included plans for landslide / erosion and sediment control within grading plans.



### **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. 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**

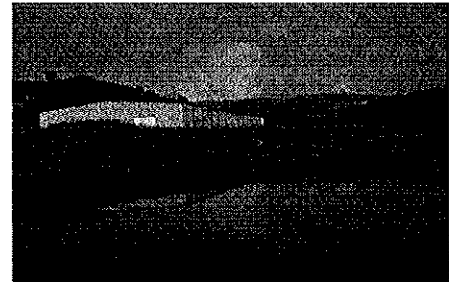
**Client:** Barbour County  
Office for Economic Development  
304-456-1225

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.

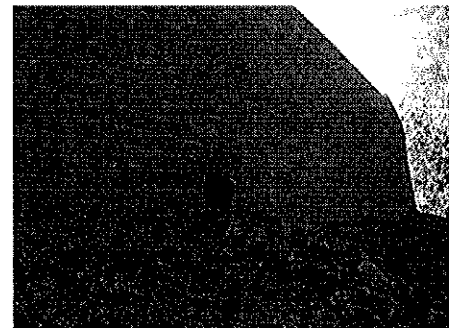


### **West Virginia National Cemetery**

**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.

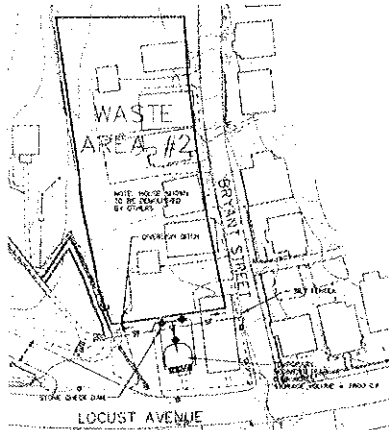
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## **Fairmont State University**

**Client:** Fairmont State University  
Dr. Dan Bradley, P.E. President  
304-367-4000



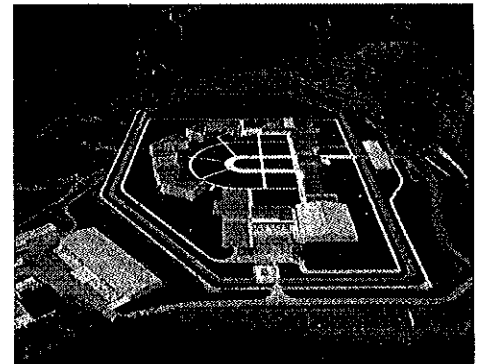
Thrasher Engineering is providing civil engineering services throughout the Fairmont State University campus within the scope of FSU's 10-year \$10 million master plan for infrastructure improvements. This portion of the project included storm water management during and after construction. During the 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.



## **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, stormwater 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.

## PROJECT APPROACH

In order to develop an understanding of the WV DEP's needs for this project, Thrasher Engineering, Inc. studied the information provided in the RFQ. 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. A scope meeting and preliminary field review will be conducted to determine the most cost effective method to be used to reclaim the area. A preliminary design based on these meetings 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. A final field review will all be conducted.

**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 obtain a NPDES permit and any other permits that are required for the project. Also, any right of ways, and easements that is 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 Engineering will provide the highest level of customer service and responsiveness throughout the project to the WV DEP Office of Abandoned Mine Lands & Reclamation representatives.



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

PROJECT NAME Hawkinberry Hollow Portals & Sub Design WDEP 15220	DATE (DAY, MONTH, YEAR) November 1, 2010	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
4. HOME OFFICE TELEPHONE 304-624-4108	5. ESTABLISHED (YEAR) 1983	6. TYPE OWNERSHIP Individual Corporation X Partnership Joint-Venture YES NO X
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		
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM H. Wood Thrasher, P.E. - President Kenneth P. Moran, P.E. - Vice President		
9. PERSONNEL BY DISCIPLINE		
24 ADMINISTRATIVE 3 ARCHITECTS — BIOLOGIST 18 CADD OPERATORS — CHEMICAL ENGINEERS 27 CIVIL ENGINEERS 41 CONSTRUCTION INSPECTORS 2 DESIGNERS — DRAFTSMEN	— ECOLOGISTS — ECONOMISTS — ELECTRICAL ENGINEERS 2 ENVIRONMENTALISTS — ESTIMATORS 1 GEOLOGISTS — HISTORIANS — HYDROLOGISTS	LANDSCAPE ARCHITECTS MECHANICAL ENGINEERS — MINING ENGINEERS 3 PHOTOGRAMMETRISTS — PLANNERS: URBAN/REGIONAL — SANITARY ENGINEERS — SOILS ENGINEERS 2 SPECIFICATION WRITERS
— SURVEYORS — TRAFFIC ENGINEERS 10 OTHER	STRUCTURAL ENGINEERS 38 SURVEYORS — TRAFFIC ENGINEERS 10 OTHER 171 TOTAL PERSONNEL	
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? <input type="checkbox"/> YES <input type="checkbox"/> NO NOT APPLICABLE		

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

NAME AND ADDRESS: NCE St. Albans, WV	SPECIALTY: GEOTECHNICAL 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
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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 AND WATER TREATMENT PLANT PROJECTS RELATED TO AML. NUMEROUS PROJECTS INVOLVING LAND REMEDIATION, STORM WATER DRAINAGE, SLIP REPAIR, MASS GRADING IN RELATION TO SITE DEVELOPMENT AND HIGHWAY PROJECTS.

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: THRASHER ENGINEERING MAINTAINS AN AASHTO CERTIFIED MATERIALS TESTING AND ANALYSIS LAB AT ITS CLARKSBURG AND BECKLEY OFFICES. SOIL ANALYSIS EXPERIENCE IS SPECIFICALLY IN GRADATIONS AND CLASSIFICATION.

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: 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.

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 RECENTLY DESIGNED TWO RECLAMATION PROJECTS FOR WVDEP RELATED SPECIFICALLY TO ACID MINE DRAINAGE AND ABATEMENT, BOTH OF WHICH ARE LOCATED IN BARBOUR COUNTY, WEST VIRGINIA. 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 EXPERIENCE	
MORAN, KENNETH P., PE		YEARS OF AML DESIGN EXPERIENCE: 7	YEARS OF AML RELATED DESIGN EXPERIENCE: 17
Mr. Moran joined Thrasher Engineering in 1991 and currently serves as Vice President and Chief Operations Officer and Chief Engineer.		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 24	
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 (Degree, Year, Specialization) B.S., Civil Engineering Technology, 1983 - Fairmont State University			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
<input type="checkbox"/> Friendship Lodge No.56 A.F. & A.M. <input type="checkbox"/> WV Society of Professional Engineers <input type="checkbox"/> Member of American Society of Civil Engineers			
REGISTRATION (Type, Year, State)			
<input type="checkbox"/> Registered Professional Engineer (PE), State of West Virginia #11309 <input type="checkbox"/> Registered Professional Engineer (PE), State of Virginia #0102021855 <input type="checkbox"/> Registered Professional Engineer (PE), State of Ohio #64412 <input type="checkbox"/> Professional Land Surveyor (PS), State of West Virginia #1333			

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	
BILLER, CHADWICK D., P.E.		YEARS OF AML DESIGN EXPERIENCE: 3	YEARS OF AML RELATED DESIGN EXPERIENCE: 16
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 projects 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 (Degree, Year, Specialization):			
<input checked="" type="checkbox"/> B.S., Civil Engineering, 1992 - West Virginia University			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
<input type="checkbox"/> American Society of Civil Engineers <input type="checkbox"/> Society of American Military Engineers <input type="checkbox"/> National Society of Professional Engineers			
REGISTRATION (Type, Year, State)			
<input type="checkbox"/> Registered Professional Engineer (PE), State of West Virginia #13620 <input type="checkbox"/> Registered Professional Engineer (PE), State of Pennsylvania #PE056012E <input type="checkbox"/> Registered Professional Engineer (PE), State of Ohio #64594			

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NESTOR, MICHAEL, P.E.		YEARS OF AML DESIGN EXPERIENCE: 2	YEARS OF AML RELATED DESIGN EXPERIENCE: 7

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 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 (Degree, Year, Specialization)		REGISTRATION (Type, Year, State)	
<input type="checkbox"/> B.S. Civil Engineering Technology - Fairmont State University, 2003		<input type="checkbox"/> ENGINEERING INTERN (EIT), State of West Virginia	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
<input type="checkbox"/> American Society of Civil Engineers <input type="checkbox"/> Eastern Panhandle Home Builders Association			

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	
ROHRBAUGH, APRIL		YEARS OF AML DESIGN EXPERIENCE: 1	YEARS OF AML RELATED DESIGN EXPERIENCE: 6

Brief Explanation of Responsibilities Mrs. Rohrbaugh joined Thrasher Engineering in January of 2006 and serves as a Staff Engineer on site development projects. Mrs. Rohrbaugh has experience in all aspects of site engineering, taking projects from survey to concept to construction. Specialties include geometric layout of sites, subdivisions, and roads, grading, drainage, storm water management, erosion and sediment control, environmentally sensitive design and various regulatory permitting requirements.

EDUCATION (Degree, Year, Specialization)		REGISTRATION (Type, Year, State)	
<input type="checkbox"/> B.S., Civil Engineering, West Virginia University		<input type="checkbox"/>	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Clevenger, Cliff - CADD TECHNICIAN		YEARS OF AML DESIGN EXPERIENCE: 1	YEARS OF AML RELATED DESIGN EXPERIENCE: 20
Brief Explanation of Responsibilities Mr. Clevenger joined Thrasher Engineering in 1991 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)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
REGISTRATION (Type, Year, State)			

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

NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NEWBROUGH, KURT		YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 24
Brief Explanation of Responsibilities Mr. Newbrough joined Thrasher Engineering in 1990 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)			
<input type="checkbox"/> Surveying - John Tyler Community College, Chester, VA <input type="checkbox"/> United Career Center, Clarksburg, WV			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
<input type="checkbox"/> West Virginia Association of Land Surveyors <input type="checkbox"/> American Congress on Surveying and Mapping <input type="checkbox"/> Member Strathmore's Who's Who			
REGISTRATION (Type, Year, State)			
<input checked="" type="checkbox"/> Professional Land Surveyor (PS), West Virginia #1618 - 1995 <input checked="" type="checkbox"/> OSHA Hazardous Waste Operations and Emergency Response Center 29 CFR 1910.120 <input checked="" type="checkbox"/> US Department of Labor/Mine Safety and Health Administration			

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

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

15. CUR. ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATE 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
SQUIRES CREEK AML RECLAMATION PRESTON COUNTY, WV	WV DEP- OFFICE OF AML&R 601 57TH STREET, SE CHARLESTON, WV 25304	ENGINEERING DESIGN FOR ACCESS ROAD, REMOVE BUILDING REMAINS, RECLAIM REFUSE PILES & HIGHWALLS, PORTAL SEALING, BAT GATES, DRAINAGE	\$500,000	5%
OVERFIELD (LAFFERTY) AML RECLAMATION BARBOUR COUNTY	WV DEP- OFFICE OF AML&R 601 57TH STREET, SE CHARLESTON, WV 25304	ENGINEERING DESIGN FOR ABANDONED MINE RECLAMATION	\$303,000	5%
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	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	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	ON-GOING

TOTAL ESTIMATED CONSTRUCTION COSTS:

\$4,500,000 +

TOTAL NUMBER OF PROJECTS:

6 (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT - APPROXIMATELY 40 MILLION)



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%
HAMELICK PSD MOORE/PORTERWOOD EXTENSION TUCKER COUNTY, WV	HAMELICK 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. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER 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
KINGWOOD SEWER REPLACEMENT AND SERVICE EXTENSIONS KINGWOOD, WV	CITY OF KINGWOOD 313 TUNNELTON STREET KINGWOOD, WV 26537	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,000,000	40%
GREATER HARRISON COUNTY PSD PHASE II-B HARRISON COUNTY, WV	GREATER HARRISON COUNTY PSD P.O. BOX 190 WEST MILLFORD, WV 26451	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,000,000	65%
TENNERTON PSD PHASE III SANITARY SEWER EXTENSION UPSHUR COUNTY, WV	TENNERTON PSD 188 FAYETTE ST. BUCKHANNON, WV 26201	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,800,000	5%
POCAHONTAS COUNTY PSD WWTP AND COLLECTION SYSTEM POCAHONTAS COUNTY, WV	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	\$11,600,000	95%
HEPZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH DRAWER H HEPZIBAH, WV 26369	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$3,400,000	95%
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, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,600,000.	89%
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, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,500,000.	95%
TOTAL NUMBER OF PROJECTS: 7 REPRESENTED		TOTAL ESTIMATED CONSTRUCTION COSTS: \$70,300,000.00		
TOTAL ACTIVE SANITARY SEWER PROJECTS APPROXIMATELY 32		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
MINERAL WELLS ROUTE 2 WOOD COUNTY	WVDOE/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	\$6,000,000	50%
COUNTY LINE BRIDGE, MARSHALL COUNTY	WVDOE/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	\$1,800,000.	50%

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

TOTAL ESTIMATED CONSTRUCTION COSTS: \$7,800,000



17. C. LISTED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

AS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
ANGLIN'S RUN AML REMEDIATION PROJECT, BARBOUR COUNTY, WV	WV DEP OFFICE OF AML&R 601 57TH STREET, SE CHARLESTON, WV 25304	\$70,000	2010	YES
ROARING CREEK AML REMEDIATION PROJECT RANDOLPH COUNTY, WV	WV DEP OFFICE OF AML&R 601 57TH STREET, SE CHARLESTON, WV 25304	\$70,000	2010	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 WETSSELL 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)
<p>JAKES RUN BRIDGE MONONGALIA COUNTY, WV</p>	<p>WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305</p>	<p>\$1,300,000.</p>	<p>2008</p>	<p>YES</p>
<p>ICG - THREE FORKS BRIDGE TAYLOR COUNTY</p>	<p>INTERNATIONAL COAL GROUP, INC. 2000 ASHLAND DRIVE ASHLAND, KY 41101</p>	<p>\$1,119,000.00</p>	<p>2008</p>	<p>YES</p>
<p>CITY OF RIPLEY - MAIN STREET REVITALIZATION - JACKSON CO.</p>	<p>CITY OF RIPLEY TIM KING, CITY SUPERINTENDENT 203 SOUTH CHURCH ST. RIPLEY, WV 25271</p>	<p>\$1,200,000.</p>	<p>2008</p>	<p>YES</p>

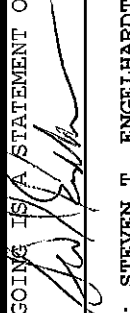
18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE ASSOCIATED WITH OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

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
GLENVILLE 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: JUNE 23, 2010



**AML and RELATED PROJECT EXPERIENCE MATRIX**

PROJECT	Exp. Basis C=Corp. P=Personal	Additional Info Provided in Section (S) **	PROJECT EXPERIENCE REQUIREMENTS													PARTICIPATION/CAPACITY *** M=Management					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Substance Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Managem ent	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ken Moran, P.E.	Chadwick Blier, P.E.	April Rohrbough	Kurt Newbrough
WW DEP ANGLINS RUN	C	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WW DEP ROARING CREEK	C	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WW DEP AMHERSTDALE	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WW DEP SQUIRES CREEK	C	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WW DEP OVERFIELD (LAFFERTY)	C	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
BELINGTON INDUSTRIAL PARK	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
MINGO COUNTY INDUSTRIAL PARK	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
HARRISON COUNTY BUS. PARK	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
INDIAN RIDGE INDUSTRIAL PARK	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
MARTINKA COAL COMPANY	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WHITE OAKS BUSINESS PARK	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
CANAAN PRISON	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P
WW DOH BRIDGEPORT HILL	C	4				X	X	X	X	X	X	X	X	X	X	X	M	M	M	M	P

\* List whether project experience is corporate or personnel based or both.

\*\* Use this area to provide specific sections or pages if needed for reference.

\*\*\* List Primary Design personnel and their functional capacity for the projects listed.

STATE OF WEST VIRGINIA  
Purchasing Division**PURCHASING AFFIDAVIT**

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

**DEFINITIONS:**

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

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

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

**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. Vendors should visit [www.state.wv.us/admin/purchase/privacy](http://www.state.wv.us/admin/purchase/privacy) for the Notice of Agency Confidentiality Policies.

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

Vendor's Name: Thrasher Engineering, Inc.

Authorized Signature: \_\_\_\_\_

Date: June 23, 2010