Statement of Qualifications to provide Engineering Services

To The West Virginia Department of Environmental Protection,

Office of Abandoned Mine Lands & Reclamation, for

DEP 15216 LAUREL RUN DESIGN





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www.thrashereng.com thrasher@thrashereng.com



30 Columbia Boulevard Clarksburg, WV 26301 (304) 624-4108 www.thrashereng.com 300 Association Drive Charleston, WV 25311 (304) 343-7601

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 15216, Laurel Run #1 Design, Expression of Interest

Dear AML Chief and Selection Committee:

Thrasher Engineering, Inc. is very interested to provide engineering design services for the Laurel Run #1 design project in Preston 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 Mike Nestor, PE Ken Moran, PE Matt Fluharty, PE Chad Riley, PE Doug Forni, PE Chad Biller, PE Daniel Ferrell, PE Clay Riley, PE Tom Urquhart, PE Jeff Gola, 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	CAD
1) Woody Thrasher, PE	Brady Stutler
2) Chad Biller, PE	Cliff Cleavenger
3) Mike Nestor, PE	April Rohrbaugh
4) Daniel Ferrell, PE	Jason Heflin,
5) Ken Moran. PE	Phil Lantz
6) Clay Riley, PE	Joe Lowther
7) Matt Fluharty, PE	John Sirianni
8) Tom Urquhart, PE	Jeff Bonaventura
9) Chad Riley, PE	Mike Oldaker
10) Jeff Gola, PE	Zack Gain
11) Doug Forni, PE	Trudy Hiel

STATEMENT OF QUALIFICATIONS

FIRM OVERVIEW

THRASHER ENGINEERING, INC.

Established

1983

Officers

H. Wood Thrasher, P.E., Kenneth P. Moran, P.E., P.S.

Kurt L. Newbrough, P.S.

Partners

Wm. Randy Watson

Chadwick Biller, P.E. Chad Riley, P.E.

Clay P. Riley, P.E. Daniel E. Ferrell, P.E.

Kenneth P. Moran, P.E., P.S.

Jonathan Carpenter, P.E.

Aaron Denham

President

Vice-President

Secretary/Treasurer

Public Utilities

Site Development/Highways/Airports

Site Development Public Utilities Public Utilities

Vice-President

Charleston Branch Manager/

Public Utilities

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.

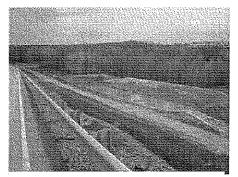
Providing a full range of professional engineering services, Thrasher Engineering, Inc. currently maintains a staff of 170 full-time employees. Our staff includes registered professional engineers, graduate engineers, registered professional surveyors, and support staffing of surveyors, design technicians, 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 Laurel Run #1 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



Storm water Pond, Canaan Federal Prison, Scranton, PA

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 longterm goals.

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.

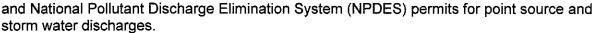
<u>Grading Plans</u> - which includes development of cut and fill quantities and construction plans (showing existing and proposed contours, structures, and facilities on site) to allow for the best use of available land.

<u>Utility Layout/Mapping</u> - 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

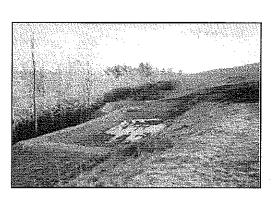
Our experience includes development of Sediment and Erosion Control measures on all types of construction sites as required by the WV Division of Environmental Protection, design of drainage facilities including piping, intake structures, etc., for site stabilization and flood control. Our staff members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

hydraulic design experience and have successfully obtained local, state, and federal erosion and sediment control permits





- 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).

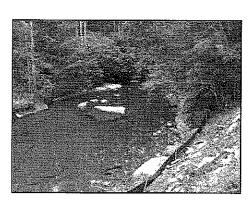
Experience includes:

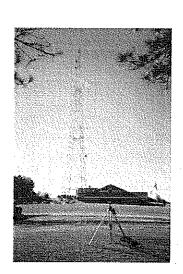
- □ Permitting Related Activities (401 and 404)
- NEPA Environmental Document Preparation
- Wetland Delineation and Mitigation
- Rare, Threatened and Endangered Species Section 7 Informal Consultation
- □ Rare, Threatened and Endangered Species Section 10 Habitat Conservation Plans
- Water Use and Water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





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

<u>Pre- and Post-Mining Surveys</u> - 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

<u>Boundary Surveys</u> - 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.

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

<u>Construction Layout</u> - 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.

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 Laurel Run #1 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.

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

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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

REPR	ESENTATIVE PROJECT EXPERIENCE
Site D	evelopment 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
Airpor	ts
·a	Harrison Marion Regional Airport – Improvement Master Plan
	Raleigh County Airport – Business Park and Master Plan
	Grafton Hospital, Helipad Relocation

Highv	vay/Road/Bridge Projects
Ī	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 th Street Bridge, Parkersburg
	Rehabilitation of the 35 th and 36 th 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.

Charles Treated	
	SHENANDOAH OFFICE PARK – Two commercial buildings totaling 50,000 sf. Sketch Plat design.
	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.
	•

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.

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

William A. Bruce, AIA; Food Lion Stores

C	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	B00 0 0000 0	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
Го	pographical Surveys		•
3	West Virginia Department of	GF	PS Surveys
	Transportation/Division of Highways		US Army Corps of Engineers, Baltimore
	Harrison County Board of Education		District
]	Gandee and Partners; Huntington Summit		Benatech Associates
	High School		IDG Incorporated

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 **Laurel Run #1** 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.

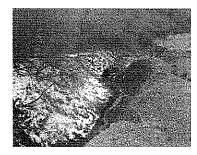
ROARING CREEK, RANDOLPH COUNTY

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 regarding 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.

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.

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

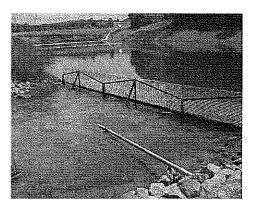
This project consisted of the design of a 17.3 MGD Water Treatment Plan to blend mine borehole water with acid mine drainage; the plan removes iron (1000 mg/l (ferric hydroxide) to less than 1 mg/l.

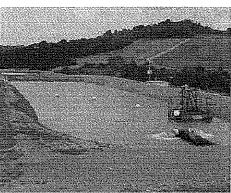


- Aeration Blending and Stripping Carbon Dioxide
- □ Feed Hydrogen Peroxide Shifts chemical equilibrium for utilization of naturally calcium carbonate for neutralization
- □ Coagulation/Flocculation Three (3) stage tapered flocculation with axial flow propeller mixers and variable frequency drives
- □ 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

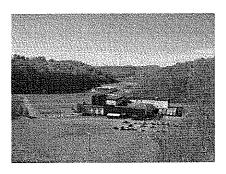




SITE DEVELOPMENT PROJECTS - SEDIMENT AND EROSION MEASURES

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.

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

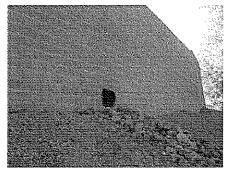
Client:

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.

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.

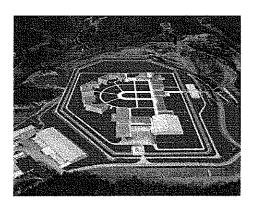
Glenville Correctional Institution, Gilmer County, West Virginia

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.



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.

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 and visited the 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.

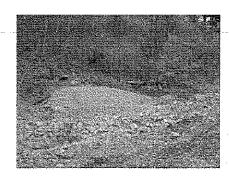
This project approach is a general approach that will be used on any WVDEP reclamation project and may need to be modified depending on the existing information that is available for the specific project. Also, some steps may not be needed on every project.

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.

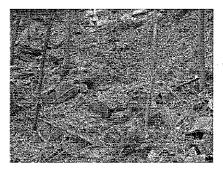
Step #2 Design the project. Thrasher will work closely with the WVDEP in designing the project. A scope meeting and preliminary field review will be conducted to determine the most cost effective method to be used to reclaim the area. A preliminary design based on these meetings will be submitted to 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 VIRGI	NIA	DEPARTMENT C ENVIRONMENTAL PROTECTION LIFICATION & STIONNAIRE Attachmen	ROTECTION Attachment "B"
PROJECT NAME Laurel Run #1 Design WVDEP 15216	DATE (DAY, MONTH, November 1, 2010	YEAR)	FEIN 55-0633596-6
. FIRM NAME THRASHER ENGINEERING, INC.	2. HOME OFFICE F 30 COLUMBIA BLVI 26301	HOME OFFICE BUSINESS ADDRESS COLUMBIA BLVD., CLARKSBURG, WV 101	3. FORMER FIRM NAME NOT APPLICABLE
4. HOME OFFICE TELEPHONE 5. ES 304-624-4108 1983	ESTABLISHED (YEAR 3	6. TYPE OWNERSHIP Individual Corporation X Partnership Joint-Venture	ion X (Disadvantaged Business nture Enterprise)
. PRIMARY AML DESIGN OFFICE: ADDRESS/ 30 COLUMBIA BLVD, CLARKSBURG, WV / 300 ASSOCIATION DRIVE, CHARLESTON,	TELEPHONE/ PE 304-624-4108 WV / 304-343-	IN CHARGE/ NO. NNETH P. MORAN, / JONATHAN CARE	NNEL EACH OFFICE DENT / 12 PARTNER / 2
3. NAMES OF PRINCIPAL OFFICERS OR MEMBERS H. Wood Thrasher, P.E President Kenneth P. Moran, P.E Vice President	OR MEMBERS OF FIRM dent President	8a. NAME, TITLE, & TELEPHONE NURWM. RANDY WATSON -304-624-4108 - CHAD BILLER, P.E304-624-4108 - CHAD M. RILEY, P.E304-624-4108 CLAY P. RILEY, P.E304-624-4108 DANIEL E. FERRELL, P.E304-32	5, & TELEPHONE NUMBER - OTHER PRINCIPALS NN -304-624-4108 - PARTNER E304-624-4108 - PARTNER P.E304-624-4108 - PARTNER P.E304-624-4108 - PARTNER ILL, P.E304-324-4108 - PARTNER
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- NUMEROUS PROJECTS INVOLVING LAND REMEDIATION, STORM WATER DRAINAGE, SLIP REPAIR, MASS GRADING IN ENGINEERING HAS PERFORMED ENGINEERING DESIGN SI Remediation/Mine Reclamation Engineering? your firm experienced in Abandoned Mine Land Description and Number of Project: THRAS RELATION TO SITE DEVELOPMENT AND HIGHWAY PROJECTS. დ Н YES κĠ
- THRASHER ENGINEERING MAINTAINS AN AASHTO CERTIFIED MATERIALS TESTING AND ANALYSIS LAB AT ITS CLARKSBURG AND BECKLEY OFFICES. SOIL ANALYSIS EXPERIENCE IS SPECIFICALLY IN Is your firm experienced in Soil Analysis? Description and Number of Projects: GRADATIONS AND CLASSIFICATION. . ш
- 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 Is your firm experienced in hydrology and hydraulics? WEST VIRGINIA. ပ
- Does your firm produce its own Aerial Photography and Develop Contour Mapping? YES Description and Number of Projects: Description and Number of Projects: . o

WE UTILIZE THE SERVICES OF NUMEROUS FIRMS, INCLUDING PENTREE, INC. WHICH IS AN AFFILIATE COMPANY OF THRASHER ENGINEERING INC. o Z

- 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 (Include any experience your firm has in STORAGE FACILITIES. MANY OF THESE PROJECTS ARE IN AREAS WITH AML AFFECTED WATER evaluation of aquifer degradation as a result of mining.) Is your firm experienced in domestic waterline design? YES [1]
- Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design? . [11]

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 Description and Number of Projects: TEI RECENTLY DESIGNED TWO RECLAMATION PROJECTS FOR WYDEP COUNTY, WEST VIRGINIA TO TREAT DRAINAGE

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	YEARS OF EXPERIENCE	
MORAN, KENNETH P., PE	EXPERIENCE: YEARS OF AML RELATED DESIGN YEARS EXPERIENCE: 17 EXPER.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 24
Mr. Moran joined Thrasher Engineering in 1991 and currently Chief Engineer.	serves as Vice President and Chief Open	Operations Officer and
feasibility stucents. Additional	on of public utility and site in has extensive experience in with projects.	development projects all aspects of
B.S., Civil	Engineering Technology, 1983 - Fairmont Sta	State University
MBERSHIP IN PROFESSIONAL ORGENIE Triendship Lodge No.56 A.F.	Year, Stat	Engineer (PE), State of
<pre>¬ w socrety or rrolessional Engineers</pre> □ Member of American Society of Civil Engineers	Mest Virginia #11309 Registered Professional En	Engineer (PE), State of
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	☐ Professional Land Surveyor Virginia#1333	(PS), State of West
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BILLER, CHADWICK D., P.E.	EXPERIENCE: YEARS OF AML RELATED DESIGN YEARS WATERI EXPERIENCE: 16 EXPERI	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 16
Brief Explanation of Responsibilities: Mr. Biller has experience on site development, highways, roads, bridges, and airports. Mr. partner of Thrasher Engineering. For Thrasher Engineering, Mr. B and private site development projects, specializing in airports, all of the firm's WVDOT/DOH projects, he has extensive knowledge	ce in all aspects of engineering r. Biller joined Thrasher Enginee Biller is responsible for WV DEPs, highways, roads and bridges. Age of state and federal building	with specific emphasis ring in 1999 and is a AML projects and public s Project Manager for standards.
EDUCATION (Degree, Year, Specialization: B.S., Civil Engineering, 1992 - West Virginia University		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers Society of American Military Engineers National Society of Professional Engineers	REGISTRATION (Type, Year, State) Registered Professional English Registered Professional Englemsylvania #PE056012E Registered Professional English Registere	Engineer(PE),State of Engineer (PE),State of Engineer (PE),State of

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f Explanation of Responsibilities Mr. Nestconeer. Mr. Nestor has a wide range of experi	nd serves as Project M development projects,
pects of infrastructure design including systems, storm water drainage, storm wate ition, Mr. Nestor oversees all general op	including street and lot layout, street profiles, extensions of public sewer and storm water management, erosion and sediment control plans, and NPDES permitting. general operations within The Berkeley Associates, directing administrative
staff, CAD technicians, and staff engineers to ensure successi surveying, material testing, and environmental services.	
EDUCATION (Degree, Year, Specialization) B.S. Civil Engineering Technology - Fairmont State University	University, 2003
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MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State) Charactering intern (EIT), State of West Virginia
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TLE (Last, First, Middle Int.)	
ROHRBAUGH, APRIL 1	CE: YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC EXPERIENCE: 6 EXPERIENCE: -
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, all aspects of site engineering, taking projects from survey to concept to construction. Specialtive design and various regulatory permitting requirements.	off Engineer on site development projects. Mrs. Rohrbaugh has experience in Specialties include geometric layout of sites, subdivisions, and roads, nentally sensitive design and various regulatory permitting requirements.
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B.S., Civil Engineering, West Virginia University	
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YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN WATERLINE DE EXPERIENCE: Newbrough joined Thrasher Engineering in 1990 Mr. Newbrough has cluding but not limited to boundary and easement surveys and the proton private clientele in conjunction with Thrasher Engineering the also serves in the elected position of Harrison County (WV) Surveyors Ollege, Chester, VA REGISTRATION (Type, Year, State) **RESISTRATION (Type, Year, State) **Response Center 29 CFR 1910.120 **Response Center 29 CFR 1910.120 ***Response Center 29 CFR 1910.120 ***Mamphing** **WATTELINE DESTRUCTION (Type, Year, State) ***Response Center 29 CFR 1910.120 ***Response Center 29 CFR 1910.120 ***Response Center 29 CFR 1910.120 ***Mamphing** **WATTELINE DESTRUCTION (Type, Year, State) ***Response Center 29 CFR 1910.120 ***Response Center 29 CFR 1910.120 ***Response Center 20 CFR 1910.120 ***Mamphing** ***Response Center 20 CFR 1910.120 ****Response Center 20 CFR 1910.120 ****Response Center 20 CFR 1910.120 ****Response Center 20 CFR 1910.120 *****Response Center 20 CFR 1910.120 *****Response Center 20 CFR 1910.120 *****Response Center 20 CFR 1910.120 *******Response Center 20 CFR 1910.120 **********Response Center 20 CFR 1910.120	PERSONAL HISTORY STATEMENT OF data but keep to essentials)	AND ASSOCIATES	FOR AML PROJECT	
Newbrough joined Thrasher Engineering in 1990 Mr. Newbrough has coluding but not limited to boundary and easement surveys and the prough also performs courthouse research, computes field data for oth public and private clientele in conjunction with Thrasher Engine also serves in the elected position of Harrison County (WV) Sullege, Chester, VA WY REGISTRATION (Type, Year, State) REGISTRATION (Type, Year, State) Mapping ROSHA Hazardous Waste Operations and E Response Center 29 CFR 1910.120 Response Center 29 CFR 1910.120 ROSHA Hazardous Vaine Safety an Administration		OF AML DESIGN		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 24
Ollege, Chester, VA REGISTRATION (Type, Year, State) Surveyors Mapping OSHA Hazardous Waste Operations and En Response Center 29 CFR 1910.120 Response Center 29 CFR 1910.120 Administration	Brief Explanation of Responsibilitie experience in all aspects of surveys of plats and legal descriptions. Mr. layout, and processes GPS raw data for projects as well as separate contracts	joined The not limit performs and privateres in the creeking trues in the creeking privateres in the creeking the creeking privateres in the creeking the creekin	eering in 1990 Mr. ry and easement sur esearch, computes f in conjunction with sition of Harrison	brough has extensive s and the preparation d data for construction rasher Engineering nty (WV) Surveyor.
Surveyors Mapping Maste Operations and Emresponse Center 29 CFR 1910.120 Response Center 29 CFR 1910.120 Mapping Mapping Mapping	EDUCATION (Degree, Year, Specializat Surveying - John Tyler Communi United Career Center, Clarksbu	college, Chester,		
	MEMBERSHIP IN PROFESSIONAL ORGANIZAT West Virginia Association of L American Congress on Surveying Member Strathmore's Who's Who	IONS and Surveyors and Mapping	EGISTRATION (Type, Ye Professional Land S #1618 - 1995 OSHA Hazardous Wast Response Center US Department of La	, West and Em 120 ety and

SOFTWARE AND EQUIPMENT AVAILABLE IN TWE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AMI A LIST OF SERVICES PROV DES1 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

locations. This will allow work designed for AML to be prepared and updated at the office location that best meets the Connected through a Virtual Private Network, our CAD staff has the ability to share necessary plans among our needs of the scope of services.

are Additionally, equipment includes 10 large format (size E) plotters and 5 large format plotter / scanners.CAD plans prepared by both dedicated CAD employees and by staff engineers and engineering technicians in each of the firm's AutoCAD Landdesktop 2008 and Microstation V8 software is utilized at 48 CAD stations throughout our locations. 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
- Station Instrument Total Leica 307
- Total Station Instrument Leica 403
- Station Instrument Total Leica 405
- Lecia 407 Total Station Instrument
- Total Station Instrument 703 Lecia

15. CURI ACTIVITIES C	ACTIVITIES ON WHICH YOUR FIRM IS THE	E DESIGNATE: GINEER OF	RECORD: SITE DEVELOPMENT PROJECTS	T 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 AMLGR 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	&
OVERFIEID (LAFFERTY) AML RECLAMATION BARBOUR COUNTY	WV DEP- OFFICE OF AMLER 601 57TH STREET, SE CHARLESTON, WV 25304	ENGINEERING DESIGN FOR ABANDONED MINE RECLAMATION	000'808\$	%
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	
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	\$ 09
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 NUMBER OF PROJECTS: 6 (TOTAL IN FULL APPROXIM APPROXIMATELY 40 MILLION)	FAL NUMBER OF PROJECTS: (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT PROXIMATELY 40 MILLION)	TOTAL ESTIMAT \$4,500,000 +	TOTAL ESTIMATED CONSTRUCTION COSTS: \$4,500,000 +.	

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: WATER TREATMENT AND DISTRIBUT.

PROJECT NAME, TYPE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
	Cure and a minus and	THE CALCACION TO A COMMO	1000	
Charles Albaba For	Chestrol Klose Fall			
BAKBOOK/FRESTON EATENSTON	ZUS Z MAIN SIKEET	DESIGN, FONDING AND		(
BAKBOOK COUNTY, WV		-	000,000,004	30%
	PHILIPPI, WV 26416			
		SERVICES OF SURVEY AND		
		INSPECTION.		
JESSICA LYNCH WATER LINE				
EXTENSION	200 BEVERLY STREET	DESIGN, FUNDING AND		
WIRT COUNTY, WV	P.O. BOX 478	PERMIT APPLICATIONS,	\$3,600,000	808
	ELIZABETH, WV 26143	CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
		Z		
SOUTHWESTERN PSD	SOUTHWESTERN WATER PUBLIC	FEASIBILITY STUDY,		
WATER LINE EXTENSION /	SERVICE DISTRICT	DESIGN, FUNDING AND		30%
REPLACEMENT	P. O. BOX 98	PERMIT APPLICATIONS	\$10.430,000.	
	TTEMTNOTION WY 26347	CONTRACT DOCTMENTS STATELD		
		1		
		LUSFECTION	THE STATE OF THE S	
HAMRICK PSD	HAMRICK PSD	FEASIBILITY STUDY,		
MOORE/PORTERWOOD	PO BOX 228	DESIGN, FUNDING AND		
EXTENSION	HENDRICKS, WV 26271	PERMIT APPLICATIONS,	\$1,100,000.	25%
IUCKER COUNTY, WV		CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
CSG WHATOO MICONITI	TANCOL N. DOD	TT A CTRITITUM CONTINU		
TAN MEN TAND TOWN TO THE PROPERTY OF THE PROPE	TINCOLLA FEED	THE STORY THE STORY		c L C
WATER LINE EXTENSION		DESIGN, FUNDING AND	\$6,920,000.	7 0%
PROJECTS	240 LITTLE COAL RIVER RD.	•		
	ALUM CREEK, WV 25003	CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
		Z		
POCAHONTAS COUNTY PSD	POCAHONIAS COUNTY PSD	FEASIBILITY STUDY,		
WATER LINE REPLACEMENT	HC 63 BOX 122	DESIGN, FUNDING AND	\$10,456,000.	••••
DURBIN / BARTOW/FRANK	FRANK, WV 24920	PERMIT APPLICATIONS,		25%
	•	CONTRACT DOCUMENTS, FIELD		
	-			
	SALEM, CITY OF	FEASIBILITY STUDY,		80%
CITY OF SALEM, WEST	P.O. BOX 352	DESIGN, FUNDING AND	\$1,500,000.	
VIRGINIA	229 W. MAIN	PERMIT APPLICATIONS.		
WATER LINE REPLACEMENT	SALEM, WV 26426	CONTRACT DOCUMENTS, FIELD		
		NC		
TOTAL NUMBER OF PROJECTS:	7 REPRESENTED (APPROXIMATELY	20	TED CONSTRUCTION COSTS:	
ADDITIONAL CURRENTLY IN PRELIMINARY / DESIGN	OR O	NCTION \$32,83	щ	
PHASES		ESTIMATED COST	T OF ALL JOBS APPROXIMATELY \$150,000,000.00	\$150,000,000.00

SCORD: SANITARY SEWER PROJECTS
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D ENGINEER
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YOUR FIR
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ACTIVITIES OF
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PROJECT NAME, TYPE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
LOCATION	OWNER	RESPONSIBILITY	COST	
	CITY OF KINGWOOD			
REPLACEMENT AND SERVICE		DESIGN, FUNDING AND		
EXTENSIONS	KINGWOOD, WV 26537		\$10,000,000	40%
KINGWOOD, WV		DOCUMENTS		
		SERVICES OF SURVEY AND		
WHITTOU NOSTEGORE GENERAL	THE PROPERTY OF THE PROPERTY O		THE REPORT OF THE PARTY OF THE	The same management of the same same same same same same same sam
Greater Mannagu Court	CREATER HARKLSON COUNTY	FEASIBLILITY STUDY,		
לייין די וני אין ני		DESIGN, FUNDING AND		
			\$6,000,000	65%
HARRISON COUNTY, WV	WEST MILFORD, WV 26451	ğ		
		SERVICES OF SURVEY AND		
Territoria del Adela Adela del Companyo del		INSPECTION		
TENNERTON PSD PHASE III	TENNERTON PSD	FEASIBILITY STUDY,		
SANITARY SEWER EXTENSION	188 FAYETTE ST.	DESIGN, FUNDING AND		
UPSHUR COUNTY, WV	BUCKHANNON, WV 26201	PERMIT APPLICATIONS,	\$6,800,000	of of
		CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
		N _C		
POCAHONTAS COUNTY PSD	POCAHONTAS COUNTY PSD	FEASIBILITY STUDY,	The state of the s	
WWTP AND COLLECTION	HC 63 BOX 122	DESIGN, FUNDING AND		ው የተ
SYSTEM	FRANK, WV 24920	PERMIT APPLICATIONS,	\$11,600,000)
POCAHONTAS COUNTY, WV		CONTRACT DOCUMENTS, FIELD		
		N		
HEPIZIBAH PSD	ENLARGED HEPZIBAH	FEASTBILITY STIMY	THE PROPERTY AND ADDRESS OF THE PROPERTY OF TH	
SANITARY SEWER EXTENSION				c L C
	HEPZIBAH WV 26369	DEBMIN ADDITOR	\$3 400 000	λ N
	:	COMPANDA OF THE STATE OF THE ST	000,004,00	
		ž		
MALDEN PUBLIC SERVICE	MALDEN PUBLIC SERVICE	FEASTRITTEV SPIDY		TOTTO TOTO TOTO TOTO TOTO TOTO TOTO TO
DISTRICT				°C C
SANITARY SEWER	P.O. BOX 350	PERMIT APPLICATIONS	\$13,600,000	P D
REHABILITATION	TAD, WV 25201-0350	CONTRACT DOCUMENTS, FIELD		
KANAWHA COUNTY, WV				
		X		
CANYON PUBLIC SERVICE		FEASIBILITY STUDY,	THE PARTY AND TH	
	ᄪ	DESIGN, FUNDING AND		
SANITARY SEWER UPGRADE	MORGANTOWN, WV 26508	•	\$6,500,000.	958
MONOMONITY COUNTRY 1237		ğ		
AM / TENIOOO CATITUDINOSIO		SERVICES OF SURVEY AND INSPECTION		
TOTAL NUMBER OF PROJECTS:	OF PROJECTS: 7 REPRESENTED SANIMBY SEMED DECTE A DESCRIPTION OF THE PROPERTY 20	4	CONSTRUCTION COSTS:	\$70,300,000.00
			TOTAL FOR ALL PROJECTS APPROXIMATELY \$150,000,000	000,000

15. CURRENT ACTIVITIES	വ	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	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	000,000,3\$	50%
COUNTY LINE BRIDGE, MARSHALL COUNTY	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	\$1,800,000.	50%
TOTAL NUMBER OF PROJECTS: 6 (TOTAL IN FULL APPROXIM APPROXIMATELY 40 MILLION)	TAL NUMBER OF PROJECTS: (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT PROXIMATELY 40 MILLION)	TOTAL ESTIMATED	red construction costs: \$7,800,000	

_			1		<u> </u>	!		 -
	CONSTRUCTION COST	YOUR FIRMS RESPONSIBILITY	\$50,000,000.					
IRS	ESTIMATED CONS	ENTIRE PROJECT	\$220,000,000.					
CONSULTANT TO OTHERS	ESTIMATED COMPLETION DATE		2010					
FIRM IS SERVING AS A	NAME AND ADDRESS OF OWNER		US DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS DESIGN AND CONSTRUCTION BRANCH 500 FIRST STREET NW WASHINGTON, DC 20534					
ACTIVITIES ON WHICH YOUR FIF	NATURE OF FIRMS RESPONSIBILITY		SITE DEVELOPMENT ENGINEERING DESIGN (GRADING/ STORM WATER/UTILITIES/ ROADS)					
16. CUR ACTIVITI	PROJECT NAME, TYPE AND LOCATION		MC DOWELL COUNTY FEDERAL PRISON WELCH, WV SITE DEVELOPMENT	·			To consider the second	

17. C. ETED WORK WITHIN LAST	T 5 YEARS ON WHICH YOUR FIRE	S THE DESIGNATED FNCTNERR OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION	YEAR	CONJIRUCTED
1	WV DEP OFFICE OF AMLAR 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	000'006 \$	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	ΎΕS
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
Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	NORION-HARDING-JIMTOWN PSD P.O. BOX 87 SCOIT ROAD NORION, 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

TOMOT MINITER MADE CARRET MACHE	מוח מממנו נוסע וויידווני וגי ממגמע			
1000		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
GIIMER COUNTY PSD DUSK CAMP WATER LINE EXTENSION GIIMER COUNTY, WV	GIIMER 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 IREAIMENT PLANT/ EXI. PRESION COUNIY, WV	TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET ROWLESBURG, WV 26425	\$4,500,000.	2008	YES

17. COL. LETED WORK WITHIN LAST 5	COL. LETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DEL.	LONATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION		ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
JAKES RUN BRIDGE MONONGALIA COUNTY, WV	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	\$1,300,000.	2008	YES
	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
				- The second sec
				The second property of

18. CUMPLETED WORK WI WAS RESPONSIBLE)	COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH S RESPONSIBLE)	YOU WERE ASSOLATED WITH OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH	IS (INDICA	IE PHASE OF WORK	FOR WHICH JOUR FIRM
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 ST STREET NW 500-6 WASHINGTON, DC 20534	\$96,000,000	2003	YES	BELL JUSTICE FACILITIES
FEDERAL BUREAU OF PRISONS -CANAAN FACILITY - SITE DEVELOPMENT - SCRANION, PA	FEDERAL BUREAU OF PRISONS 320 1 ST 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
MMONT STATE FERSITY CREATIVE AND ENGINEERING H BUILDING SITE HLOPMENT MONT, WV	ONT STATE UNIVER- LOCUST AVENUE ONT, WV 26554-2	.000	2007	YES	
19. USE THIS SPACE TO PE PERFORM WORK FOR TH SEE ATTACHMENT - STATEME	JSE THIS SPACE TO PROVIDE ANY ADDITIONAL INFORMATION PERFORM WORK FOR THE WV ABANDONED MINE LANDS PROGRAM ATTACHMENT - STATEMENT OF QUALIFICATIONS	OR DESCRIPTION OF RESOURCES	SUPPORTING	YOUR FIRM'S	QUALIFICATIONS TO
SIGNATURE: PRINTED NAME: STEVEN T.	FIGURENT OF FACTS.	TITLE: DIRECTOR OF BUSINESS DEVELOPMENT	OPMENT	DATE: JUNE 23,	2010

		AM	AML and RELATED PR	RELAT	ED PF	ROJEC	EXPE	RILING	OJECT EXPERILINCE MATRIX	₹							-			J		
							PROJECT		EXPERIENCE		GUIR	REQUIREMENTS	Ş					PART	PARTICIPATION/CAPACITY *** M=Management	ION/C	APAC	λL
PROJECT	Exp. Basis C=Cop. P=Personal	Additional Info Provided in Section (s)	eoshu& benobnsdA notismsloeЯ eniM	qəed bənobnadA noitsmaləəA əniM	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	noitsulsv∃ gninimeЯ	eni'i esubeMeniM Abatement AnemetsdA	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Manageme nt	Mater Treatment	Eq,uipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ken Moran, P.E. Chadwick Biler, P.E.	Chadwick Brief, F.E.	Kurt Newbrough	Mike Nestor, E.I.	
WV DEP ANGLINS RUN	С	4	×	×	×	×			×		×	Annual Annua					×	M	M	M	Ь	
WV DEP ROARING CREEK	O	4	×	×	×	×			×		×						×	M	N	M	Р	
WV DEP AMHERSTDALE	C	4				×			×		×		×	×			×	M		M	Ь	
WV DEP SQUIRES CREEK	0	4	×	×	×	×			×		×		×				×	_	M P	M		
WV DEP OVERFIELD (LAFFERTY)	0	4	×	×	×	×			×		×		×			×	×	-	M P	М		
BELINGTON INDUSTRIAL PARK	O	4				×			×		×		×				×	M	д	Ŋ	Ь	
MINGO COUNTY INDUSTRIAL PARK	, c	4				×			×		×		×				×	2	M	Z	Œ	
HARRISON COUNTY BUS, PARK	9	7	·			×			×		×		×				×	M		2		
INDIAN RIDGE INDUSTRIAL PARK	O	4	***			×			×		×		×			×	×	Σ	Ь	Σ	۵	
MARTINKA COAL COMPANY	٥	4				×					×	×		×			×	Σ		M		
WHITE OAKS BUSINESS PARK	Ö	-4				×			×		×		×				×	N	g.	M		
CANAAN PRISON	ن	4				×			×		×		×			×	×	M	Р	M	Р	
WV DOH BRIDGEPORT HILL	O	4				×			×		×		×					N	Ь	M		

* 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.

RFQ No.	EP 15216
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STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

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

DEFINITIONS:

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

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

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

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** 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 Signa	iture: M. Killust	Date: June 23, 2010

Purchasing Affidavit (Revised 06/15/07)