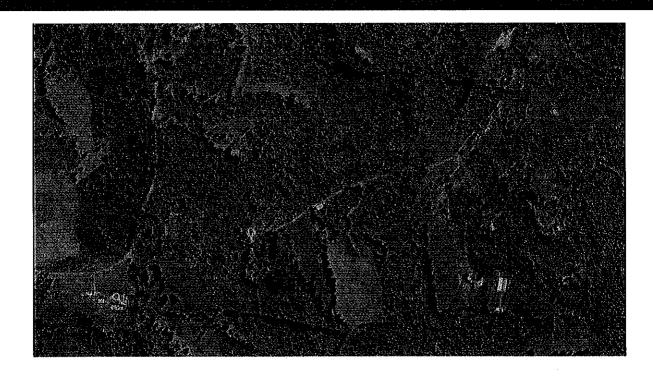
Statement of Qualifications to provide Engineering Services

To The West Virginia Department of Environmental Protection,

Office of Abandoned Mine Lands & Reclamation, for

DEP 15217 CLARKSBURG (LYONS) DESIGN



RECEIVED

2010 DEC -1 AM 9: 21

WV/PURCHASING DIVISION

Northgate Business Park 300 Association Drive Charleston, WV 25311 304-343-7601 304-343-7604 Fax



30 Columbia Boulevard P.O. Box 1532 Clarksburg, WV 26301 304-624-4108 304-624-7831 Fax

www.thrashereng.com thrasher@thrashereng.com 3000 Thayer Center Oakland, MD 21550 301-334-3866 301-334-4020 Fax



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 15217, Clarksburg (Lyons) LS Design, Expression of Interest

Dear AML Chief and Selection Committee:

Thrasher Engineering, Inc. is very interested to provide engineering design services for the Clarksburg (Lyons) design project in Harrison 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.

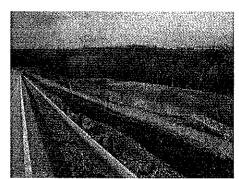
Providing a full range of professional engineering services, Thrasher Engineering, Inc. currently maintains a staff of 170 full-time employees. Our staff includes registered professional engineers, graduate engineers, registered professional surveyors, and support staffing of surveyors, design technicians, 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 Clarksburg (Lyons) LS 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



Storm water Pond, Canaan Federal Prison, Scranton, PA

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.

Our Site Development Services Include:

<u>Planning and Conceptual Design</u>- 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

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:

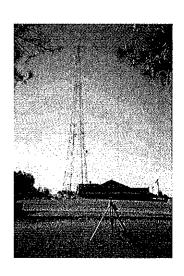
- □ Permitting Related Activities (401 and 404)
- □ NEPA Environmental Document Preparation
- Wetland Delineation and Mitigation
- □ Rare, Threatened and Endangered Species Section 7 Informal Consultation
- Rare, Threatened and Endangered Species
 Section 10 Habitat Conservation Plans
- Water Use and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





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

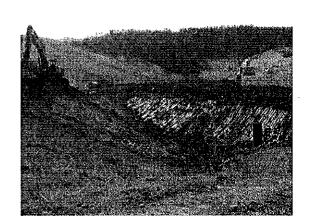
<u>Pre- and Post-Mining Surveys</u> - vertical and horizontal control, inspector's report of protected structures, interior and exterior photographs, and videos. Thrasher Engineering provides these survey services for numerous coal companies, including Eastern and Martinka. Additional services performed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

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.

<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 Clarksburg (Lyons) LS 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

CERT	<u>IFICATIONS</u>
	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
	evelopment Projects
	WV DEP Anglin's Run and Roaring Creek Projects
ā	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
	oran 💆 orang oran
	Wetland Replacement Project, Putnam County
	Hurricane Business Park
	Shinnston City Park, Including Pool and Bathhouse
	City of Bridgeport, Walking Trail and Bridge
_	City of Bridgeport, Walking Trail and Bridge
Airpor	rts
Ġ	Harrison Marion Regional Airport – Improvement Master Plan
	Raleigh County Airport – Business Park and Master Plan
	Grafton Hospital, Helipad Relocation

Highv	vay/Road/Bridge Projects
ā	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

-		• • •		
	AMANAAA	シヘヘ(())	A# ['11/11	-nainaare
_	American	COCICIA	UI CIVII	LIIGIIIGGIG

☐ Eastern Panhandle Home Builders Association

REPRESENTATIVE PROJECT EXPERIENCE

_	WV DEF AME FOR THE AND DIVAMAGE 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.

.6	
	SHENANDOAH OFFICE PARK – Two commercial buildings totaling 50,000 sf. Sketch Plat design.
۵	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.
0	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.
0	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
0	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 Házardous 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(Development Harman Construction, Incorporated	B 00 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
То	pographical Surveys	О Г	26 6
	West Virginia Department of	_	S Surveys
	Transportation/Division of Highways	u	US Army Corps of Engineers, Baltimore
		_	District
	Gandee and Partners; Huntington Summit	u _	Benatech Associates
	High School	u	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 Clarksburg (Lyons) LS 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.

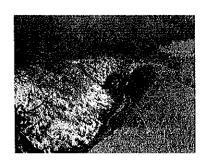
ROARING CREEK, RANDOLPH COUNTY

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

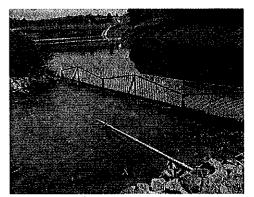
This project consisted of the design of a 17.3 MGD Water Treatment Plan to blend mine borehole water with acid mine drainage; the plan removes iron (1000 mg/l (ferric hydroxide) to less than 1 mg/l.

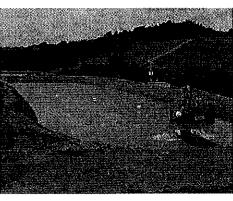
The plant design included:

- 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.

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

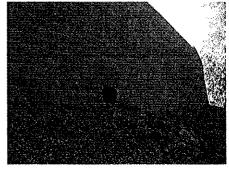
Client:

U.S. Department of Veterans Affairs Peter Fernandez, National Cemetery

Administration

Carter VanDyke Associates

215-345-5053



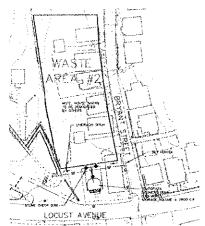
Project Description: The project consisted of the planning, design and bidding for the expansion of the WV National Cemetery. The scope of the work included site utilities, storm sewers, roads, sidewalks, retaining walls, pre-cast concrete crypt burial areas, site grading and sediment and erosion control.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

•	ST VIRGINIA	WEST VIRGINIA DEPARTMENT	CHARTEL PROTECTION	PROTECTION
O AML CON	CONSULTANT OU	7111	STIONNALKE	Accachment "B"
PROJECT NAME Clarksburg (Lyons) LS Design WVDEP 15217	DATE Noven	DATE (DAY, MONTH, November 1, 2010	YEAR)	EEIN 55-0633596-6
1. FIRM NAME THRASHER ENGINEERING, INC.	2 HO 30 CO 26301	HOME OFFICE BUSINESS ADDRESS COLUMBIA BLVD., CLARKSBURG, 101	SINESS ADDRESS , CLARKSBURG, WV	3. FORMER FIRM NAME NOT APPLICABLE
4. HOME OFFICE TELEPHONE 5 304-624-4108 1	5. ESTABLÍSHED 1983	ID (YEAR 6	. TYPE OWNERSH. Individual Partnership	P 6a. WV REGISTERED DBE Corporation X (Disadvantaged Business Joint-Venture Enterprise) NO X
7. PRIMARY AML DESIGN OFFICE: ADD 30 COLUMBIA BLVD, CLARKSBURG, 300 ASSOCIATION DRIVE, CHARLE	E: ADDRESS/ TELEPHC (SBURG, WV / 304-624 CHARLESTON, WV / 30	NE/ PE 1-4108)4-343-	PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EAC 8 / KENNETH P. MORAN, P.E., VICE PRESIDENT / 3 3-7601 / JONATHAN CARPENTER, MANAGING PARTNER	AMI DESIGN PERSONNEL EACH OFFICE P.E., VICE PRESIDENT / 12 PENTER, MANAGING PARTNER / 2
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS H. Wood Thrasher, P.E President Kenneth P. Moran, P.E Vice President		OF FIRM OF CO	8a. NAME, TITLE, & TELEPHONE NUNWE. 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.E304-324	J. TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS Y WATSON -304-624-4108 - PARTNER LER, P.E304-624-4108 - PARTNER RILEY, P.E304-624-4108 - PARTNER RILEY, P.E304-624-4108-PARTNER RILEY, P.E304-324-4108 - PARTNER
9. PERSONNEL BY DISCIPLINE				
24 ADMINISTRATIVE 3 ARCHITECTS — BIOLOGIST 18 CADD OPERATORS — CHEMICAL ENGINEERS 27 CIVIL ENGINEERS 41 CONSTRUCTION INSPECTORS 2 DESIGNERS	ECOLOGISTS - ECONOMISTS - ELECTRICAL ENGINE - ENVIRONMENTALISTS - ESTIMATORS - GEOLOGISTS - HISTORIANS - HYDROLOGISTS	TALISTS TALISTS	LANDSCAPE ARCHITECTS MECHANICAL ENGINEERS MINING ENGINEERS PHOTOGRAMMETRISTS PLANNERS: URBAN/REGIONAL SANITARY ENGINEERS SOLLS ENGINEERS SOLLS ENGINEERS BAPTERS BAPTERS	TECTS STRUCTURAL ENGINEERS SERS SURVEYORS - TRAFFIC ENGINEERS SS 10 OTHER REGIONAL SRS 171 TOTAL PERSONNEL
— DRAFTSMEN TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: *RPEs other than Civil and Mining must provide supporting documentation supervise and perform this type of work.	ERED PROFESS Mining must s type of wo	SSIONAL ENGINEER	WALLERS FISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: and Mining must provide supporting documentation this type of work.	12 that qualifies them to
10. HAS THIS JOINT-VENTURE WORKED	ED TOGETHER	BEFORE?	YES NO NOT APPLICABLE	ICABLE

11. OUTSTIF KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED	TO "" USED.	Attach "AML Consultant Confidential Qualification
E AND AI	SPECIALTY:	WORKED WITH BEFORE
NGE	GEOTECHNICAL SERVICES	\$ \(\)
Sc. ALbdis, wv	4	
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIAL TY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIAL TY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No

- ES NUMEROUS PROJECTS INVOLVING LAND REMEDIATION, STORM WATER DRAINAGE, SLIP REPAIR, MASS GRADING IN TO THE WY DEP FOR BOTH DRAINAGE AND PORTAL AMI PROJECTS AS WELL AS FOR WATER LINE AND WATER TREATMENT PLANT PRO ENGINEERING HAS PERFORMED ENGINEERING DESIGN SEI Is your firm experienced in Abandoned Mine Land Remediation/Mine Reclamation Engineering? Description and Number of Project: THRAS! RELATION TO SITE DEVELOPMENT AND HIGHWAY PROJECTS. RELATED TO AME. XES Ø
- 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 Is your firm experienced in Soil Analysis? GRADATIONS AND CLASSIFICATION.
- WEST VIRGINIA DEPARTMENT OF HIGHWAYS AND WATER LINE EXTENSION PROJECTS, THRASHER ENGINEERING HAS EXTENSIVE EXPERIENCE Description and Number of Projects: THROUGH OUR WORK IN THE PLANNING AND DESIGN OF BRIDGES FOR THE IN HYDROLOGY. WE ALSO HAVE EXTENSION EXPERIENCE IN HYDRAULIC MODELING FOR WATER AND WASTEWATER PROJECTS THROUGHOUT WEST VIRGINIA. Is your firm experienced in hydrology and hydraulics? YES
- Does your firm produce its own Aerial Photography and Develop Contour Mapping? Description and Number of Projects: YES Ω

NO WE UTILIZE THE SERVICES OF NUMEROUS FIRMS, INCLUDING PENTREE, INC. WHICH IS AN AFFILIATE COMPANY OF THRASHER ENGINEERING INC.

- 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 ഥ.
- RELATED SPECIFICALLY TO ACID MINE DRAINAGE AND ARATEMENT, BOTH OF WHICH ARE LOCATED IN BARBOUR COUNTY, WEST VIRGINIA. THE CHARLESTON WY 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 WVDEP Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design? COUNTY, WEST VIRGINIA TO TREAT DRAINAGE. 냰.

13. PERSC" I HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES "" SPONS date t keep to essentials) NAME & TITLE (Last, First, Middle Int.)	FOR AML PROJECT DESIGN (Furnish RS OF EXPERIENCE
YEARS OF AML DESIGN EXPERIENCE: 7 7	YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC EXPERIENCE: 17 EXPERIENCE: 24
Mr. Moran joined Thrasher Engineering in 1991 and currently serves Chief Engineer.	as Vice President and Chief Operations Officer and
for management feasibility stud and private clients. Additional ding and regulatory agencies in	utility and site devesive experience in all
(Degree, Year, Specialization) B.S., Clvll	1983 -
Eriendship Lodge No.56 A.F.	REGISTRATION (Type, rear, state) C Registered Professional Engineer (PE), State of West Virginia #11309
<pre>□ Wv Society of Froiessional Engineers</pre> □ Member of American Society of Civil Engineers	tered Pro
	☐ Registered Professional Engineer (PE), State of Ohio #64412
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE data but keep to essentials)	FOR AM
:	OF EXPERIENCE
FEARS OF AML DESIGN EXPERIENCE: 3 3	EXPERIENCE: 16 EXPERIENCE: 16 EXPERIENCE: 16
Brief Explanation of Responsibilities: Mr. Biller has experience in all a on site development, highways, roads, bridges, and airports. Mr. Biller partner of Thrasher Engineering. For Thrasher Engineering, Mr. Biller is and private site development projects, specializing in airports, highways all of the firm's WVDOT/DOH projects, he has extensive knowledge of state	in all aspects of engineering with specific emphasis Biller joined Thrasher Engineering in 1999 and is a ller is responsible for WV DEP AML projects and public highways, roads and bridges. As Project Manager for of state and federal building 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) Consider Registered Professional Engineer(PE), State of West Virginia #13620 Considered Professional Engineer (PE), State of Pennsylvania #PE056012E Considered Professional Engineer (PE), State of Ohio #64594

13. PER: L HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATE: SPON	SPONSIBLE FOR AME PROJECT DESIGN (Furnish comple
ITLE (Last, First, Middle Int.)	EXPERIENCE
NESTOR, MICHAEL, P.E.	YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC EXPERIENCE: 7 EXPERIENCE: 7
Brief Explanation of Responsibilities Mr. Nestor joined Thrasher Engineering Engineer. Mr. Nestor has a wide range of experience in residential and commen all aspects of infrastructure design including street and lot layout, street water systems, storm water drainage, storm water management, erosion and sedi In addition, Mr. Nestor oversees all general operations within The Berkeley I staff, CAD technicians, and staff engineers to ensure successful completion curveying, material testing, and environmental services.	Mr. Nestor joined Thrasher Engineering in 2005 and serves as Project Manager and of experience in residential and commercial site development projects, utilizing 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 nineers to ensure successful completion of projects covering site development, ronmental services.
EDUCATION (Degree, Year, Specialization) - B.S. Civil Engineering Technology - Fairmont State University,	£y, 2003
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers Eastern Panhandle Home Builders Association	REGISTRATION (Type, Year, State) C ENGINEERING INTERN (EIT), State of West Virginia
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE data but keep to essentials)	NSIBLE FOR AML PROJECT DESIGN (Furnish complete
Last, Fir	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN 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 experien 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. Specialties include geometric layout of sites, subdivisions, and roads, and aspects of site engineering, taking projects from survey to concept to construct an engineering projects.	6 and serves as a Staff Engineer on site development projects. Mrs. Rohrbaugh has experience in procept to construction. Specialties include geometric layout of sites, subdivisions, and roads, nent control, environmentally sensitive design and various regulatory permitting requirements.
EDUCATION (Degree, Year, Specialization) B.S., Civil Engineering, West Virginia University	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

Clevenger, Cliff - CADD TECHNICIAN		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	AML CE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 20
Brief Explanation of Responsibilities Mr. for the firm. His duties entail all aspec extension of the public sewer and water swater management, erosion and sediment co	Clever ts of i ystems atrol F	eering in 199 uding street nd profiles,	1 and serves as CADD Operator and log layout, street profiles, storm water drainage, storm
EDUCATION (Degree, Year, Specialization)	ion)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	IONS	REGISTRATION (Type, Year, St	State)
13. PERSONAL HISTORY STATEMENT OF PRI data but keep to essentials)	PRINCIPALS AND ASSOCIATES RESPON	RESPONSIBLE FOR AML PROJECT DESIGN	N (Furnish complete
TLE (Last, Fir		YEARS OF EXPERIENCE	
ROUGH, KURT	YEARS OF AML DESIGN EXPERIENCE:	AML E:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 24
Brief Explanation of Responsibilities Mr. experience in all aspects of surveys, inc of plats and legal descriptions. Mr. Newblayout, and processes GPS raw data for bo projects as well as separate contracts.	Newbrough joined The luding but not limit rough also performs the public and private He also serves in the the lubble controls.	joined Thrasher Engineering in 1990 Mr. Newbr not limited to boundary and easement surveys performs courthouse research, computes field nd private clientele in conjunction with Thra wes in the elected position of Harrison Count	Newbrough has extensive veys and the preparation ield data for construction Thrasher Engineering County (WV) Surveyor.
EDUCATION (Degree, Year, Specialization) Surveying - John Tyler Community College, United Career Center, Clarksburg, WV	ion) ty College, Chester, VA rg, WV		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS West Virginia Association of Land Surveyors American Congress on Surveying and Mapping Member Strathmore's Who's Who	IONS and Surveyors and Mapping	REGISTRATION (Type, Year, State) Professional Land Surveyor (PS), Wes #1618 - 1995 OSHA Hazardous Waste Operations and Response Center 29 CFR 1910.120 US Department of Labor/Mine Safety a Administration	State) yor (PS), West Virginia erations and Emergency FR 1910.120 Mine Safety and Health

PROVITIE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AMI, SERVICES DES 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.

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 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
- Leica 307 Total Station Instrument
- Leica 30/ 10tal Station Instrument
- Leica 405 Total Station Instrument
- Lecia 407 Total Station Instrument
- Lecia 703 Total Station Instrument

15. CUR _ I ACTIVITIES C	ON WHICH YOUR FIRM IS THE	DESIGNATE NGINEER OF	RECORD: SITE DEVELOPMENT	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 AME RECLAMATION PRESTON COUNTY, WV	WV DEP- OFFICE OF AMLER 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	υ &
OVERFIELD (LAFFERTY) AML RECLAMATION BARBOUR COUNTY	WV DEP- OFFICE OF AMLAR 601 57TH STREET, SE CHARLESTON, WV 25304	ENGINEERING DESIGN FOR ABANDONED MINE RECLAMATION	\$303,000	
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. MCT, 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 KINCMONT ROAD PLEASANT VALLEY, WV 26554	DESIGN, SURVEY, CONSTRUCTION MGT, INSP AND TESTING - SIDEWALKS PHASE III	\$250,000	809
NORIH 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)	AL NUMBER OF PROJECTS: (TOTAL IN FULL APPROXIMATELY 30 SITE DEVELOPMENT ROXIMATELY 40 MILLION)	TOTAL ESTIMAT \$4,500,000 +	TOTAL ESTIMATED CONSTRUCTION COSTS: \$4,500,000 +	

15.	15. CURRENT	CURRENT ACTIVITIES ON WHICH YOUR FIRM	S ON WHICH YOUR FIRM	H YOUR	FIRM I	S THE 1)ESIGNATED /	SNGINEER O	OF RECORD	: WATER	TREATMENT	AND	DISTRIBUTI	ì
000	STOTE COLD													

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	CHESTNUT RIDGE PSD	FEASIBILITY STUDY,		
BARBOUR/PRESTON EXTENSION BARBOUR/PRESTON	ZOS S MALN STREET	DESIGN, FUNDING AND DERMIT APPLICATIONS	99,500,000	30%
ERRECON COUNTY NA	PHILIPPI, WV 26416	CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND INSPECTION.		
JESSICA LYNCH WATER LINE	TOWN OF ELIZABETH	FEASIBILITY STUDY,		
EXTENSION	200 BEVERLY STREET	DESIGN, FUNDING AND		
WIRT COUNTY, WV		APPLICATIONS,	\$3,600,000	808
	ELIZABETH, WV 26143	DOCUMENTS		
		SERVICES OF SURVEY AND		
SOUTHWESTERN PSD	SOUTHWESTERN WATER PUBLIC	FEASIBILITY STUDY,		
WATER LINE EXTENSION /	SERVICE DISTRICT	DESIGN, FUNDING AND		30%
REPLACEMENT	P. O. BOX 98	APPLICATIONS,	\$10,430,000.	
	FLEMINGTON, WV 26347	8		
		SERVICES OF SURVEY AND		
		INSPECTION		
HAMRICK PSD	HAMRICK PSD			
MOORE/PORTERWOOD	PO BOX 228	DESIGN, FUNDING AND		L C
EXTENSION	HENDRICKS, WV 26271		\$1,100,000.	ZD*
TUCKER COUNTY, WV		8		
		SERVICES OF SURVEY AND		
LINCOLN COUNTY PSD	LINCOLN PSD	FEASIBILITY STUDY,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6
WATER LINE EXTENSION	P.O. BOX 38	DESIGN, FUNDING AND	\$6,920,000.	Z5%
PROJECTS	240 LITTLE COAL RIVER RD.			
	ALUM CREEK, WV 25003	ရွ		
		SERVICES OF SURVEY AND		
		INSPECTION		
POCAHONTAS COUNTY PSD	POCAHONTAS COUNTY PSD	FEASIBILITY STUDY,		
WATER LINE REPLACEMENT	HC 63 BOX 122	DESIGN, FUNDING AND	\$10,456,000.	
DURBIN / BARIOW/FRANK	FRANK, WV 24920	•		25%
		ָב ב		
		SERVICES OF SURVEY AND		
	TO WILL CARREST	EESCHILLING CHILLY		808
HORITA STATES TO THE PER	SALEM, CLII OF	PERSTELLINE STOLY	\$1,500,000	
CITY OF SALEM, WEST	200 W WATE	DERMIT APPLICATIONS	• • • • • • • • • • • • • • • • • • • •	
WATER LINE REDIACEMENT	SATEM WV 26426	CONTRACT DOCUMENTS, FIELD		
		RL.		
		N		
TOTAL NUMBER OF PROJECTS: 7 REPRESENTED (APPROXIMA	7 REPRESENTED (APPROXIMATE)	MELY 20 TOTAL ESTIMAT	TOTAL ESTIMATED CONSTRUCTION COSTS:	
ADDITIONAL CURRENTLY IN PRELIMINARY / DESIGN	O.R.	CONSTRUCTION \$32,830,000.0	\$32,830,000.00 REPRESENTED	
PHASES		ESTIMATED COS	ESTIMATED COST OF ALL JOBS APPROXIMATELY \$150,000,000.00	z \$150,000,000.00

FIRM IS THE DESIGNATED ANGINEER OF RECORD: SANITARY SEWER PROJECTS
I IS THE DESIGNATED THE OF RECORD: SANITARY SEWER
I IS THE DESIGNATED WGINEER OF RECORD: SANITARY
I IS THE DESIGNATED T
I IS THE DESIGNATED ENGINEER O
IS THE DESIGNATED
I IS THE
ST I
IRM
YOUR F
N WHICH
TACTIVITIES ON WHICH
CURRENT
15.

PROJECT NAME, TYPE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
LOCATION	OWNER	RESPONSIBILITY	COST	
KINGWOOD SEWER	CITY OF KINGWOOD	FEASIBILITY STUDY,		
REPLACEMENT AND SERVICE	313 TUNNELTON STREET	DESIGN, FUNDING AND		
EXTENSIONS	KINGWOOD, WV 26537		\$10,000,000	40%
KINGWOOD, WV		8		
		SERVICES OF SURVEY AND		
WHATCO NOSTOGEN GENEGGO	CREATER HARRISON COINTY	EEASTRII.THY SHITTY		
	Dan	CINA CINTERNATION AND		
FOUR SE TI-D	100 POR 100		36,000,000	e U
HADDISON COUNTY WAY		CONTRACT DOCUMENTS FIRST		Š S
		1		
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	5%
		CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
		INSPECTION		
POCAHONTAS COUNTY PSD	POCAHONTAS COUNTY PSD	FEASIBILITY STUDY,		
WWTP AND COLLECTION	HC 63 BOX 122	DESIGN, FUNDING AND		958
SYSTEM	FRANK, WV 24920	PERMIT APPLICATIONS,	\$11,600,000	
POCAHONTAS COUNTY, WV		8		
		SERVICES OF SURVEY AND		
		INSPECTION		
HEPIZIBAH PSD	ENLARGED HEPZIBAH	FEASIBILITY STUDY,		
SANITARY SEWER EXTENSION	DRAWER H	DESIGN, FUNDING AND		95%
	HEPZIBAH, WV 26369	PERMIT APPLICATIONS,	\$3,400,000	
		CONTRACT DOCUMENTS, FIELD		
		SERVICES OF SURVEY AND		
MALDEN PUBLIC SERVICE	MALDEN PUBLIC SERVICE	FEASIBILITY STUDY,		
DISTRICT	DISTRICT	DESIGN, FUNDING AND		868
SANITARY SEWER	P.O. BOX 350		\$13,600,000.	
	TAD, WV 25201-0350	8		
KANAWHA COUNTY, WV		SERVICES OF SURVEY AND		
CANYON PIBLIC SEBUTCE	CANYON PSD	FEASIBILITY STUDY.		
	12 WICHITA STREET	DESIGN, FUNDING AND		
SANITARY SEWER UPGRADE		PERMIT APPLICATIONS,	\$6,500,000.	958
AND EXT		g		
MONONGALIA COUNTY, WV		SERVICES OF SURVEY AND INSPECTION		
TOTAL NUMBER OF PROJECTS:	OF PROJECTS: 7 REPRESENTED	-	CONSTRUCTION COSTS:	\$70,300,000.00
			TOTAL FOR ALL PROJECTS APPROXIMATELY \$150,000,000	0,000,000

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	\$6,000,000	50%
COUNTY LINE BRIDGE, MARSHALL COUNTY	WVDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	PRELIMINARY ENGINEERING, DESIGN, SURVEY	\$1,800,000.	& O U
TOTAL NUMBER OF PROJECTS: 6 (TOTAL IN FULL APPROXIMATELY APPROXIMATELY 40 MILLION)	ARTELY 30 SITE DEVELOPMENT	TOTAL ESTIMATED	TED CONSTRUCTION COSTS: \$7,800,000	

)

)

RESPONSIBILITY YOUR FIRMS ESTIMATED CONSTRUCTION COST \$50,000,000. ENTIRE PROJECT \$220,000,000. CONSULTANT TO OTHERS ESTIMATED COMPLETION DATE 2010 ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A 8 JUSTICE FEDERAL
BUREAU OF PRISONS
DESIGN AND
CONSTRUCTION BRANCH
500 FIRST STREET NW WASHINGTON, DC 20534 NAME AND ADDRESS OF OWNER US DEPARTMENT OF SITE DEVELOPMENT ENGINEERING DESIGN NATURE OF FIRMS RESPONSIBILITY (GRADING/ STORM WATER/UTILITIES/ ROADS) PROJECT NAME, TYPE SITE DEVELOPMENT AND LOCATION MC DOWELL COUNTY FEDERAL PRISON WELCH, WV 16. CURF

17. C. ETED WORK WITHIN LAST 5 YEARS ON WHI	CH YOUR FIRE	S THE DESIGNATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
ANGLIN'S RUN AME 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 AMLGR 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 WAIER LINE REPLACEMENT PROJECT MARION COUNTY, WV	TOWN OF FARMINGTON 1314 MILL STREET FARMINGTON, WV 26571	\$1,300,000.	2007	YES
CITY OF KINGWOOD WHETSELL SETTLEMENT WATER LINE EXTENSION PRESTON COUNTY, WV	KINGWOOD, CITY OF 313 TUNNELFON ST. KINGWOOD, WV 26537-1462	\$ 420,000.	2007	YES
NORTON-HARDING-JIMIOWN PSD WAIER LINE EXTENSION RANDOLPH COUNTY, WV	NORION-HARDING-JIMIOWN 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

MISSION \$2,500 FE 1 651 CE DISTRICT \$2,46 FMENT \$2,46 60 52,46 54,50	ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD	
NICHOLAS CO BIDG COMMISSION 700 MAIN STREET, SUITE 1 SUMMERSVILLE, WV 26651 RALEICH COUNTY PSD 224 EAST MAIN PO BOX 1286 SOPHIA, WV GILMER COUNTY PSD 232 W. MAIN STREET GLENVILLE, WV 26351 HODGESVILLE PUBLIC SERVICE DISTRICT 188 FAYETES TREET CITY OF CAMERON 44 MAIN STREET CAMERON, WV 26033 HAMRICK PUBLIC SERVICE DISTRICT P.O. BOX 228 HENDRICKS, WV 26271 P.O. BOX 228 HENDRICKS, WV 25560 TOWN OF BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET	NAME AND ADDRESS ESTIMATED CONSTRUCTION COST YEAR OF OWNER	CONSTRUCTED (YES OR NO)
COUNTY PUBLIC SERVICE LINE EXTENSIONS COUNTY PSD P WATER LINE EXTENSION CHARLE COUNTY PSD 224 BAST MAIN CHARL COUNTY PSD 23 W. MAIN STREET GLENVILLE, WV 26351 LIE PUBLIC SERVICE LIE PUBLIC SERVICE TION OF WATER LINE N. BOOSTER STATIONS, N. BOOSTER STATIONS, N. BOOSTER STATIONS, THOUGHANNON, WV 26201 CITY OF CAMERON CHARLOR COUNTY, WV 26033 COUNTY, WV 26033 CHARLIC SERVICE HAMRICK PUBLIC SERVICE DISTRICT THE WATER TREATMENT ONNTY BUSINESS PARK; ON OF 13 ACRES OF ROTHORITY WE TIAND COUNTY PUBLIC SERVICE THOUGHAND COUNTY DEVELOPMENT ON OF 13 ACRES OF ROTHORITY RETIAND COUNTY PUBLIC SERVICE THOUGHAND COUNTY DEVELOPMENT ON OF 13 ACRES OF ROTHORITY PO DOX 458 COUNTY, WV 42 POPLAR STREET	COMMISSION SUITE 1 26651	YES
GILMER COUNTY PSD 232 W. MAIN STREET GLENVILLE, WV 26351 HODGESVILLE PUBLIC SERVICE DISTRICT 188 FAYETTE STREET P.O. BOX 758 BUCKHANNON, WV 26201 CITY OF CAMERON 44 MAIN STREET CAMERON, WV 26033 HAMRICK PUBLIC SERVICE DISTRICT P.O. BOX 228 HENDRICK, WV 26271 P.O. BOX 228 HENDRICKS, WV 26271 PUTNAM COUNTY DEVELOPMENT AUTHORITY P.O. BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET	PSD	YES
EEVICE HODGESVILLE PUBLIC SERVICE DISTRICT 188 FAYETTE STREET TATIONS, P.O. BOX 758 BUCKHANNON, WV 26201 CITY OF CAMERON 44 MAIN STREET CAMERON, WV 26033 CE HAMRICK PUBLIC SERVICE DISTRICT RTY, WEST P.O. BOX 228 EPARATION HENDRICKS, WV 26271 ES OF P.O. BOX 167 SS PARK; PUTNAM COUNTY DEVELOPMENT ES OF P.O. BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG TOWN OF ROWLESBURG TOWN OF ROWLESBURG TOWN ASTREET	51	YES
CCITY OF CAMERON 44 MAIN STREET CAMERON, WV 26033 CAMERON, WV 26033 CAMERON, WV 26033 CAMERON, WV 26271 RESPARATION HENDRICKS, WV 26271 RESPARATION ESS PARK; PUTNAM COUNTY DEVELOPMENT RES OF P.O. BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG TOWN OF SOWLESBURG	LIE PUBLIC SERVICE \$3,100,000 TTE STREET 758 ON, WV 26201	YES
HAMERICK PUBLIC SERVICE DISTRICT P.O. BOX 228 HENDRICKS, WV 26271 TO PUTNAM COUNTY DEVELOPMENT AUTHORITY P.O. BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET	033	YES
PUTNAM COUNTY DEVELOPMENT AUTHORITY P.O. BOX 167 SCOTT DEPOT, WV 25560 TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET		YES
ANT/ EXT. PO BOX 458 42 POPLAR STREET	ONTY DEVELOPMENT 167 OT, WV 25560	YES
ROWLESBURG, WV 26425	MLESBURG STREET , WV 26425	YES

)

	CONSTRUCTED (YES OR NO)	YES	YES	XES			
	YEAR	2008	2008	2008			·
NATED ENGINEER OF RECORD	ESTIMATED CONSTRUCTION COST	\$1,300,000.	\$1,119,000.00	\$1,200,000.			
COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESTONATED ENGINEER OF RECORD	NAME AND ADDRESS OF OWNER	WYDOT/DOH 1900 KANAWHA BLVD EAST CHARLESTON, WV 25305	INTERNATIONAL COAL GROUP, INC. 2000 ASHLAND DRIVE ASHLAND, KY 41101	CITY OF RIPLEY TIM KING, CITY SUPERINTENDENT 203 SOUTH CHURCH ST. RIPLEY, WV 25271			
17. COMPLETED WORK WITHIN LAST 5	PROJECT NAME, TYPE AND LOCATION	JAKES RUN BRIDGE MONONGALIA COUNTY, WV	ICG - THREE FORKS BRIDGE TAYLOR COUNTY	CITY OF RIPLEY - MAIN STREET REVITALIZATION - JACKSON CO.			

18. COMPLETED WORK WI WAS RESPONSIBLE)	WORK WITHIN LAST 5 YEARS ON WHICH	YOU WERE ASSOCIATED WITH OTHER FIRMS (INDICATE	S (INDICA:		PHASE OF WORK FOR WHICH OUR 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	000'000'96\$	2003	YES	BELL JUSTICE FACILITIES
FEDERAL BUREAU OF PRISONS -CANAAN FACILITY - SITE DEVELOPMENT - SCRANTON, 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		2005	YES	VOA ARCHITECIS
MACNI STATE FERSITY CREATIVE AND ENGINEERING I BUILDING SITE LOPMENT MONT, WV	FAIRMONI STATE UNIVERSITY 1201 LOCUST AVENUE FAIRMONI, WV 26554-2491	\$100,000.	2007	YES	DESIGN ALLIANCE OMNI ASSOCIATES
19. USE THIS SPACE TO PR PERFORM WORK FOR THI SEE ATTACHMENT - STATEME	Y ADDITIONAL INFOR	DESCRIPTION OF RESOURCES	SUPPORTING	YOUR FIRM'S	QUALIFICATIONS TO
SIGNATURE: SIGNATURE: PRINTED NAME: STEVEN T.	STATEMENT OF FACTS.	TITLE: DIRECTOR OF BUSINESS DEVELOPMENT		DATE: JUNE 23,	2010

		AM	AML and RELATED PR	RELAT		COLECT	EXPE	RENS!	OJECT EXPERIENCE MATRIX	 ≚)		
							PROJE	CT EX	PROJECT EXPERIENCE	ш	QUIR	REQUIREMENTS	S				<u> </u>	PART	PARTICIPATION/CAPACITY	ON/CA	PACIT	<u>}</u>
PROJECT	Exp. Basis C=Com. P=Personal	Additional Info Provided in Section (s)	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Fire Fire the Partie of the properties of the pr	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications Water Quality	Evaluation/Mitigation/ Replacement	Construction Inspection/Management In	fnemtserT retsVV	Eq;uipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Ken Moran, P.E. Chadwick Bller, P.E.	April Rohrbaugh	Kurt Newbrough	Mike Nestor, E.I.	
							-	568383383838														
WV DEP ANGLINS RUN	Ú	4	×	×	×	×			×		×						×	2		Σ	O.	
WV DEP ROARING CREEK	9	4	×	×	×	×			×		×						×	N	Σ	M	Œ	
WV DEP AMHERSTDALE	S	4				×			×		×		×	×			×	2		Σ	Œ.	
WV DEP SQUIRES CREEK	U	4	×	×	×	×			×		×		×				×	€	P P	ž		
WV DEP OVERFIELD (LAFFERTY)	2	4	×	×	×	×			×		×		×			×	×	2	MP	M		
BELINGTON INDUSTRIAL PARK	Ų	4				×			×		×		×				×	M	O.	Σ	o.	
MINGO COUNTY INDUSTRIAL PARK	Ü	4				×			×		×		×				×	M. N	M	7	Ω.	
HARRISON COUNTY BUS. PARK	Ú	4				×			×		×		×				×	М		M		
INDIAN RIDGE INDUSTRIAL PARK	υ U	4				×			×		×		×			×	×	M	Q.	2	Ω	
MARTINKA COAL COMPANY	Ų	4				×					×	×		×			×	M		M		
WHITE OAKS BUSINESS PARK	Э	4				×			×		×		×				×	\$	ů.	2		
CANAAN PRISON	C	4				×			×		×		×			×	×	M	Q.	Σ	Q.	
WAY DOH BRIDGEPORT HILL	J	7				×			×		×		×					=	a	N		
	oden western v. State and selection of the selection of t	Audient Brown Company Company	1		 		1	1						1	1	1						

* 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 N	o. DEP	15217
-------	--------	-------

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	ature: While	Date: June 23, 2010