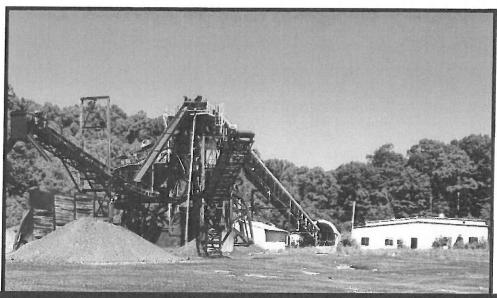
EXPRESSION OF INTEREST

for

Carson One Mining, LLC, O-4-84, Glady Fork Mining, Inc. D-35-82 & U-60-83

> DEP 16488 June 11, 2014





06/11/14 18:43:24AM West Virginia Purchasing Division

THRASHER

600 WHITE OAKS BLVD. BRIDGEPORT, WV 26330 www.thrashereng.com



PEZDOR

RFO COPY

TYPE NAME/ADDRESS HERE

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

Solicitation

NUMBER DEP16488 PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

FRANK WHITTAKER 304-558-2316

ENVIRONMENTAL PROTECTION DEPT. OF

OFFICE OF SPECIAL RECLAMATION 105 S. RAILROAD STREET

PHILIPPI, WV

26416-9998 304-457-3219

DATE PRINTED 05/15/2014

BID OPENING DATE: 06/11/2014 BID OPENING TIME 1:30PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT NO. d001 JB 906-29 1 MULTIPLE PERMITS DESIGN EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL MAPPING AND DESIGN SERVICES AT THE BOND FORFEITED PERMITS OF CARSON ONE MINING, LLC 0-4-84 AND GLADY FORK MINING INC. D-35-82 AND U-60-83 IN UPSHUR COUNTY, WEST VIRIGINA HER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS. THIS IS THE END OF REQ DEP16488 ***** TOTAL: TELEPHONE 304-624-4108 DATE June 11, 2014 55-0633596-6 Charge ADDRESS CHANGES TO BE NOTED ABOVE

June 11, 2014

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

RE: DEP 16488, Carson One Mining, LLC, Glady Fork Mining, Inc.

Dear Members of the Selection Committee:

Thrasher is no stranger to DEP projects. Our attention to detail and project execution speak for itself. Like most projects we undertake, Thrasher has visited the Carson Mining and Glady Fork project site. We understand the depth and breath of this project and believe we will provide timely, cost effective improvements. Our experience in reclamation projects assures project success.

As the Principal-In-Charge, I have assembled a team of professionals who will deliver based on the following competencies:

- detailed review of the existing conditions of the project area,
- · ability to provide recommendations and options for the improvements,
- preparation of itemized cost estimates,
- review of estimate and design concepts,
- development of drawings, showing all required work, and
- construction administration.

Thrasher has built a business reputation that stands on integrity, experience, efficiency and judgment. In taking this approach, we have carefully and concisely responded to your request. We have assembled an experienced group of professionals to meet the various needs of this project.

Sincerely,

CHADWICK D. BILLER, PE

Partner, Principal-in-Charge

had Bell

SELECTION CRITERIA

A. WV Professional Engineers in the Primary Office: Thrasher employs 14 registered PE's at our company headquarters located in Bridgeport, WV.

- H. Wood "Woody" Thrasher, PE
- · Chad Biller, PE
- · Mike Nestor, PE
- Daniel Ferrell, PE
- Ken Moran, PE
- Clay Riley, PE
- Matt Fluharty, PE
- Tom Urguhart, PE, BCEE
- Chad Riley, PE
- Jeff Gola, PE
- Doug Forni, PE
- Rob Milne, PE
- · Richard Hovatter, PE
- Brad Messenger, PE
- Garrett Grubb, PE
- B. Our reclamation engineering design experience as it relates to the specific project:
 - Chad Biller, PE, Principal-in-Charge. Chad has more than 19 years of civil engineering experience with specific emphasis in 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 and business parks, highways, and airports. Mr. Biller is also familiar with reclamation of mine sites.
 - April Rohrbaugh, Staff Engineer has completed the design of eight projects, under the direction of Chad Biller.
 - Richard "RJ" Hovatter, PE has extensive experience in grouting projects for the WVDEP and Ohio.

C. Available Design Team:

Civil PE's: Chad Biller, Richard Hovatter, Mike Nestor, Dan Ferrell, Ken Moran, Clay Riley, Matt Fluharty, Tom Urquhart, Chad Riley, Jeff Gola and Doug Forni

CAD: Cliff Cleavenger, Brandon Hinkle, John Pitman, Jason Heflin, Joe Lowther, Phil Lantz, John Sirianni, Robert Hebb, Mike Oldaker, Zack Gain and Tudy Heil

BACKGROUND

Thrasher is a privately owned engineering firm that specializes in multidisciplinary engineering services. Established in 1983, Thrasher is built on stable leadership, financial strength and reputation. Our dedication to creative design solutions, well-managed projects and customer service has made Thrasher West Virginia's largest privately owned engineering firm and an industry leader in the Mid-Atlantic region.

Since our formation, the company has grown to a firm of more than 300 employees. Our diverse staff has the resources to handle many projects, both large and small, simultaneously. Our client base is diverse and includes municipalities, state and federal government agencies, secondary and higher education, pubic and private entities, etc.

Principals:

H. Wood "Woody" Thrasher, PE

Kenneth P. Moran, PE, PS

Chad M. Riley, PE

Daniel E. Ferrell, PE

Wm. Randy Watson, PE

Clay P. Riley, PE

Jonathan Carpenter, PE

Chadwick D. Biller, PE

Craig Baker, Associate AIA

Robert R. Milne, PE

Ron Stanley, CPA

Jenelle Armstrong, PE

Matt Fluharty, PE

Our Locations:

Bridgeport, West Virginia Charleston, West Virginia Beckley, West Virginia Princeton, West Virginia Oakland, Maryland Canton, Ohio Fredericksburg, Virginia

Multi-Disciplinary Services:

Civil Engineering

Utility Services

Land and Site Development

Roadways

Bridges

Streetscapes

Airports

Storm Water Systems

Environmental Services

Architecture

Land Planning

Landscape Architecture

Construction Monitoring

Materials Testing

Pipeline Inspection

GIS Mapping

OUR APPROACH

Thrasher has completed projects for the West Virginia Department of Environmental Protection (WVDEP), as well as many other clients, all having scopes of the work that vary. Our experience and resources to apply the following design aspects:

Consolidate and Entomb Refuse Piles: refuse piles were incorporated into the backfill of re-grading of available waste sites. These areas are then covered with soil and re-seeded.

Highwall Re-Grading: miles of highwalls have been backfilled and re-graded utilizing plans developed by Thrasher. Balancing the amount of cut and fill and keeping the amount of disturbance to a minimum is a challenge on any project. Thrasher has successfully met these challenges on other projects.

Sealing of Portals: Thrasher has developed plans for dozens of wet and modified mine seals for many projects. Including: wet or modified mine seals, bat gate mine seals and dry seals as required by the slope and dip of the coals seam and the presence of groundwater.

Sink Hole Repair: shallow mine voids cause sink holes that divert natural streams underground. Thrasher evaluates each site and develops a plan to backfill the voids, thereby reestablishing the original property.

Landslide Repair: two different landslide repair projects have been completed by Thrasher. Each repair required extensive geo-technical design for soldier pile and concrete lagging and concrete segmental gravity block walls. Both projects were in close proximity to residential areas that required special care during construction. Additionally, Thrasher has completed dozens of slip mitigation for confidential oil ang gas clientele.

Drainage Design: all site projects completed by Thrasher have required design of drainage structures. These have included vegetated, grouted, riprap, as well as culverts and storm sewers. Drainage calculations were completed to properly size all conveyences.

Permitting: the permitting process can delay projects if they are not submitted correctly or in a timely manner. Thrasher takes pride in on our ability to quickly obtain permits for our clients. We are able to utilize our excellent relationship with the WVDEP for NPDES permits as well as our relationship with the West Virginia Division of Highways for entrance and drainage permits. We are also experienced in obtaining ACE permits for stream bank restoration.

OUR APPROACH

Active Mine Water Treatment

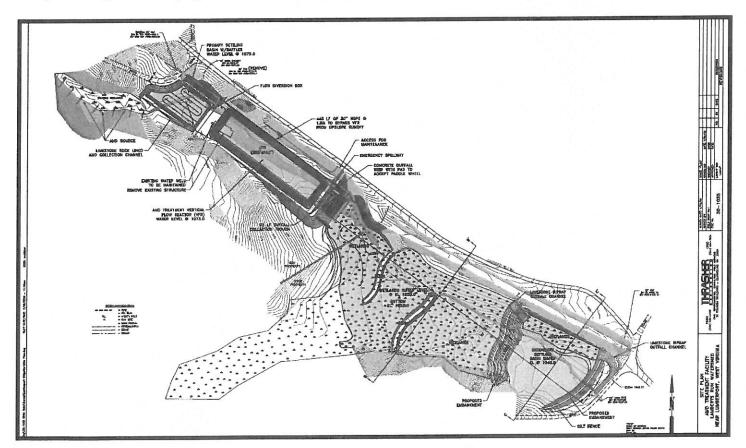
- Requires mine sites to treat discharges to acceptable pH and metal concentrations
- Utilizes strong alkaline chemicals including: lime, caustic soda, ammonia and calcium oxide Thrasher has provided a project sheet for the Martinka Mine project, located in Marion County, WV.

Passive Mine Water Treatment (Wetland mitigation, vertical flow reactor, Lambert's Run 6&7)

- Includes reclamation, addition of limestone sand to streams, redirection of drainage through limestone ditches, buried channels and constructed wetlands.
- Thrasher is very familiar with wetland mitigation and vertical flow reactor systems.

Thrasher has provided a project sheet for Lambert's Run Site 6, located in Harrison County, WV. Thrasher is currently working on Lambert's Run Site 7.

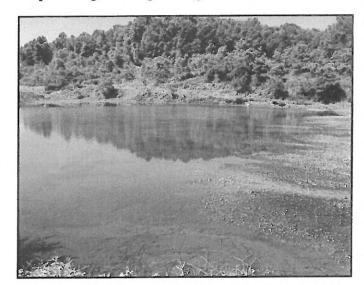
The following is a design for Lambert's Run prepared by Thrasher.

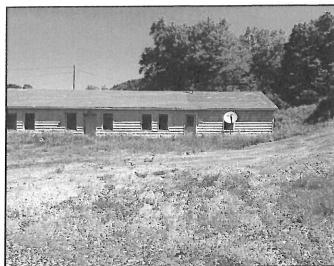


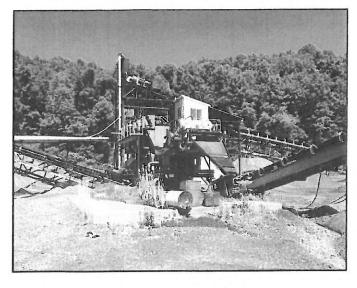
CARSON ONE MINING, LLC

Thrasher has taken steps to adequately respond to the WVDEP's expression of interest by visiting the job site. Our assessment of the site reveals this project will require the following steps:

- Step 1. Adequate Mapping and Geotechnical Investigation
- Step 2. Project Assessment and Design
- Step 3. Environmental and Permitting
- Step 4. Construction Drawings, Specifications and Estimates
- Step 5. Engineering during Construction





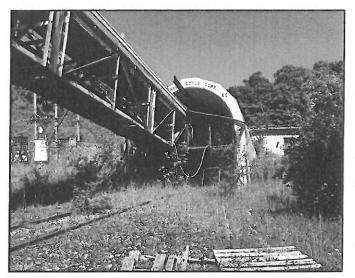




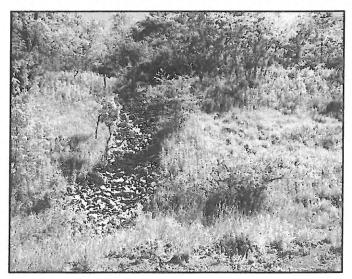
GLADY FORK MINING, INC.

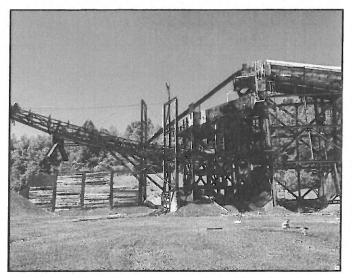
Thrasher has taken steps to adequately respond to the WVDEP's expression of interest by visiting the job site. Our assessment of the site reveals this project will require the following steps:

- Step 1. Adequate Mapping and Geotechnical Investigation
- Step 2. Project Assessment and Design
- Step 3. Environmental and Permitting
- Step 4. Construction Drawings, Specifications and Estimates
- Step 5. Engineering during Construction









ENVIRONMENTAL

In today's ever-changing regulatory landscape, compliance with federal and state environmental laws is critical to the success of any project. But compliance can often seem at odds with your project vision and financial constraints. Thrasher 's environmental team no only knows the regulations, but also provides common sense strategies and develops viable solutions.

Beginning with due diligence assessments and proceeding through project planning and permitting negotiations, Thrasher works closely with Federal and State regulatory agencies. We are also adept at meeting the requirements of multiple funding agencies. Our team has developed relationships with academic consultants from colleges and universities to assist us in performing specialized assessments.

Areas of Expertise:

- Permitting related activities (401 and 404)
- NEPA Environmental document preparation
- · Wetland delineation and mitigation
- · Water use and water quality
- · Sediment and erosion control
- Consent orders and compliance schedules
- SPCC plans, Contingency plans, and Groundwater protection plans
- · Storm water pollution prevention plans
- · Waste treatment and site remediation
- Channel and stream bank stabilization
- · Enforcement actions



SURVEY

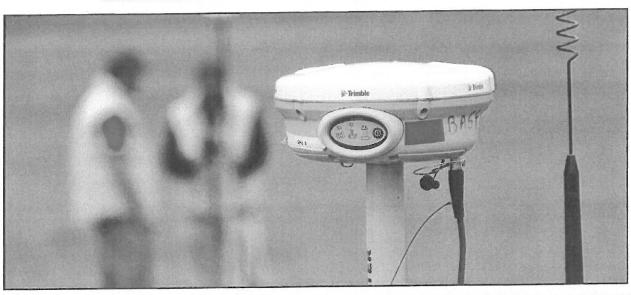
In addition to a full service professional engineering staff, Thrasher Group maintains a complete surveying department which includes six licensed professional land surveyors, eighteen full-time survey crews, CADD technicians, and office support staff. We perform our work utilizing the most current methods and equipment available. Our survey work is accomplished using global positioning systems (GPS) and electronic distance measuring (EDM) survey stations with data gathering capabilities.

Geographic Information System (GIS) software allows its users to analyze, process and visualize information to assist in solving problems and making sound planning and business decisions. But, to be effective, a system must be practical. Thrasher Group's team develops user friendly workable tools for resolving everyday issues.

Clients ranging from small public utilities through large, metropolitan areas have benefited from Thrasher's full-service approach to GIS, including our in-house survey and field verification personnel. Thrasher's commitment to training and on-going technical support makes certain you benefit from all applications of your GIS.

Areas of Expertise:

- Route location surveys
- · Ground control for aerial photography
- · Large scale boundary work
- Topographic survey and mapping
- · Lake and river soundings
- · Permanent project GPS base stations
- Metro GIS
- Natural resource management and mapping
- Realty location analysisStorm water pollution prevention plans
- Waste treatment and site remediation
- · Channel and stream bank stabilization
- Enforcement actions



SERVICES

SITE DEVELOPMENT

Projects ranging from sites for residential housing to business and industrial parks to multi-purpose "live, work and play" communities are included in our range of site development projects.

Services Include:

- Planning and Conceptual Design
- Grading Plans
- Utility Layout and Mapping

STORM WATER, SEDIMENT AND EROSION

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.

Capabilities Include:

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

SURVEY

In addition to a full service professional engineering staff, we maintains a surveying department which includes 10 licensed professional land surveyors, twenty full-time survey crews, CADD technicians, and office support staff.

ENVIRONMENTAL REPORTING SERVICES

Thrasher provides full environmental assessment and clearance services. We have more than 20 years of experience conducting environmental and natural resource compliance consultation with both state and federal agencies.

Experience includes:

- Permitting Related Activities (401 and 404)
- NEPA 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
- 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

ADDITIONAL RELATED SERVICES

CONSTRUCTION MANAGEMENT AND INSPECTION

Thrasher knows how projects should be built. We provide the knowledge and experience necessary to manage the construction of your project. Our project managers and inspectors are experienced in all types of construction activities. Many of our construction managers and inspectors have years of experience, and our are certified by the West Virginia Department of Transportation, Division of Highways for roadwork and materials testing.

MATERIALS TESTING

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

EQUIPMENT AND SOFTWARE

Thrasher provides one of the largest networks of computer aided design (CAD) equipment, software and trained personnel in the State of West Virginia. Civil 3D, Carlson and Microstation V8 software is utilized at 70 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.



April Rohrbaugh, Project Manager reviews project designs and answers questions with a group of contractors on a recent site visit to Roger Camp Hill.



PROJECT TEAM



Chad Biller, PE Principal-In-Charge

Education:

• BS, Civil Engineering, West Virginia University

Registrations:

- Registered Professional Engineer (PE) State of West Virginia
- Registered Professional Engineer (PE) State of Pennsylvania
- Registered Professional Engineer (PE) State of Ohio
- American Society of Civil Engineers
- American Society of Highway Engineers
- Society of American Military Engineers
- National Society of Professional Engineers

ANGLINS RUN and ROARING CREEK:

Anglins Run: Thrasher provided preliminary plans and final design for two WVDEP AML projects. Anglins Run included a total of eight collapsed mine portals with at least five of them having discharges ranging from one to ten gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher's plan for this project included construction of an access road, excavation and wet seal of at least eight deep mine portals and the re-grade and fill of subsidence sinkholes. To carry water safely off site, drainage control channels, conveyance pipe and under drain was constructed.

Roaring Creek: This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of three open and three closed portals discharging AMD, AMD seeps along the unnamed tributary and an area of subsidence, which drains surface water into the mine workings. AMD flow from the deep mine portals ranges from 10gpm to 100 gpm with PH ranging from 3.1 to 5.0. Preliminary plans included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond to handle the additional flow.

OVERFIELD AND SQUIRES CREEK: These projects consisted of engineering design for portal sealing, drainage and retaining walls for the Overfield - Lafferty Site and engineering design for portal sealing, drainage and backfilling of the highwall with refuse for the Squires Creek Site.

UPPER DOG RUN IMPOUNDMENT IMPROVEMENTS: Principal-In-Charge for initial investigation and report along with subsequent design for improvements.

PROJECT TEAM



April Rohrbaugh Project Manager

Education:

• BS, Civil Engineering Technology, West Virginia University

Project Manager on the following:

- Squires Creek: Reclaim Refuse Piles; Highwall Re-grading
- · Anglin's Run: Seal Portals
- Roaring Creek: Sink Hole Repair
- · Overfield (Lafferty): Landslide Repair
- · Laurel Run: Bat Gates
- Clarksburg Lyons Landslide: Retaining Wall
- · Pleasant Valley: Highwall
- Roger Camp Hill: Access Road; Drainage and Culverts

ANGLINS RUN and ROARING CREEK:

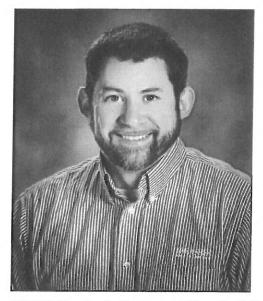
Anglins Run: Thrasher provided preliminary plans and final design for two WVDEP AML projects. Anglins Run included a total of eight collapsed mine portals with at least five of them having discharges ranging from one to ten gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher's plan for this project included construction of an access road, excavation and wet seal of at least eight deep mine portals and the re-grade and fill of subsidence sinkholes. To carry water safely off site, drainage control channels, conveyance pipe and under drain was constructed.

Roaring Creek: This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of three open and three closed portals discharging AMD, AMD seeps along the unnamed tributary and an area of subsidence, which drains surface water into the mine workings. AMD flow from the deep mine portals ranges from 10gpm to 100 gpm with PH ranging from 3.1 to 5.0. Preliminary plans included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond to handle the additional flow.

OVERFIELD AND SQUIRES CREEK: These projects consisted of engineering design for portal sealing, drainage and retaining walls for the Overfield - Lafferty Site and engineering design for portal sealing, drainage and backfilling of the highwall with refuse for the Squires Creek Site.

WV DEP Shinns Run Portals: Ms. Rohrbaugh served as Project Engineer and was responsible for the design, drawings along with the construction documents on an AML project outside of Shinnston on Shinns Run Road. The project consisted of a total seven open mine portals that needed to be sealed. Three of the portals were required to have bat gates installed and the others were to be piped for drainage. During the subsurface investigation it was determined that the section of Shinns Run that passed over three of the portals was constructed over significant mine voids. This resulted in a grout stabilization design to be added to the project scope.

PROJECT TEAM



Richard Hovatter, PE Project Engineer

Education:

BS, Civil Engineering Technology, Fairmont State University

Registrations:

- Registered Professional Engineer (PE) State of West Virginia
- Registered Professional Engineer (PE) State of Pennsylvania
- Level I Rosgen Natural Stream Construction
- Level II Rosgen Natural Stream Construction
- HEC—RAS Operator Training Short Course
- Annual Oil & Gas Training Pennsylvania
- MSHA Training

ODOT Route 2, Gypsum Mine Stabilization: Mr. Hovatter served as Project Engineer and was responsible for developing a grout stabilization plan for approximately two miles of Route 2 in Sandusky, Ohio. The plan was to stabilize all four lanes of highway where it crossed over an abandoned gypsum mine. The mined gypsum seam was approximately twelve to fifteen feet thick and was completely mined out. As part of the plan, Mr. Hovatter was responsible with acquiring an underground injection permit through the Ohio Department of Natural Resources.

WV DEP Shinns Run Portals: Mr. Hovatter served as Project Engineer and was responsible for the design, drawings along with the construction documents on an AML project outside of Shinnston on Shinns Run Road. The project consisted of a total seven open mine portals that needed to be sealed. Three of the portals were required to have bat gates installed and the others were to be piped for drainage. During the subsurface investigation it was determined that the section of Shinns Run that passed over three of the portals was constructed over significant mine voids. This resulted in a grout stabilization design to be added to the project scope.

Charleroi Drainage Project: Mr. Hovatter served as Project Engineer and was responsible for the site design and all construction documents at the Charleroi Liquid Propane load out facility. The site was constructed so that the scales set at the low point of the site and all the site drainage settled under the scales.

JK Alfred Property: Mr. Hovatter served as Project Engineer and was responsible for analyzing the existing drainage system and determining if it was adequate to pass the design storm runoff from the site. He was also responsible for obtaining a modification to the existing NPDES permit.

Grafton National Cemetery: Taylor County, WV. Mr. Hovatter served as Project Engineer for this design build project to re-mediate the discharge of the storm collection system at the cemetery. The discharge was released out on to an unstabilized slope and had caused significant erosion below the pipe. Mr. Hovatter designed a concrete sump along with a grouted riprap channel to collect the discharge and convey it downslope to a stable are for discharge.



Michael Nestor, PE, CFM Project Engineer

Education:

BS, Civil Engineering Technology, Fairmont State University

Registrations:

- Registered Professional Engineer (PE) State of West Virginia
- Current President of American Society of Highway Engineers, North Central West Virginia Chapter
- American Society of Civil Engineers

Anglins Run and Roaring Creek: Mr. Nestor served as Project Engineer for the design of wet mine seal for abandoned mine portals and downstream conveyance of water associated with abandoned mines. Mr. Nestor worked closely with the DEP to identify sinkholes associated with abandoned mines and developed a site grading plan to restore collapsed areas and re-route drainage around problem areas.

Stream Modeling: Various Counties, WV. Mr. Nestor has performed several stream evaluations utilizing HEC-RAS stream modeling software for projects located in Monongalia, Harrison and Hampshire counties.

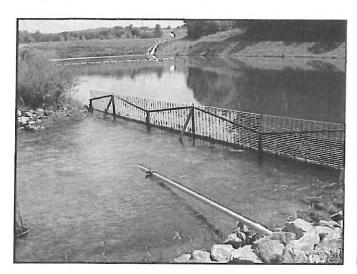
Town of Oak Hill Storm Water Project: Fayette County, WV. Mr. Nestor served as Project Manager for the design of storm sewer upgrades for the Town of Oak Hill. The project included the addition of a 2'x6' box culvert under Trump Avenue, construction drawings and specifications.

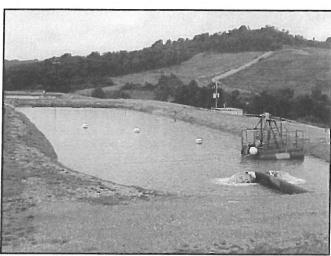
Hawks Nest Sub-Division: Garrett County, MD. Mr. Nestor served as Project Engineer for the development of a storm water management plan for a residential subdivision using low impact development methods. The scope of the project included site grading, storm water management, erosion and sediment control plans.

Fairmont State University Storm Water Management Plan: Marion County, WV. Mr. Nestor served as Project Engineer for the development of a storm water management program for the FSU campus, which is classified as an MS4 entity. The scope of this project included meeting all MS4 requirements in addition to preparing and submitting all necessary permit applications to the WV DEP.

City of Clarksburg Storm Water Management Plan: Harrison County, WV. Mr. Nestor served as Project Engineer for the development of a storm water management program for the entire city. Mr. Nestor assisted the city in getting all permitting required and the application to the WV DEP.

MARTINKA MINE





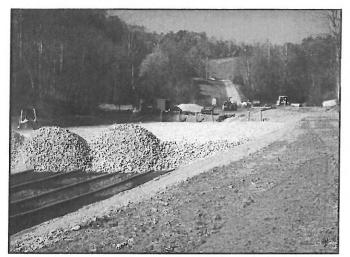
MARTINKA MINE

This project consisted of the design of a 17.5 MGD Water Treatment Plant to blend mine borehole water with acid mine drainage; the plan remove D iron (1000 mg/(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 stage tapered flocculation with axial flow propeller mixers and variable frequency drives
- Sedimentation Six settling ponds with ferric hydroxide sludge removal and underground injection wells
- Polishing Pond Sodium hexamataphosphate addition for calcium stabilization.

LAMBERT'S RUN SITE 6



Lambert's Run Site 6 Vertical Flow Reactor



Lambert's Run Site 6 Site photo in March, 2009



Lambert's Run Site 6 Settling Basin, August, 2009



Lambert's Run Site 6 Wetland Mitigation, August, 2009

A three step process was used to remove the acid mine drainage from an abandoned mine located adjacent to Lambert's Run. The treatment steps consisted of a settling basin to remove the solids at the mine outlet, a vertical flow reactor to treat the runoff in a anoxic environment and a wetland system to remove the metals and aerate the water before it enters the stream.

SQUIRES CREEK



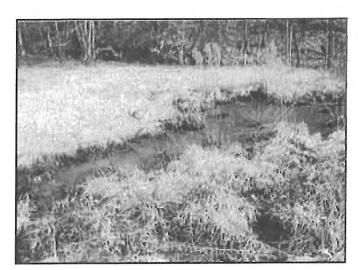


SQUIRES CREEK

This job site included two refuse piles covering about two to three acres in total. There were remains of one mine building, unvegetated coal refuse, deep mine portals and acid mine drainage. Nearly all of this land was unvegetated with signs of severe erosion, the toe of the eastern pile extended down to the creek. Both piles had very steep outslopes and several well used 4-wheeler (ATV) trails extended up and down the face, thereby posing public safety hazards.

There were also six open and collapsed deep mine portals. Of these portals, one was open enough to easily allow entrance by either a child or adult. This opening was 4 to 5 feet high by 20 feet in width. Inside the portal were mine props that were clearly visible and the mine appeared to extend for a considerable distance into the hill. The remaining five portals, all located along a 200 LF mine face-up or highwall, approximately 10 to 15 ft. in height, were collapsed with only one discharging about 2 to 3 gpm of acid mine drainage (AMD).

ANGLINS RUN & ROARING CREEK





ANGLINS RUN

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

ROARING CREEK

This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of 3 open and 3 closed portals discharging AMD. The AMD seeped along the unnamed tributary and an area of subsidence, which drained surface water into the mine workings. AMD flow from the deep mine portals ranged from 10 gpm to 100 gpm with PH ranging from 3.1 to 5.0. The seeps along the UNT showed an average PH of 3.3. Thrasher's design plans called for the construction and rehabilitation of access roads to the site, and installation of wet seals at the portal locations. The plans also included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond which was designed to handle the additional flow.

LAUREL RUN #1

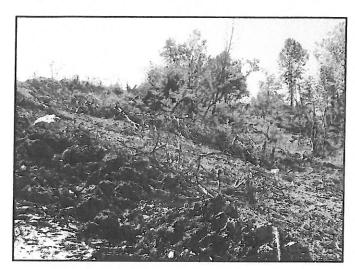


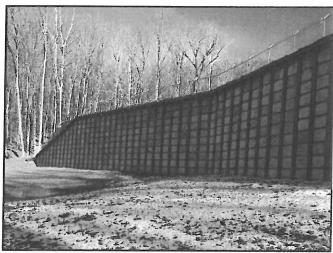


LAUREL RUN #1

This project site consisted of seven sections of highwall that totaled approximately 5,700 feet in length and averaged 20 feet in height. There were three collapsed portals adjacent to one another discharging approximately 25 gpm. One open portal entrance measured 2 foot by 3 foot and had no known discharge associated with it. Approximately 230 feet of abandoned railroad tracks remained on the project site and they did not connect to any existing tracks. The project site covered a total area of six acres and suffered from a lack of vegetation and toeing into Laurel Run.

CLARKSBURG LYONS LANDSLIDE





LYONS LANDSLIDE

The project site is located in Clarksburg, WV off of Route 19. There was a two acre slide mass composed of strip mine spoil and natural slip prone material located above and behind a the Lyons residence. The scope of work consisted of constructing a soldier pile and concrete lagging retaining wall with appurtenances to stabilize the slope above the existing residence and pond, as well as, regarding the slip area while installing underdrains and channels to carry water safely through or around the slip area.

AMT.	WEST VIRG	INIA DEPARTME	NT OF	ENVIRONMENTAL	PROTECTIO	ON
1. FIRM NAME THE THRASHER GROUP, INC.	CONSULTANT	DATE (DAY, MONT JANUARY 1, 2014 2. HOME OFFICE 600 WHITE OAKS BOU	H, YEAR BUSINES)	FEIN 55-0633596- 3. FORMER	R FIRM NAME
4. HOME OFFICE TELEPHONE 304-624-4108 7. PRIMARY AML DESIGN OFFIC 600 WHITE OAKS BOULEVARD, BRIDG 300 ASSOCIATION DRIVE, CHARLESTO 3000 THAYER PLACE, OAKLAND, MD/30 380 AIRPORT CIRCLE, BEAVER, WV 25 4150 BELDEN VILLAGE STREET, SUITE 10 236 CAMBRIDGE STREET, FREDERICKS 1428 MAIN STREET, PRINCETON, WV 24	E: ADDRESS/ 5 EPORT, WV 26330 N, WV / 304-343-7 01-334-3866 / CHA 5813 /304-860-192 01, CANTON, OHIO BURG, VA 22405 /	TELEPHONE / PERSO D / 304-624-4108 / CHA 2601 / JONATHAN CAR AD RILEY, PE / 1 24 / ROBERT CRADDOC D 44718 / 330-491-8170	6. TYP Indi Part N IN CH. D D. BILLE PENTER, M K/O D/ STEVE H	E OWNERSHIP vidual Corpor nership Joint- ARGE/ NO. AML DES R, P.E., PARTNER / 12 ANAGING PARTNER / 2	ation X Venture	ER ENGINEERING, INC. 6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO X NEL EACH OFFICE
8. NAMES OF PRINCIPAL OFFIC H. WOOD THRASHER, P.E PRESIDENT KENNETH P. MORAN, P.E VICE PRESIDENT RONALD STANLEY, CPA - CHIEF FINAN 9. PERSONNEL BY DISCIPLINE	ERS OR MEMBEI	RS OF FIRM	8a. NA WM. RAN CHAD M. CHADWIC CLAY P. RI DAN FERR CRAIG BA ROBERT N JONATHA MATTHEV	ME, TITLE, & TELI DY WATSON-PARTNER (304 RILEY, P.E.— PARTNER (304) K BILLER, P.E.— PARTNER (304) ELL, P.E.— PARTNER (304) 6 KER, ASSOCIATE AIA — PAR IILNE, P.E.— PARTNER (304) N CARPENTER, P.EPARTNE V FLUHARTY, PE— PARTNE RMSTRONG, PE— PARTNE	04) 624-4108 1) 624-4108 304) 624-4108 624-4108 17NER (304) 624-4 1) 624-4108 1ER (304) 343-760 1R (304) 624-4108	21
44 ADMINISTRATIVE 7 ARCHITECTS — BIOLOGIST 18 CADD OPERATORS — CHEMICAL ENGINEERS 38 CIVIL ENGINEERS 37 CONSTRUCTION INSPECTORS DESIGNERS — DRAFTSMEN TOTAL NUMBER OF WY REC	2 ENVIRONI — ESTIMAT GEOLOGI — HISTORI — HYDROLO	ESTS ICAL ENGINEERS MENTALISTS FORS ISTS IANS OGISTS	2 5 	LANDSCAPE ARCHITECT MECHANICAL ENGIN MINING ENGINEED PHOTOGRAMMETRIST PLANNERS: URBAN/ SANITARY ENGINEE SOILS ENGINEERS SPECIFICATION WRITERS	FS NEERS RS S (REGIONAL CRS	STRUCTURAL ENGINEERS 72 SURVEYORS TRAFFIC ENGINEERS 1 GIS SPECIALIST 1 PIPELINE INSPECTOR 24 MATERIALS TESTING TECH. 257 TOTAL PERSONNEL es them to supervise and
10. HAS THIS JOINT-VENTURE (] YES	X NO NOT APPL		

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTA	NTS ANTICIPATED TO BE USED. Attach "AML C	Conquitant Confidential O. 1'5'
		Consultant Confidential Qualification
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
NOVEL GEO-ENVIRONMENTAL	GEO-TECHNICAL SERVICES	MOKVED MITH REFORE
650 MACCORKLE AVENUE WEST		V
ST. ALBANS, WV 25177		_X Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
RELIANCE LABORATORIES, INC	WATER SAMPLE ANALYZATION	WORKED WITH BEFORE
2044 MEADOWBROOK ROAD		V Voc
BRIDGEPORT, WV 26330		X Yes
		N
NAME AND ADDRESS:	SPECIALTY:	No WORKED WITH BEFORE
		WORKED WITH BEFORE
		Yes
		165
NAME OF THE PARTY		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		WORLD WITH BELONE
		Yes
	,	105
NAME AND ADDRESS		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		_
		Yes
		0001000 (000000000000000000000000000000
NAME AND ADDRESS:	SPECIALTY:	No
	SI ECIALIT.	WORKED WITH BEFORE
		37
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
	1 Services about	WORKED WITH BEFORE
		Yes
		100
NAME AND ADDRESS		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	GDE GVA V TO	No
THE THE ADDRESS.	SPECIALTY:	WORKED WITH BEFORE
	. 4	
**		Yes
		N.
		No

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

 X YES Description and Number of Project: THRASHER PERFORMS ENGINEERING DESIGN SERVICES TO THE WV DEP FOR DRAINAGE,
 PORTAL, HIGHWALL AND OTHER REMEDIATION PROJECTS, AS WELL AS FOR WATER LINE AND WATER TREATMENT PLANT PROJECTS RELATED TO AML. NUMEROUS
 PROJECTS INVOLVING LAND REMEDIATION, STORM WATER DRAINAGE, SLIP REPAIR, MASS GRADING IN RELATION TO SITE DEVELOPMENT AND HIGHWAY PROJECTS ARE
 ENGINEERED BY THE FIRM ON A REGULAR BASIS.
- B. Is your firm experienced in Soil Analysis?

 X YES Description and Number of Projects: THRASHER MAINTAINS AN AASHTO CERTIFIED MATERIALS TESTING AND ANALYSIS LAB AT BOTH THE CLARKSBURG AND BECKLEY OFFICES. SOIL ANALYSIS EXPERIENCE IS SPECIFICALLY IN GRADATIONS AND CLASSIFICATION.
- C. Is your firm experienced in hydrology and hydraulics?

 X 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 THROUGHOUT THE STATE, THRASHER HAS EXTENSIVE EXPERIENCE IN HYDROLOGY. WE

 ALSO HAVE EXTENSION EXPERIENCE IN HYDRAULIC MODELING FOR WATER AND WASTEWATER PROJECTS THROUGHOUT WEST VIRGINIA.
- Does your firm produce its own Aerial Photography and Develop Contour Mapping?

 YES Description and Number of Projects: THRASHER SURVEY ONLY SUBCONTRACTS THE ACQUISITION OF AERIAL PHOTOGRAPHY.

 ALL OTHER SERVICES ASSOCIATED WITH MAPPING ARE PERFORMED IN-HOUSE INCLUDING AERO-TRIANGULATION, PLANIMETRIC COMPILATION, SURFACE MODELING,
 CONTOURING AND DIGITAL ORTHO-RECTIFIED IMAGERY. THRASHER MAPPING AND CONTROL SERVICES INCLUDE NGS "BLUE-BOOKING", PERMANENT MONUMENT
 POSITIONING AND INSTALLATION, GPS BASE STATION INSTALLATION, PRECISE LEVELING, CONTROL NETWORKS, AERIAL PHOTO CONTROL, VERTICAL SCALE MAPPING,
 STEREO PHOTOGRAMMETRY, ORTHO-RECTIFIED IMAGES, TRIANGULATED SURFACE MODELS, 3D MODELING AND ANIMATION. THRASHER PROVIDES THESE SERVICES
 FROM BOTH MANNED AND UNMANNED PLATFORMS. THRASHER LIDAR/REMOTE SENSING IS PERFORMED FROM TERRESTRIAL AND AIRBORNE PLATFORMS BOTH
 MANNED AND REMOTE CONTROLLED. THRASHER'S MODEL WHEN IT COMES TO ADVANCED TECHNOLOGIES IS TO EMPLOY TECHNICAL EXPERTISE, OWN SOFTWARE AND
 RENT/LEASE HARDWARE AS NEEDED SINCE TECHNOLOGY CHANGES ARE CONSTANT.
- E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

 YES Description and Number of Projects: THRASHER HAS DESIGNED MORE WATER LINE SYSTEMS THAN ANY OTHER WEST VIRGINIA FIRM. PROJECTS INCLUDE NEW SYSTEMS, EXTENSIONS AND REPLACEMENTS OF WATER LINE DISTRIBUTION SYSTEMS, MANY OF WHICH HAVE BEEN AFFECTED BY ABANDONED MINE LANDS. DESIGN OF THE PROJECTS INCLUDES INCLUDE LINES, BOOSTER STATIONS, WATER TREATMENT PLANTS, AND STORAGE FACILITIES.

 OF SURFACE WATER.
 - F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
- YES Description and Number of Projects_THRASHER HAS BEEN AWARDED AND HAS SUCCESSFULLY COMPLETED NUMEROUS RECLAMATION PROJECTS FOR WVDEP RELATED SPECIFICALLY TO ACID MINE DRAINAGE AND ABATEMENT. THE CHARLESTON WV BRANCH OF OUR COMPANY DESIGNED AN AWARD WINNING WATER TREATMENT PLANT FOR MARTINKA MINES IN MARION COUNTY, WEST VIRGINIA TO TREAT MINE DRAINAGE.

12: LEKSONAL HISTORI STATEMENT OF PE	RINCIPALS AND ASSOCIATES RESPO	MOTRIE EOR ANT PROTECT PROTECT	
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	MEDICIAL TO ADDOCTATED NEDFO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE	YEARS OF DOMESTIC
BILLER, CHADWICK D. P.E.	5	EXPERIENCE: 19	WATERLINE DESIGN
			EXPERIENCE: 19
Brief Explanation of Responsibilitie	es · Mr Riller has experience in all accept		<u></u>
roads, bridges, and airports. Mr. Biller joined Thrasi WV DEP AML project and public and private site de	her Fnaineering in 1999 and is a narther of	s of engineering with specific emphasis on s	site development, highways,
WV DEP AML project and public and private site dev WVDOT/DOH projects, he has extensive knowledge	velonment projects, specializing in give and	Inrasner Engineering. For Thrasher Engine	ering, Mr. Biller is responsible for
	o, state and jederal building standards .	, nignways, roads and bridges. As Project N	lanager for all of the firm's
EDUCATION (Degree, Year, Specializat	ion:		
 B.S., Civil Engineering, 1992 – Wes 	t Virginia University		
MEMBERSHIP IN PROFESSIONAL ORGANIZAT			
☐ American Society of Civil Engineers	CIONS	REGISTRATION (Type, Year, Sta	ate)
Society of American Military Engineers		Registered Professional Engineer	r(PE),State of West Virginia
National Society of Professional Engineers		#13620	•
- riadional Society of Projessional Engineers		Registered Professional Engineer	r (PE),State of Pennsylvania
		#PE056012E	
		Registered Professional Engineer	r (PE),State of Ohio #64594
		1	
13. PERSONAL HISTORY STATEMENT OF PR	TNCIPALS AND ASSOCIATES PROPE		
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
To observe all by	INCIPALS AND ASSOCIATES RESPO		(Furnish complete
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials) NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie	YEARS OF AML DESIGN EXPERIENCE: 3 S. Mr. Nestor joined Thrusher Engineering	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si	YEARS OF AML DESIGN EXPERIENCE: 3 s Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspects	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspects water drainage, storm water management.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and ordinary and ordina	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspects water drainage, storm water management perkeley Associates, directing administration.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and, erosion and sediment control plans, and at the street of	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspects water drainage, storm water management perkeley Associates, directing administration.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and, erosion and sediment control plans, and at the street of	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspects water drainage, storm water management be Berkeley Associates, directing administrative in the projects of the story of the sto	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and, erosion and sediment control plans, and at the street of	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management be Berkeley Associates, directing administrative ying, material testing, and environment ion)	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and, erosion and sediment control plans, and at the street of	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology – Fairmont State U	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management water drainage, storm water management in Berkeley Associates, directing administrativelying, material testing, and environment ion)	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street and, erosion and sediment control plans, and at the street of	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles,
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology – Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management water drainage, storm water management in Berkeley Associates, directing administrativelying, material testing, and environment ion)	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street int, erosion and sediment control plans, and ative staff, CAD technicians, and staff engine ital services.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, neers to ensure successful
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management in Berkeley Associates, directing administrativelying, material testing, and environment ion) Iniversity, 2003 IONS	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and sets of infrastructure design including street int, erosion and sediment control plans, and ative staff, CAD technicians, and staff engineral services. REGISTRATION (Type, Year, Sta	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, neers to ensure successful te)
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology – Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management in Berkeley Associates, directing administrativelying, material testing, and environment ion) Iniversity, 2003 IONS	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street int, erosion and sediment control plans, and ative staff, CAD technicians, and staff engine ital services.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, neers to ensure successful te)
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering ite development projects, utilizing all aspect water drainage, storm water management in Berkeley Associates, directing administrativelying, material testing, and environment ion) Iniversity, 2003 IONS	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and sets of infrastructure design including street int, erosion and sediment control plans, and ative staff, CAD technicians, and staff engineral services. REGISTRATION (Type, Year, Sta	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 d Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, neers to ensure successful te)

13. PERSONAL HISTORY STATEMENT OF PE	TNCIPALS AND ASSOCIABLE PER		
13. PERSONAL HISTORY STATEMENT OF PF data but keep to essentials)	CINCIPALS AND ASSOCIATES RESI	PONSIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		VIDDO	
2101,	YEARS OF AML DESIGN EXPERIENCE	YEARS OF EXPERIENCE	
ROHRBAUGH, APRIL	3	EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: -
Brief Explanation of Responsibilities	es .		
Ms. Rohrbaugh joined Thrasher Engineering in Janu	ary of 2006 and serves as Staff Familia	in the site development	
Her responsibilities with AML projects include: Design sediment control. Ms. Rohrbaugh's other responsible planning for residential, commercial, and recreation drainage, storm water management, erosion and seasons.	gn of wet and modified mine seals, gradi ilities include: design surveying consistin nal developments. Site/Land Developmen ediment control, and various regulatory	ects of site engineering, taking projects from ng associated with reclaiming, storm water g of both field traversing and survey location at engineering: geometric layout of sites, su permitting requirements.	n survey to concept to construction. management, and erosion and ans and aerial mapping. Conceptual bdivisions, and roads, grading,
EDUCATION (Degree, Year, Specializat	ion) B.S. Civil Engineering - West 1	/irginia University, 2005, Civil Engineerin	00
		The second of th	'y
MEMBERSHIP IN PROFESSIONAL ORGANIZAT	TOMA		
THOLESSIONAL ORGANIZAT	TONS	REGISTRATION (Type, Year, St	ate)
13. PERSONAL HISTORY STATEMENT OF PF data but keep to essentials)	RINCIPALS AND ASSOCIATES RESI	PONSIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
and the second of the second o	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	VELDO
HOVATTER, RICHARD (RJ) – PROJECT MANAGER	9	EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9
	With the second	I I	
Brief Explanation of Responsibilitie	s: Richard Hovatter Jr. joined Thrashe	r Engineering, Inc. in 2011 and serves as Pro	ject Managar from TEV.
Brief Explanation of Responsibilities Clarksburg Office. As a graduate of Fairmont State Is situations such as landslides and mine subsidence of surface, sediment erosion control plans and waterling EDUCATION (Degree, Year, Specializate	f abandoned mine land. Mr. Hovatter is a ne feasibility studies.	r Engineering, Inc. in 2011 and serves as Proj lovatter has extensive knowledge of abando responsible for the designs, scheduling, colle	iect Manager from TEI's ned mine land and emergency ction and reporting of mine
situations such as landslides and mine subsidence of surface, sediment erosion control plans and waterline EDUCATION (Degree, Year, Specializate Bachelor of Science, 2002, Civil Engineering To	f abandoned mine land. Mr. Hovatter is in the feasibility studies. ion) echnology – Fairmont State University	ovatter has extensive knowledge of abando responsible for the designs, scheduling, colle	ned mine land and emergency ction and reporting of mine
situations such as landslides and mine subsidence of surface, sediment erosion control plans and waterlin EDUCATION (Degree, Year, Specializat	f abandoned mine land. Mr. Hovatter is in the feasibility studies. ion) echnology – Fairmont State University	responsible for the designs, scheduling, colle REGISTRATION (Type, Year, Sta	ened mine land and emergency ction and reporting of mine
situations such as landslides and mine subsidence of surface, sediment erosion control plans and waterline EDUCATION (Degree, Year, Specializate Bachelor of Science, 2002, Civil Engineering To	f abandoned mine land. Mr. Hovatter is in the feasibility studies. ion) echnology – Fairmont State University	REGISTRATION (Type, Year, Sta	ned mine land and emergency ction and reporting of mine

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

THRASHER ENGINEERING, INC. WILL DESIGN WORK FOR AML UTILIZING ONE OF THE LARGEST NETWORKS OF COMPUTER AIDED DESIGN (CAD) EQUIPMENT, SOFTWARE AND TRAINED PERSONNEL IN THE STATE OF WEST VIRGINIA.

CONNECTED THROUGH A VIRTUAL PRIVATE NETWORK, OUR CAD STAFF HAS THE ABILITY TO SHARE NECESSARY PLANS AMONG OUR LOCATIONS. THIS WILL ALLOW WORK DESIGNED FOR AML TO BE PREPARED AND UPDATED AT THE OFFICE LOCATION THAT BEST MEETS THE NEEDS OF THE SCOPE OF SERVICES. CIVIL 3D, CARLSON AND MICROSTATION V8 SOFTWARE IS UTILIZED AT 70 CAD STATIONS THROUGHOUT OUR LOCATIONS. ADDITIONALLY, EQUIPMENT INCLUDES 10 LARGE FORMAT (SIZE E) PLOTTERS AND 5 LARGE FORMAT PLOTTER / SCANNERS.CAD PLANS ARE PREPARED BY BOTH DEDICATED CAD EMPLOYEES AND BY STAFF ENGINEERS AND ENGINEERING TECHNICIANS IN EACH OF THE FIRM'S OFFICES.

THRASHER ENGINEERING, INC. ALSO UTILIZES 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. THE SURVEY CREWS AND OFFICE SUPPORT STAFF GENERATE MAPPING DELIVERABLES IN VIRTUALLY ANY DIGITAL FORMAT REFERENCED TO SPECIFIED PROJECTION SYSTEMS.

ADDITIONAL SURVEY SERVICES INCLUDE: HIGH ACCURACY MONUMENTATION, ASTRONOMIC OBSERVATIONS / ORIENTATION, NGS BLUE BOOKING, HYDROGRAPHIC, TERRESTRIAL SCANNING, 3D AS-BUILTS, 3D MONITORING, SUB-SURFACE UTILITY LOCATION / DESIGNATION. THE FIELD CREWS ARE ALL EQUIPPED WITH LATE MODEL **FOUR**

WHEEL DRIVE VEHICLES STOCKED WITH THE MOST MODERN EQUIPMENT AVAILABLE TO PERFORM PROFESSIONAL LAND SURVEYING SERVICES.

63 TRIMBLE GNSS UNITS

6 TRIMBLE ROBOTS

2 PRECISE DIGITAL FIRST ORDER LEVELS WITH INVAR RODS

25 LEICA, NIKON OR TOPCON TOTAL STATIONS ALL MANAGED BY TRIMBLE TSC3 FIELD COMPUTERS

REMOTE CONTROLLED/UNMANNED MAPPING AERIAL PLATFORM

HYDROGRAPHIC SURVEY VESSEL

3D SUB-SURFACE UTILITY LOCATORS

CIVIL 3D

CARLSON AND MICROSTATION V8 SOFTWARE

70 CAD STATIONS

10 LARGE FORMAT (SIZE E) PLOTTERS AND

5 LARGE FORMAT PLOTTER / SCANNERS.

CURRENT ACTIVITIES - WVDOH PROJECTS- DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
MINERAL WELLS ROUTE 2 WOOD COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING DESIGN, SURVEY, CONSTRUCTION DOCUMENTS	\$6,000,000.00	DESIGN STUDY 100% ENGINEERING DESIGN – 0%
BASNETTVILLE BRIDGE MARION COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING DESIGN, SURVEY, CONSTRUCTION DOCUMENTS	\$1,800,000.00	15%
JS ROUTE 119 BRIDGES ROANE COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING DESIGN, SURVEY, CONSTRUCTION DOCUMENTS	\$1,500,000.00	10%

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

PRESENT ACTIVITIES - WATER AND WASTEWATER PROJECTS- DESIGNATED ENGINEER OF RECORD

THRASHER IS CURRENTLY THE DESIGNATED "ENGINEER OF RECORD" ON MORE THAN 200 ON-GOING PROJECTS. THESE PROJECTS RANGE FROM SIMPLE BOUNDARY SURVEYS WHICH ARE COMPLETED WITHIN A FEW DAYS' TIME TO COMPLETE MUNICIPAL PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF TIME. THE FOLLOWING LIST OF SELECTED CURRENT PROJECTS REPRESENTS THOSE WHICH HAVE BEEN AWARDED TO THRASHER WITHIN THE PAST THREE (3) YEARS AND DEMONSTRATES THE RANGE OF SERVICES PROVIDED BY THRASHER.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
MALDEN PUBLIC SERVICE DISTRICT WASTEWATER TREATMENT PLANT KANAWHA COUNTY, WV	MALDEN PUBLIC SERVICE DISTRICT P.O. BOX 350 TAD, WV 25201-0350	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,600,000.00	50%
CITY OF RIPLEY, WV WASTEWATER TREATMENT PLANT & SYSTEM IMPROVEMENTS JACKSON COUNTY, WV	CITY OF RIPLEY, WV 203 SOUTH CHURCH STREET RIPLEY, WV 25271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,000,000.00	50%
FOUNTAIN PUBLIC SERVICE DISTRICT WATER SYSTEM PROJECT MINERAL COUNTY, WV	FOUNTAIN PUBLIC SERVICE DISTRICT PO BOX 146 / ROUTE 46 EAST KEYSER, WV 26726	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,500,000.00	45%
CITY OF ROMNEY WASTEWATER FREATMENT PLANT, ROMNEY, WV	CITY OF ROMNEY 340 E MAIN STREET ROMNEY, WV 26757	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$9,000,000.00	60 %
TOWN OF FLEMINGTON SANITARY SEWER EXTENSION FLEMINGTON, WV	TOWN OF FLEMINGTON PO BOX 443 FLEMINGTON, WV 26347	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		
CITY OF CLARKSBURG NASTEWATER TREATMENT PLANT JPGRADES FOR LTCP	CITY OF CLARKSBURG 222 WEST MAIN STREET CLARKSBURG, WV 26301	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		
PRESTON COUNTY SEWER PUBLIC SERVICE DISTRICT WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM	PRESTON COUNTY SEWER PUBLIC SERVICE DISTRICT PO BOX 89 BRUCETON MILLS, WV 26525	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		

7 SHOWN – 200+ COMPANY-WIDE

TOTAL ESTIMATED CONSTRUCTION COSTS:

TOTAL ESTIMATED CONSTRUCTION COSTS: \$60,350,000.00 SHOWN - TOTAL PROJECTS

APPROXIMATELY \$750,000,000.00

15.CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: PRESENT ACTIVITIES - WATER AND WASTEWATER PROJECTS- DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
CHESTNUT RIDGE PSD BARBOUR/PRESTON EXTENSION BARBOUR COUNTY, WV	CHESTNUT RIDGE PSD 209 S MAIN STREET P.O. BOX 386 PHILIPPI, WV 26416	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF	\$4,500,000	90%
GILMER COUNTY PSD WATER LINE EXTENSION	GILMER COUNTY PSD PO BOX 729 GLENVILLE, WV 26351	SURVEY AND INSPECTION. FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$3,200,000.00	85%
MINGO COUNTY PSD WATER LINE EXTENSION HAMRICK PSD	MINGO COUNTY PSD PO BOX 98 NAUGATUCK, WV 25685	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,075,000.00	60%
MOORE/PORTERWOOD EXTENSION FUCKER COUNTY, WV	HAMRICK PSD PO BOX 228 HENDRICKS, WV 26271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,100,000.	35%
LINCOLN COUNTY PSD WATER LINE EXTENSION PROJECTS	LINCOLN PSD P.O. BOX 38 240 LITTLE COAL RIVER RD. ALUM CREEK, WV 25003	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,920,000.	25%
TOWN OF CAPON BRIDGE WATERLINE AND PUMP STATION REPLACEMENT	TOWN OF CAPON BRIDGE PO BOX 183 FRANK, WV 24920	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,925,000.00	50%
CITY OF SALEM, WEST VIRGINIA WATER LINE REPLACEMENT	SALEM, CITY OF P.O. BOX 352 229 W. MAIN SALEM, WV 26426 7 REPRESENTED (APPROXIMATELY 20 A	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,500,000.	80%

CURRENTLY IN PRELIMINARY / DESIGN OR CONSTRUCTION PHASES

LESTIMATED CONSTRUCTION COSTS:

\$18,220,000.00 REPRESENTED

ESTIMATED COST OF ALL JOBS APPROXIMATELY \$150,000,000.00

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD: **SANITARY SEWER PROJECTS**THRASHER ENGINEERING IS CURRENTLY THE DESIGNATED "ENGINEER OF RECORD" ON MORE THAN 200 ON-GOING PROJECTS. THESE PROJECTS RANGE FROM SIMPLE BOUNDARY

SURVEYS WHICH ARE COMPLETED WITHIN A FEW DAYS' TIME TO COMPLETE MUNICIPAL PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF TIME. A PARTIAL LISTING OF CURRENT PROJECTS FOLLOWS WHICH DEMONSTRATES THE RANGE OF SERVICES PROVIDED BY THRASHER ENGINEERING.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF Y RESPONS	OUR FIRM'S IBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
KINGWOOD SEWER REPLACEMENT AND SERVICE EXTENSIONS KINGWOOD, WV	CITY OF KINGWOOD 313 TUNNELTON STREET KINGWOOD, WV 26537	FEASIBILITY STUDY, FUNDING AND PERI APPLICATIONS, CON DOCUMENTS, FIELD SURVEY AND INSPE	MIT NTRACT SERVICES OF	\$10,000,000.00	50%
GREATER HARRISON COUNTY PSD PHASE II-B HARRISON COUNTY, WV	GREATER HARRISON COUNTY PSD P.O. BOX 190 WEST MILFORD, WV 26451	FEASIBILITY STUDY, FUNDING AND PERI APPLICATIONS, CON DOCUMENTS, FIELD SURVEY AND INSPEC	MIT NTRACT SERVICES OF	\$6,000,000.00	65%
TENNERTON PSD PHASE III SANITARY SEWER EXTENSION UPSHUR COUNTY, WV	TENNERTON PSD 188 FAYETTE ST. BUCKHANNON, WV 26201	FEASIBILITY STUDY, FUNDING AND PERM APPLICATIONS, CON DOCUMENTS, FIELD SURVEY AND INSPEC	MIT ITRACT SERVICES OF	\$6,800,000.00	5%
ENLARGED HEPZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH PSD DRAWER H HEPZIBAH, WV 26369	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		\$2,666,000.00	50%
CITY OF WEIRTON, WV PHASE II SEWER PROJECT	CITY OF WEIRTON 3031 BIRCH DRIVE WEIRTON, WV 26062	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		\$5,728,000.00	40%
TOWN OF JUNIOR WASTEWATER TREATMENT PLANT JUNIOR, WV	TOWN OF JUNIOR PO BOX 247 JUNIOR, WV 26275	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		\$2,332,000.00	45%
TOTAL NUMBER OF PROJECTS: TOTAL ACTIVE SANITRY SEWER PROJEC	7 REPRESENTED CTS APPROXIMATELY 38		FOTAL ESTIMAT	ED CONSTRUCTION COSTS: \$46,000,	000.00

16. CURRENT ACTIVIT	IES ON WHICH YOUR FI	RM IS SERVING AS A SU	UB-CONSULTANT TO OTH	ERS	
PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONS	STRUCTION COST
DEDUC				ENTIRE PROJECT	YOUR FIRMS
BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT WASTEWATER TREATMENT PLANT BERKELY COUNTY,WV	DESIGN SUPPORT CONSTRUCTION ADMIN.	BERKELEY COUNTY PSSD PO BOX 944 MARTINSBURG, WV 25402	2015	\$20,000,000.00	RESPONSIBILITY \$10,000,000.00
RD BAILY WATER SYSTEM MCGRAWS, WV	DESIGN SUPPPORT CONSTRUCTION ADM.	RAVENCLIFF-MCGRAWS- SAULSVILLE PSD P.O. BOX 217 MCGRAWS, WV 25875	2016	\$30,000,000.00	\$12,000,000.00
		,			

COMPLETED WORK – WVDEP OFFICE OF AML&R - PROJECTS DESIGNATED ENGINEER OF RECORD

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD THRASHER HAS DESIGNED, BID AND PROVIDED CONSTRUCTION SERVICES FOR MORE THAN 200 PUBLICLY FUNDED PROJECTS WITHIN THE PAST 10 YEARS. THE FOLLOWING LIST IS COMPRISED OF PROJECTS COMPLETED WITHIN THE LAST THREE (3) YEARS THAT DEMONSTRATE THE RANGE OF DISCIPLINES PROVIDED BY THRASHER

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
PLEASANT VALLEY AML RECLAMATION MARION COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$764,000.00	2013	YES YES
ROGER (CAMP HILL) AML RECLAMATION TUCKER COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$210,000.00	2013	YES
ANGLINS RUN PORTALS AML RECLAMATION BARBOUR COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$321,000.00	2010	YES
ROARING CREEK SUBSIDENCE AML RECLAMATION RANDOLPH COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$353,000.00	2010	YES
SQUIRES CREEK PORTALS REFUSE AML RECLAMATION	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$260,000.00	2011	YES
OVERFIELD (LAFFERTY) CS&P AML RECLAMATION	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$492,000.00	2011	YES
LAUREL RUN #1 REFUSE / HIGHWALL AML RECLAMATION MONONGALIA COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$1,558,000.00	2012	YES
CLARKSBURG (LYONS) LANDSLIDE AML RECLAMATION HARRISON COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$1,492,000.00	2012	YES

PROJECT NAME, TYPE	AST 5 YEARS ON WHICH YOUR FIRM W	AS THE DESIGNATED ENGINEER OF RECOR	D	
AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED
McHENRY BUSINESS PARK SITE DEVELOPMENT AND UTILITIES GARRETT COUNTY, MD	GARRETT COUNTY EDA 203 SOUTH 4TH STREET COURTHOUSE ROOM 208 OAKLAND, MD 21550	\$3,500,000.00	2011	(YES OR NO)
WHITE OAKS BUSINESS PARK SITE DEVELOPMENT AND UTILITIES HARRISON COUNTY, WV	HIGH TECH CORRIDOR DEVELOPMENT,LLC MR. JACK KEELEY PO BOX 1532 CLARKSBURG, WV 26302	\$12,100,000.00	2010	YES
CANYON PUBLIC SERVICE DISTRICT SANITARY SEWER UPGRADE AND EXT MONONGALIA COUNTY, WV	CANYON PSD 12 WICHITA STREET MORGANTOWN, WV 26508	\$6,500,000.	2009	YES
HEPIZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH DRAWER H HEPZIBAH, WV 26369	\$3,400,000	2010	YES
SUN VALLEY WATER AND SEWER SYSTEM IMPROVEMENTS REYNOLDSVILLE, WV	SUN VALLEY PSD PO BOX 95 REYNOLDSVILLE, WV 26422	\$12,500,000	2010	YES
BROOKE COUNTY PSD REPLACEMENT AND EXTENSION BROOKE COUNTY, WV	BROOKE CO. PSD 711 CHARLES ST. P. O. BOX 150 WELLSBURG, WV 26070	\$10,000,000	2009	YES
HUTTONSVILLE PSD PHASE II RANDOLPH COUNTY, WV	HUTTONSVILLE PSD P.O. BOX 277 MILL CREEK, WV 26280	\$4,300,000	2009	YES
POCAHONTAS COUNTY PSD WWTP AND COLLECTION SYSTEM POCAHONTAS COUNTY, WV	POCAHONTAS COUNTY PSD HC 63 BOX 122 FRANK, WV 24920	\$11,600,000	2009	YES
HARDY COUNTY WATER SYSTEM MPROVEMENTS HARDY COUNTY, WV	HARDY COUNTY PSD 223 N. MAIN STREET MOOREFIELD, WV 26836	\$8,000,000	2010	YES

17. COMPLETED WORK WITHIN LAST PROJECT NAME, TYPE	5 YEARS ON WHICH YOU WERE THE DESI	GNATED ENGINEER OF RECORD		
AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTE
LEWIS COUNTY ECONOMIC DEVELOPMENT AUTHORITY BLOODY RUN WATER LINE EXTENSION	LEWIS COUNTY EDA 16 GARTON PLAZA WESTON, WV 26452	\$167,165.00	2013	(YES OR NO)
HEPIZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH DRAWER H HEPZIBAH, WV 26369	\$3,400,000	2010	YES
SOUTHWESTERN PSD WATER LINE EXTENSION / REPLACEMENT	SOUTHWESTERN WATER PUBLIC SERVICE DISTRICT P. O. BOX 98 FLEMINGTON, WV 26347	\$10,430,000	2012.	YES
CITY OF SALEM WATER LINE REPLACEMENT AND DAM IMPROVEMENTS HARRISON COUNTY, WV	CITY OF SALEM 229 WEST MAIN STREET SALEM, WV 26426	\$981,595.00	2013	YES
TOWN OF ROWLESBURG WATER TREATMENT PLANT/ EXT. PRESTON COUNTY, WV	TOWN OF ROWLESBURG PO BOX 458 42 POPLAR STREET ROWLESBURG, WV 26425	\$4,500,000.	2010	YES
COUNTY LINE BRIDGE MARSHALL COUNTY, WV	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	\$1,800,000.00	2013	YES
WVDOH DISTRICT 7 HEADQUARTERS LEWIS COUNTY, WV	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	\$2,300,000.00	2013	YES
I-64 WEIGH STATION PUTNAM COUNTY, WV	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	\$800,000.00	2013	YES

18. COMPLETED WORK W WAS RESPONSIBLE)	ITHIN LAST 5 YEARS ON WHIC	H YOU WERE ASSOCIATED WITH OTHER FIRE	MS (INDICA	TE PHASE OF WORK	FOR WHICH YOUR 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
MC DOWELL COUNTY FEDERAL PRISON WELCH, WV SITE DEVELOPMENT	US DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS 500 FIRST STREET NW WASHINGTON, DC 20534	\$25,000,000.00	2010	YES	BELL JUSTICE FACILITIES
CITY OF BECKLEY INTERMODAL GATEWAY	CITY OF BECKLEY 409 S. KANAWHA STREET BECKLEY, WV 25801	\$250,000.00	2012	YES	PARSONS BRINCKERHOFF
19. USE THIS SPACE TO PROVIE WV ABANDONED MINE I SEE ATTACHMENT – STATEME	LANDS PROGRAM		 YOUR FIRM'	 S QUALIFICATIONS TO	 D PERFORM WORK FOR THE
20. THE FOREGOING IS A STAT SIGNATURE: MAD B PRINTED NAME: CHADWICK D	EMENT OF FACTS.	TLE: PARTNER / PRINCIPAL-IN-CHARGE		DATE: Collo	2814

EXPRESSION OF INTEREST

Carson One Mining, LLC O-4-84, Glady Fork Mining, Inc. D-35-82 & U-60-83 DEP16488

			US	IX an	iu n		AII	ED P	KOJ	EC 1	LLA	PER	CLEN	CE	IVIA	IKL	X						
PROJECT C-Corp info	Additional		PROJECT EXPERIENCE REQUIREMENTS												Primary staff participation/capacity *** M-Management P-Professional								
	info provided in Section (s) **	Forfeited Surface Mine Reclamation	Forfeited Deep Mine Reclamation	Portal/shaft closure	Hydrologic/Hydraulic design/ Eval.	Remining Evaluation	Mine / refuse fire abatement	Subsidence investigation/ mitigation	Hazardous waste disposal	Project specifications	Water quality evaluation /mitigation replacement	Construction inspection / management	Water treatment	Equipment /structure removal	Stream restoration	Geotechnical/stability	NPDES/ Stormwater preparation	Chad Biller, PE ***	Mike Nestor, PE, CFM	April Rohrbaugh	Dayton Carpenter, PE	Doug Forni, PE	
Martinka Mine														X								X	
Roaring Creek			X			X			X		X					X		X	X	X			
Lambert's Run Site 6						X					X	X	X				X	X					X
Lyons Landslide					X	X					X					X		X	X		X		
Laurel Run			X			X					X	X						X	X		X		

^{*}List whether project experience is corporate or personnel based or both

Attachment "C"

Revised 6/8/2012

^{**} 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.

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety, understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

The Thrasher Group, Inc.
(Company)
Chad Biller JE
(Authorized Signature)
Chad Biller, PE, PFC
(Representative Name, Title)
304-624-4108 304-624-783
(Phone Number) (Fax Number)
June 11, 2014
(Date)

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

DEFINITIONS:

WITNESS THE FOLLOWING CICHATURE

"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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"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.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITHESS THE FOLLOWING SIGNATURE:	
Vendor's Name: The Thraster	Group, Inc.
Authorized Signature: Mad Biller	At
State of West Virginia	
County of Harrison, to-wit:	
Taken, subscribed, and sworn to before me this	day of June 2014.
My Commission expires	, 20[9].
AFFIX SEAL HERE	NOTARY PUBLIC Devade Herns
	Purchasing Affidavit (Revised 07/01/2012,
OFFICIAL OFFI	(