

VENDOR

DATE PRINTED

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East 30

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Post Offic	e Box	50130	
Charlesto	n, WV	25305	-013

RFQ COPY TYPE NAME/ADDRESS HERE

The Thrasher Group, Inc. 600 White Oaks Blvd. Bridgeport, WV 26330

Solicitation

NUMBER DEP16434 PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF:

FRANK WHITTAKER 304-558-2316

ENVIRONMENTAL PROTECTION S DEPARTMENT OF OFFICE OF AML&R 601 57TH STREET SE CHARLESTON, WV

25304 304-926-0499

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LINE	QUANTITY	UOP	NO.	ITEM NUMBER	UNIT	PRICE	AMOUNT
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anuary 14, 2014

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

RE: DEP 16434, Canyon Refuse and Dump

Dear Members of the Selection Committee:

Thrasher is no stranger to DEP AML projects. Our attention to detail and project execution speak for itself. Like most projects we undertake, Thrasher has visited the Canyon Refuse and Dump 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 Urquhart, 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 portals, using either wet or dry seals.
 - April Rohrbaugh, Staff Engineer has completed the design of four AML projects, under the direction of Chad Biller.
 - Richard "RJ" Hovatter, PE has extensive experience in grouting projects for the WVDEP.
- C. Available AML 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

THRASHER

BACKGROUND

rasher 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 250 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

THRASHER

OUR APPROACH TO AML

rasher has, or is in the process of, completing eight Abandoned Mine Lands (AML) projects for the West Virginia Department of Environmental Protection (WVDEP). While the scope of the projects varies, Thrasher has the experience and resources to apply the following design aspects:

Reclaim Refuse Piles: refuse piles were incorporated into the backfill of re-graded highwalls. 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 AML 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 AML projects, including bat gate mine seals.

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.

ndslide 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.

Drainage Design: all of the AML 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 conveyances.

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.

CANYON REFUSE AND DUMP

rasher 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
- Step 2. Project Development and Design
- Step 3. Environmental and Permitting
- Step 4. Bidding
- Step 5. Construction Management









ADDITIONAL RELATED SERVICES

TE 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

INSTRUCTION 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

d 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.





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 a 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.

RALEIGH COUNTY AIRPORT INDUSTRIAL PARK: This multi-phased project consisted of all preliminary design, permitting, final design and construction management for the development of a 300+ acre business and industrial park adjacent to the Raleigh County airport. Engineering design consisted of mass grading, E&S plans, stormwater, public utilities, roadways, sidewalks and building pads.



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

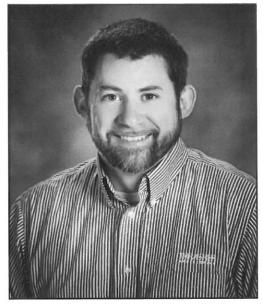
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OVERFIELD AND SQUIRES CREEK: These projects consisted of engineering design for portal sealing, drainage and retaining walls for the Overfield - Lafferty Site and engineering design for portal sealing, drainage and backfilling of the highwall with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

WV DEP Shinns Run Portals: 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 sif ficant mine voids. This resulted in a grout stabilization design to be added to the project scope.



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 remainly sufficient to make the plan of the p

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 ar 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 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.

SQUIRES CREEK



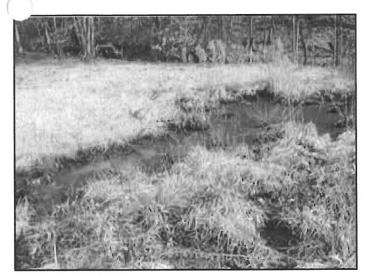


SQUIRES CREEK

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 d 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 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 isting 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.

2000		TMENT OF ENVIRONMENTAL F ATION QUESTIONNAIRE		N ment "B"
PROJECT NAME		MONTH, YEAR)	FEIN 55-0633596-6	
1. FIRM NAME THE THRASHER GROUP, INC.	ICE BUSINESS ADDRESS S BOULEVARD, BRIDGEPORT, WV 26330	3. FORMER		
4. HOME OFFICE TELEPHONE 304-624-4108	5. ESTABLISHED (YEAR 1983	6. TYPE OWNERSHIP Individual Corpora Partnership Joint-V		6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO X
7. PRIMARY AML DESIGN OFFICE: 600 WHITE OAKS BOULEVARD, BRIDGEPO 300 ASSOCIATION DRIVE, CHARLESTON, W 3000 THAYER PLACE, OAKLAND, MD/301-3 380 AIRPORT CIRCLE, BEAVER, WV 25813 4150 BELDEN VILLAGE STREET, SUITE 101, O 236 CAMBRIDGE STREET, FREDERICKSBUR 1428 MAIN STREET, PRINCETON, WV 24740	ORT, WV 26330 / 304-624-4108 / VV / 304-343-7601 / JONATHAN 34-3866 / CHAD RILEY, PE / 1 3 /304-860-1924 / ROBERT CRAD CANTON, OHIO 44718 / 330-491 3G, VA 22405 / 540-372-3499/DO	CHAD D. BILLER, P.E., PARTNER / 12 CARPENTER, MANAGING PARTNER / 2 DDOCK/0 -8170/ STEVE HAMIT, P.E./2 OUGLAS RICHMOND, L.S./9 GAN, PE /39		
8. NAMES OF PRINCIPAL OFFICERS H. WOOD THRASHER, P.E. – PRESIDENT KENNETH P. MORAN, P.E. – VICE PRESIDEN RONALD STANLEY, CPA – CHIEF FINANCIA	т	8a. NAME, TITLE, & TELE WM. RANDY WATSON-PARTNER (304) CHAD M. RILEY, P.E.— PARTNER (304) CHADWICK BILLER, P.E.— PARTNER (304) 62 CLAY P. RILEY, P.E.— PARTNER (304) 62 DAN FERRELL, P.E.— PARTNER (304) 62 CRAIG BAKER, ASSOCIATE AIA— PART ROBERT MILNE, P.E.— PARTNER (304) JONATHAN CARPENTER, P.EPARTNER MATTHEW FLUHARTY, PE— PARTNER JENELLE ARMSTRONG, PE— PARTNER	4) 624-4108 624-4108 04) 624-4108 624-4108 4-4108 'NER (304) 624-4: 624-4108 IR (304) 343-7601 (304) 624-4108	108
9. PERSONNEL BY DISCIPLINE 44 ADMINISTRATIVE 7 ARCHITECTS — BIOLOGIST 18 CADD OPERATORS — CHEMICAL ENGINEERS 38 CIVIL ENGINEERS 37 CONSTRUCTION INSPECTORS DESIGNERS — DRAFTSMEN TOTAL NUMBER OF WV REGINERS *RPES other than Civil as perform this type of wo	nd Mining must provide	2 LANDSCAPE ARCHITECTS MECHANICAL ENGIN	EERS S REGIONAL RS	STRUCTURAL ENGINEERS 72 SURVEYORS TRAFFIC ENGINEERS 1 GIS SPECIALIST 1 PIPELINE INSPECTOR 24 MATERIALS TESTING TECH. 257 TOTAL PERSONNEL
10. HAS THIS JOINT-VENTURE WO	RKED TOGETHER BEFORE?	€ YES X NO NOT APPL	ICABLE	

11. OUTSIDE KEY CONSULTANTS/SUB-C	CONSULTANTS ANTICIPATED TO BE USED. Attach "A	
NAME AND ADDRESS: NOVEL GEO-ENVIRONMENTAL	SPECIALTY: GEO-TECHNICAL SERVICES	WORKED WITH BEFORE
650 MACCORKLE AVENUE WEST ST. ALBANS, WV 25177		_X YesNo
NAME AND ADDRESS: RELIANCE LABORATORIES, INC	SPECIALTY: WATER SAMPLE ANALYZATION	WORKED WITH BEFORE
2044 MEADOWBROOK ROAD BRIDGEPORT, WV 26330		XYes No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
NAME AND ADDRESS:	SPECIALTY:	No WORKED WITH BEFORE
		Yes
		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. THRASHER'S ANALYSIS AND DESIGN ALSO INCLUDES IMPROVEMENTS AND ALTERNATIVES FOR WATER SOURCES DEEMED GROUND WATER UNDER THE DIRECT EFFECT 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.

13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	INCIPALS AND ASSOCIATES RESPON	SIBLE FOR AML PROJECT DESIGN	(Furnish complete
		WHADO OF EVERTENCE	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	Typang on Downgmig
BILLER, CHADWICK D. P.E.	YEARS OF AML DESIGN EXPERIENCE: 5	YEARS OF AML RELATED DESIGN EXPERIENCE: 19	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 19
Brief Explanation of Responsibilitie bridges, and airports. Mr. Biller joined Thrasher Engi AML project and public and private site development projects, he has extensive knowledge of state and fe	neering in 1999 and is a partner of Thrashe t projects, specializing in airports, highway.	r Engineering. For Thrasher Engineering, I	Mr. Biller is responsible for WV DEP
EDUCATION (Degree, Year, Specializat • B.S., Civil Engineering, 1992 – West			
MEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers Society of American Military Engineers National Society of Professional Engineers	IONS	REGISTRATION (Type, Year, St Registered Professional Enginese #13620 Registered Professional Enginese #PE056012E Registered Professional Enginese	er(PE),State of West Virginia er (PE),State of Pennsylvania
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
NESTOR, MICHAEL – PROJECT ENGINEER	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9
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	te development projects, utilizing all aspect in water drainage, storm water management in Berkeley Associates, directing administra irveying, material testing, and environment ion)	ts of infrastructure design including street nt, erosion and sediment control plans, an ative staff, CAD technicians, and staff engi	and lot layout, street profiles, d NPDES permitting. In addition,
MEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers Eastern Panhandle Home Builders Association	TONS	REGISTRATION (Type, Year, St Professional Engineer (P.E.), 200	

13. PERSONAL HISTORY STATEMENT OF PF data but keep to essentials)	RINCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DES	IGN (Furnish complete
		YEARS OF EXPERIENCE	
NAME & TITLE (Last, First, Middle Int.) ROHRBAUGH, APRIL	YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: -
Brief Explanation of Responsibilities Ms. Rohrbaugh joined Thrasher Engineering in Janu reclamation and sediment/erosion control project. It Her responsibilities with AML projects include: Desig sediment control. Ms. Rohrbaugh's other responsible planning for residential, commercial, and recreation drainage, storm water management, erosion and se	ary of 2006 and serves as Staff Engineer in Ms. Rohrbaugh has experience in all aspect gn of wet and modified mine seals, grading ilities include: design surveying consisting o nal developments. Site/Land Development	ts of site engineering, taking projects f g associated with reclaiming, storm wa of both field traversing and survey loca engineering: geometric layout of sites	rom survey to concept to construction. ter management, and erosion and tions and aerial mapping. Conceptual
EDUCATION (Degree, Year, Specializat	cion) B.S. Civil Engineering – West Vi	irginia University, 2005, Civil Engin	eering
MEMBERSHIP IN PROFESSIONAL ORGANIZATION OF PROFESSIONAL HISTORY STATEMENT OF PROFESSIONAL PROFESSIONAL ORGANIZATION ORGAN		REGISTRATION (Type, Year,	
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
HOVATTER, RICHARD (RJ) – PROJECT MANAGER	YEARS OF AML DESIGN EXPERIENCE: 9	YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9
Brief Explanation of Responsibilitie Office. As a graduate of Fairmont State University a as landslides and mine subsidence of abandoned m erosion control plans and waterline feasibility studi	ınd previous experience Mr. Hovatter has e ine land. Mr. Hovatter is responsible for th	extensive knowledge of abandoned mi	ne land and emergency situations such
EDUCATION (Degree, Year, Specializate Bachelor of Science, 2002, Civil Engineering T			
	TIONS	REGISTRATION (Type, Year,	Chaha)

14. 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.

6 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%
US 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 TREATMENT 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 WASTEWATER TREATMENT PLANT UPGRADES 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		

TOTAL NUMBER OF PROJECTS: 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 COST	PERCENT COMPLETE
CHESTNUT RIDGE PSD BARBOUR/PRESTON EXTENSION BARBOUR COUNTY, WV	CHESTNUT RIDGE PSD 209 S MAIN STREET P.O. BOX 386 PHILIPPI, WV 26416	9 S MAIN STREET FUNDING AND PERMIT D. BOX 386 APPLICATIONS, CONTRACT		90%
GILMER COUNTY PSD WATER LINE EXTENSION	PO BOX 729 GLENVILLE, WV 26351	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	MINGO COUNTY PSD PO BOX 98 NAUGATUCK, WV 25685	PO BOX 98 FUNDING AND PERMIT		60%
HAMRICK PSD MOORE/PORTERWOOD EXTENSION TUCKER COUNTY, WV	HAMRICK PSD PO BOX 228 HENDRICKS, WV 26271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,100,000.	35%
LINCOLN COUNTY PSD WATER LINE EXTENSION PROJECTS	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	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,500,000.	80%

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 YOUR FIRM' RESPONSIBILITY	S ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE	
KINGWOOD SEWER REPLACEMENT AND SERVICE EXTENSIONS KINGWOOD, WV	CITY OF KINGWOOD 313 TUNNELTON STREET KINGWOOD, WV 26537	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,000,000.00	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, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$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, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$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 PROJE			MATED CONSTRUCTION COSTS: \$46,00 L PROJECTS APPROXIMATELY \$150,000,000	0,000.00	

PROJECT NAME, TYPE	NATURE OF FIRMS	RM IS SERVING AS A SU	ESTIMATED		STRUCTION COST
AND LOCATION	RESPONSIBILITY	OF OWNER	COMPLETION DATE	ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
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	\$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
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

17. COMPLETED WORK WITHIN LAS	ST 5 YEARS ON WHICH YOUR FIRM WA	AS THE DESIGNATED ENGINEER OF RECOR)	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
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
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 IMPROVEMENTS HARDY COUNTY, WV	HARDY COUNTY PSD 223 N. MAIN STREET MOOREFIELD, WV 26836	\$8,000,000	2010	YES

17. COMPLETED WORK WITHIN LAST 5	YEARS ON WHICH YOU WERE THE DESIG	NATED ENGINEER OF RECORD	The state of the s	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
LEWIS COUNTY ECONOMIC DEVELOPMENT AUTHORITY BLOODY RUN WATER LINE EXTENSION	LEWIS COUNTY EDA 16 GARTON PLAZA WESTON, WV 26452	\$167,165.00	2013	YES
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 WITHIN LAST 5 YEARS ON WHICH YOU WERE ASSOCIATED WITH OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM					
WAS RESPONSIBLE) PROJECT NAME, TYPE NAME AND ADDRESS ESTIMATED CONSTRUCTION COST OF YEAR CONSTRUCTED FIRM ASSOCIATED					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	YOUR FIRM'S PORTION	TEAK	(YES OR NO)	WITH
MC DOWELL COUNTY FEDERAL	US DEPARTMENT OF JUSTICE				
PRISON	FEDERAL BUREAU OF PRISONS				
WELCH, WV	500 FIRST STREET NW	\$25,000,000.00	2010	YES	BELL JUSTICE FACILITIES
SITE DEVELOPMENT	WASHINGTON, DC 20534		2010	1E3	
CITY OF BECKLEY INTERMODAL	CITY OF BECKLEY				
GATEWAY	409 S. KANAWHA STREET	\$250,000.00	2012	YES	PARSONS BRINCKERHOFF
	BECKLEY, WV 25801	¥230,000.00	2012	1,34	
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AS A SECTION OF THE PROVIDE ANY ADDITIONAL INCOMMETION OF DESCRIPTION OF DESCRIPT					
19. USE THIS SPACE TO PROVIDE ANY ADDITIONAL INFORMATION OR DESCRIPTION OF RESOURCES SUPPORTING YOUR FIRM'S QUALIFICATIONS TO PERFORM WORK FOR THE					
WV ABANDONED MINE LANDS PROGRAM					
COS ATTACHMATAIT CTATEMENT OF CHAUSICATIONS					
SEE ATTACHMENT – STATEMENT OF QUALIFICATIONS					
20. THE FOREGOING IS A STATEMENT OF FACTS.					
Olhad Palle					
SIGNATURE: TITLE: PARTNER / PRINCIPAL-IN-CHARGE DATE: JANUARY 14, 2014					
SIGNATURE. WE WAY TO THE TAKEN THE CHANGE					
PRINTED NAME: CHADWICK D. BILLER, P.E.					
FRINTED NAME: CHADNICK D. DILLERY F.E.					

RFQ No.	110434
AFQ NO.	19

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 SIGNATURE:

"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.

Vendor's Name: The Thrasher Ground	p Inc.	
Authorized Signature: Mad Aullo	Dat	e:
State of West-Virginiae County of Harrison, to-wit:		
County of It le Kri Sun, to-wit:	7	.77
Taken, subscribed, and sworn to before me this 44 day	of Hanuary	, 26 <u>4</u> .
	, 2019.	O W
AFFIX SEAL HERE	NOTARY PUBLIC	ovapre ferms
	2.7	Purchasing Affidavit (Revised 07/01/2012

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.

Thrasher	
(Company)	
Chad Billu	
(Authorized Signature)	
(Representative Name, Title)	
304.624.4108	
(Phone Number)	(Fax Number)
1/14/2014	
(Date)	

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DEP16434

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: Thereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addendum received)					
	Addendum No. 1		Addendum No. 6		
	Addendum No. 2		Addendum No. 7		
	Addendum No. 3		Addendum No. 8		
	Addendum No. 4		Addendum No. 9		
	Addendum No. 5		Addendum No. 10		
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.					
			Company		
			Authorized Signature		
			Date		

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.