

EXPRESSION OF INTEREST

To provide

Professional Mapping
And
Design Services

for the

Chicopee Coal Company, Inc.

Nicholas Counties

West Virginia

DEP16557

Prepared for the

West Virginia Department

of Environmental Protection

Office of Special Reclamation

CTL Engineering of West Virginia, Inc.

733 Fairmont Road Morgantown, WV 26501

510 C Street
South Charleston, WV 25303

06/17/14 11:55:27AM West Virginia Purchasing Division

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Statement of Qualifications to Provide Professional Engineering Services

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CTL Engineering Of West Virginia, Inc.

733 Fairmont Road, Morgantown, West Virginia 26501

Phone: 304/292-1135 • Fax: 304/296-9302

e-mail: ctlwv@ctleng.com

AN EMPLOYEE OWNED COMPANY



Craculting Engineers • Testing • Inspection Services • Analytical Laboratories

Established 1927

June 16, 2014

West Virginia Department of Environmental Protection Office of Special Reclamation 105 S. Railroad Street Philippi. WV 26416-9998

> Re: RFQ #DEP 16557 Expression of Interest Design Engineering Services Proposal Chicopee Coal Company, Inc. (S-3006-99 & S-3002-98)

Gentlemen:

CTL Engineering of WV, Inc. is very pleased to present this proposal to provide design engineering and related services for the West Virginia Special Reclamation Program. With over 80 years in the business, we feel our firm can provide the professionals and facilities the State of West Virginia is looking for.

CTL has evolved into a recognized leader in the Abandoned Mine Lands Engineering Design and Investigation field. We offer the services necessary to provide a non-subcontract, quality product to support your program. Our capabilities include laboratory facilities, drilling rigs, surveying systems, design equipment, and a qualified staff. We have 12 Professional Engineers, five of which are registered in West Virginia and have direct Special Reclamation and AML Design Experience. Our in-house disciplines of professionals include: Civil & Mining Engineers, CAD Designers, Surveyors, Geologists, Hydrologists and Biologists. We are experienced in completing more than 50 projects annually that require aerial mapping, support surveying with GPS, and final contouring for design.

Our in-house ability reaches beyond simply being an Reclamation design firm. We also have extensive contract administration and management experience with the procedures of the state of West Virginia. Our invoicing procedures and accounting software has been accepted, used, and audited by various state agencies.

CTL's primary staff has over 125 years of experience with mine reclamation engineering on both a national and international level. Our qualifications and facilities are unsurpassed when it comes to Mine Reclamation Design. With offices in Charleston and Morgantown, we can effectively respond to any AML Design tasks throughout West Virginia. In addition, we have six full time design teams available to complete design projects. Our corporation and individual staff members have extensive experience relative to mine and refuse reclamation, mine and refuse fire elimination, site stabilization design, portal seal design and drainage control structures. The Chicopee Coal Company Project is similar in

scope to many of the reclamation design projects we have successfully completed. Attached to this proposal are numerous examples of similar projects successfully designed and completed.

We sincerely appreciate the opportunity to submit this proposal to you for consideration. Should you have any questions or need additional information, please contact our office.

Respectfully submitted,

CTL Engineering of West Virginia, Inc.

Royden L. Loucks

Director Business Development





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

Solicitation

NUMBER DEP16557 PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF

FRANK WHITTAKER

304-558-2316

ENVIRONMENTAL PROTECTION

DEPT. OF

OFFICE OF SPECIAL RECLAMATION

601 57TH STREET SE

O CHARLESTON, WV

25304

304-926-0499

RFQ COPY TYPE NAME/ADDRESS HERE CTL Engineering of West Virginia, Inc. 733 Fairmont Road Morgantown, WV 26501

DATE PRINTED 05/28/2014

BID OPENING DATE: 06/19/2014 BID OPENING TIME 1:30PM QUANTITY UOP CAT. ITEM NUMBER UNIT PRICE

LINE	QUANTITY	UOP NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
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SIGNATURE	An Contraction	L.C.	TELEPHON		DATE June 16, 2014
Director - Busin	ess Development	55-063-1834	[(304) 2	292-1135 ADDRESS C	HANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No.	DEP16557

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:

"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, 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

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: CTL Engineering of West Virginia, Inc. Authorized Signature: Date: June 16, 2014 State of West Virginia County of Monongalia , to-wit: Taken, subscribed, and sworn to before me this 16thday of June , 20 14. My Commission expires January 17 , 20 20 .

AFFIX SEAL HERE

NOTARY PUBLIC

Purchasing Affidavit (Revised 07/01/2012)



NOTARY PUBLIC

STATE OF WEST VIRGINIA

KATHLEEN J. O'BRIEN

451 Nuce Rd., Masontown, WV 26542

My Commission Expires January 17, 2020

OFFICIAL SEAL

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.

CTL Engineering of W	vest virginia, inc.
(Company)	
1	>
Authorized Signature)	
atrick E. Gallagher,	
Representative Name,	l'itle)
(304) 292-1135	(304) 296-9302
(Phone Number)	(Fax Number)
June 16, 2014	
Date)	WA

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DEP16557

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

Addendum (Check the be	Numbers Received: ox next to each adden	dum 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
discussion hel	stand that any verbal r ld between Vendor's i	the receipt of addenda may be cause for rejection of this bid. I spresentation made or assumed to be made during any oral expresentatives and any state personnel is not binding. Only the ded to the specifications by an official addendum is binding.
		CTL Engineering of West Virginia, Inc.
		Company
		Authorized Signature
5		June 16, 2014
		Date

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

CTL Engineering of West Virginia, Inc.

An Employee Owned Company

CTL Engineering of West Virginia, Inc. (CTL of WV) is a full service consulting civil engineering, testing, inspection, and analytical services company. CTL Engineering of West Virginia, Inc. was formed in 1981 to service West Virginia, Maryland and Pennsylvania. CTL of WV is part of CTL Engineering, Inc. formerly known as Columbus Testing Laboratory, which was established in Columbus, Ohio in 1927 as an independent engineering testing laboratory serving the local community. During the early years, our expertise focused mainly on soils, foundation engineering, and construction testing and inspection services.

The Engineering News-Record ranked CTL Engineering, Inc. among top 500 architectural and engineering firms in the nation. CTL Engineering maintains a staff of over 200 employees, including registered engineers, architects, chemists, environmental scientists, geologists, hydrologists, wetland scientists and technicians.

CTL of WV provides total Civil Site Design for development projects throughout West Virginia. These designs include site layouts, utility design and interconnections, stormwater management design, parking and roadway design, permit preparation and submittal, and interaction with architects, owners and all interested parties to the projects.

CTL of WV provides all necessary surveying services required of projects including boundary and ALTA surveys, topographic surveys, aerial survey control, GPS surveys, and site construction surveys to assure proper construction and compliance with specifications of the project.

CTL of WV has become an industry leader in geotechnical design and investigations. In the past 5 years, CTL of WV has provided over 1000 geotechnical investigations including drilling, sampling and design for both the public and private sectors. CTL of WV is regularly called upon to provide unique geotechnical engineering design services for projects throughout the United States and Canada.

CTL of WV provides environmental services for developments throughout West Virginia and Maryland. Environmental Services include Phase I and II ESAs, wetland delineation and mitigation plans, State and Federal 401 and 404 Permit submittals, Ms4 Phase II storm water permitting, soil and groundwater sampling, asbestos surveys and sampling, lead based paint testing, mold testing, UST removal oversight, hazardous material identification and remedial design and other environmental services as required

CTL of WV provides construction, material and concrete testing and observation services. CTL of WV has ten field technicians providing dedicated construction observation and compliance testing. CTL's in-house material laboratory provides the much needed prompt turn-around required for projects to be successful.

Additional services provided by CTL include Nondestructive Testing and Inspection, Forensic Science, Accident Re-Construction, Roofing Consulting, Product Testing, Laboratories, Analytical Chemistry and Metallurgy Services.





Professional Services

Analytical Chemistry

Organics

- Metals
- Liquid and Solid Fuels Soil and Water
- Oils and Sludge
- Solid & Hazardous Wastes
- Construction Materials

Computer Technology

- **Drafting Services**
 - AutoCad
 - Digitizing
 - Microstation
- Software Development
 - Internet & Intranet
 - Application Software

Construction Administration

- **ODOT LPA Projects**
- County & Municipal Projects
- Daily On-Site Inspections
- Owner's Representative

Construction Monitoring

- Floor Flatness Soils, Concrete, Asphalt, Masonry, Fireproofing, and Steel
- Earth and Concrete Dams
- Pavement for Streets and **Airports**
- Pre and Post Construction Inspection
- Embankments, Fill, and Cut

Environmental

- Phase I & II ESAs
- RCRA Closure & Site Remediation
- Asbestos/Lead/Mold Surveys
- Abatement Design/
- Monitoring Wetlands Delineation,
- Permitting & Mitigation Endangered Species/ Ecological Surveys
- Stormwater Management
- Water Resource Engineering
- Underground Storage Tank Management per BUSTR
- Hydrogeologic Studies & Aquifer Characterization

Existing Structure Evaluation

- **Delamination Determination**
- Bridges/Buildings
- Sonic Velocity Testing
- Half Cell Potential Tests

Forensic Science

- **Roofing Failures**
- **Building Failures**
- Legal Testimony
- **Product Liability**

Investigations

- Landslide, Soil and Foundation Failures
- Accident Reconstruction

Geotechnical

- Site Selection
- Pavement Design (including CBR Study)
- Foundation Analysis & Design
- **Embankment & Earth** Dam Analysis
- Slope Stability Analysis
- Subsurface Exploration -**Drilling Services**

Ground Penetrating Radar

- Concrete Inspection & Evaluation
- **Bridge Inspection**
- Utility Detection & Mapping

Materials Testing

- Concrete
- Aggregates
- Soils and Rock
- Clay and Masonry Products Bituminous Materials
- Petrographic Studies
- Concrete & Asphalt Mix Designs

Metallurgy

- Metallography
- Failure Analysis
- Fracture Analysis
- Corrosion Studies Tensile and Hardness
- Application
- Recommendations

- Mining Engineering
 Mine Plan Design
- Permit Preparation
- Refuse Disposal Design
- Mine Reclamation Design
- **Environmental Monitoring**
- Subsidence Investigations
- **Drainage Control**
- Structures

Nondestructive Testing & Inspection

- Level II Services
- Ultrasonic Inspections
- Liquid Penetrant Inspection
- Magnetic Particle Inspection

Pavement Management

- Budgeting Prioritization
- **Deterioration Rates**
- Condition Assessment
- Maintenance &
- Rehabilitation Strategies
- Network Needs & Long Range Goals

Product Testing

- Calibration
- Design Analysis
- Safety Evaluation
- Hydrostatic Testing
- Mechanical and Physical **Property Testing**
- Load and Strength Testing

Roofing Engineering & Building Envelope Services

- Infrared & Nuclear Testing
- Air/Water Infiltration
- Quality Control
- Roof Surveys Evaluation
- Design & Construction Administration

Roof Management System

- Budgeting Prioritization
- **Deterioration Rates**
- Condition Assessment
- Maintenance &
- Rehabilitation Strategies

Security & Safety Systems

- Design
- Construction
- Paging Systems Video Surveillance
- Intrusion Detection
- Card Access Control
- Audio Visual Solutions Digital Video Recording

- Site/Civil EngineeringCommercial Land
- Development
- Infrastructure Planning Residential/Community **Planning**

- Surveying & Mapping Topographic Mapping
- Development Property Surveying &
- Boundary Determination Global Positioning System

Telecommunication Services

- Design
- Construction Existing Structure Analysis and Maintenance
- Lighting Systems
- Inventory and Warehousing

Welding & Quality Control

- QA/QC Programs
- Certified Welding
- Inspection
- Welding/Brazing Qualification
- Procedure Development

Office Locations

2860 Fisher Road Columbus, OH 43204 Phone: (614) 276-8123

Fax: (614) 276-6377

4343 Saguaro Trail Indianapolis, IN 46268 Phone: (317) 295-8650 Fax: (317) 295-8395

3085 Interstate Parkway Brunswick, OH 44212 Phone: (330) 220-8900 Fax: (330) 220-8944

3902 New Vision Drive Fort Wayne, IN 46845 Phone: (260) 482-4503 Fax: (260) 482-2002

633 High Street Minford, OH 45653 Phone: (740) 820-8355 Fax: (740) 820-5698

510 C Street So. Charleston, WV 25303

Phone: (304) 746-1140

Fax: (304) 746-1143

102 Commerce Dr. Wapakoneta, OH 45895 Phone: (419) 738-1447

Fax: (419) 738-7670

733 Fairmont Road Morgantown, WV 26501 Phone: (304) 292-1135 Fax: (304) 296-9302

2105 Schappelle Lane Cincinnati, OH 45240 Phone: (513) 722-8665 Fax: (513) 834-6650

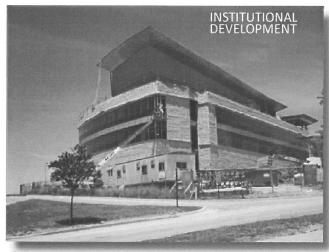
100 Central Plaza N **Canton, OH 44702** Phone: 330-994-1590

Sachina Engineering 407 "B" Block SNS Arcade, Airport Rd Bangalore, India 560017 011-91-80-526-8615

www.ctleng.com

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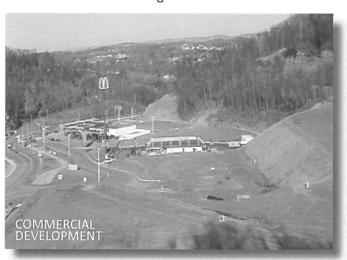
Site/Civil Engineering



CTL Engineering's in-house staff provides a full array of services, with support from our Site/Civil Department, including mapping and surveying services.

From a Raw Piece of Property --CTL Engineering Provides Full Site Layout Design.

- · Topographic Mapping Development
- Global Positioning Systems (GPS) Services
- Aerial Mapping Layout & Control
- Construction Layout
- Wetlands Delineation / Flood Plain Determination & Certification
- Property Survey & Boundary Determination
- Micrometer Leveling



Services Include:

- Commercial Land Development
- · Residential / Community Planning
- Infrastructure Planning & Design
- · Pavement Design and Management
- Conceptual Designs / Presentations
- Recreational Resort / Facility Planning
- Erosion & Sediment Control Design
- Storm Water Management Systems
- Preliminary Cost Estimates / Feasibility Analyses
- Oil & Gas Pad and Pipeline Layout, Design, Survey & Permitting
- As-Built Surveys and Drawings
- Remediation Plans for AML & Emergency Programs
- Permitting for all Project Types
- Site Development, Utilities and Appurenances



Surveying & Mapping





CTL Engineering maintains a full service, in-house survey and mapping team, which has extensive experience in performing most common surveying needs.

CTL Engineering has the professional staff and the latest equipment to support (8) full survey crews. Our equipment includes a Global Positioning System and robotic surveying instruments which gives us an added dimension to our surveying and mapping capabilities.

We have performed surveying and mapping on many of our civil/site projects and have supplied construction stakeout and monitoring for many of

Professional Services:

- Property Surveying and Boundary Determination
- Topographic Mapping Development
- Aerial Mapping Layout and Control
- · Gas Midstream Development and Construction Surveys
- Construction Layout
- Settlement Plate Monitoring
- Micrometer Leveling
- Flood Plain Determination and Certification
- Wetland Profiling

Project Synopsis:

- Residential Subdivision Layout
- Commercial Development Layout
- · Access Road and Parking Lot Layout
- · Bridge Construction Layout and Monitoring
- Elevation Certificates (FEMA)
- Property Survey Projects
- Storm Water Surveillance Mapping
- · Water Body Sounding Studies



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Mining Engineering Services

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CTL Engineering has experienced engineers, geologists, and mining technicians to provide the expertise to insure successful mining operations. We provide abandoned mine land reclamation design and project management, mine subsidence evaluations and remediation plans, hydraulic and hydrology studies, hydrogeologic evaluations, mine permitting, preblast surveys, pre and post mining surveys, and coal reserve studies.

The CTL Mining Engineering Group coordinates with our drilling services and various testing departments to provide a full scope of services to the mining industry. Our laboratories are certified to perform the water and overburden analysis prescribed by federal regulatory programs.

CTL Engineering provides drainage control structure design to comply with the regulatory requirements for controlling and treating site damage. Exploration equipment and remote video camera monitoring are used by CTL Engineering to prepare accurate maps for reclamation, subsidence stabilization measures, and mine closures.

We have experienced mechanical and metallurgical engineers on staff to provide mine equipment evaluation and consultation services. CTL Engineering is a proven source for accurate and dependable technical information.

CTL Engineering Mining Services Include:

- Subsidence Investigations and Stabilization Designs
- Abandoned Mine Reclamation Design
- Permit Preparation
- · Mine Design Plans
- Refuse Disposal Plans
- · Environmental Monitoring
- Coal, Water, and Overburden Analysis
- Drainage Control Structure Design
- Failure Analysis
- Legal Testimony
- Passive Treatment System Design





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Geotechnical Services

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CTL Engineering's Geotechnical Department routinely performs subsurface investigations and soil and rock testing. We prepare engineering reports, make recommendations regarding foundation and construction techniques, and perform other geotechnical services, as dictated by a given project.

Drilling Services

CTL Engineering owns and operates its own fleet of drill rigs. Our rigs are capable of Hollow Stem Augering, Rotary Core drilling and Direct Push Sampling. CTL is able to perform in house energy transfer calibrations on all of its automatic drive hammers. In fact, CTL calibrates many of our competitors' drive hammers as well.

CTL has continuously owned and operated drilling equipment since the 1970's. We have the equipment and experience to perform just about any geotechnical or environmental drilling project you may have.

Analytical Laboratory

Our soils laboratory has been accredited by AMRL since 1999. The lab has consolidometers, triaxial and direct shear apparata, permeability devices, soil compaction, soils classification equipment, and other laboratory testing equipment. We routinely perform testing on undisturbed as well as remolded soil samples. We also provide strength and durability testing services on rock samples.

Geotechnical Services:

- Complete Subsurface Exploration Study
- Foundation Analysis
- Pile, Pier, and Caisson Analysis & Inspection
- Embankment & Earth Dam Analysis
- Slope Stability Analysis
- Settlement Analysis
- Pavement Design
- Rock & Mineral Testing
- Hydrogeologic Studies
- Field and Laboratory Testing of Soils and Rock
- Legal Testimony
- Dynamic Pile Testing

CTL Engineering routinely provides subsurface investigations on the following:

- · Roads and Bridges
- · Airport Terminals, Runways, and Taxiways
- Water/Wastewater Treatment Facilities
- Hospitals, Parking Garages, Higher Education, and PK-12 School Buildings
- Energy Facilities
- Telecommunication Towers
- Commercial, Retail, and Industrial Facilities



Drilling in Rugged Terrain



Drilling on Flat Terrain

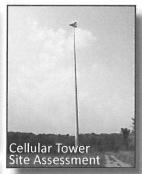


Environmental Services

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CTL has been providing Environmental Services since 1987 and has successfully completed over 7,100 projects of varying complexities for diversified clients, e.g., Governmental agencies, Universities, Private Banks, Developers, Communication Tower, Pipe-line and Oil & Gas Exploration Companies, etc. Our years of experience have made us aware of the regulatory and technical challenges our clients face when environmental issues arise.

Our clients have come to appreciate our ability to balance regulatory requirements while maintaining projects' feasibility and continuity. With multiple office locations and a knowledgeable staff of geologists, environmental scientists/engineers, wetland scientists, industrial hygienist, and certified HazMat professionals, we can provide a diverse range of environmental services to our local and regional clients. Whether our clients need a Phase I ESA or a full-scale remediation project, CTL's Environmental Department is the single source for your environmental needs.

Other Environmental Related Services:

Real Estate Related Services

- · Phase I and II ESA's
- Transaction Screenings
- FCC/NEPA Section 106 Reviews

Building Evaluation Services

- Asbestos Hazard Evaluations
- · Asbestos Abatement Design/Monitoring
- · Lead-Based Paint Surveys
- Indoor Air Quality Assessments
- · Mold Testing and Remediation

Ecological Services

- Stream, Wetlands & Jurisdictional Waters of the U.S. - Assessment & Delineation
- 404/401 Wetland Permitting
- Wetland/Stream Mitigation and Monitoring
- Threatened & Endangered Species Habitat Research and Surveys

Underground Storage Tank Services

- UST Removal & Closure
- BUSTR Tiers 1, 2 & 3 Evaluations
- Remedial Investigations and Corrective Actions

Hydrogeologic Services

- Soil Borings & Subsurface Evaluations
- Ground Water Investigations
- · Monitoring Well Installation
- Soil & Ground Water Remediation
- · Groundwater Mapping/ Modeling
- Storm Water Pollution Prevention Plans (SWPPP) Preparation, Design, and Inspections

Permitting/Compliance

- NPDES Permitting Support
- · Solid-Waste Landfill Permitting
- Permit to Install/Operate (PTI & PTO)
- . Compliance with Permit Conditions

Waste Management Services

- Hazardous & Non-Hazardous Waste Characterization and Disposal
- Spill/ Discharge Response Plans
- Effluent Sampling & Analysis
- RCRA Planning and Closure
- Spill Prevention Control & Countermeasure Plans (SPCC)

Geophysical Surveys

- Ground Penetrating Radar (GPR) survey to detect utilities and orphan USTs.
- Resistivity Testing of soil for grounding system designs.

Transportation Related Services

- Environmental Screening
- CE Documentation Preparation
- BUSTR Site Assessment
- Ecological Investigations

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Materials Testing



CTL Engineering is a leader in providing analytical services to the construction industry. We maintain a staff of experienced personnel and accurate equipment to guarantee dependable results. We evaluate all types of construction materials. Additionally, CTL Engineering can prepare and test Portland cement and bituminous concrete mixes for optimization studies to insure the proper mix design for specific jobs.

CTL Engineering offers petrographic examination of construction materials. These specialized microscopic evaluations allow us to closely evaluate concrete quality and determine the causes and extent of failures in concrete, in addition to potential future performance.

In addition to the standard ASTM tests of strength, absorption, dimensions unit weights, etc., CTL Engineering provides several specialty tests on concrete block and brick, including the fire rating test, specified by the BOCA, and efflorescence testing required by many architectural firms.

CTL Engineering also provides complete and thorough analysis of clay products.

We provide complete testing of the following:

Aggregates

- Component Analysis (sand, gravel, lime stone) – Department of Transportation
- Filter Sand Environmental Protection Agency (EPA)
- Railroad Ballast American Railroad Engineering Association
- Rip-Rap U.S. Soil Conservation Service

Soils

- Classification
- Compaction Parameters
- · Permeability Tests

Concrete

- Mix Designs
- Mix Verification Tests to verify strength, air content, consistency, and yield of concrete
- Compression Tests
- Flexural and Split Tensile Strength Tests
- · Modulus of Elasticity
- Creep Testing

Asphalts

- Mix Designs
- Nuclear Gauge Calibrations Extraction and Grading
- · Core Testing for Density and Strength

Clay-brick, Pipe & Tile

- · Compressive Strength
- Absorption
- · Freeze-thaw
- Efflorescence
- Dimensional Analysis
- Acid resistance

In addition to the standard tests that are required by specification, we perform specific tests on construction materials as dictated by the needs of the customer.

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Construction Administration & Daily On-Site Inspections

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Projects require a high level of administration and quality control to meet the project's demands. The Counties and Municipalities, through ODOT's LPA Program, as well as private Owners, Developers, and Contractors have selected CTL Engineering for Construction Administration, knowing that we have the experienced staff to be accurate, dependable, and perform these services in a timely manner. Our experienced engineers, inspectors, and technicians are your partners in construction. We help in completing these projects successfully a meeting the specific project requirements.

CTL Engineering's qualified construction inspectors will observe and inspect your construction project and complete the necessary daily documentation required by the Federal, State, and Local funding agencies participating in the project.

CTL Engineering also provides in-house testing services such as concrete, asphalt, and sub-grade compaction, as well as daily on-site inspection services.

CTL Engineering provides the following Construction Administration Services:

- Conduct Pre-Construction Conference
- Project Team Coordination
- Field Reports & Construction Documents' Administration
- Field Engineering and Inspections
- Material Certification and Shop Drawing Reviews
- Progress Meetings and Schedule Tracking
- Payments and Reimbursements
- · Change Order Reviews
- Prevailing Wage Compliance
- EEO/DBE Contract Requirements
- Project Closeout Activities

CTL Engineering's On-Site Inspector provides and/or participates in the following Daily On-Site Inspection Services:

- Pre-Construction Conference
- Prepare Field Inspection & Quantities Reports
- Prepare Construction Documentation & provide to Construction Administrator
- Field Engineering in conjunction with Construction Administrator
- Observe & verify materials being used for the project
- Observe, identify and notify Construction Administrator of deficiencies
- Provide Construction Administrator with monthly quantities for payment preparation
- Material Testing, i.e., compaction, concrete, asphalt, etc.

Project Management Plan

Our approach to the *Chicopee Coal Company*, *Inc. Project* will be similar to other CTL AML drainage and site stabilization projects. The Project Management Plan we have developed for these sites are as follows:

- The project manager will be solely responsible for expedient and accurate completion of each phase of the individual projects performed under this contract. He will review the project sites and discuss the specific scope of work for the project with the project representative from the WVDEP. A cost proposal will be prepared, in accordance with contract unit rates, based upon an estimate of manpower, equipment, and laboratory needs.
- CTL will then mobilize a fully equipped survey crew to set survey control and map the
 project sites. Permanent control monuments will be established to ensure that the
 construction contractor can tie into the necessary baselines. The project manager will
 supervise the surveying tasks and provide budgetary control for this portion of the work.
- A geotechnical investigation shall be performed to determine mine pools and perform slope stabilization analysis in order to optimize grading design and stabilize slide zones on site.
 This investigation shall be performed with a focus on safety to insure the safety of the local inhabitants and dwellings as well as the safety of the drilling and geotechnical personnel.
- Should field conditions dictate that additional work or a major modification is required, the project manager will contact the WVDEP representative immediately to confirm the changed conditions.
- Following completion of the surveying, field investigation. and any material sampling, the
 analytical design work will begin. The Project Manager and Engineer will review the project
 data, evaluate the feasible alternatives and prepare a preliminary set of construction
 documents. The documents will include at a minimum:
- 1. A site map indicating existing conditions;
- 2. A tax map overlay with the parcels identified that may be impacted by the proposed design;
- 3. Proposed grading plans, including excavation, for stabilizing slide zones, including safely dewatering and excavation of any portal sites;



- 4. Design plans and details for optimum mine seals and bat gates relevant to the site;
- 5. Provide Sedimentation and Erosion Control Plan
- 6. Site Profiles;
- 7. Cross Sections;
- 8. Drainage systems and control structures, with details;
- 9. Revegetation plans;
- 10. Soil amendment plans;
- 11. Water treatment systems, active and/or passive for meeting NPDES standards, if required;
- 12. Survey control points;
- 13. Miscellaneous Site details.
- CTL will also provide all necessary data for NPDES permits including S&E Control Plans as required for the site construction and if deemed necessary, perform environmental assessments.
- In addition to preparation of the above-described drawings, a complete set of specifications will be prepared and outlined to describe in detail the scope and methods of work to be accomplished. An estimate of construction costs and the design calculations will also be submitted to the WVDEP for review and future reference.
- Following the submission of the construction documents, a project design review meeting will be coordinated with the WVDEP, CTL, and appropriate individuals to review the proposed plans.
- Recommendations for plan revisions will be discussed and implemented, as necessary, into the final design documents. Upon completion, all final documents, drawings, plans and specifications will be forwarded to the WVDEP for bidding purposes.
- Construction observation will be provided during the construction phase of the projects
- At the request of the WVDEP, CTL will provide construction observation personnel.

Our Project Manager and/or Engineer will coordinate the pre-bid and pre-construction conferences with the WVDEP to address any questions and supply the necessary survey control data. Periodic inspections may be conducted by our Project Manager, as deemed necessary by the WVDEP, to address specific problems that arise during construction. A report will be prepared by CTL following each of these meetings detailing the findings, conclusions, recommendations, and responses to pertinent questions.



Project Scope / Experience Reference

<u>Chicopee Coal Company, Inc.(S-3006-99 & S-3002-98)</u> DEP16557

Project Scope of Work

To provide drawings, specifications, and engineering design services to prepare construction documents for the following general work items:

- 1. Prepare work areas by clearing and grubbing.
- 2. Install new and refurbish existing drainage controls and erosion protection (sediment ponds, sediment ditches, and diversions).
- 3. Locate, protect, and/or avoid existing utility lines, poles, gas lines, etc. Coordinate with utility companies for locating and relocating existing facilities and/or providing for new utility services.
- 4. Construct new and upgrade existing access roads, and install culverts.
- 5. Install mine seals, and subsurface drains
- 6. Perform blasting designs and pre-blast surveys, if needed for reclamation of site.
- 7. Eliminate existing highwalls by backfilling and regrading with materials available onsite, or designated borrow area sites nearby.
- 8. Install surface water ditches where appropriate to control runoff.
- 9. Repair or eliminate any slip areas on partially backfilled highwalls.
- 10. Regrade/remove sediment ditches when not needed.
- 11. Reshape, and add lime amendments to any potentially toxic coal refuse piles.



- 12. Condition, stabilize, and revegetate disturbed land by plan view acre, based on post-mine land use from permit files and landowners.
- 13. If long term water treatment is anticipated on the site, prepare and regrade areas to accommodate space for structures or facilities.
- 14. Design efficient passive and active water treatment and pumping systems which minimize maintenance and meet NPDES water quality standards.
- 15. Design appropriate sludge handling facilities on site.
- 16. Final site cleanup.

Relevant Project Experience Profiles are provided directly hereafter as referenced under each item of Project Scope.



Chicopee Coal Company, Inc. (S-3006-99 & S-3002-98) DEP16557

PROJECT EXPERIENCE PROFILE REFERENCE																	
DDO IECT EVDEDIENCE	SPECIFIC PROJECT SCOPE OF WORK ITEMS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16																
PROJECT EXPERIENCE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HOPEWELL CHURCH REFUSE & AMD (WV AML '13)	Х											1133	F. Carrie				
MORGANTOWN ANDERSON HIGHWALLS (WV AML '12)	Х																100
SCHRAMM - GORDON - EAST FRANKLIN LANDSLIDES (MD AML '12)										153							
DOUGLAS AVENUE LANDSLIDE (MD AML '12)																	
SHINNS RUN PORTALS (WV AML '11)	Х												6 53				
REAM REFUSE PILE (WV AML '10)	Х			P. Carlo							1868						646
KENNEL MINE CLOSURE (MD AML '10)																	
FROSTBURG NORTH CLOSURE (MD AML '10)	Х																
WILLIAMS REFUSE PILE #2 (Private AML '09)																	
PENINSULA HIGHWALLS (WV AML '09)	Х					Marine					6016						
ST. CLAIR PORTALS (WV AML '09)	Х										Page 1						
CHEAT NECK LANDSLIDE (WV AML '09)	Х																
COLLINS MINING (ODNR FOR. '09)																	
AARON'S RUN (MD AML '09)	X		A S														
McCOURT LANDSLIDE(ODNR FOR. '08)	Х								1								
JONES TRUCKING (ODNR FOR. '08)				A STATE													
MILLER MINING (ODNR FOR. '08)																	
BELVILLE MINING 1 (ODNR FOR. '08)																	
BELVILLE MINING 2 (ODNR FOR. '08)									50								
ZILMAN CLOSURE (MD AML '08)				1													
CALDONIA HILL SLOPE STABILITY (MD AML '08)																	
VARIOUS WV MINING PERMITS ('95 - '13)																	



HOPEWELL CHURCH REFUSE & AMD DEP 16074

MINE PORTALS, COAL REFUSE & MINE DRAINAGE

CTL Engineering Inc.

Preston County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents
- Natural Stream Design

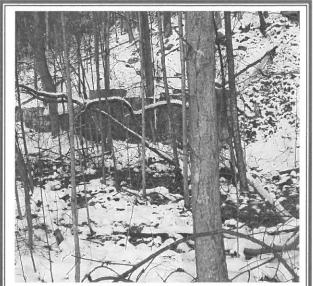
Project Background

The site consisted of refuse, open portals and mine drainage with impounded water, collapsed mine portals. Foreign materials were present throughout site.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following services and design:

- Geotechnical drilling for mine pools
- Surveying
- Clearing & Grubbing Plan
- Mine Seals
- Diversion & Drainage for total site
- Dewater, excavate and seal all portals
- Refuse Reclamation & Removal of all foreign material
- Revegetation Plan including soil cover
- Sedimentation & Erosion Control Plans





Client / Contact

WV DEP-AML&R
101 Cambridge Place
Bridgeport, WV 26501
Design Completion Date
2014

MORGANTOWN (ANDERSON) PORTALS & HIGHWALLS DEP15609



MINE PORTALS, HIGHWALLS & FOREIGN MATERIALS

CTL Engineering Inc.

Monongalia County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents

Project Background

The site consisted of dangerous highwalls, seven or more open or partially open portals and a dangerous scrap yard with potentially dangerous materials.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following services and design:

- Geotechnical drilling for mine pools
- Surveying
- Clearing & Grubbing Plan
- Mine Seals
- Diversion & Drainage for total site
- Dewater, excavate and seal all portals
- Refuse Reclamation & Removal of all foreign material
- Revegetation Plan including soil cover
- Sedimentation & Erosion Control Plans





Client / Contact

WV DEP-AML&R 101 Cambridge Place Bridgeport, WV 26501 Design Completion Date

2013
Estimated Construction Cost

\$350,000

SHINNS RUN PORTALS & AMD

MINE PORTALS, COAL REFUSE, HIGHWALLS & MINE DRAINAGE CTL Engineering Inc.



Shinnston, Harrison County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- **Civil Site Design**
- **Construction Documents**
- **Natural Stream Design**

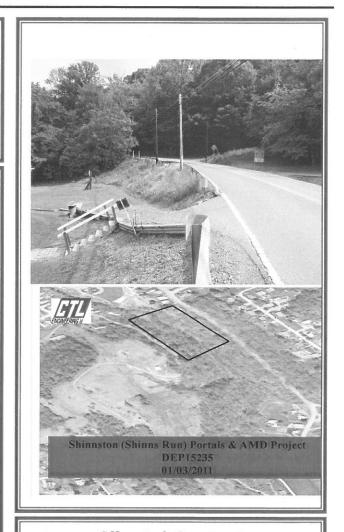
Project Background

The site consisted of multiple open and collapsed mine portals and highwalls. Requires access road to implement reclamation. Divert mine flow and stabilize streambanks on both sides of Shinns Run. Debris and foreign material on site to be disposed. Mine seals required on both sides of Shinns Run.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Provide clearing & grubbing plan
- Design for access road
- Design grading plan to excavate, dewater & mine seals for all portals on site
- Design plan for streambank stabilization
- Diversion channels, ditches, underdrains to carry water off site
- Conditioning and revegetation of all disturbed



Client / Contact

WV DEP-AML&R 209 South Main Street Philippi, WV 26416 **Design Completion Date** April 2012 **Estimated Project Cost** \$ 59,000

REAM REFUSE PILE DEP15004

REFUSE PILE REMEDIATION & DRAINAGE



McDowell County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents

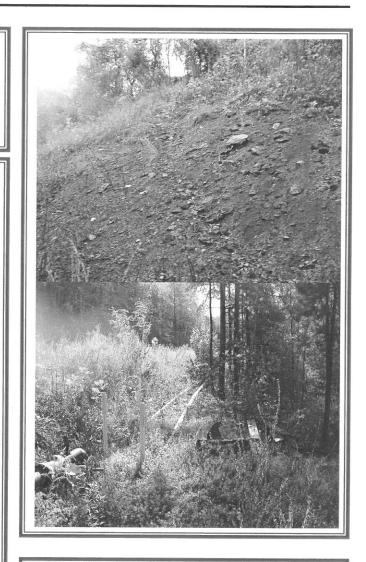
Project Background

Project includes two refuse piles, one about 25 acres, brick building, concrete foundations, retaining walls, and coke ovens. One pile needed to be stabilized to keep from eroding into the creek.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Design grading plan for all refuse areas.
- Design drainage control channels, ditches and underdrains to carry water safely off site
- Provide plan to demolish and dispose of hazardous equipment and facilities.
- Provide plan for reclamation and revegetation of all disturbed areas



Client / Contact

WV DEP-AML&R 601 57th Street Charleston, WV 25304

Design Completion Date
On-Going 2011

Estimated Construction Cost \$400,000

MARYLAND DEEP MINE CLOSURES

DEEP MINE SEALS / BAT GATES & SITE RECLAMATION



Allegany & Garrett Counties, Maryland

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents

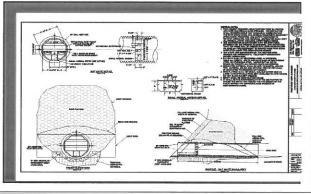
Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following:

Develop detailed engineering design plans and construction plans including; Cost Estimates, Bid Documents, Project Drawings, Maps, Plans & Specifications for the reclamation construction of multiple Mine Mouth Closures.

Design and Plans to include dry and wet mine seals, bat gates, regrading, drainage structures and site reclamation.





Client / Contact

MDE- AML Division 106 South Water Street Frostburg, MD 21532 Design Completion Date June 2010

ST. CLAIR PORTALS DEP 14233

MINE PORTALS, COAL REFUSE, HIGHWALLS & MINE DRAINAGE CTL Engineering Inc.



Morgantown, Monongalia County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- **Civil Site Design**
- Construction Documents
- **Natural Stream Design**

Project Background

The site consisted of coal refuse, acid mine drainage with impounded water, collapsed mine portals and highwalls. 17 portals were found along the highwall bench. Three impoundments of approximately 70,000 sq.ft. had water flowing at 300 gpm with a pH value of 3.1 and iron >10 mgl. A 35' to 45' high refuse pile was in the middle of the site as well as scattered refuse throughout the site.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Excavation and wet seal of at least 17 mine
- Dewater three impoundments
- 2000 LF of stream reconstruction
- Regrade and cover of coal refuse and spoil areas on mine bench
- Drainage control channels to carry water off
- Backfill of highwalls using spoil material to original contour
- Conditioning and revegetation of all disturbed areas





Client / Contact WV DEP-AML&R

601 57th Street Charleston, WV 25304 **Design Completion Date** March 2010 **Estimated Project Cost** \$1,500,000

PENINSULA HIGHWALL #1 & #2 DEP 14233

HIGHWALL & SUBSIDENCE RECLAMATION — MINE SEALS



Morgantown, Monongalia County, West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents

Project Background

This site contained 1,800 LF of vertical to sloughed highwalls 15 to 25 feet high, 7 partially of totally collapsed mine portals, 1 open mine portal, subsidence depressions behind the portals and water present at or flowing from the portals.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Access road into the site
- Wet seal 2 portals
- Regrade face of 2 portals
- Riprap channel and additional channel to carry water off site
- Backfill of highwalls and subsidence areas
- Restoration of golf path asphalt
- Conditioning and revegetation of all disturbed areas





Client / Contact

WV DEP-AML&R
601 57th Street
Charleston, WV 25304
Design Completion Date
November 2009
Estimated Construction Cost
\$219,000

CHEAT NECK (LENHART) LANDSLIDE DEP14233

LANDSLIDE, MINE PORTALS & MINE DRAINAGE



Morgantown, Monongalia County West Virginia

CTL Professional Services

- Surveying
- Geotechnical
- Civil Site Design
- Construction Documents

Project Background

Drainage from two collapsed deep mine portals located behind the Lenhart residence created a small landslide. The slide measured about 50' wide and 80' long and the toe was within 20' of the residence and 10' of the LP gas tank.

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Regrade and or removal of the slipping material
- Excavation, dewatering and wet seal of each deep mine portal
- Drainage control channels to carry water off site
- Conditioning and revegetation of all disturbed areas





Client / Contact

WV DEP-AML&R 601 57th Street Charleston, WV 25304

Design Completion Date
June 2009

Estimated Construction Cost \$175,000

AARON'S RUN AMD PROJECT

ACID MINE DRAINAGE TREATMENT SYSTEM



Location: Garrett County, Maryland

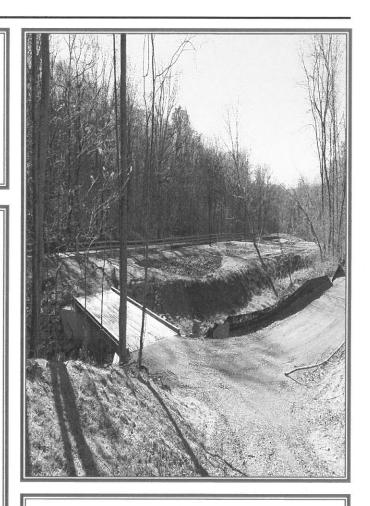
CTL Professional Services

Site Review & Reconnaissance
Surveying & Mapping
Civil Site Design
Permiting including USACOE, MDE Wetland,
MDE S&E
Construction Specifications

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Multiple AMD Treatment
 Systems
- 2 SAP Cells
- Slurry Doser
- Settling Ponds
- Natural Wetlands
- Full Site Grading Plans & Drainage Controls
- Access Road & Highway Rated Bridge
- All State & Federal Permitting
- Construction Specifications and Drawings



Client / Contact

MDE AML Program
160 South Water Street
Frostburg, MD 21532
Design Completion Date
October 2009
Estimated Construction Cost
\$ 450,000

McCOURT LANDSLIDE ODNR CL-Yc-09-F

LANDSLIDE STABILIZATION



CTL Engineering Inc.

Location: Yellow Creek Twp., Columbiana County, Ohio

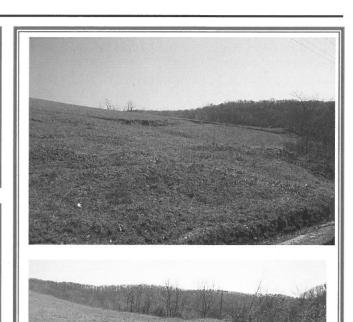
CTL Professional Services

Site Review & Reconnaissance
Surveying & Mapping
Geotechnical Evaluation
Slope Stability
Civil Site Design
Construction Specifications

Project Scope

CTL Engineering of West Virginia, Inc. was retained to provide the following design:

- Remediate existing landslide area by regarding slopes
- Toe Key Design
- Provide positive drainage from the site
- Provide multiple bonding benches
- Underdrain for site
- Temporary erosion and sedimentation control



Client / Contact ODNR - FORFEITURE 2050 East Wheeling Ave. Cambridge, OH 43725 Design Completion Date November 2008 Estimated Construction Cost \$ 101,700



AML & Relevant Project Experience (2008 – 2013)

HIGHWALLS

- Anderson Highwalls, WVDEP
- Peninsula Highwalls, WVDEP
- St. Clair Portals, WVDEP
- Collins Mining, ODNR
- Miller Mining, ODNR

OPEN PITS

- Shinn's Run Portals, WVDEP
- Jones Trucking, ODNR
- General Clay #1 & #2, ODNR

OPEN MINE SHAFTS

- Kennel Mine Closure, MDE, AMLD
- Frostburg North Closure, MDE, AMLD
- Zilman Closure, MDE, AMLD

REFUSE PILES

- Hopewell Church & AMD, WVDEP
- Ream Refuse Pile, WVDEP
- Williams Refuse Pile, Private
- Harrison Power Plant, Allegheny Power



MINE SUBSIDENCE

- Fairmont Subsidence, WV DEP
- Lower Consol Road MDE, AMLD
- Terra Haute Airport, IN AML
- Farmington UMC, WV DEP Emergency
- Morningside Baptist, WV DEP Emergency
- Eccles Subsidence, WV DEP
- McArthur Subsidence, WV DEP
- Mark Kempner, NJ Private
- WV BRIM
- OMSIUA

MINE DRAINAGE/STREAM RESTORATION

- St. Clair Portals, WV DEP
- Aarons Run, MDE, AMLD
- Deckers Creek, WVDEP

LANDSLIDES

- Douglas Avenue Landslide, MDE, AMLD
- Schramm Landslide, MDE, AMLD
- Gordon Landslide, MDE, AMLD
- East Franklin Landslide, MDE, AMLD
- Cheat Neck Landslide, WV DEP
- McCourt Landslide, ODNR
- Caldonia Hill Slope Stability, MDE, AMLD



WATER SUPPLY REPLACEMENT

- Douglas Avenue Stormwater System Repair, MDE, AMLD
- Bald Knob & Potomas Hollow Water Invsetigations, MDE, AMLD
- Pee Wee Hill Supply Design, MDE, AMLD
- Pee Wee Will Water Feasibility Study, MDE, AMLD
- Fairview Water Feasibility, WV DEP
- Tioga Water Feasibility, WV DEP



WES	T VIRGIN	IA DEPARTMENT	OF VIRONMENTAL PRO	OTECTION				
OSR	CONSULTA	NT CONFIDENTIA	L & LIFICATION QUE	STIONNAIR	RE "Attachment E			
PROJECT NAME Chicopee Coal Company, Inc., S-30)06-99 & S-	DATE (DAY, MONT)	H, YEAR)	FEIN 55-063-18				
3002-98 DEP16557 1. FIRM NAME		2 HOME OFFICE	BUSINESS ADDRESS	3 FORMET	P FIRM NAME			
CTL Engineering of West Virginia,	2860 Fisher Road Columbus, OH 4	d		ORMER FIRM NAME Abus Testing Laboratories				
4. HOME OFFICE TELEPHONE	CTL-WV 1983	6. TYPE OWNERSHIP Individual Corpor	ation Venture	6a. WV REGISTERED DBE (Disadvantaged Business				
(614)276-8123	CTL-1927	CTL-WV 1983	Partnership Joint-	venture	Enterprise) YES NO			
6. PRIMARY OSR DESIGN OFFICE: ADD 733 Fairmont Road, Morgantown, W. 7. NAMES OF PRINCIPAL OFFICERS OF Patrick E. Gallagher, President CK Satyapriya, VP/Sec.	7 26501/ 3	04-292-1135/ Patr	rick E. Gallagher, Presi	dent / Mor	gantown - 16 BER - OTHER PRINCIPALS			
9. PERSONNEL BY DISCIPLINE					1			
7 CADD DESIGNERS 3 ENVIRO - CHEMICAL ENGINEERS - ESTIMA 4 CIVIL ENGINEERS 3 GEOLOG 9 CONSTRUCTION INSPECTORS - HISTOR		MISTS RICAL ENGINEERS DAMENTALISTS ATORS GISTS/GEOTECH ENG	- LANDSCAPE ARCH: - MECHANICAL ENG: - MINING ENGINEER - PHOTOGRAMMETRIS - PLANNERS: URBAR 1 SANITARY ENGINE 1 SOILS ENGINEERS - SPECIFICATION WAS	INEERS RS STS J/REGIONAL EERS	1 STRUCTURAL ENGINEERS 10 SURVEYORS/RODMEN - TRAFFIC ENGINEERS X OTHER, 3 Geotechnical Drillers			
DIGITOMBN					47 TOTAL PERSONNEL			
TOTAL NUMBER OF WV REGISTER *RPEs other than Civil and supervise and perform this	Mining mus	t provide support		4 qualifies	them to			
The TOTAL PERSONNEL number is for	CTL Engin	eering of West Vi	rginia, Inc.					
TOTAL PERSONNEL for CTL Engineeri	ng, Inc. i	s 225, which incl	udes CTL Engineering of	West Virg	inia.			
			0.00000000					
10. HAS THIS JOINT-VENTURE WORKER	TOGETHER	BEFORE? YES	□ NO					

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS Ques nnaire" for each if copy is not	ANTICIPATED TO PF USED. Attach "AML Conson file with AM.	ultant Confidential Qualification
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
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		Yes
NAME AND ADDRESS		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
6		Yes
		No

12. A.	Is your firm experienced in Acid Mine Drainage er treatment and remediation?
	YES Description and Number of Projects: CTL Engineering has completed 7 projects in the past 5 years that a remediation and system designs for sites requiring AMD treatment and drainage controls in multiple States. The med "AML Past Project Experience" and WVOSR Matrix for specific examples. NO
В.	Is your firm experienced in Soil Analysis and coal refuse analyses?
	YES Description and Number of Projects: Our in-house laboratories perform all ASTM mechanical, organic
and in-org	ganic analyses for soils and refuse. Our labs are certified by WVDOH, OEPA and US Corps of Engineers.
	NO
C.	Is your firm experienced in hydrology and hydraulics for handling mine water discharges on mining sites?
	YES Description and Number of Projects: Each of our site design and AML projects require hydrology &
<u>hydraulic</u>	evaluations. We estimate that annually, we complete more than 100 projects requiring hydrology design.
	NO
D.	Does your firm produce its own aerial photography and development of contour mapping?
	YES Description and Number of Projects:
	NO However, we annually complete more than 50 projects requiring aerial photography & mapping. While we
_sub-contr	ract the aerial photography, in-house we provide GPS, surveying and develop the contouring as needed.
E.	Is your firm experienced in design of highwall elimination, grading and material handling plans for land reclamation?
1	YES Description and Number of Projects: At least 60% of the AML, Special Rec. and Emergency projects CTL
nas comple	eted required highwall elimination, grading and material design and plans for reclamation.

NO

Brief Explanation of Responsibilities President of CTL Engineering of WV, Inc.; responsible for the overall administration of the Morgantown, WV office along with the management of the individual engineering projects. His administration and management responsibilities include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagher include: Geotechnical Investigations, Design Investigations, Design Stability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Mine Reclamation Designs, Failure Investigations, and Mining Permits. BEDUCATION (Degree, Year, Specialization) B.S., 1975, Ctvil Engineering B.S., 1975, Equivalent, Geology MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS MEMBERSHIP IN PROFESSIONAL GRANIZATIONS American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineer, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists Triangle Fraternity of Engineer, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists Triangle Fritz Heath (First, Middle Int.) PROJECT DESIGN (Furnish complete data but Keep to essentials) NYEARS OF EXPERIENCE YEARS OF OSR RELATED DESIGN EXPERIENCE: 15 PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) Professional Surveyor, 1995-West Virginia Tyears of OSR RelateD DESIGN EXPERIENCE: 15 PERSON OF OSR RELATED DESIGN EXPERIENCE: 15 YEARS OF OSR RELATED DESI									
NAME STITLE (Last, First, Middle Int.) Gallagher, Patrick E., PE President, Project Manager Brief Explanation of Responsibilities President of CTL Engineering of WV, Inc.; responsible for the overall administration of the Morgantown, WV office along with the management of the individual engineering projects. Els administration and management responsibilities Include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagaer include scheduling investigations, Completed by Mr. Gallagaer include scheduling. Investigations, foundation Design Personnel, Scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagaer include Scheduling. Investigations, Mine Research and Projects successfully completed by Mr. Gallagaer include Scheduling, Ludget control, and report preparation. Projects successfully completed by Mr. Gallagaer include Scheduling, budget control, and report preparations, projects and Mining Permits. B.S., 1975, Civi Engineeria, Fallure Investigations, and Mining Permits. B.S., 1975, Equivalent, Geology MRMESERHER IN RECESSIONAL ORGANIZATIONS American Society of Civil Engineers Society of Mining Reg. Reg. Mr. M. Registraction of Engineers (Mr. Mr. Mr. Mr. Mr. Mr. Mr. Mr. Mr. Mr.		PALS AND ASSOCIATES PESPONSIBI	E FOR AMI	L PROJECT DESIGN (Furnish complete					
President, Patrick E., PE President, Project Manager Brief Explanation of Responsibilities President of CTL Engineering of WV, Inc.; responsible for the overall administration and management responsibilities Include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagher include: Geotechnical Investigations, Foundation Design. Investigations, Dam Sability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Foundation Design. Investigations, Dam Sability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Mine Reclamation Designs, Fallure Investigations, and Mining Permits. BUCCATION (Degree, Year, Specialization) B.S., 1975, Civil Engineers of A.I.M.E. WEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers of A.I.M.E. Triangle Fraternity of Soil Mechanics and Foundation Engineers Triangle Fraternity of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR ANL PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, first, Model Int.) Selfridge, Carl G. Department Head, Geotechnical Services Translation (Degree, Year, Specialization) Translation (Pegree, Year, Specialization) Translation (Degree, Year, Specialization) Translation (Degree, Year, Specialization) Translation (Type, Year, Specialization) Translation (Type, Year, Specialization) Translation (Type, Year, Specialization) Translation (Type, Year, State) Translation (Type, Year, State) Translation (Type, Year, State) Translation (Type, Year, State) Translat			VENDO	OF EVERTINGS					
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President of CTL Engineering of WV, Inc.; responsible for the overall administration of the Morgantown, WV office along with the management of the individual engineering projects. His administration and management responsibilities include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagher include: Geotechnical Investigations, Foundation Design Investigations, Dam Stability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Mine Reclamation Designs, Failure Investigations, and Mining Permits. EDUCATION (Degree, Year, Specialization) B.S., 1975, Cuvil Engineering B.S., 1975, Equivalent, Geology MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers American Institute of Professional Geologists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists American Institute of Professional Geologists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists American Institute of Professional Geologists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists International Society of Soil Mechanics and Foundation Engineers Beliated Professional Surveyor, 1995-West Virginia International Society of Soil Mechanics and Foundation Engineers Professional Surveyor, 1995-West Virginia Pennsylvania, 1984-Ohio, 1983-Meryland, 1993- Pennsylvania, 2006-Myoming, 2006-North Carolina Pennsylvania, 2006-Myoming, 2006-North Carolina Pennsylvania, 2006-Myoming, 2006-North Carolina Pennsylvania, 2006-Myoming, 2006-North Carolina Pennsylvania, 1983-Ohio, 1983-West Virginia, 1984-Ohio, 1983-Meryland, 1993-West Virginia, 1984-Ohio, 1983-Meryland, 1993-West Virginia	President, Project Manager	YEARS OF OSR DESIGN EXPERIENCE:	36	YEARS OF OSR RELATED DESIGN EXPERIENCE: 36					
along with the management of the individual engineering projects. His administration and management responsibilities include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagher include: Geotechnical Investigations, Foundation Design Investigations, Dan Stability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Mine Reclamation Designs, Failure Investigations, and Mining Permits. BUDCATION (Degree, Year, Specialization) B.S., 1975, Equivalent, Geology MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Selfridge, Carl G. Department Head Geotechnical Services Pearatment Head Geotechnical Engineering. Responsible for subsurface investigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Craduate Studies, 1996-1999, Civil Engineering, Geotechnical) B.S., 1994, Engineering, Geotechnical and Structural A.S., 1994, Mechanical Technology — Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	Brief Explanation of Responsibilities		10.00						
B.S., 1975, Equivalent, Geology MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Selfridge, Carl G. Department Head, Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis.Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Registered Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Warryland, 1993-Pennsylvania, 2006-Worming, 2006-North Carolina Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Certified Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Marryland, 1993-Pennsylvania, 2006-Worming, 2006-North Carolina Certified Professional Geological Scientists Professional Surveyor, 1995-West Virginia Pennsylvania, 2006-Wyoming, 2006-North Carolina Certified Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Marryland, 1993-Pennsylvania, 2006-North Carolina Certified Professional Engineer; 1984 Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Marryland, 1993-Pennsylvania, 2006-North Carolina Certified Professional Engineer; 1984 Professional Surveyor, 1995-West Virginia Certified Professional Engineer; 1984 Professio	along with the management of the indivinclude marketing, proposal preparation, report preparation. Projects successfully Investigations, Dam Stability Analyses, Maclamation Designs, Failure Investigation	idual engineering projects. client contact, supervision completed by Mr. Gallagher i line Subsidence Evaluations, M	His adm of design nclude: G	ministration and management responsibilities in personnel, scheduling, budget control, and Geotechnical Investigations, Foundation Design					
American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists American Institute of Professional Geologists Triangle Fraternity of Engineers of A.I.M.E. International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists Triangle Fraternity of Engineering, 2006-Myoming, 200	B.S., 1975, Civil Engineering B.S., 1975, Equivalent, Geology								
American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists Table American Institute of Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Certified Professional Engineering Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Terminal Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Terminal Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Terminal Certified Professional Certif									
Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Selfridge, Carl G. Department Head, Geotechnical Services PYEARS OF OSR DESIGN EXPERIENCE: To program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Pennsylvania, 2006-Wyoming, 2006-North Carolina Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Surveyor, 1995-West Virginia Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Surveyor, 1995-West Virginia Professional Surveyor, 1995-West Virginia Professional Surveyor, 1996-Estign (Furnish complete Started Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Professional Surveyor, 1995-West Virginia Professional Surveyor, 1995-West Virginia Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia Professional Professional Geological Surveyor, 1996 Experience: Professional Professional Surveyor, 1996-West Professional Geological Surveyor, 1996-West Professional Certains			Register	ed Professional Engineer; 1983-West					
International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Selfridge, Carl G. Department Head, Geotechnical Services PERSONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) YEARS OF EXPERIENCE YEARS OF OSR RELATED DESIGN EXPERIENCE: 15 Department Head, Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1994, Engineering Science A.A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York									
American Institute of Professional Geologists Professional Surveyor, 1995-West Virginia 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Selfridge, Carl G. Department Head, Geotechnical Services Professional Surveyor, 1995-West Virginia YEARS OF EXPERIENCE (Furnish complete YEARS OF EXPERIENCE) YEARS OF EXPERIENCE YEARS OF OSR RELATED DESIGN EXPERIENCE: 15 Department Head Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1994, Engineering, Geotechnical and Structural A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York			Pennsylvania, 2006-Wyoming, 2006-North Carolina						
American Institute of Professional Geologists Professional Surveyor, 1995-West Virginia 13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) YEARS OF EXPERIENCE Selfridge, Carl G. YEARS OF OSR RELATED DESIGN EXPERIENCE: YEARS OF OSR RELATED DESIGN EXPERIENCE: 15 Department Head, Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1994, Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York			Certified Professional Geological Scientist - 1984						
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Selfridge, Carl G. Department Head, Geotechnical Services The profession Experience: The profession Experience:	13. PERSONAL HISTORY STATEMENT OF PRINCIP data but keep to essentials)	PALS AND ASSOCIATES RESPONSIBI	E FOR AMI	L PROJECT DESIGN (Furnish complete					
Selfridge, Carl G. Department Head, Geotechnical Services The profession Experience: The profession Experience:	NAME & TITLE (Last, First, Middle Int.)		YEARS	OF EXPERIENCE					
Department Head, Geotechnical Services 7 Department Head Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1996, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York		YEARS OF OSR DESIGN EXPERIENCE:							
analysis & recommendations, program development for investigative and laboratory analysis. Selfridge has been responsible for 8 landslide evaluations and remediation projects in the past 7 years. EDUCATION (Degree, Year, Specialization) Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1996, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	Department Head, Geotechnical Services	7							
Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1996, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	analysis & recommendations, program deve	elopment for investigative an	d laborat	igations, geotechnical reporting, foundation tory analysis. Selfridge has been responsible					
Graduate Studies, 1996-1999, Civil Engineering (Geotechnical) B.S., 1996, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	EDUCATION (Degree, Year, Specialization)	12.00	9						
B.S., 1996, Civil Engineering, Geotechnical and Structural A.S., 1994, Engineering Science A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York		eering (Geotechnical)							
A.A.S., 1991, Mechanical Technology - Design & Drafting MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York				· · · · · · · · · · · · · · · · · · ·					
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	A.S., 1994, Engineering Science								
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State) Fellow of the American Society of Civil Engineers, The GEO-Institute, Engineering Intern (EI), 1996, New York	A.A.S., 1991, Mechanical Technology - Des	sign & Drafting							
	MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRA	TION (Type, Year, State)					

13. PERSC HISTORY STATEMENT OF PRINCIP data but keep to essentials)	PALS AND ASSOCIATES PONSIBLE FO	OR AML PROJECT DESIGN (Furnish complet
NAME & TITLE (Last, First, Middle Int.)	7	YEARS OF EXPERIENCE
Darrah, Timothy A. Civil Site Dept. Mgr., Project Manager	YEARS OF OSR DESIGN EXPERIENCE: 24	YEARS OF OSR RELATED DESIGN EXPERIENCE: 24
reclamation design, AMD Treatment System scheduling, invoicing and client contact layout. Mr. Darrah's duties include calculations and various other forms of software including AutoCAD, Civilsoft, Manager for all of the WV, MD and OH AML&	ems, commercial and residential of tts for all surveying projects drafting, writing of property surveying and civil engineering HEC-1, HEC-RAS and various other	ous types of civil engineering projects including development projects. He is also responsible for including topographic, property and construction descriptions, hydrology calculations, quantity related duties. He is also proficient in computer er engineering software. He has been the Project
EDUCATION (Degree, Year, Specialization) B.S., 1988, Civil Engineering Technology		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REG	GISTRATION (Type, Year, State)
13. PERSONAL HISTORY STATEMENT OF PRINCI data but keep to essentials)	IPALS AND ASSOCIATES RESPONSIBLE 1	FOR AML PROJECT DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)	ż	YEARS OF EXPERIENCE
Joseph Stanley Project/ Staff Engineer	YEARS OF OSR DESIGN EXPERIENCE:	YEARS OF OSR RELATED DESIGN EXPERIENCE: 13
Residential Development, Valley Fill Foo	otprinting, Surveying, Subsidence des Hydrologic TR-20, TR-55, Exce	ogy, Quantity Calculations, Stability Analysis, e Surveys, Pre-Blast Surveys, Acid Base Accounts, 1, Harstad Methods, Word, AutoCADD Land, Quarttro, for the past 10 years.
EDUCATION (Degree, Year, Specialization)		
A.S., 2001 Civil -Engineering Technology	Drafting & Design	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REG	GISTRATION (Type, Year, State)

data but keep to essentials)								
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE							
Charles Waltz, P.E.	YEARS OF OSR DESIGN EXPERIENCE:	YEARS OF OSR RELATED DESIGN EXPERIENCE: 12						
rief Explanation of Responsibilities roject Engineer / Staff Engineer prov eotechnical subsurface investigations a	iding engineering services for a and foundation recommendations and	variety of projects including, site developmen road construction.						
DUCATION (Degree, Year, Specialization								
3.A., Fairmont State, Business Administ: 3.S., Fairmont State, Civil Engineering Graduate Studies, West Virginia Univers. MEMBERSHIP IN PROFESSIONAL ORGANIZATION:	tty, Geotechnical Engineering REG Reg	ISTRATION (Type, Year, State) istered Professional Engineer, WV (no.17626), VA . 37038)						
data but keep to essentials)		FOR AML PROJECT DESIGN (Furnish complete EARS OF EXPERIENCE						
data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Gregory Foreman, P.E.								
data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Brief Explanation of Responsibilities Mr. Foreman serves as Project Manager water supply, sanitary design for pub water, sanitary sewer, storm sewer, specifications, plans and engineering co	YEARS OF OSR DESIGN EXPERIENCE: 5 and Design Engineer for various of the control of the contro	EARS OF EXPERIENCE YEARS OF OSR RELATED DESIGN EXPERIENCE:						
data but keep to essentials) NAME & TITLE (Last, First, Middle Int.) Gregory Foreman, P.E. Brief Explanation of Responsibilities Mr. Foreman serves as Project Manager water supply, sanitary design for pub- water, sanitary sewer, storm sewer,	YEARS OF OSR DESIGN EXPERIENCE: 5 and Design Engineer for various of the control of the contro	EARS OF EXPERIENCE YEARS OF OSR RELATED DESIGN EXPERIENCE: 20 Eivil site design projects including reclamation services provided include site grading, potab						

OFFICE EQUIPMENT

HP4520 Design Jet Color Plotter

HP Color Scanner

Duplicating equipment, copiers, blueprinting, laser printers, etc.

Facsimile Machine

VCR/Video Recording Equipment

DESIGN SOFTWARE

Windows 7 * Windows 8 based operating systems

Microsoft Office 2010 is used for word processing, spreadsheet creation, data processing, and presentation creation. Alternative software including Corel Suite is available, if necessary Project designs and specifications are produced in our Computer Aided Drafting and Design (CADD) section using all versions of AutoCAD including Release 2015.

Civil Engineering Software

AUTOCAD Civil 3D 2015

Profiling

Civilsoft

TR-20 & TR-55

SEDCAD

HEC 1 & 2

HEC-RAS

Arc GIS

ArcPAD

Carlson (Survey)

Hydrogeologic Studies

MODFLO

MODPATH

SURFER

CAPZONE

GWPATH

SKUGIS

PHREEOCI

WATEO4F

Groundwater for Windows

Geotechnical

GINT

STABL6

SHAFT

WSPRO

SLOPE W

RETAINPRO

Various Other Bridge, Pavement, Retaining Wall, Pile and Foundation Software

SURVEY EQUIPMENT

- 4 I'RIMBLE GNSS R-8 Global Positioning System (GPS)
- 3 TRIMBLE GNSS R-10 Global Positioning System (GPS)
- 2 TRIMBLE S6 Robotic Stations
- 2 Total Stations
- NAK Micrometer Level System & Direct Levels
- 4X4 Vehicles
- 2-Way Radios

SUBSURFACE INVESTIGATION EQUIPMENT

- 3 CME 75 Drilling Rigs, 4-Wheel Drive Truck Mounted
- 2 CME 75 HD Drilling Rigs, 2-Wheel Drive Truck Mounted
- 1 CME 55 HD Drilling Rig, All-Terrain Mounted
- 1 CME 45 Drill Rig, 2-Wheel Drive Truck Mounted
- 1 CME 45 Drill Rig, 2-Wheel Drive Skid Mounted
- 1 Simco 4000 Track Rig
- 4-Wheel Drive Support Vehicles
- Portable barges for water borne drilling (including supply boats w/outboard motors)
- In-situ permeability apparatus
- Single or double ring field infiltrometers for hydraulic conductivity testing
- Down hole temperature gauges
- Color Borehole Camera with 300 foot range
- Ground Penetrating Radar Undisturbed shelby tube sampling devices
- Standard penetration testing equipment (1", 2", 3" split spoons)
- Settlement probes
- Tripod portable drilling equipment for interior drilling with 7 feet of clearance
- CBR equipment
- Hand Augers
- Solid flight augers 4" O.D.
- Hollow stem augers 33", 43", 63" 83" I.D.
- Rotary drilling capability up to 12" O.D.
- Hydro Punch In-situ groundwater monitoring
- Conventional and wireline coring capabilities (1", 2", 3", & 4")
- Soil-gas survey equipment
- Decontamination Equipment Steam cleaners, drums, generators, etc.
- Electronic Data Loggers
- Field Sampling equipment for soil, water and groundwater
- Nuclear Densometer Soil Compaction
- PID, FID, CGI and various field monitoring equipment
- Groundwater and Soil Remediation Equipment
- Air and chemical stripping of soils and water

15. CURRENT TIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED EN EER OF RECORD (AML Projects)

PROJECT NAME, TYPE AND	NAME AND ADDRESS OF	NATURE OF YOUR FIRM'S	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
Open Contract to provide engineering design services throughout the State of Ohio (2 year contract 2014-2015))	OWNER OH Department of Natural Resources AML Emergency Program 1855 Fountain Square Court, 2nd Floor Columbus, Ohio 43224	RESPONSIBILITY Reclamation Design, geotechnical drilling, mine subsidence, slope stability analysis and design, pressure grout stabilization design, risk assessment, acid mine drainage, burning refuse extinguishment and earthwork calculations	\$75,000 /year Fees	
Open Contract to provide engineering support and design services throughout the State of Maryland.(5 year contract- 2015))	MD Department of Environment-AMLD 160 S. Water St. Frostburg, MD 21532	Reclamation Design, geotechnical drilling, mine subsidence, slope stability analysis and design, pressure grout stabilization design, risk assessment, acid mine drainage, burning refuse extinguishment and earthwork calculations	\$500,000 Fees \$15,000,000+ Const.	65%
Hopewell Church Refuse & Drainage (DEP16074), Preston County, WV	WVDEP - AML 601 57 th Street SE Charleston, WV 25304	Draining mine portal remediation design, mine seals, drainage systems, grading design, specifications		Design - Preliminary Review complete. Submittal Dec. 2013
TOTAL NUMBER OF PROJECTS: 4	TOTAL ESTIMATED CONSTRUCTION COSTS: +\$10,000,000			

	OWNER	ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
1			
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PROJECT NAME, TYPE	NAME AND ADDRESS	THE DESIGNATED ENGINEER OF RECOR		
AND LOCATION	OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Peninsula Highwalls, AML Project, Monongalia County, WV	WVDEP- AML 601 57 th Street SE Charleston, WV 25304	\$244,000	2009	YES
St. Clair Portals, AML Project, Monongalia County, WV	WVDEP- AML 601 57 th Street SE Charleston, WV 25304	\$1,462,000	2009	YES
Shinn's Run Portals & AMD, AML Project, Harrison County, WV	WVDEP- AML 601 57 th Street SE Charleston, WV 25304	\$1,887,000	2012	YES
Pee Wee Hill Water Supply, MD AML Project, Garrett County, MD	MD Department of Environment 160 S. Water St. Frostburg, MD 21532	\$650,000	2011	YES
Anderson Highwalls, AML Project, Monongalia County, WV	WVDEP- AML 601 57 th Street SE Charleston, WV 25304	\$1,200,000	2013	YES
Terra Haute Airport, IN AMLD, Subsidence Grouting	Indiana Abandoned Mine Land Division Indianapolis, IN	\$6,500,000	2010	YES
Schramm, Gordon & East Franklin (MD) Landslides	MD Department of Environment-AMLD 160 S. Water St. Frostburg, MD 21532	\$1,500,000	2013	On-going

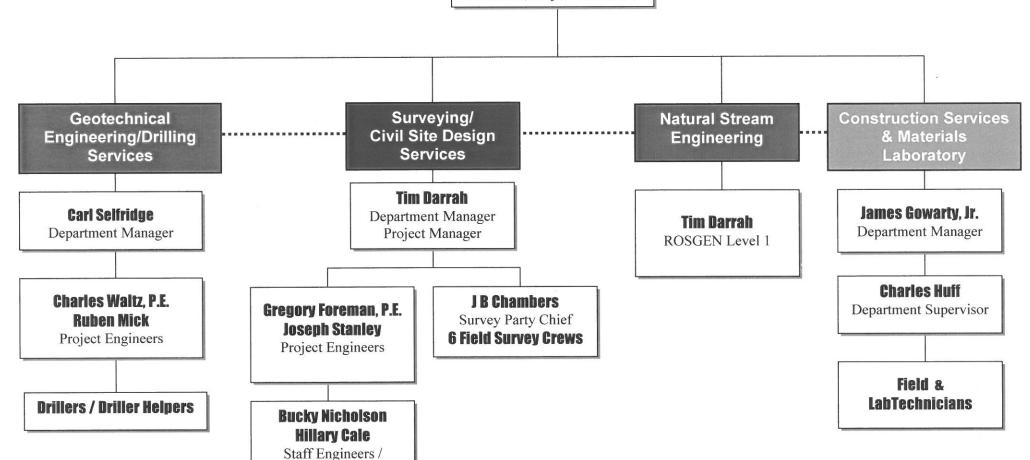
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qualifications	to perform work for the	West Virginia Abandoned Mine La	: resource	es supporting y	our firm's
For the past 25	5 vears, CTL has successf	Fully designed more than 200 AMI	mas Progr	ram.	
internationally	v on a variety of AML pro	oblem sites. We have developed	i brolecca	. we have wor	ked nationally and
development, AN	D Treatment, Mine Subsid	dence Abatement, Mine Fires and	unique so	Diutions that n	ave been applied to site
involved with h	nighwall and refuse pile	stabilization and extinguishmen	ntghwarr	Elimination.	Routinely, CTL is
	is a statement of facts.		10.		
1	To be a second of face.				
Signature:	7	Title: President		Date: June 16	£ 2014
	rick E. Gallagher, P.E.	TICIO: IICDIGOTIC		Date. Julie 16	5, 2014

CTL Engineering of West Virginia, Inc.

PROJECT ORGANIZATION CHART & KEY PERSONNEL



President, Project Executive



CAD Designers

Expertise:

Mr. Gallagher serves as President of CTL Engineering of West Virginia, Inc. Projects successfully completed under Mr. Gallagher's direction include: Civil Site Design, Foundation Design, Storm Water Management, Waste Water Design, Roadway design, Parking Lot Design, Geotechnical Investigations & Design, Site Stability Analyses, Mine Subsidence Evaluations, Failure Investigations and Environmental Investigations and Permitting.

Prior to joining CTL Engineering, Mr. Gallagher was the chief of the Abandoned Mine Reclamation Program for the State of Maryland, Department of Natural Resources, and Bureau of Mines. In addition, he was also responsible for overall engineering/geologic support to the Maryland Bureau of Mines Program.

Education:

B.S., Civil Engineering, 1975 Virginia Polytechnic Institute and State University, Blacksburg, Virginia B.S., Geology, 1975 Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Professional Registration / Certifications:

- Registered Professional Engineer
 - Ohio, #48459; Maryland, #13256; West Virginia, #9297; Pennsylvania, #PE-044930-R;
 Wyoming, #11033; North Carolina, #032503; Kentucky, #24988
- Certified Professional Geological Scientist, #6575
- Professional Surveyor, WV
- Adjunct Professor Civil Engineering Fairmont State College 2001 Present

Career Experience:

CTL Engineering, Inc.- 30 years Other – 7 years

Relevant Project Experience:

Mine Related

Project: Morgantown Anderson Highwalls

AML Reclamation Design

Monongalia County, West Virginia

Role: Project Executive Project Year: 2012

Project: Schramm – Gordon – East Franklin Landslides

AML Reclamation

Allegany & Garrett Counties, Maryland

Role: Project Executive Project Year: 2012

Project: Douglas Avenue Stormwater System

Geotechnical/Hydrologic Allegany County, Maryland

Role: Project Executive Project Year: 2012



President

PATRICK E. GALLAGHER, P.E., C.P.G.S.

Project: Fairmont Subsidence

AML Reclamation / Geotechnical Fairmont, Marion County, West Virginia

Role: Project Executive Project Year: 2012

Project: Ottawa State Route2 Mine Subsidence

Geotechnical/ Grouting Plan

Ottawa County, Ohio

Role:

Project Executive Project Year: 2005, 2010, 2012

Project: Douglas Avenue Landslide

AML Reclamation/Geotechnical/Hydrologic

Maryland

Role: Project Executive Project Year: 2012

Project: Lower Consol Road Subsidence

AML Reclamation/Subsurface Mine Investigation/Geotechnical

Maryland

Role: Project Executive Project Year: 2011

Project: Bald Knob Water Supply Study

Hydrologic Maryland

Role: Project Executive Project Year: 2011

Project: Shinns Run Portals

AML Reclamation/Portal Closure/Geotechnical Shinnston, Harrison County, West Virginia

Role: Project Executive Project Year: 2011

Project: Terra Haute Airport

AML Reclamation/Hazardous Waste Disposal/Geotechnical

Indiana

Role: Project Executive Project Year: 2010

Project: Peninsula Highwalls

AML Reclamation/Hydrology/Geotechnical

West Virginia

Role: Project Executive Project Year: 2009



PATRICK E. GALLAGHER, P.E., C.P.G.S.

Transportation

Project: Emerson Avenue

Slope Stabilization Investigation & Design

Wood County, West Virginia

Role: Project Executive Project Year: 2010

Project: I-81 Martinsburg to Marlowe Interchange

Design Build

Martinsburg, Jefferson County, West Virginia

Role: Project Manager Project Year: 2011

Project: Morgantown Municipal Airport

Geotechnical Services

Morgantown, Monongalia County, West Virginia

Role: Project Executive Project Year: 2007

Primary & Secondary Education

Project: New University High School

Various Services

Morgantown, Monongalia County, West Virginia

Role: Project Executive Project Year: 2006 - 2008

Project: South Jefferson High School

Various Services

Charles Town, Jefferson County, West Virginia

Role: Project Executive Project Year: 2006

Project: Morgantown High School Stadium Renovation

Various Services

Morgantown, Monongalia County, West Virginia

Role: Project Executive Project Year: 2011

Project: Huff Consolidated School

Geotechnical Services

Wyoming County, West Virginia

Role: Project Executive Project Year: 2012



TIMOTHY A. DARRAH

Civil Site and Survey Department Manager

Expertise

Mr. Darrah is presently responsible for department management for civil site design and surveying projects including topographic, property and construction layout. Mr. Darrah also serves as project manager on various types of civil engineering projects including residential and commercial developments, and reclamation design projects. Office work includes site designs, hydrology calculations, quantity calculations, and various other forms of engineering related duties.

Education

B.S. Civil Engineering Technology, 1988 Fairmont State College, Fairmont, West Virginia

Professional Experience

24 Years Experience with CTL Engineering, Inc.

Project Experience

A partial listing of Mr. Darrah's relevant project experience includes:

Mine Related

Project: Morgantown (Anderson) Portals and Highwall

AML Reclamation Design

Monongalia County, West Virginia

Role: Project Manager Project Year: 2012

Project: Hopewell Church Refuse & AMD

AML Reclamation

Preston County, West Virginia

Role: Project Manager Project Year: 2013

Project: Fairmont (Jackson Addition) Subsidence Project

AML Reclamation/Subsidence Investigation/Geotechnical

Fairmont, Marion County, West Virginia

Role: Project Manager Project Year: 2012

Project: Shins Run Portals & AMD

AML Reclamation/Geotechnical

Shinnston, Harrison County, West Virginia

Role: Project Manager Project Year: 2011

Project: Ream Refuse Piles

AML Reclamation/Mine Refuse & Fire Abatement

McDowell County, West Virginia



TIMOTHY A. DARRAH

Project: Cheat Neck (Lenhart) Landslide

Hydrologic Evaluation/Geotechnical Monongalia County, West Virginia

Role: Project Manager Project Year: 2008

Project: St. Clair Portals

AML Reclamation/Various Services Monongalia County, West Virginia

Role: Project Manager Project Year: 2008

Project: Morning Star Baptist Church Subsidence

Subsidence Investigation/Mitigation Marion County, West Virginia

Role: Timothy Darrah Project Year: 2009

Project: Farmington United Methodist Church

Subsidence Investigation/Mitigation

Farmington, Marion County, West Virginia

Role: Civil Site and Surveying Services Manager

Project Year: 2009

Project: Eccles & MacArthur Subsidence

Subsidence Investigation/Mitigation Beckley, Raleigh County, West Virginia

Role: Project Manager Project Year: 2008

Project: Oakland PSD

Feasibility Study

Hancock County, West Virginia

Role: Civil Site and Surveying Services Manager

Project Year: 2011

Project: Peninsula Highwalls

AML Reclamation/Hydrology/Geotechnical

Monongalia County, West Virginia



Expertise

Mr. Stanley is a Staff Engineer/CAD Designer in the Morgantown, WV office. His responsibilities include assisting in the planning and design of civil site design projects involving land planning and development aspects. He is familiar with various engineering software programs including AutoCad 2004 and AutoCad Land Desktop 2004, which provide support for the planning and design projects.

Education

A.S., Drafting and Design Fairmont State College; Fairmont, West Virginia, 2001

Professional Registrations/ Certifications

Advanced GPS Training Course

Career Experience

14 Years with CTL Engineering Inc.

Relevant Project Experience:

Mine Related

Project: Fairmont Subsidence

AML Reclamation / Geotechnical

Fairmont, Marion County, West Virginia

Role: Project Engineer Project Year: 2012

Project: Morgantown Anderson Highwalls

AML Reclamation Design

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2012

Project: Shinns Run Portals

AML Reclamation/Portal Closure/Geotechnical

Role: Project Engineer Project Year: 2011

Project: Hopewell Church Refuse & AMD

Various Services

Preston County, West Virginia

Role: Project Engineer Project Year: 2013

Project: Eccles and MacArthur Subsidence

Geotechnical

Beckley, Raleigh County, West Virginia

Role: Project Engineer



Staff Engineer

JOSEPH STANLEY

Project Year: 2008

Project: Farmington United Methodist Church

Various Services

Farmington, Marion County, West Virginia

Role: Project Engineer Project Year: 2009

Project: Peninsula Highwalls

AML Reclamation/Hydrology/Geotechnical

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Project: Cheat Neck landslide

Various Services

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Transportation

Project: Dorsey Knob Road Improvements

Surveying Services

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2006

Project: County Road 5/5 Relocation

Surveying/Mapping

Logan, Logan County, West Virginia

Role: Project Engineer Project Year: 2005

Project: Morgantown Airport Alternative Access Road

Geotechnical/Surveying/Mapping

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Project: Osage Bridge

Various Services

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2006

Education

Project: West Virginia University Child Care Center

Surveying/Mapping



Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Project: University High School Football Stadium Survey

Surveying

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2009

Power Plants

Project: Harrison Power Station Phase V Step I

Various Services

Haywood, Harrison County, West Virginia

Role: Project Engineer Project Year: 2012

Project: Overland Conveyor Permitting

Permitting

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Project: Harrison Power Station CCB Landfill Phase V Step III

Various Services

Haywood, Harrison County, West Virginia

Role: Project Engineer Project Year: 2013

Project: Pleasants Power Station

Construction Services/Surveying Pleasants County, West Virginia

Role: Project Engineer Project Year: 2009

Building Development

Project: Commercial Development

Various Services

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2010

Project: University Park

Site/Civil

Morgantown, Monongalia County, West Virginia



CARL G. SELFRIDGE

Geotechnical & Drilling Services

Manager

Expertise

Annually manages 100+ various geotechnical projects including; education, transportation, commercial development and a variety of public and private clients. Mr. Selfridge is responsible for directing all aspects of the Geotechnical Engineering Department for CTL Engineering of West Virginia, Inc. This includes the management of field drilling activities, field classification of soil and rock, field and laboratory safety procedures, the assignment of a laboratory testing program, and performing geotechnical evaluations. Engineering evaluations include foundation recommendations, settlement analysis, slope stability analysis, earth pressure coefficients and report preparation.

Education

A.A.S., Mechanical Technology - Design & Drafting, 1991 Adirondack Community College; Queensbury, NY

A.S., Engineering Science, 1994 Adirondack Community College; Queensbury, NY

B.S., Civil Engineering (Geotechnical & Structural), 1996 Rensselaer Polytechnic Institute; Troy, NY

Graduate Studies, Civil Engineering (Geotechnical), 1996-1999 Rensselaer Polytechnic Institute; Troy, NY

Registrations / Certifications

- Engineer Intern (EI): New York, 1996
- Pennsylvania Dept of Transportation Level II Drilling Inspector, 1999

Career Experience

CTL Experience – 5 years Other Engineering – 8 years

Project Experience

A partial listing of Mr. Selfridge's relevant project experience includes:

Mine & Landfill Related

Project: Eccles & MacArthur Subsidence

Subsidence Investigation/Mitigation Beckley, Raleigh County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2008



CARL G. SELFRIDGE

Geotechnical & Drilling Services

Manager

Project: Shinns Run Portals & AMD

AML Reclamation/Geotechnical Harrison County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2011

Project: Tunnel Ridge Slurry Cell A

Piezometer Installations - Geotechnical

Ohio County, West Virginia

Role: Project Manager Project Year: 2011

Project: Pine Creek / Omar Landfill

Geotechnical

Logan County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2007

Project: Marion County Land Fill

Geotechnical

Marion County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2007

Project: Wheeling Landfill

Geotechnical

Wheeling, Ohio County West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2007

Project: Mingo County Landfill

Geotechnical

Mingo County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2007

Project: South Charleston Landfill

Geotechnical

South Charleston, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2007

Project: Buzzard Pond Dam

Geotechnical

Marshall County, West Virginia



CARL G. SELFRIDGE

Geotechnical & Drilling Services

Manager

Transportation

Project: Benedum Airport Lighting Towers

Geotechnical

Bridgeport, Harrison County, West Virginia

Role: Project Manager Project Year: 2012

Project: I-81 Martinsburg to Marlowe Interchange

Design Build

Martinsburg, Jefferson County, West Virginia

Role: Project Engineer Project Year: 2011

Project: Hughes Creek Landslide

Geotechnical

Kanawha County, West Virginia

Role: Project Manager Project Year: 2011

Project: Dick Henderson Bridge

Geotechnical

Kanawha County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2010

Project: Morgantown Airport Alternative Access Road

Geotechnical

Morgantown, Monongalia County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2008

Project: Leon Bridge

Geotechnical

Mason County, West Virginia

Role: Project Manager Project Year: 2009

Project: Morgantown Rest Area

Geotechnical Evaluation

Morgantown, Monongalia County, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2008

Project: Veterans Memorial Bridge

Geotechnical

Hancock, West Virginia

Role: Geotechnical & Drilling Services Manager

Project Year: 2008



CHARLES T. WALTZ, P.E.

Geotechnical Project Manager

Expertise:

Mr. Waltz serves as a Project Manager in the Geotechnical Engineering Services Department of CTL Engineering of West Virginia, Inc. Waltz also serves as Project Manager/Engineeer for all of the WV BRIM Projects.

Prior to joining CTL, Mr. Waltz was with Triad Engineering where he was Staff Engineer/Project Engineer and provided engineering services to a variety of projects, including site development, geotechnical subsurface investigations, and road construction. The majority of these projects were performed in West Virginia where concerns for mine subsidence and slope stability were routinely investigated.

Education:

B.A., Business Administration Fairmont State University

B.S., Engineering Fairmont State University

Graduate Studies, Geotechnical Engineering West Virginia University

Professional Registration / Certifications:

Registered Professional Engineer

West Virginia, # 17626; Virginia, # 37038

CTL Experience:

3 Years

Project Experience

A partial listing of Mr. Waltz's relevant project experience includes:

Subsidence Related

Project: Windsor Heights Subsidence Claim

Geotechnical

Windsor Heights, Brooke County, West Virginia

Role: Project Manager Project Year: 2011

Project: Shinnston Subsidence Claim

Geotechnical

Shinnston, Harrison County, West Virginia

Role: Project Manager Project Year: 2011

Project: Metz Subsidence Claim

Geotechnical

Metz, Marion County, West Virginia



Project: Bruceton Mills Subsidence Claim

Geotechnical

Bruceton Mills, Preston County, West Virginia

Role: Project Manager Project Year: 2013

Project: Monongah Subsidence Claim

Geotechnical

Monongah, Marion County, West Virginia

Role: Project Manager Project Year: 2013

Project: Eccles Subsidence Claim

Geotechnical

Eccles, Raleigh County, West Virginia

Role: Project Manager Project Year: 2013

Project: Fairmont Subsidence Claim

Geotechnical

Fairmont, Marion County, West Virginia

Role: Project Manager Project Year: 2012

Project: Whitehall Subsidence Claim

Geotechnical

Whitehall, Marion County, West Virginia

Role: Project Manager Project Year: 2012

Transportation

Project: I-81 Martinsburg to Marlowe Interchange

Design Build

Martinsburg, Jefferson County, West Virginia

Role: Project Engineer Project Year: 2011

Project: Benedum Airport Lighting Towers

Geotechnical

Bridgeport, Harrison County, West Virginia



Education

Project: Lumberport Middle School

Geotechnical

Shinnston, Harrison County, West Virginia

Role: Project Manager Project Year: 2013

Project: Huff Consolidated School

Geotechnical

Wyoming County, West Virginia

Role: Project Engineer Project Year: 2012

Project: Alderson-Broaddus College New Dormitory Buildings

Geotechnical Evaluation

Philippi, Barbour County, West Virginia

Role: Project Engineer Project Year: 2012

Project: East Preston School

Geotechnical

Terra Alta, Preston County, West Virginia

Role: Project Engineer Project Year: 2011

Project: Davis & Elkins College Hermanson Welcome Center

Geotechnical

Elkins, Randolph County, West Virginia

Role: Project Engineer Project Year: 2013

Project: Central Preston Middle School

Geotechnical/Construction Services

Kingwood, Preston County, West Virginia



EXPERTISE:

Mr. Foreman serves as Project Manager and Design Engineer for a multitude of civil site design projects for municipal, commercial and private developers. Design services provided include site grading, potable water, sanitary sewer, storm sewer, pedestrian walkways, vehicular thoroughfares, preparation of permits, project specifications, plans and engineering calculations.

EDUCATION:

B.S., Civil Engineering Technology, 1989 Fairmont State College, Fairmont, West Virginia

A.S., Mechanical Engineering, 1989 Fairmont State College, Fairmont, West Virginia

A.S., Drafting and Design, 1989 Fairmont State College, Fairmont, West Virginia

PROFESSIONAL REGISTRATION / CERTIFICATIONS:

Registered Professional Engineer: West Virginia, 1999, No. 014165

PROFESSIONAL AFFILIATIONS:

- American Society of Civil Engineers
- The GEO-Institute
- Timber Framers Guild
- Construction Institute (ASCE)

CAREER EXPERIENCE:

- CTL Experience 8 years
- Other Engineering 20 years

Project Experience

A partial listing of Mr. Foreman's relevant project experience includes:

Mine Related

Project: Fairview Feasibility Studies

AML-Feasibility Studies

Fairview, Marion County, West Virginia

Role: Project Manager Project Year: 2009

Project: Craigsville/Tioga Water Well Study

Hydrologic Studies

Nicholas County, West Virginia



Gregory L. Foreman, P.E.

Project Manager - Water Systems

Project: Feasibility Study for Oakland PSD

AML-Feasibility Studies

Hancock County, West Virginia

Role: Project Manager Project Year: 2011

Project: Morgantown (Anderson) Portals and Highwall

AML Reclamation Design

Monongalia County, West Virginia

Role: Project Engineer Project Year: 2012

Water/Wastewater Treatment Plants and Water Tanks

Project: Palisades Place

Sewage Collection, Treatment & Disposal/Various Other Services

Morgantown, West Virginia

Role: Project Manager Project Year: 2006

Project: Fairmont Water Treatment Plant

Various Services

Fairmont, Marion County, West Virginia

Role: Project Engineer Project Year: 2009

Building Development

Project: West Minister Apartments – Phase II

Civil Site Design/Permitting/Geotechnical/Environmental/Surveying

Martinsburg, Jefferson County, West Virginia

Role: Project Manager Project Year: 2012

Project: University Place

Geotechnical/Surveying/Civil Site/Environmental

Morgantown, West Virginia

Role: Project Engineer Project Year: 2012

Project: Canterbury Housing Development

Various Services

Fairmont, Marion County, West Virginia

Role: Project Manager Project Year: 2006

Project: Hornbeck Road Development

Surveying/Stormwater/Testing/Permitting Morgantown, Monongalia County, West Virginia



Gregory L. Foreman, P.E.

Project: Premier Chevrolet

Site Layout/Design

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2012

Project: Mountain State Blue Cross Blue Shield

Civil Site Design

Parkersburg, Wood County, West Virginia

Role: Project Engineer Project Year: 2007

Other

Project: Bridgeport Burger King

Evaluations

Bridgeport, Harrison County, West Virginia

Role: Project Engineer Project Year: 2013

Project: Preston County High School Evaluation

Sewage Plant Evaluation/Wetland Delineation

Preston County, West Virginia

Role: Project Manager Project Year: 2012

Project: Industrial Avenue Streetscape

Various Services

Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2008

Project: Dorsey's Knob

Road Improvements

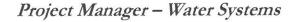
Morgantown, Monongalia County, West Virginia

Role: Project Engineer Project Year: 2006

Project: Boyers Avenue

Demolition Plan

Morgantown, Monongalia County, West Virginia





Expertise:

As the Construction Services Manager for CTL Engineering of West Virginia Inc., Mr. Gowarty is responsible for supervising field and laboratory technicians. He is also responsible for report writing for field and laboratory testing, project management, client contact, estimating, proposals and invoicing for Construction Services Department. Mr. Gowarty's experience also includes surveying, pre-mining and pre-blast surveys, field supervision of drilling crews, Phase I Environmental Site Assessments and radiation safety officer and corporate safety officer. In addition, Mr. Gowarty is the Construction Materials Testing Supervisor, providing concrete, compaction, and aggregate testing and has over twenty (20) years of experience with Nuclear Gauge Operation.

Mr. Gowarty has been CTL's Corporate Safety Officer since Fall 2008. Mr. Gowarty is CTL's USNRC Safety Officer.

Education:

B.S., Civil Engineering Technology, 1990 Fairmont State College; Fairmont, West Virginia

A.S., Mechanical Engineering Technology, 1990 Fairmont State College; Fairmont, West Virginia

Professional Registrations/ Certifications:

Safety

Radiation Safety Training, CPN Corporation Radiation Safety Officer Training, Troxler Electronics Principals of Fire Protection, Fairmont State University Certified Forklift Trainer, Brickstreet Insurance Drug Free Workplace Employee Trainer, Working Partners Drug Free Workplace Supervisor Trainer, Working Partners

Other

West Virginia DOT Certified Compaction Technician
West Virginia DOT Certified Bituminous Concrete Technician
West Virginia DOT Certified Portland Cement Concrete Technician
West Virginia DOT Certified Aggregate Sampler
NICET Level III Asphalt & Concrete
NICET Level II Soils
Certified Dipfloor Profiler Operator, Face Company

Career Experience:

CTL Experience – 24 years



Project Experience

A partial listing of Mr. Gowarty's relevant project experience includes:

Energy

Project: Harrison Power Station CCB Landfill Phase V Step III

Construction Services

Haywood, Harrison County, West Virginia

Role: Project Manager Project Year: 2010

Project: Leer Mine Complex

Construction Services

Grafton, Taylor County, West Virginia

Role: Project Manager Project Year: 2013

Project: Tunnel Ridge Coal

Construction Services

Wellsburg, Ohio County, West Virginia

Role: Project Manager Project Year: 2011

Project: Refuse Testing

Testing Services

Wellsburg, Ohio County, West Virginia

Role: Project Manager Project Year: 2011

Project: Kammer – Mitchell Run Dam Raising Project

Construction Services

Marshall County, West Virginia

Role: Project Manager Project Year: 2008

Building Development

Project: University Place – Morgantown, West Virginia

Construction Services/Survyeing/Geotechnical/Environmental/Site Civil

Morgantown, Monongalia County, West Virginia



JAMES P. GOWARTY, JR.

Construction Services Manager

Project: Downtown Panera Bread

Various Services

Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2013

Project: Hazelton Federal Corrections Institution

Various Services

Hazelton, Preston County, West Virginia

Role: Project Manager Project Year: 2010

Project: U.S. Department of Energy Facility

Geotechnical/Construction Services/Surveying Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2008

Primary/Secondary Schools

Project: Central Preston Middle School

Various Services

Kingwood, Preston County, West Virginia

Role: Project Manager Project Year: 2012

Project: East Preston School

Geotechnical/ Construction Services Terra Alta, Preston County, West Virginia

Role: Project Manager Project Year: 2012

Project: Bruceton Mills School

Various Services

Bruceton Mills, Preston County, West Virginia

Role: Project Manager Project Year: 2013

Project: New University High School

Construction Services/Geotechnical/Grout Plan Development

Morgantown, West Virginia Role: Construction Services Manager

Project Year: 2006 - 2008



JAMES P. GOWARTY, JR.

Construction Services Manager

Higher Education

Project: West Virginia University Health Sciences Center Animal Facility Annex

Surveying/Geotechnical/Construction Services

Morgantown, West Virginia

Role: Project Manager Project Year: 2012

Project: West Virginia University AERB

Construction Services

Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2013

Project: Alderson-Broaddus College New Football Field

Surveying/Materials Testing

Philippi, Barbour County, West Virginia

Role: Construction Services Manager

Project Year: 2011

Transportation

Project: I-81 Martinsburg to Marlowe Interchange

Design Build

Martinsburg, Jefferson County, West Virginia

Role: Construction Services Manager

Project Year: 2011

Project: Mileground Roundabout

Construction Services

Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2013

Project: Fairmont Airport

Various Services

Fairmont, Marion County, West Virginia

Role: Project Manager Project Year: 2012

Project: Benedum Airport

Geotechnical/Construction Services

Bridgeport, Harrison County, West Virginia



JAMES P. GOWARTY, JR.

Construction Services Manager

Project: Jackson County Airport

Construction Services

Ravenswood, Jackson County, West Virginia

Role: Construction Services Manager

Project Year: 2009

Hospitals

Project: Ambulatory Care Center

Geotechnical/Construction Services

Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2013

Project: New Preston Memorial Hospital

Various Services

Kingwood, Preston County, West Virginia

Role: Project Manager Project Year: 2013

Project: Mon General Hospital Roadway

Materials Testing

Morgantown, Monongalia County, West Virginia

Role: Project Manager Project Year: 2011

Municipal Infrastructure

Project: Water Treatment Plant Corrective Action Design

Geotechnical/Construction Services

Fairmont, Marion County, West Virginia

Role: Construction Services Manager

Project Year: 2009

Project: Water Treatment Facility Expansion

Various Services

Morgantown, Monongalia County, West Virginia

Role: Construction Services Manager

Project Year: 2007





VENDOR

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

RFQ COPY TYPE NAME/ADDRESS HERE CTL Engineering of West Virginia, Inc. 733 Fairmont Road

Morgantown, WV 26501

Solicitation

NUMBER DEP16557 PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ADDRESS CHANGES TO BE NOTED ABOVE

FRANK WHITTAKER 304-558-2316

ENVIRONMENTAL PROTECTION DEPT. OF OFFICE OF SPECIAL RECLAMATION 601 57TH STREET SE CHARLESTON, WV 25304 304-926-0499

DATE PRINTED 06/13/2014 BID OPENING DATE: 07/15/2014 BID OPENING TIME 1:30PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT ADDENDUM NO.01 ADDENDUM ISSUED TO MOVE SOLICITATION OPENING FROM: JUNE 19TH, 2014 AT 1:30 PM. EST. TO: JULY 15TH, 2014 AT 1:30 PM.EST. 0001 JB 906-29 1 1 PERMIT DESIGN IS THE END OF RFO THIS DEP16557 ***** TOTAL: 07/10/14 i0:14:11AM West Virginia Purchasing Division SIGNATURE DATE July 2, 2014 TELEPHONE (304) 292-1135 TITLE Director Business Development 55-063-1834

SOLICITATION NUMBER: DEP16557 Addendum Number: No.01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

V		Modify bid opening date and time
[]	Modify specifications of product or service being sought
[]	Attachment of vendor questions and responses
[1	Attachment of pre-bid sign-in sheet
[l	Correction of error
1	1	Other

Description of Modification to Solicitation:

Addendum issued to move bid/solicitation opening date as follows.

From: June 19th, 2014 at 1:30 PM. EST. To: July 15th, 2014 at 1:30 PM. EST.

No other changes.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DEP16557

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: I hereby 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)

[)	[X] 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.

CTL Engineering of West Virginia,Inc.

Company

Authorized Signature

July 2, 2014

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

EXPRESSION OF INTEREST

Summersville Five Block (S-3051-88) & Brady Cline Coal (EM-97)

DEP16558

OSR	and F	REI A	TF	-D	PR		P165		FY	PF	:BI	FN	CF	IΛΛ	ΔΤ	RI	×							
John			PROJECT EXPERIENCE MATRIX PROJECT EXPERIENCE REQUIREMENTS								PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional													
PROJECT	Exp. Basis C=Corp. P=Personal	Additional 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	PATRICK GALLAGHER, PE	TIM DARRAH	GREGORY FOREMAN, P.E.	JOSEPH STANLEY	CARL SELFRIDGE	CHARLES WALTZ
HOPEWELL CHURCH REFUSE & AMD (WV AML '13)	С	Profile		х	х				х		x						х		MP	MP		Р		
MORGANTOWN ANDERSON HIGHWALLS (WV AML '12)	С	Profile		х	х	х		х			х						х		MP	MP		Р	Р	
SCHRAMM-GORDON0EAST FRANKLIN LANDSLIDES (MD AML '12)	С		х			х		х			х						х		MP	MP		Р	Р	Р
DOUGLAS AVENUE STORMWATER SYSTEM (MD AML '12)	С											х				н			MP	MP		Р	Р	
FAIRMONT SUBSIDENCE (WV AML '12)	С								х		х						х		MP	MP		Р	Р	Р
DOUGLAS AVENUE LANDSLIDE (MD AML '12)	С					х			х		х						х		MP	MP		Р	Р	Р
LOWER CONSOL ROAD SUBSIDENCE (MD AML '11)	С				4*				х		х						х		MP	MP		Р	Р	Р
BALD KNOB WATER SUPPLY STUDY (MD AML '12)	С					х						х							MP	MP	Р			
SHINNS RUN PORTALS (WV AML '11)	С	Profile			х												х		MP	MP		Р	Р	
REAM REFUSE PILE (WV AML '10)	С	Profile						х											MP	MP		Р		
PEE WEE HILL WATER SUPPLY (MD AML '10)	С											х							MP	MP				
TERRA HAUTE AIRPORT (IN AML '10)	С				х				х		х						х		MP	MP			Р	
KENNEL MINE CLOSURE (MD AML '10)	С				х						х								MP	MP		Р		
FROSTBURG NORTH CLOSURE (MD AML '10)	С	Profile			х						х								MP	MP		Р		