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Header 1

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General Information [Contact](#) [Default Values](#) [Discount](#) [Document Information](#) [Clarification Request](#)

Procurement Folder: 918801

SO Doc Code: CEOI

Procurement Type: Central Purchase Order

SO Dept: 0313

Vendor ID: 000000204737

SO Doc ID: DEP2200000004

Legal Name: CTL ENGINEERING OF WV INC

Published Date: 8/18/21

Alias/DBA:

Close Date: 9/16/21

Total Bid: \$0.00

Close Time: 13:30

Response Date: 09/16/2021

Status: Closed

Response Time: 11:16

Solicitation Description: EOI - 2021 Design Group C Projects

Responded By User ID: ct leng

Total of Header Attachments: 1

First Name: Joe

Total of All Attachments: 1

Last Name: Stanley

Email: jstanley@ctleng.com

Phone: 304-292-1135



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

State of West Virginia
Solicitation Response

Proc Folder: 918801
Solicitation Description: EOI - 2021 Design Group C Projects
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2021-09-16 13:30	SR 0313 ESR09162100000001919	1

VENDOR
000000204737
CTL ENGINEERING OF WV INC

Solicitation Number: CEOI 0313 DEP2200000004

Total Bid: 0 **Response Date:** 2021-09-16 **Response Time:** 11:16:29

Comments:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X	FEIN#	DATE
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All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI Engineering Design Services - Flatbush Highwall				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments: eoi

Extended Description:

*Dates of Service are estimated for bidding purposes only.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	EOI Engineering Design Services - Fords Run Drainage				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments: eoi

Extended Description:

*Dates of Service are estimated for bidding purposes only.



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

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder: 918801			Reason for Modification:
Doc Description: EOI - 2021 Design Group C Projects			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2021-08-18	2021-09-16 13:30	CEOI 0313 DEP2200000004	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State :

Country :

Zip :

Principal Contact :

Vendor Contact Phone:

Extension:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor
Signature X

FEIN#

55-063-1834

DATE

9-16-2021

All offers subject to all terms and conditions contained in this solicitation

west virginia



EXPRESSION OF INTEREST

2021 Design Group C Projects

Flatbush Highwall – Fords Run Drainage

CEOI 0313 DEP2200000004

September 16, 2021





EXPRESSION OF INTEREST

Engineering Services

2021 Design Group C

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SECTION 1 INTRODUCTION



September 16, 2021

West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands & Reclamation
601 57th Street SE
Charleston, WV 25304

Re: CEOI 0313 DEP2200000004
Expression of Interest
Design Engineering Services Proposal
Design Group C

Joseph E. Hager III;

CTL Engineering, Inc. is very pleased to present this Letter of Interest to provide design engineering and related services for the West Virginia Abandoned Mine Lands and Reclamation Program. With over 90 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 Professional Engineers registered in West Virginia that have direct 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 AML 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 Abandoned Mine Reclamation Design. With an office Morgantown, we can effectively respond to any AML Design tasks throughout West Virginia. In addition, we have a dedicated design team available to complete AML design projects. Our corporation and individual staff members have extensive experience relative to reclamation design, highwall elimination, abandoned portal seals and drainage control structures. The Design Group A Projects are similar in scope to more than 35 AML design projects we have successfully completed. Attached to this proposal are numerous examples of similar projects successfully designed and completed.

CTL has annually completed numerous landslide projects in several different states, for both private and public entities. CTL is currently working with FEMA on several landslide projects in Ohio. CTL has completed over 50 landslide projects in the FEMA program over the last two years and is currently working on 25 active landslide projects. CTL has several geotechnical engineers with experience regarding landslide stabilization and repair.

Our team has the experience and knowledge to provide services to all levels of the public and private sector. The general engineering requirements in your request actually describe the areas of expertise and experience of the team. CTL has provided designs and specifications for Public Projects and Private throughout the region



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.

Joseph Stanley
Business Development Manager

A handwritten signature in blue ink, appearing to read 'Joe Stanley', written over a light blue circular stamp.



Executive Summary

LEGAL NAME OF PROPOSER:
CTL ENGINEERING, INC.

OFFICE RESPONSIBLE FOR WORK:

1091 CHAPLIN ROAD
MORGANTOWN, WV 26501

TELEPHONE NUMBER:
PH: 304.292.1135

TYPE OF ENTITY:
Corporation

DUE DATE OF SUBMITTAL:
September 16, 2021

PROJECT MANAGER:
Timothy Darrah
tdarrah@ctleng.com

**CTL WAS BUILT ON THREE
FOUNDATIONAL PILLARS:**

COMMUNICATION

TEAMWORK

**LEADERSHIP IN
TECHNOLOGY**

www.ctleng.com

COMPETENCE TO PERFORM THE REQUIRED SERVICE. *CTL's goal is to show that our work is transparent and lean. We treat every project, every dollar as if it were our own, because we are not a service but a business partner. Our mantra is "It is our project also".*

CTL is a multidisciplinary Consulting Firm that provides **Municipal Engineering, Civil Site Design, Surveying, Construction Inspection, Materials Testing and Geotechnical** services for private development and local agencies and municipalities. Our highly qualified Team is capable of providing all the services outlined in this Request; We have a wide range of experience that can be called upon as seen fit by the WVDEP to deliver all projects assigned to our Team on time, within budget, and as per contract documents and specifications. Our Team possesses the depth of resources, staff and knowledge to insure quick and efficient furnishing of qualified personnel as dictated by the WVDEP needs.

ABILITY TO PERFORM EXPEDITIOUSLY. Seamless collaboration with the Project Managers/Engineers in all Divisions is essential for project success. We understand the role and responsibilities of the project engineer, inspector and technician and will become a true extension of the WVDEP's staff. We practice partnering on all projects by engaging and communicating with all members of the project team and all stakeholders involved with the project. Our Team possesses the depth of resources, staff and knowledge to insure quick and efficient furnishing of qualified personnel as dictated by the WVDEP's needs.

LOCAL WORKFORCE. 100% of the Team's key personnel are located in the Morgantown, West Virginia office.

CLOSING. We hope this submittal gives an indication of our qualifications, experience, and abilities. You are invited to visit our office and laboratory facilities at your convenience or we are willing to meet with members of the project team so that we can further demonstrate the quality of our operation.



SECTION 2

PROJECT APPROACH



Project Overview

The mission or purpose of the Group of Projects (as listed below 1 and 2) for which bids are being solicited is to provide the subsequent design services for each; including but not limited to (as may be applicable to each project):

1. Flatbush Highwall project
 2. Fords Run Drainage project
- Perform Site and Geotechnical Investigations
 - Design temporary and permanent access or accesses for construction and future maintenance, and active treatment site access.
 - Design to repair drainageway through exposed and heavily scoured refuse to convey runoff.
 - Design replacement drainage structure to convey Fords Run through the site.
 - Design to repair or replace existing drainage structures.
 - Design highway relocation, if required.
 - Design to mitigate exposed refuse.
 - Locate onsite borrow material to cover exposed refuse.
 - Design to stabilize landslides, if required.
 - Design of highwall reclamation.
 - Design to mitigate AMD drainage, including possible horizontal borings.
 - Design to mitigate AMD impacted ponded area and drainage

Project Management Plan

Our approach to the Design Group C Projects will be similar to other CTL AML 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 site. 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 exploration and analysis will be performed to delineate the thickness of mine refuse to determine and design the optimum stable grading plan. This exploration will 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. For Landslide projects CTL will perform a geotechnical exploration to determine the cause(s) of the slip. We will prepare a geotechnical report which will include proposed alternatives for the repair of the slip.

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.

Other Innovative Ideas – In just the past 3 years, CTL's geotechnical engineers have performed hundreds of slope stability analyses, and have provided geotechnical services on landslides at dozens of transportation projects. In addition to numerous soldier pile and lagging and plug pile walls, to remediate slope instability issues, we have evaluated the feasibility of installing toe keys in bedrock and reconstructing the slope, utilizing gabion walls to provide toe support and to permit drainage, as well as the installation of rock anchors or soil nail walls.



Following completion of the surveying, geotechnical exploration 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. Reclamation Plans for the project area.
 4. Proposed site plans for the repair and stabilization of the landslide, including safely dewatering and excavation of all portals, if needed.
 5. Provide Sedimentation and Erosion Control Plan
 6. Site Profiles
 7. Cross Sections
 8. Drainage systems and control structures, with details
 9. NPDES Permit
 10. MM109 Permit
 11. Survey control points
 12. Miscellaneous Site details
-
- CTL will also provide all necessary data for the MM109 and NPDES permit including S&E Control Plans as required for the site construction and if deemed necessary, perform environmental assessments. CTL will make submittals and obtain the NPDES permit.
 - 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.
 - At the request of the WVDEP, CTL will provide construction observation personnel.



Project Scope

Project Scope of Work:

- Access or accesses as required
- Geotechnical investigation analysis.
- Landslide Stabilization
- Hydrologic and Hydraulic analysis
- Clear and Grub affected areas
- Regrade as necessary
- Install drainage channels, underdrains, and/or other controls to safely convey water off-site
- Condition and revegetate all disturbed areas
- Obtain require permits as determined at the Pre-Design meeting.



Project Goals

Design Group C Projects

Project and Goals:

- 2.1. Develop construction plans and technical specifications to stabilize the landslide, and design new drainage features and structures if the existing structures are unable to be repaired or replaced.
- 2.2. Design plans and develop specifications to control any associated water with the site.
- 2.3. Design plans and develop specifications for limits of disturbance, storm water control and erosion and sediment prevention. All disturbed areas are to be regraded and revegetated.
- 2.4. Design plans and develop specifications for all conditions encountered on the project sites.

CTL's abilities to complete the project scope and goals:

Tim Darrah will be the project manager for CTL. All communication through the owner for the duration of the project will be through Mr. Darrah. Mr. Darrah has the authority to engage any of CTL's staff or services for the completion of the project.

CTL has referenced several projects in (section 5) that were completed on time and on budget. CTL uses the following project Management outline. CTL has accounting software that can provide work in progress reports weekly.

Plan Schedule Management

- Define Scope
- Sequence scope tasks
- Estimate Resources and cost
- Estimate Durations and cost to complete tasks
- Develop Schedule
- Control Schedule

CTL provides services to several projects throughout the year that are constructed timely and efficient.

Construction Management Plan

- Project Organization
- Project Planning
- Project Monitoring
- Project Control

CTL completes several projects a year that involve: landslide reclamation, civil site design, stormwater and drainage control, construction administration, construction inspection and testing, geotechnical engineering, surveying and environmental engineering.



SECTION 3

CORPORATE HISTORY AND QUALIFICATIONS



FIRM INFORMATION – CTL Engineering

CTL WV is a full-service consulting civil & geotechnical engineering, drilling, materials testing and construction observation service company. CTL WV was founded in 1983 to provide regional service to West Virginia, Maryland and Pennsylvania. CTL 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. Since 1927 our expertise has focused mainly on foundation engineering, construction testing and inspection services.

CTL WV has a state-wide staff of over 20 people; including licensed professional engineers, licensed land surveyors, environmental scientists, geologists and certified engineering technicians. Nationwide CTL Engineering sustains a staff of over 300 employees, providing additional professional expertise as well as staff and equipment resources for meeting project needs and goals.

Over our 38 years in West Virginia, CTL WV has provided numerous civil geotechnical designs, stormwater plans and surveys for commercial and developments and roadway projects. We have successfully prepared 401 and 404 Permit submittals, Ms4 Phase II stormwater permits and Environmental Site Assessments. CTL WV also has significant working on mining related projects including mine plans and permitting, reclamation and subsidence evaluations and investigation. These completed by conscientious interaction with Architects, Engineers, State Agencies and Owners.

CTL WV has certified engineering and laboratory technicians providing and construction observation services. Our Morgantown lab is annually West Virginia Division of Highways. CTL WV maintains a fleet of four drill rigs including truck, rubberized track and ATV mounted. Our crews have experience in steep terrain and barge drilling and deep boring exploration to depths greater than 300 feet. Additionally, CTL Engineering has a total of ten drills allowing CTL to place multiple rigs on one site, if project schedule demands.



site designs,
residential
State and Federal
conducted
experience
mine refuse
projects were
and Federal

material testing
inspected by the



TECHNICAL AREAS OF STRENGTH

Engineering Categories	Technical Areas of Strength
Geotechnical Engineering Services	✓
Civil Site Design	✓
Professional Surveying Services	✓
Environmental	✓
Construction Inspection/Administration & Materials Testing	✓

Geotechnical Capabilities

CTL's Routinely Performs Subsurface Investigations and Soil and Rock Testing

CTL annually performs over 350 geotechnical explorations, including soil and rock testing, for highway, bridge and geohazard projects throughout the states of West Virginia, Ohio, Indiana and Kentucky. CTL owns and operates its own fleet of 13 drill rigs, the largest of which can drill, core rock, and take samples up to 300 feet deep. Our rigs are capable of accessing difficult locations since many of them are track-mounted, ATV or 4-wheel drive truck-mounted rigs. We are currently running three (3) drilling crews from the Morgantown office.

In addition, CTL utilizes in-house geophysical equipment and software to evaluate variations in subsurface conditions such as the identification of the bedrock surface. These capabilities include Refraction Microtremor (ReMi), Electrical Resistivity Imaging (ERI) along with Ground Penetrating Radar (GPR) equipment to locate voids or other anomalies. CTL also has Pile Driving Analyzer (PDA) equipment for performing dynamic testing of piles per the ODOT BDM.



CTL houses AASHTO-Accredited geotechnical testing laboratories in several office locations, which are each managed by Professional Engineers specializing in geotechnical engineering. These analytical laboratories provide a detailed analysis of the surface and subsurface composition and chemistry of soils and rock encountered during geotechnical explorations and are equipped to conduct Consolidation, Tri-axial Shear, Unconfined Compressive Strength, Direct Shear, Moisture Density Relationship (Proctor Tests), and CBR tests.

CTL is well-known for providing cost-effective, yet safe solutions to difficult subsurface conditions. We review a significant number of geotechnical reports prepared by others for the

purpose of providing alternative recommendations that are more constructible, less conservative, yet maintain an appropriate factor of safety.

CTL has 20 geotechnical engineers with a majority of the engineers with Master's degrees and Professional Engineer Registration.





Civil Site Design

CTL WV's Design Team has the capabilities to handle any size project.

The main goals of civil site design are functionality, quality and efficient use of space, and overall appearance. Our design team consist of qualified people who live and work in the area and take pride in seeing their designs benefit the community. We have performed civil site design services for a wide variety of projects in Morgantown and throughout West Virginia, Pennsylvania and Ohio. These projects consist of mining and AML related projects, medical facilities, restaurants, and shopping centers. In addition, we have performed engineering for local school districts and universities. In our efforts to be a full-service company, we provide assistance through the funding process, design every element of a site, and manage the construction process, ensuring not only a quality product, but also the success of our clients. These are some civil site design services we can offer:



CTL WV provides the following Civil Design services:

Complete Site Development	Infrastructure Planning and Design
Conceptual Design / Presentations	Preliminary Cost Estimates
Stormwater Management	Permitting (NPDES)
Erosion and Sediment Control	As-Built Surveys and Drawings

Professional Surveying Services

CTL WV Maintains a Full-Service In-house Surveying and Mapping Team



CTL WV has the professional staff and the latest equipment to support eight (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 our clients.

- Multi-disciplined offices within the region staffed with qualified and experienced personnel.
- Multiple crews equipped with the most up to date survey equipment: Trimble GPS, Trimble Robotic Instruments. Most of our crew chiefs have over 30 years of experience.

Drone capabilities with multiple licensed pilots. We also have experience with the latest 3D modeling software.

Environmental Services

CTL Provides Environmental Services for Projects Varying in Complexities for Diversified Clients

The Environmental Services Department at CTL is ODOT pre-qualified in the Environmental Document Prep-CE, Ecological Surveys, ESA Screening, Phase I & II ESAs, and Remedial Design. In the past, CTL has held Environmental Task Orders, including BUSTR Site Assessments, for ODOT Districts 3, 6 and 9 and obtained **CES rating of 84% to 86%** and successfully obtained **NFA status from BUSTR for 100%** of the ODOT sites managed under these task orders.

Currently, CTL is working in District 1, 2, 4, & 11 under EMH&T under their ESA Task Order. In 2017, D04 & D11 gave a CES of 100% to EMH&T/CTL team, where CTL provided ESA Screening, Ph1 ESA, PCS Monitoring, & Asbestos Surveys.

CTL's environmental staff has a combined total of 144 years of experience in managing and conducting environmental projects of varying complexities. CTL performs over 500 environmental projects per year and follows the various ASTM standards, BUSTR and EPA regulations, and ODOT Guidelines for ESA Screening, Phase I and Phase II ESAs, UST Closures, Tier I & II Assessments, HazMat management and remediation. We also perform wetland delineation, permitting, and mitigation; asbestos, lead-based paint, and hazardous materials surveys, sampling, evaluation, as well as abatement project design & monitoring; waste management and disposal; GPR surveys; environmental monitoring/inspections during construction.



Construction Administration & Inspection

CTL WV's Construction Administration Services Include On-site Daily Inspections

Federal, State, and Locally funded Construction Projects require a administration and quality control to meet the project's demands. Municipalities, as well as private owners, developers, and selected CTL WV for Construction Administration, knowing that we experienced staff to be accurate, dependable, and perform these timely manner. Our experienced engineers, inspectors, and your partners in construction. We help in completing these projects meeting the specific project requirements.

CTL WV's qualified construction inspectors will observe and construction project and complete the necessary daily required by the Federal, State, and Local funding agencies participating in the project. CTL WV also provides in-house testing services such as concrete, asphalt, and sub-grade compaction, as well as daily on-site inspection services.



high level of Counties and contractors have have the services in a technicians are successfully and

inspect your documentation

CTL WV provides the following CA services:

- Conduct Pre-Construction Conference
- Project Team Coordination
- Field Reports & Construction Documents' Admin
- 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 WV'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 Docs & provide to Construction Admin
- Field Engineering in conjunction with Construction Administrator
- Observe & verify materials being used for the project
- Observe, identify and notify Construction Admin of deficiencies
- Provide Admin w/ monthly quantities for payment prep
- Material Testing, i.e., compaction, concrete, asphalt, etc.

Materials Testing and Laboratory Services

CTL WV 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 WV can prepare and test Portland Cement and bituminous concrete mixes for optimization studies to insure the proper mix design for specific jobs.

CTL WV 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 WV 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.

AML & Relevant Project Experience

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 Refuse & 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 & Potomac Hollow Water Investigations, 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



SECTION 4
ATTACHMENTS
CCQQ
RPEM

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE**

"Attachment B"

PROJECT NAME EOI - Ethel Hollow Phase II and Phase III		DATE (DAY, MONTH, YEAR) 3/18/2021		FEIN 55-063-1834					
1. FIRM NAME CTL Engineering, Inc.		2. HOME OFFICE BUSINESS ADDRESS 2860 Fisher Road Columbus, OH 43204		3. FORMER FIRM NAME Columbus Testing Laboratories					
4. HOME OFFICE TELEPHONE (614)276-8123	5. ESTABLISHED (YEAR) CTL-1927 CTL-WV 1983	6. TYPE OWNERSHIP Individual <u>Corporation</u> Partnership Joint-Venture		6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES <u>NO</u>					
6. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 1091 Chaplin Road, Morgantown, WV 26501/ 304-292-1135/ CK Satyapriya, President / Morgantown - 16									
7. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM CK Satyapriya, President			8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS Ali Jamshidi, Treasurer (614) 276-8123						
9. PERSONNEL BY DISCIPLINE									
<table style="width:100%; border: none;"> <tr> <td style="width:25%; vertical-align: top;"> <u>1</u> ADMINISTRATIVE - ARCHITECTS - BIOLOGIST <u>4</u> CADD DESIGNERS - CHEMICAL ENGINEERS <u>2</u> CIVIL ENGINEERS <u>6</u> CONSTRUCTION INSPECTORS - DESIGNERS <u>1</u> DRAFTSMEN </td> <td style="width:25%; vertical-align: top;"> - ECOLOGISTS - ECONOMISTS - ELECTRICAL ENGINEERS <u>1</u> ENVIRONMENTALISTS - ESTIMATORS <u>1</u> GEOLOGISTS/GEOTECH ENG. - HISTORIANS <u>1</u> HYDROLOGISTS </td> <td style="width:25%; vertical-align: top;"> - LANDSCAPE ARCHITECTS - MECHANICAL ENGINEERS <u>1</u> MINING ENGINEERS - PHOTOGRAMMETRISTS - PLANNERS: URBAN/REGIONAL - SANITARY ENGINEERS <u>1</u> SOILS ENGINEERS <u>1</u> SPECIFICATION WRITERS </td> <td style="width:25%; vertical-align: top;"> - STRUCTURAL ENGINEERS <u>2</u> SURVEYORS/RODMEN - TRAFFIC ENGINEERS <u>X</u> OTHER, <u>2</u> Geotechnical Drillers <u>2</u> Driller Helpers <u>2</u> Geotechnical Engineers <u>1</u> Laboratory Technicians </td> </tr> </table>						<u>1</u> ADMINISTRATIVE - ARCHITECTS - BIOLOGIST <u>4</u> CADD DESIGNERS - CHEMICAL ENGINEERS <u>2</u> CIVIL ENGINEERS <u>6</u> CONSTRUCTION INSPECTORS - DESIGNERS <u>1</u> DRAFTSMEN	- ECOLOGISTS - ECONOMISTS - ELECTRICAL ENGINEERS <u>1</u> ENVIRONMENTALISTS - ESTIMATORS <u>1</u> GEOLOGISTS/GEOTECH ENG. - HISTORIANS <u>1</u> HYDROLOGISTS	- LANDSCAPE ARCHITECTS - MECHANICAL ENGINEERS <u>1</u> MINING ENGINEERS - PHOTOGRAMMETRISTS - PLANNERS: URBAN/REGIONAL - SANITARY ENGINEERS <u>1</u> SOILS ENGINEERS <u>1</u> SPECIFICATION WRITERS	- STRUCTURAL ENGINEERS <u>2</u> SURVEYORS/RODMEN - TRAFFIC ENGINEERS <u>X</u> OTHER, <u>2</u> Geotechnical Drillers <u>2</u> Driller Helpers <u>2</u> Geotechnical Engineers <u>1</u> Laboratory Technicians
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TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: <u>3</u> *RPES other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.					<u>29</u> TOTAL PERSONNEL				
The TOTAL PERSONNEL number is for CTL Engineering, Inc. Morgantown, WV Office									
TOTAL PERSONNEL for CTL Engineering, Inc. is 250+, which includes the Morgantown Office.									
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO									

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire" for each if copy is not on file with AML.

[illegible]

12. A. Are your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects: CTL Engineering has completed more than 800 AML related projects nationally and internationally. See attached "AML Past Project Experience" for some specific examples. CTL completes an excess of 100 testing projects each year.

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: Our in-house laboratories perform all ASTM mechanical, organic and in-organic analyses for soils. Our labs are certified by WVDON, OEPA and US Corps of Engineers.

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: Each of our site design and AML projects require hydrology & hydraulic 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 Develop Contour Mapping?

YES Description and Number of Projects:

NO However, we annually complete more than 25 projects requiring aerial photography & mapping. While we sub-contract the aerial photography, in-house we provide GPS, surveying and develop the contouring as needed. CTL deploys a drone to support contour mapping typically for sites less than 10 acres.

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects: We have completed numerous waterline design projects and our in-house staff has more than 50 years of combined experience with aquifer degradation.

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects: CTL has developed more than 20 active and passive treatment systems for AMD. More than 50 of our AML Design projects required some form of AMD evaluation and design.

NO

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.) Gallagher, Patrick E., PE President, Project Manager	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 39	YEARS OF AML RELATED DESIGN EXPERIENCE: 39	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 32
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, 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, Civil Engineering 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		REGISTRATION (Type, Year, State) Registered Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Maryland, 1993-Pennsylvania, 2006-Wyoming, 2006-North Carolina Certified Professional Geological Scientist - 1984 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	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 10	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities Deartment Head Geotechnical Engineering. Responsible for subsurface inveatigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis.			
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 Fellow of the American Society of Civil Engineers, The GEO-Institute, Timber Framers Guild, Construction Institute (ASCE)		REGISTRATION (Type, Year, State) Engineering Intern (EI), 1996, New York Level II Drilling Inspector, 1999, PennDOT	

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.) Darrah, Timothy A. Civil Site Dept. Mgr., Project Manager	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 25	YEARS OF AML RELATED DESIGN EXPERIENCE: 25	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE 25
Brief Explanation of Responsibilities Mr. Darrah is presently responsible for Management and Design for various types of civil engineering projects including reclamation design, commercial and residential development projects. He is also responsible for scheduling, invoicing and client contacts for all surveying projects including topographic, property and construction layout. Mr. Darrah's duties include drafting, writing of property descriptions, hydrology calculations, quantity calculations and various other forms of surveying and civil engineering related duties. He is also proficient in computer software including AutoCAD, Civilsoft, HEC-1, HEC-RAS and various other engineering software.			
EDUCATION (Degree, Year, Specialization) B.S., 1988, Civil Engineering Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
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.) Stanley, Joseph Project Manager	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 11	YEARS OF AML RELATED DESIGN EXPERIENCE: 11	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 8
Brief Explanation of Responsibilities Mr. Stanley is responsible for Reclamation Design, Drafting Hydrology, Quantity Calculations, Stability Analysis, Residential Development, Valley Fill Footprinting, Surveying, Subsidence Surveys, Pre-Blast Surveys, Acid Base Accounts, Groundwater Inventory. PC Software includes Hydrologic TR-20, TR-55, Excel, Harstad Methods, Word, AutoCADD Land, Quarttro, Access.			
EDUCATION (Degree, Year, Specialization) A.S., 2001 Civil -Engineering Technology Drafting & Design			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

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		
Grani, Joe Branch Manager (WV) Geotechnical Manager	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 27	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities			
Mr. Grani is the Branch Manager of the WV office and also responsible for field review and exploration for the Geotechnical Engineering Department for CTL Engineering of West Virginia. Joe is involved in the management of field drilling, classification of soil and rock, field safety procedures, assignment of project specific lab testing, and performing geotechnical evaluations. Engineering evaluations include subsidence evaluation, foundation recommendations, settlement analysis, slope stability analysis, earth pressure coefficients and report preparation.			
EDUCATION (Degree, Year, Specialization)			
B.S., 1991, The Ohio State University, Civil Engineering M.S., 1994, The Ohio State University, Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)		
ASHE ACEC	Civil Engineering Professional Engineer, ██████ Ohio		

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

OFFICE EQUIPMENT

3 HP Color Plotters
HP Color Scanner
Duplicating equipment, copiers, blueprinting, laser printers, etc.
Facsimile Machine

DESIGN SOFTWARE

Windows 10 based operating systems

Microsoft Office 2019 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 2020.

Hydrogeologic Studies

MODFLO

MODPATH

SURFER

CAPZONE

GWPATH

SKUGIS

PHREEQCI

WATEQ4F

Groundwater for Windows

Civil Engineering Software

Civil 3D 2019-2020 (AutoCADD) - 1 Seats

Profiling

Civilsoft

TR-20 & TR-55

SEDCAD

HEC 1 & 2

HEC-RAS

Arc GIS

ArcPAD

Carson Software

Geotechnical

GINT

STABL6

SHAFT

WSPRO

Various Bridge, Pavement, Pile and Foundation Software

SURVEY EQUIPMENT

- 8 - Trimble GPS Systems - 6-R8 Receivers & 2- R10 Receiver
- 6 Total Stations (1- Robotic)
- DJI Inspire II Drone
- NAK Micrometer Level System & Direct Levels
- 4X4 Vehicles, including ATV for off-road use
- 2-Way Radios

SUBSURFACE INVESTIGATION EQUIPMENT

• CTL Engineering Inc.'s subsurface exploration equipment is adaptable for use on barges or all terrain vehicles (ATV's). CTL can mobilize special equipment or a fleet of drilling rigs to a particular project requiring multiple units. CTL Engineering currently owns and operates twelve (12) drill rigs with a capacity of drilling to a depth of 500 feet. Other equipment includes large diameter soil boring and rock core sampling equipment, in-situ pressure meters, field vane, GUS Sampler along with other field sampling and testing.

•

• CTL's drill rigs are rotary drilling rigs equipped to conduct standard split-spoon sampling with the use of hollow-stem augering, continuous sampler, casing with advancer, air and mud rotary, down-hole hammer, etc. The rigs are also equipped with Moyno pumps, wire-line or standard coring equipment for proper and efficient execution of a subsurface investigation program.

•

- For this proposal, CTL owns and operates the following rigs:
- 1996 CME 45C Skid, trailer, and/or Truck Mounted Drill Rig System
- 1988 CME 55 Truck Mounted Rig
- 1978 CME 75 Truck Mounted Rig
- 1985 CME 75 Truck Mounted Rig
- 1987 CME 75 Truck Mounted Rig
- 2012 CME 550X Rubber Tired ATV Mounted Rig
- 2015 CME 550X Rubber Tired ATV Mounted Rig
- 1995 SIMCO 4000 Rubber Track Mounted Rig
- 2002 CME 55 Rubber Track Mounted Rig
- 2005 CME 550 Rubber Track Mounted Rig
- 2015 Mobile B-57 Rubber Track Mounted Rig
- Mobile "Minuteman" Small Portable Drilling Rig with Tripod System
- Portable Electric Core Drill with Truck Mount System

- 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
- Pump testing 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
- Mobile activated carbon system
- Air and chemical stripping of soils and water

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Geotechnical Engineering	ODOT District 9 ODOT District 6	Geotechnical Engineering and Drilling	NA	80%
WV Statewide Drilling Contract	WVDOT Charleston, WV	Geotechnical Engineering and Drilling	NA	2019-2020
Guernsey Power Plant Mine Grout Project Cambridge, Ohio	Gemma Power Systems Glastonbury, CT	Surveying and Site Design, Geotechnical Engineering and Drilling	CTL Fee's \$500,000	90%
Highway Geotechnical Engineering Multiple Counties, Indiana 10 Projects	INDOT Indianapolis, IN	Geotechnical Engineering	CTL Fees \$330,000	40%-80%
Gateway Development Commercial Development Morgantown, WV	MAGCS, LLC 308 Cheat Road Morgantown, WV 26508	Civil Site Design, Surveying, Geotechnical Engineering	\$15,000,000	90%
WVDOT District Engineering Contract, (Inspection and Materials)	WVDOT District 4 and 7	Engineering	NA	2020
TOTAL NUMBER OF PROJECTS: 20				

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Fremont City Schools 4 elementary schools	Civil Site Design and Surveying	SSOE Group, 1001 Madison Ave. Toledo, Ohio	2020	\$52,000,000	\$400,000
Cacapon Resort	Civil Site Design and Surveying	Paradigm Architecture 2223 Cheat Rd. Morgantown, WV	2019	\$25,000,000	\$140,000
Sunnyside TIF Project	Geotechnical Engineering and Surveying	Herbert, Rowland and Grubic, Inc 829 Fairmont Road Morgantown, WV	2019	\$6,000,000	\$50,000
Arizona Infrastructure Project	Civil Site Design	Rizzo International	2020	NA	\$150,000
West Run Widening Morgantown, WV	Surveying and Geotechnical	Herbert, Rowland and Grubic (HRG)	2020	\$28,000,000	\$175,000

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
WVU Aquatic Center Morgantown, WV	West Virginia University	\$45,000,000	2018	YES
Maple Drive Extension	Mon General Hospital	\$1,800,000	2015	YES
WVUH Drug Rehab Center	WVU Hospitals 1 Medical Center Drive Morgantown, WV 26506	\$30,000,000	2018	YES
Southern WV Drilling	Department of Environmental Protection Office of the AML	\$650,000	2017- 2018	YES
University Park	Glenmark Holding, LLC	\$20,000,000	2013	YES
Harrison Power Station Landfill Const. Services Shinnston, WV	FirstEnergy Corporation 800 Cabin Hill Drive Greensburg, PA 15601	\$1,100,000	2015	YES
Multiple County Highway Segments Construction Inspection	ODOT Districts 2,4,6,9 and 12	NA	2010- 2016	YES

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Mark West Site Processig Plant Nobel County, OH	West Virginia DOT 1900 Kanawha Blvd. Charleston , WV 25305	\$396,000 Geotechnical Engineering & Construction Observation	2015	YES	Beaver Excavating PO Box 6059 Canton, OH 44706
I-79 New Exit 142	WVDOT	\$15,000,000 (Geotechnical Engineering, Construction Observation & Testing)	2016	YES	Mountaineer Contracting
ODOT 113000 FRA 71-17.76 Franklin County, OH	Ohio DOT		2011-2015	YES	Kokosing Construction Construction Inspection
Frostburg State University Dorm Frostburg, MD	Maryland University	\$28,000,000	2018	No	PJ Dick Corporation

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

For the past 30 years, CTL has successfully designed more than 200 AML projects. We have worked nationally and internationally on a variety of AML problem sites. We have developed unique solutions that have been applied to site development, AMD Treatment, Mine Subsidence Abatement, Mine Fires and Highwall Elimination. Routinely, CTL is involved with highwall and refuse pile stabilization, extinguishment and landslides.

20. The foregoing is a statement of facts.

Signature:  Title: Business Development

Printed Name: Joseph Stanley

Date: 3/10/2021

NOTE: THIS DOCUMENT WILL BECOME VOID AFTER DECEMBER 31 IN CALENDAR YEAR OF DATE HEREON.

AML and RELATED PROJECT EXPERIENCE MATRIX (2008 - 2021)

PROJECT	Exp. Basis C=Corp. P=Personal	Additional Info Provided in Section (s)	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional				
			Abandoned Surface Mine Reclamation	Abandoned 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	PATRICK GALLAGHER, PE	TIM DARRAH	JOSEPH STANLEY	CARL SELFIDGE	Millard Nicholson
MORGANTOWN ANDERSON HIGHWALLS (WV AML '12)	C			X	X	X				X							MP	MP	P		P	
SCHRAMM - GORDON -EAST FRANKLIN LANDSLIDES (MD AML '12)	C		X	X						X					X		MP	MP	P	P		
DOUGLAS AVENUE STORMWATER SYSTEM (MD AML '12)	C					X					X						MP					
FAIRMONT SUBSIDENCE (WV AML '12)	C	Profile		X					X		X				X		MP	MP	P	P	P	
DOUGLAS AVENUE LANDSLIDE (MD AML '12)	C			X		X			X		X				X		MP	MP	P	P	P	
LOWER CONSOL ROAD SUBSIDENCE (MD AML '11)	C		X	X					X		X				X		MP	MP	P	P	P	
BALD KNOB WATER SUPPLY STUDY (MD AML '12)	C					X					X						MP	MP				
SHENNS RUN PORTALS (WV AML '11)	C	Profile		X	X										X		MP	MP	P	P	P	
REAM REFUSE PILE (WV AML '10)	C	Profile	X					X									MP	MP	P			
PEE WEE HILL WATER SUPPLY (MD AML '10)	C										X						MP	MP				
TERRA HAUTE AIRPORT (WV AML '10)	C			X	X				X		X				X		MP	MP		P		
KENNEL MINE CLOSURE (MD AML '10)	C		X	X	X						X						MP	MP	P			
FROSTBURG NORTH CLOSURE (MD AML '10)	C		X	X	X						X						MP	MP	P			
PEE WEE HILL WATER FEASIBILITY (MD AML '10)	C										X						MP	MP		P		
WILLIAMS REFUSE PILE #2 (Private AML '09)	C		X			X	X			X	X	X	X	X	X							
PENINSULA HIGHWALLS (WV AML '09)	C	Profile	X	X		X			X		X				X		MP	MP	P	P	P	
ST. CLAIR PORTALS (WV AML '09)	C	Profile	X	X	X	X					X				X	X	MP	MP	P	P	P	
CHEAT NECK LANDSLIDE (WV AML '09)	C	Profile			X	X					X				X		MP	MP	P	P		
FARMINGTON UMC (WV DEP EMER. '09)	C								X		X						MP	MP		P		
MORNINGSIDE BAPTIST (WV DEP EMER. '09)	C								X		X						MP	MP		P		
COLLINS MINING (ODNR FOR. '09)	C		X								X						MP	MP	P			
FAIRVIEW WATER FEASIBILITY(WV AML '09)	C										X						MP	MP				
AARON'S RUN (MD AML '09)	C	Profile	X			X					X	X		X	X		MP	MP	P			
ECCLES SUBSIDENCE (WV AML '08)	C								X		X				X		MP	MP		P		
McARTHUR SUBSIDENCE (WV AML '08)	C								X						X		MP	MP		P		
TIOGA WATER FEASIBILITY (WV AML '08)	C										X						MP	MP				
McCOURT LANDSLIDE(ODNR FOR. '08)	C		X			X					X				X		MP	MP	P	P		
JONES TRUCKING (ODNR FOR. '08)	C		X								X						MP	MP	P			
MILLER MINING (ODNR FOR. '08)	C					X					X	X					MP	MP	P			
ZILMAN CLOSURE (MD AML '08)	C			X	X						X						MP	MP	P			
CALDONIA HILL SLOPE STABILITY (MD AML '08)	C		X												X		MP	MP				
WEST VIRGINIA BRIM (2005 - 2012) 42 Projects	C								X						X		MP	MP		P		
OMS/UA (2005 - 2010) 47 Projects	C								X						X		MP	MP		P		
(2005 - 2008) 20 Additional AML Projects for WV, MD, OH, PA	C		X	X	X				X		X	X	X		X		MP	MP		P		

* List whether project experience is corporate or personnel based or both.

** Use this area to provide specific sections or pages if needed for reference.

*** List Primary Design personnel and their functional capacity for the projects listed.

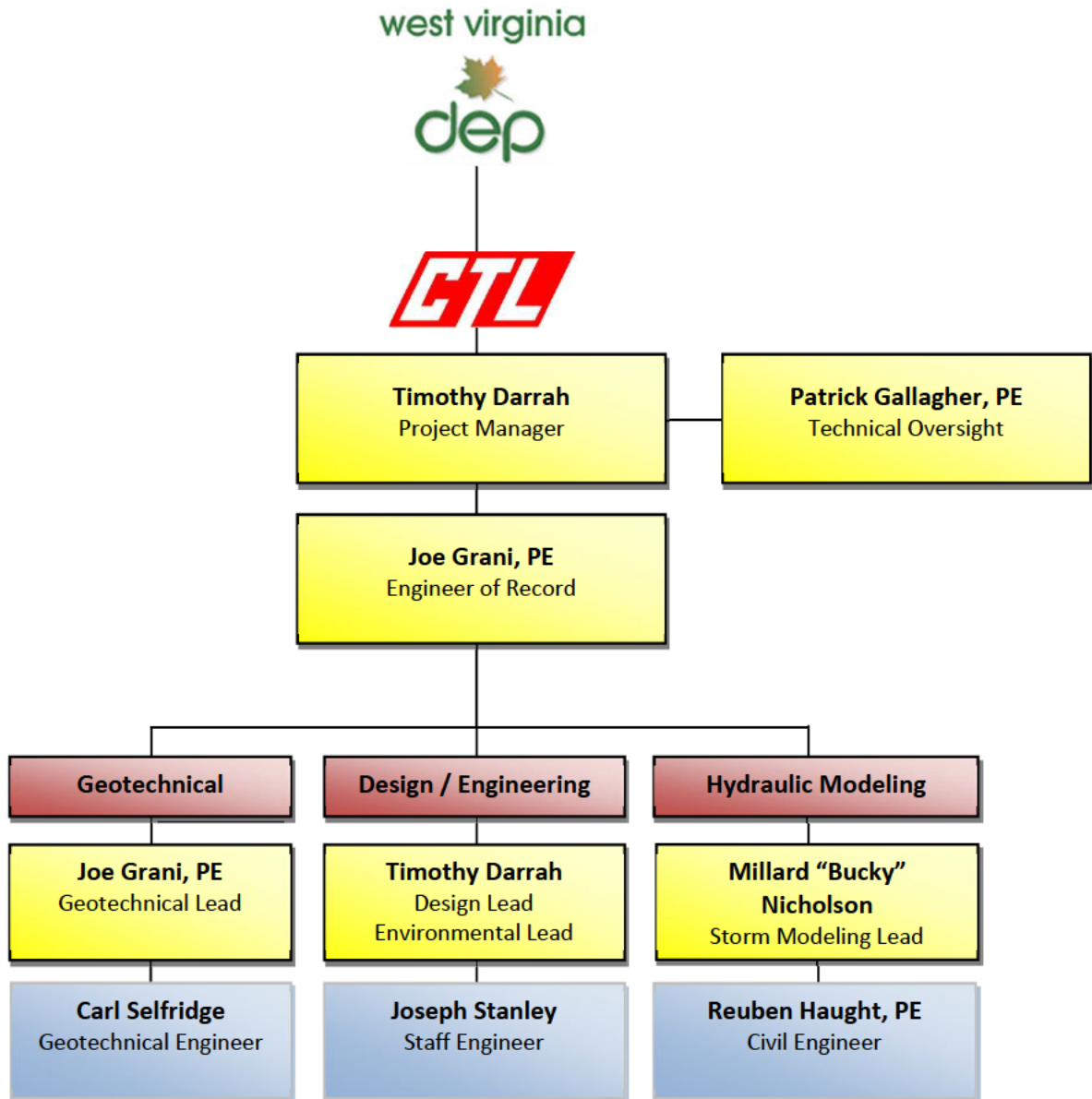
Attachment "B"



SECTION 5

ADDITIONAL INFORMATION

CTL TEAM ORGANIZATION



CTL Team Key Personnel / Experience**Tim Darrah | Civil/Site and Surveying Department Manager****Education:** B.S. Civil Engineering

Summary: Mr. Darrah will serve as the project manager for CTL. Mr. Darrah is presently responsible for department management for municipal engineering, 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 water, sewer and stormwater designs as well as residential, commercial developments and reclamation design projects. Office work includes site designs, hydrology calculations, quantity calculations, and various other forms of engineering related duties.

**Relevant Project Experience**

- Morgantown Anderson Portals & Highwall – Abandoned Mine Land Reclamation Design, Morgantown, West Virginia
- Hopewell Church Refuse and Acid Mine Drainage – Abandoned Mine Lands, Preston County, West Virginia
- Fairmont (Jackson Addition) Subsidence Project – Abandoned Mine Land Reclamation, Marion County, West Virginia
- Shinns Run Portals & Acid Mine Drainage – Abandoned Mine Lands Reclamation, Harrison County, West Virginia
- Ream Refuse Piles – Abandoned Mine Lands Reclamation, McDowell County, West Virginia
- Cheat Neck (Lenhart) Landslide, Monongalia County, West Virginia
- St. Clair Portals – Abandoned Mine Lands Reclamation, Monongalia County, West Virginia
- Morning Star Baptist Church Subsidence, Marion County, West Virginia
- Fairmont United Methodist Church-Subsidence Investigation & Mitigation, Fairmont, West Virginia
- Eccles and MacArthur Subsidence, Raleigh County, West Virginia
- Oakland Public Service District - Feasibility Study, Hancock County, West Virginia
- Peninsula Highwalls – Abandoned Mine Lands Reclamation, Monongalia County, West Virginia

Joseph Grani, P.E. | Geotechnical Engineer**Education:** M.S. Geotechnical Engineering, 1994; B.S. Civil Engineering, 1991

Summary of Experience: Mr. Grani has over 28 years of experience in the geotechnical field. He is responsible for the supervision of all subsurface exploration projects including landslides, foundation analyses and recommendations for roadways, bridges, sewers, buildings, towers, and tanks. He has also worked on several roadway rehabilitation projects where unsuitable soils were encountered. His innovative solutions to projects have included using geogrid to bridge soft soils and decrease required pavement thicknesses and the use of drying agents such as cement and lime to stabilize the soils. Mr. Grani was the Project Manager for various landslide projects including a 1,590-foot long plug pile retaining wall (HEN-110-0.66), and a 1,170-foot long plug pile retaining wall (ADA-125-13.30).



Also, Mr. Grani served as the Project Manager for the geotechnical explorations with varying level of design calculations on over 100 landslides in West Virginia and Ohio. In addition to landslides, in the past 6 years, Mr. Grani has served as Geotechnical Project Manager on over 50 other transportation projects including roadway realignments, as well as bridge and culvert replacements.

Patrick E. Gallagher, PE, CPGS | Technical Advisor**Education:** B.S. Civil Engineering, Minor in Geology

Summary: Mr. Gallagher will serve as technical oversight for the project. Projects successfully completed under Mr. Gallagher's direction include: Civil Site Design, Foundation Design, Stormwater Management, Waste Water Design, Roadway Design, Parking Lot Design, Geotechnical Investigations & Design, Site Stability Analyses, Mine Subsidence Evaluations, Failure Investigations and Environmental Investigations and Expert Witness Testimony. 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. His career began in Pittsburgh as a project geotechnical engineer with Orbital Engineering.

**Relevant Project Experience**

- ODOT 11-16 – Mine Voids Mitigation SR 2, Ottawa County, OH
- Step&J 11-12 – Eastern/Patriot Kopperston Refuse Impoundment, Wyoming County, WV
- LP Mineral 11-17 – Overhead Conveyor Yearly Inspection, Monongalia County, WV
- MDE 2012 – Douglas Avenue Landslide Repair Project – Task Order #9, Allegany County, MD
- WV DEP 12-13 – Fairmont (Jackson Addition) Subsidence Project (DEP 15594), Marion County, WV
- CONSOL 2013 – Annual Certification – Loveridge, Marion County, WV
- Mepco 13-14 – Seal Certification – Prime No. 1 Mine, Monongalia County, WV
- MDE 2014 – Shaft Firehall (TO#22), Frostburg, MD
- Island Creek 2015 – North Branch Annual Certifications, Grant County, WV
- MDE 14-15 – Aarons Run, Garrett County, MD
- AECOM 14-16 – I-79 Interchange Mine Subsidence and Grout Stabilization, Monongalia County, WV
- Beaver 2015 – Cowgill Waterline – Stability Analysis, Noble County, OH
- MDE 15-16 – Upper Georges Creek Stream Sealing Project Acid Mine Drainage, Allegany County, MD

Carl Selfridge | Geotechnical Engineer**Education:** B.S. Civil Engineering Technology

Summary: Mr. Selfridge will serve as a geotechnical engineer and provide geotechnical oversight and review for the project. 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.

**Relevant Project Experience**

- Eccles and MacArthur Subsidence-Subsidence Investigation & Mitigation. Raleigh County, W.V.
- Shinns Run Portals & AMD-AML Reclamation & Geotechnical Services. Harrison County, W.V.
- Tunnel Ridge Slurry Cell A-Piezometer Installations & Geotechnical Services. Ohio County, W.V.
- Pine Creek: Omar Landfill-Geotechnical Services. Logan County, W.V.
- WV State- wide Landfill-Geotechnical Services.
- Buzzard Pond Dam-Geotechnical Services. Marshall County, W.V.

Millard “Bucky” Nicholson | Civil Engineer**Education:** B.S. Civil Engineering

Summary: Mr. Nicholson will serve as the Stormwater Modeling Lead. Mr. Millard L. Nicholson Jr. is a Staff Engineer, Project Manager, and CAD Designer in the Morgantown, West Virginia office of CTL Engineering, Inc. His responsibilities include assisting in the planning and design of civil site design projects involving land planning and site development aspects, stormwater for MS4 communities and permitting. He is proficient in AutoCAD Civil 3D, HEC-RAS, TR-55, Hydraflow Hydrographs, Microsoft Word, and Microsoft Excel. His projects include commercial and residential properties, mine and energy sites, and, also, state, county, and local roads. Mr. Nicholson expertise in stormwater and hydraulic modeling are crucial for any project CTL completes. All site development designs are coordinated through Bucky and rely on his calculations and analyses for site specific specifications. Bucky has completed numerous studies and analyses in support of modification to FEMA Flood Maps via LOMR (Letter of Map Revision) process. He has modeled several sites using HEC-RAS to determine the actual floodplain limits. Bucky also is our lead for green design in stormwater, such as biocells and rain gardens. Ditch calculations and drainage areas are other examples of Bucky’s experience.

**Relevant Project Experience**

- LOMR and FEMA permits various locations in West Virginia
- Site Development stormwater design, various locations in West Virginia
- Hydraulic Modeling for Bridge Analysis, Monongalia County, West Virginia
- Fairmont Subsidence – Abandoned Mine Land Reclamation, Marion County, West Virginia
- Morgantown Anderson Highwalls – Abandoned Mine Land Reclamation Design, Monongalia County, West Virginia
- Shinns Run Portals – Abandoned Mine Land Reclamation & Portal Closure, Harrison County, West Virginia
- Williams Refuse Pile – Land Reclamation, Harrison County, West Virginia

James P. Gowarty | Construction Services Manager**Education:** B.S. Civil Engineering, 1990; A.S. Mechanical Engineering, 1990

Summary: Mr. Gowarty will serve as the Construction Services Lead for the Project. 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 the Fall of 2008. Mr. Gowarty is CTL’s USNRC Safety Officer.

Relevant Project Experience

- Water Treatment Plant Correctional Action Design-Geotechnical & Construction Services. Marion County, W.V.
- Fairmont Airport-Variou Services. Fairmont, W.V.
- Hazelton Federal Correctional Institute-Variou Services. Hazelton, W.V.
- U.S. Department of Energy Facility-Geotechnical, Construction, Surveying Services. Morgantown, W.V.
- I-81 Martinsburg to Marlow Interchange-Design Build. Martinsburg, W.V.
- Mileground Roundabout-Construction Services. Morgantown, W.V.
- Harrison Power Station CCB Landfill Phase V Step III, Harrison County, West Virginia
- Leer Mine Complex, Taylor County, West Virginia
- Tunnel Ridge Coal, Ohio County, West Virginia
- Refuse Testing, Ohio County, West Virginia
- Longview Conveyor, Monongalia County, West Virginia

Joseph Stanley | Civil Engineer**Education:** A.S. Drafting and Design

Summary of Experience: Mr. Joe Stanley is a Staff Engineer, Project Manager, and CAD Designer in the Morgantown, West Virginia office of CTL Engineering, Inc. His responsibilities include assisting in the planning and design of civil site design projects involving land planning and site development aspects. His projects vary from commercial and residential properties, mine and energy sites, and also includes state, county, and local roads.

**Relevant Project Experience**

- Fairmont Subsidence – Abandoned Mine Land Reclamation, Marion County, West Virginia
- Morgantown Anderson Highwalls – Abandoned Mine Land Reclamation Design, Monongalia County, West Virginia
- Shinns Run Portals – Abandoned Mine Land Reclamation & Portal Closure, Harrison County, West Virginia
- Hopewell Church Refuse – Abandoned Mine Drainage, Preston County, West Virginia
- Peninsula Highwalls – Abandoned Mine Land Reclamation, Monongalia County, West Virginia
- Cheat Neck Landslide, Monongalia County, West Virginia

Reuben Haught, P.E. | Civil Engineer**Education:** B.S. Civil Engineering Technology

Summary: Mr. Haught will provide engineering support to stormwater modeling and design for the project. Mr. Haught is a Staff Engineer and CAD Designer whose responsibilities include site design, site grading, stormwater design in and out of MS4 communities, permitting, retaining pond design, and impoundment stability inspections. He is proficient in AutoCAD Civil 3D, Hydraflow Hydrographs, Microsoft Word, and Microsoft Excel.

**Relevant Project Experience**

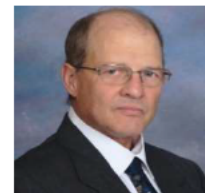
WVU Track and Aquatic Center in Morgantown, WV: Site Layout, Site Grading, Stormwater Design, Erosion and Sediment Permitting, Retaining Pond Design.

WVU Medicine Clinic in Fairmont, WV: Site Grading, Stormwater Design, Erosion and Sediment Permitting, Retaining Pond Design

Mon General Outpatient Facility in Fairmont, WV: Site Grading, Stormwater Design, Erosion and Sediment Permitting, Retaining Pond Design

Terrence Allison PS | Survey Lead**Education:** A.A.S. Surveying & Construction Technology, A.A.S. Computer Technology**Registration:** Licensed Surveyor in West Virginia and Ohio.

Summary: Mr. Allison has over 35 years of all types of surveying in Ohio, around the country and around the world. He is responsible for the supervision, coordination, reporting and consultation of land surveying and construction surveying related services. These responsibilities include reviewing of the scope of work, project plans and specifications prior to the start of work, assigning appropriate field crews and cad personnel to projects, reviewing all field and office work for the project and delivering the final plats, deeds and other surveying products requested. Mr. Allison has been the project manager on a variety of surveying projects that include, but are not limited to boundary and topographic surveys, municipal infrastructure and park surveys, oil and gas well plats and design surveys, FEMA LIDAR check surveys, cell towers, subdivisions, site developments, roads, bridges, sewers and other utilities, flood control studies, and construction layout for major buildings, roads, and bridges.





AML / Mine Related-Past Performance Matrix

Name	Location	Landslide	Subsidence	Highwalls	Refuse Piles	AMD	Mine Openings	Stream Design / Restorations	Construction Docs / Bidding
Anderson Highwall	Monongalia County, WV			X			X		X
Tars Hill Landslide	Jefferson County Ohio	X							X
Oakhill Landslide	Allegheny County Maryland	X							X
Riddles Run Landslide	Jefferson County, Ohio	X							X
Aarons Run Road Failure & Landslide	Garrett County, Maryland	X							X
Peninsula Highwall	Monongalia County, WV			X			X		X
St. Clair Portals	Monongalia County, WV			X	X	X	X	X	X
Aaron's Run	Garrett County, MD					X		X	X
George's Creek	Garrett County, MD							X	X
Shinn's Run Portals	Harrison County, WV					X	X		X
Williams Refuse Pile	Harrison County, WV				X	X			X
Maryland Deep Mine Closures	Allegheny & Garrett County, MD						X		X
Hopewell Church & AMD, WVDEP	Preston County, WV			X	X	X	X		X
Fairmont Subsidence	Fairmont, WV		X						X
Blackwater River AMD	Tucker County, WV					X			X
Taylor Creek Impoundment	Clay County, WV				X			X	X
Thomas Subsidence	Thomas, WV		X						X
Red Hollow Refuse Pile	Mc Comas, WV				X				X
Alderson Branch Refuse Pile	Raleigh County, WV				X				X
General Clay	Medina County, Ohio			X					X
Zerger Quarry	Noble County, Ohio			X					X

Past Project Experience

Project: Anderson Highwall

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Monongalia County, West Virginia

Project Description: The site consisted of dangerous highwalls, seven or more open or partially open portals and a dangerous scrap yard with potentially dangerous materials. CTL provided surveying, geotechnical investigation, civil design and construction bidding documents.



Project: Tars Hill Landslide

Client: ODNR – Division of Mineral Resource Management

Contact: AML Division

Phone: (614) 265-7079

Location: Jefferson County, Ohio

Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to repair and stabilize a landslide that has damaged a road and made it impassable. In addition, the hillside above the damaged road has become unstable and has several large slip areas. Abandoned deep mines, on both sides of the hollow, produce a significant number of ground water sources, which has added to the instability of the area.



Site design will begin on the collection and diversion of ground water, slope stability and road replacement once the final site investigation has been completed.

Project: Oakhill Landslide

Client: Maryland Department of Environment – Bureau of Mining

Contact: MBOM

Phone: (301) 689-8020

Location: Allegheny County, Maryland

Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to reclaim and stabilize a landslide encroaching on Georges Creek and reducing the flow area of the stream. The site had been backfilled with mine spoil and mine drainage was saturating the slope and creating the instability. Subsurface investigations were performed to determine soil characteristics, strata depths and water levels, using piezometers. Slope stability analyses were performed to determine the corrective actions required to stabilize the area. Surface and subsurface drainage structures, a toe key, and stream bank protection were designed to correct the instability problems and provide long term protection to the area.



Project: Riddles Run Landslide**Client:** ODNR – Division of Mineral Resource Management**Contact:** AML Division**Phone:** (614) 265-7079**Location:** Jefferson County, Ohio

Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to repair and stabilize a landslide that has damaged a road. Mine drainage of abandoned deep mine entries have saturated the soil causing it to slide down the slope toward the road. In addition, trees whose roots have been loosened by the movement of soils are in danger of sliding onto the roadway.

This 0.15-acre site was cleared and grubbed to install a sub-surface drain that will carry mine drainage away from the slip area.

This drain was constructed above and perpendicular to the slip. An additional surface drain was constructed and lined with rock to direct the flow from the subsurface drain to natural drainage.



Project: Oakhill Landslide**Client:** Maryland Department of Environment – Bureau of Mining**Contact:** MBOM**Phone:** (301) 689-8020**Location:** Garrett County, Maryland

Project Description: CTL Engineering of West Virginia Inc. provided site investigation, geotechnical drilling and engineering services and remediation design for this road failure which was caused by subsidence from abandoned deep mines. The mines were within 50 feet of the road surface and had active water discharge on the outslope of the roadway. The design required the excavation of all material to the deep mine, create and engineered embankment to the road level and move the roadway further into the uphill side of the existing roadway.

This design was selected as the most cost effective way to remediate the failure and utilize nearby material for the fill.



Project: Peninsula Highwall**Client:** WVDEP AML**Contact:** AML Division (Bridgeport Office)**Phone:** (304) 926-0499**Location:** Monongalia County, West Virginia

Project Description: 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. CTL Engineering of West Virginia, Inc. was retained to provide the design for the 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, and conditioning and revegetation of all disturbed areas.



Project: St. Clair Portals

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Monongalia County, West Virginia

Project Description: 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 mg/l. A 35' to 45' high refuse pile was in the middle of the site as well as scattered refuse throughout the site.



CTL Engineering of West Virginia, Inc. was retained to provide the design for excavation and wet seal of at least 17 mine portals, 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 site. CTL was also responsible for the backfill of highwalls using spoil material to original contour and conditioning and revegetation of all disturbed areas.

Project: Aaron's Run AMD Project

Client: Maryland Department of Environment – AML Division

Contact: Mike Garner

Phone: (301) 689-1440

Location: Garrett County, Maryland

Project Description: CTL Engineering of West Virginia, Inc. was retained to provide the design for multiple AMD treatment systems, 2 SAP cells, slurry doser, settling ponds, and natural wetlands. CTL also provided full site grading plans & drainage controls, access road & highway rated bridge, all state & federal permitting, and construction specifications and drawings.



Project: Upper Georges Creek Stream Sealing Project

Client: Maryland Department of Environment – AML Division

Contact: Tim Miller

Phone: (301) 689-1440

Location: Garrett County, Maryland

Project Description: CTL Engineering of West Virginia Inc. was retained to perform geologic and hydrologic assessments of the Upper Georges Creek Watershed to determine the extent and amount of stream flow lost to underground mines. CTL was responsible for conducting cooperative meetings with several stakeholders, reviewing existing reports and data on file at the AMLD office and based on available data along with possibly field measurements or drilling, develop plans to monitor streams to locate stream water loss zones. CTL then performed stream flow measurements within the study area to locate the areas of most significant water loss. Also, assessments to each tributary was completed as a part of the study. Upon completion of the study, CTL provided remediation options for sealing the streams.



Project: Shinns Run

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Harrison County, West Virginia

Project Description: CTL Engineering provided surveying, reclamation design and subsurface investigations for this Abandoned Mine Lands and Reclamation project. The surveying was completed in order to establish the areas that will be reclaimed and to locate utilities that were not apparent on the mapping provided for the job. CTL provided drilling services near the mine entries to determine the mine pool as well as near a bridge on site to determine the foundation depth and bearing capacity. CTL also developed sedimentation and erosion control plans for all disturbed sites.



Project: Williams Refuse Pile

Client: Targe Energy

Contact: Van Plocus

Phone: (412) 784-0750

Location: Harrison County, West Virginia

Project Description: CTL Engineering of West Virginia, Inc. was selected to perform engineering related services including environmental services, site design, and permitting for Targe Energy Reclamation, LLC during this *turnkey project*. This project was treated very similar to a complete surface mine application. The scope of services provided by CTL included a refuse removal plan, field reconnaissance, ash backfill design, permits preparation, and environmental sampling.



Project: Maryland Deep Mine Closures

Client: Maryland Department of Environment – AML Division

Contact: Tim Miller

Phone: (301) 689-1440

Location: Allegheny and Garrett County, Maryland

Project Description: CTL Engineering of West Virginia, Inc. was retained to provide the 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 included dry and wet mine seals, bat gates, regrading, drainage structures and site reclamation.



Project: Fairmont Subsidence

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Harrison County, West Virginia

Project Description: CTL Engineering provided surveying, reclamation design and subsurface investigations for this Abandoned Mine Lands and Reclamation project. The surveying was completed in order to establish the areas that will be reclaimed and to locate utilities that were not apparent on the mapping provided for the job. CTL provided drilling services near the mine entries to determine the mine pool as well as near a bridge on site to determine the foundation depth and bearing capacity. CTL also developed sedimentation and erosion control plans for all disturbed sites.



Project: Blackwater River

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Tucker County, West Virginia

Project Description: CTL Engineering of West Virginia, Inc. provided Engineering Design Services and construction documents to rehabilitate an existing concrete dam and install a rotating drum and limestone slurry treatment facility on the Blackwater River. This project was a cooperative project with West Virginia Department of Environmental Protection and West Virginia Division of Natural Resources. This project has been recognized by "Trout Unlimited" and was mentioned in the February 1993 issue of "Outdoor Life". The Blackwater River/Beaver Creek Treatment Project has successfully transformed a formally dead section of the Blackwater River into a high quality trout fishery and was recognized by the *US Dept of Interior, Office of Surface Mining, as the 1999 Appalachian Region Award Winner.*



Project: Taylor Creek Impoundment

Client: WVDEP AML

Contact: AML Division (Bridgeport Office)

Phone: (304) 926-0499

Location: Clay County, West Virginia

Project Description: CTL Engineering of West Virginia, Inc. provided Engineering Design Services and construction documents necessary for the reclamation and extinguishment of a 120-acre burning refuse pile. This project also included the subsurface investigation of burning material to depths of approximately 110 feet, and the design and reconstruction of approximately 3,400 feet of Taylor Creek. Several areas of slope instability required stabilization. Additionally, an existing 24-acre coal related impoundment had to be evaluated, dewatered and the area stabilized.



DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Joe Stanley Business Development Manager

(Name, Title)

Joe Stanley Business Development Manager

(Printed Name and Title)

1091 Chaplin Road, Morgantown, WV 26501

(Address)

304-292-1135 / 304296-9302

(Phone Number) / (Fax Number)

jstanley@ctleng.com

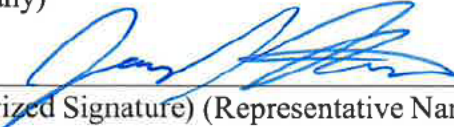
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

CTL Engineering of West Virginia, Inc.

(Company)



(Authorized Signature) (Representative Name, Title)

Joe Stanley Business Development Manager

(Printed Name and Title of Authorized Representative)

9-14-2021

(Date)

304-292-1135 / 304-296-9302

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: 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, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, 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.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: CTL Engineering of West Virginia, Inc.

Authorized Signature: [Signature] Date: 9-14-2021

State of West Virginia

County of Monongalia, to-wit:

Taken, subscribed, and sworn to before me this 14th day of September, 2021.

My Commission expires August 3, 2023.

AFFIX SEAL HERE



NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 01/19/2018)

West Virginia Ethics Commission
Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: CTL Engineering of WV, Inc. Address: 1091 Chaplin Road
Morgantown, WV 26501

Name of Authorized Agent: NA Address: NA

Contract Number: NA Contract Description: Design Group C

Governmental agency awarding contract: WVDEP

☒ Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (*attach additional pages if necessary*):

1. Subcontractors or other entities performing work or service under the Contract

☒ Check here if none, otherwise list entity/individual names below.

2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)

☒ Check here if none, otherwise list entity/individual names below.

3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

☒ Check here if none, otherwise list entity/individual names below.

Signature: [Signature] Date Signed: 9-16-2021

Notary Verification

State of West Virginia, County of Monongalia:

I, Joe Stanley, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 16th day of September, 2021.

[Signature]
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____



ABANDONED MINE LANDS (AML) CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining Reclamation and Enforcement (OSMRE) to determine if you are eligible to receive an AML contract. This requirement applies to contractors and their sub-contractors and can be found under OSMRE's regulations at 30 CFR 874.16. **NOTE:** This form must be signed and **dated within 30 days** of submission to be considered for a current bid.

Part A: General Information

Business Name: CTL Engineering of WV, Inc
Tax ID #: 55-063-183
Address: 1091 Chaplin Road
City, State, & Zip: Morgantown, WV 26501
Phone Number: 304-292-1135
Email Address: jstanley@ctleng.com

Part B: Obtain an Organizational Family Tree (OFT) from the Applicant Violator System (AVS)

If you plan to certify the existing AVS information or submit updates under Part C, you must include an OFT. To obtain an OFT, you may contact the AVS Office at 800-643-9748 or from the AVS website at: <https://avss.osmre.gov/>. Instructions for how to download an OFT from the AVS can be found at: <https://www.osmre.gov/programs/AVS/aml-instructions.pdf>.

Part C: Certifying and updating information in the AVS

Select only one of the following options, follow the instructions for that option, and sign and date below.

I, Joe Stanley, have express authority to certify that:
(Print Name)

- ☒ 1. Our business is in the AVS and is accurate, complete, and up-to-date. If you select this option, you must attach an Entity OFT from the AVS to this form. Do not complete Part D.
- ☐ 2. Our business is in the AVS but needs to be updated. If you select this option you must attach an Entity OFT from the AVS to this form. Use Part D to provide the missing or corrected information.
- ☐ 3. Our business is not in the AVS and needs to be added. Complete Part D.

9-14-2021
Date


Signature

Business Developer
Title



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All OFT's where the selected entity is listed as an entity or related entity

Entity Selected (138901) CTL Engineering Inc

Parent Entity	Relationship	Description	Related Entity	% Ownership	Begin Date	End Date
(247114) CTL Engineering Inc ESOP	Shareholder		(138901) CTL Engineering Inc		1/15/1999	
(138901) CTL Engineering Inc	Owner		(247019) CTL Engineering of Indiana Inc	100%	12/1/2007	
(138901) CTL Engineering Inc	President		(138899) C K Satyapriya		5/10/1986	
(138901) CTL Engineering Inc	Shareholder		(138899) C K Satyapriya	17%	7/1/1980	
(138901) CTL Engineering Inc	Chief Executive Officer		(138899) C K Satyapriya		1/15/1999	
(138901) CTL Engineering Inc	Chairman of the Board		(138899) C K Satyapriya		1/15/1999	
(138901) CTL Engineering Inc	Shareholder		(247019) CTL Engineering of Indiana Inc	80%	3/20/1998	1/15/1999
(138901) CTL Engineering Inc	Chairman of the Board		(138898) Asbjorn Kvammen Jr		11/23/1980	1/15/1999
(138901) CTL Engineering Inc	Chief Executive Officer		(138898) Asbjorn Kvammen Jr		11/23/1980	1/15/1999
(138901) CTL Engineering Inc	Shareholder		(138898) Asbjorn Kvammen Jr	73%	6/27/1980	1/15/1999
(138901) CTL Engineering Inc	Shareholder		(247019) CTL Engineering of Indiana Inc	29%	1/15/1999	12/1/2007