



# EXPRESSION OF INTEREST

To provide

## Professional Engineering Design Services

For the

## Repair and Rehabilitation of

## WVDNR State Fish Hatcheries Various Locations – West Virginia

DNR 213227

Prepared for the

West Virginia Department

of Natural Resources

Wildlife Resources Section

**CTL Engineering of West Virginia, Inc.**

733 Fairmont Road  
Morgantown, WV 26501

510 C Street  
South Charleston, WV 25303

07/01/13 09:50:21 AM  
West Virginia Purchasing Division

July 2, 2013

West Virginia Department of Natural Resources  
Wildlife Resources Section  
324 4<sup>th</sup> Avenue  
South Charleston, West Virginia 25303

Re: RFQ #DNR 213227  
Expression of Interest  
Professional Engineering Services – Repair and Rehabilitation of  
WVDNR State Fish Hatcheries at Various Locations

Gentlemen,

CTL Engineering of West Virginia, Inc. is very pleased to submit this proposal to provide environmental and design engineering and related services for the West Virginia Division of Natural Resources Wildlife Resources Section. With more than 80 years in the business, we feel our firm can provide the professionals and the facilities the State of West Virginia is looking for.

CTL Engineering has evolved into a recognized leader in the infrastructure design, environmental, and construction services fields. We offer the services necessary to provide a non-subcontracted, quality solution to support your program. Our capabilities include laboratory facilities, drilling rigs, surveying systems, design equipment, and most importantly, a team of qualified staff. CTL has 12 Professional Engineers, 5 of which are registered in West Virginia. Our in-house disciplines of professionals include: Civil Engineers, CAD Designers, Surveyors, Geologists, Hydrologists, and Biologists. Our professionals have completed numerous projects involving the evaluation and design of water/wastewater systems. CTL has also provided design services for a number of landfills all of which required services related to the installation of liners.

Our in-house ability reaches beyond simply being a 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 Engineering has examined the RFQ in detail and has provided the related experience of each member of our team that holds a management position or who will be a key asset in completing this project. CTL has also developed a project management plan, as found in this proposal, that will provide detail regarding our approach and methodologies that will be employed to complete this project in the most efficient and economically way feasible.

CTL Engineering of West Virginia, Inc. has been providing the state of West Virginia with professional engineering services for more than 30 years. With offices in Morgantown and South Charleston, CTL is very well situated to provide our services on a statewide scale. Our locations

also enable us to quickly respond to any emergencies that may arise while working on a specific project.

We sincerely appreciate the opportunity to submit this proposal to you for consideration. We hope this proposal and the contents herein provide a clear indication of our qualifications, experience, and capabilities related to your needs. We are eager to meet with the appropriate personnel to further demonstrate the quality of our operation. Should you have any questions or need additional information, please do not hesitate to contact our office.

Thank you for your consideration.

Respectfully Submitted,  
CIL Engineering of West Virginia, Inc.



Charles R. Harman  
Marketing Associate







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

# Solicitation

NUMBER

DNR213227

PAGE

1

ADDRESS CORRESPONDENCE TO ATTENTION OF

GUY NISBET  
304-558-8802

RFQ COPY

TYPE NAME/ADDRESS HERE

CTL Engineering of West Virginia, Inc.  
733 Fairmont Road  
Morgantown, WV 26501

DIVISION OF NATURAL RESOURCES  
WILDLIFE RESOURCES SECTION  
324 4TH AVENUE  
SOUTH CHARLESTON, WV  
25303 304-558-3397

DATE PRINTED

05/28/2013

BID OPENING DATE:

07/02/2013

BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LB		906-00-00-001		
PROFESSIONAL ENGINEER/ARCHITEC. SERVICES						
EXPRESSION OF INTEREST (EOI)						
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF NATURAL RESOURCES, WILDLIFE RESOURCES SECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES FOR THE REPAIR AND REHABILITATION OF WVDNR STATE FISH HATCHERIES AT VARIOUS LOCATIONS PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
***** THIS IS THE END OF RFQ DNR213227 ***** TOTAL:						

SIGNATURE

*Charles Han*

TELEPHONE

(304)-292-1135

DATE

July 1, 2013

TITLE

Marketing Associate

FEIN

55-063-1834

ADDRESS CHANGES TO BE NOTED ABOVE

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



RFQ No. DNR 213227STATE OF WEST VIRGINIA  
Purchasing Division**PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

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

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, 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 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: \_\_\_\_\_

Date: July 2, 2013State of West VirginiaCounty of Monongalia, to-wit:Taken, subscribed, and sworn to before me this 1<sup>st</sup> day of July, 20 13My Commission expires 1/17, 20 20

AFFIX SEAL HERE

NOTARY PUBLIC

Kathleen J. O'Brien

Purchasing Affidavit (Revised 07/01/2012)



**CERTIFICATION AND SIGNATURE PAGE**

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

CTL Engineering of West Virginia, Inc.

(Company)

  
(Authorized Signature)

Patrick E. Gallagher, President

(Representative Name, Title)

(304) 292-1135                      (304) 296-9302

(Phone Number)

(Fax Number)

July 1, 2013

(Date)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.:** DNR213227

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

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

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |   |  |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

CTL Engineering of West Virginia, Inc.  
 Company

  
 Authorized Signature

July 1, 2013  
 Date

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



# *Table of Contents*

## ***Statement of Interest & Qualifications to Provide Professional Engineering Services***

1. **PROJECT MANAGEMENT PLAN & CORPORATE HISTORY**
2. **CORPORATE CAPABILITIES**
3. **RESUMES OF KEY PERSONNEL**
4. **RELATED PROJECT EXPERIENCE PROFILES**
5. **PROFESSIONAL REFERENCES & CERTIFICATIONS**

## *Project Management Plan*

Our approach to the WVDNR Fish Hatchery Rehabilitation Project will be similar to other projects completed by CTL Engineering of West Virginia, Inc. involving a broad scope of requested services. The project management plans we have developed for this project are described below.

- The project manager will be solely responsible for the expedient and accurate completion of each phase of this project. He will also be responsible for insuring that CTL Engineering reaches all goals and objectives as described in Exhibit A in the RFP. The project manager will coordinate weekly or biweekly progress meetings in order to maintain a continual and open line of communication between all involved parties. These progress meetings will provide all parties involved with the opportunity to raise any questions, concerns, or comments concerning any phase of the project.
- CTL Engineering of West Virginia, Inc. has become very proficient and experienced with the permit acquisition process on a federal, state, and local scale. CTL continues to be directly involved in the permitting process for projects being completed in the oil and gas industry as well as the private development sector.
- Below you will find the 4 primary goals and objectives as listed in the RFP. CTL has provided our approach and methodologies that will be utilized in order to meet and exceed these goals and objectives.

## *Approach and Methodology for Meeting Goals and Objectives*

**Goal/Objective 1:** *Provide all necessary Architectural and Engineering Services for the design, construction, and implementation of the attached Exhibit A "WVDNR Wildlife Resources Section Hatchery Rehabilitation"*

### **CTLs Approach to Reach Goal:**

CTL Engineering of West Virginia, Inc. will provide all appropriate services required to complete tasks 1-6 listed in Exhibit A of the RFP.

**Task 1:** *Pond Liner Replacement*

**Location:** *Apple Grove State Fish Hatchery, Bowden State Fish Hatchery*

**Task 2:** *Rehabilitation of the Water Supply System*

**Location:** *Palestine State Fish Hatchery*

**Task 3:** *Installation of Composite Samplers and Flow Measurement Devices*

**Location:** *Bowden, Edray, Petersburg, Reeds Creek, and Ridge Hatcheries*

**Task 4:** *Water Supply Rehabilitation*

**Location:** *Edray, Petersburg, Ridge, Spring Run, and Tate Lohr Hatcheries*



**Task 5: Wastewater Treatment Systems**

**Location:** Bowden, Edray, and Petersburg Hatcheries

**Task 6: Bio-Filter Repair and Rehabilitation**

**Location:** Reeds Creek Hatchery

Tasks 1, 4, and 6 will be approached from a repair/rehabilitation standpoint. CTL will be implementing an ERDI (evaluate, recommend, design, and implement) methodology to complete these specific tasks. All work undertaken throughout all stages of this project will involve a Professional Engineer Licensed and Registered in the state of West Virginia. CTL will also provide the WVDNR with an Engineers Estimate of Costs for each task item in this project.

The first step will be to evaluate the existing condition of the appropriate pond liners, water supply, and bio-filters. During the evaluation CTL will examine the condition of the pertinent pond liners to determine the extent of damage and whether or not a repair or replacement is more appropriate. CTL will provide a similar evaluation for Task Items 4 and 6 to determine the extent of damage and identify the most appropriate course of action to pursue.

Once the evaluation phase is completed CTL will provide recommendations for design for the repair and/or replacement of any damaged material or systems observed. Pending approval and authorization to proceed, CTL will transition into the design phase. At this stage, CTL Engineering's professional design staff will provide design and/or specifications for the repair or the replacement of the said pond liners, water supply lines and spring boxes, and the bio-filter.

The final stage of the process will be implementation. At this stage, CTL Engineering will provide construction administration services to implement our design. These services will be covered in more detail in the sections below, however, they will include but are not limited to management of all aspects of the bidding process up to and including selection of a contractor, construction observation and monitoring services, materials testing, and project management.

Tasks 2, 3, and 5 will primarily involve the design and implementation of new water/wastewater systems as well as the design/oversight of the installation of composite wastewater samplers and flow measurement devices. CTL will use the ERDI methodology in these cases as well but with the mindset of designing new infrastructure rather than rehabilitation of aged infrastructure.

CTLs professional staff will begin by evaluating the current infrastructure in place, if in existence, to identify current flow capacities, causes of inefficiencies, and the required flow capacities to support the new systems. CTL will also evaluate the relevant stream ratings near hatcheries that will require a wastewater system. These ratings will determine the allowable discharge amounts and dictate the appropriate treatment activities. Once the evaluation is complete, CTL will provide design recommendations to the WVDNR. Once approval is obtained, CTL will begin the final design for each task. These designs will be completed by CTLs professional staff and will all involve oversight from a Professional Engineer Licensed and Registered in the state of West Virginia.

Once the designs have been completed, CTL will transition into the implementation phase. Similar to the implementation phase for tasks 1, 4, and 6 this phase will consist of construction administration services. These services will include but are not limited to management of all aspects of the bidding process up to and including selection of a contractor, construction observation and monitoring services, materials testing, and project management.



**Goal/Objective 2:** *Provide all necessary services to design the tasks described in this EOI in a manner that is consistent with the Division of Natural Resources' needs, objectives, current code, and budget.*

**CTLs Approach to Reach Goal:**

CTL Engineering of West Virginia, Inc. will assemble an in-house team of professionals whose objective will be meeting and exceeding the expectations for each aspect of this project. This team will be comprised of professional engineers with backgrounds in civil design, public water systems, environmental services, and construction services. The designated project manager will work in unison with this team, the WVDNR, and any other involved parties to make certain that all necessary services to complete the work described in the EOI are provided in a manner that is consistent with the Division of Natural Resources' needs, objectives, current code, and budget.

**Goal/Objective 3:** *Provide Construction Contract Administration Services that ensure that each task is constructed and functions as designed.*

**CTLs Approach to Reach Goal:**

CTL Engineering's project manager will ensure that all construction administration services necessary to guarantee that each task is constructed and functions as designed will be provided. These services typically include conducting a pre-construction conference, providing project team coordination, managing progress meetings and schedule tracking, reviewing change orders, and providing project closeout activities. CTL will also provide an on-site inspector, who will prepare/provide field inspection reports, construction documentation and construction observation services. The inspector will also observe, identify, and notify the construction administrator of any deficiencies and provide monthly quantities reports for payment preparation.

**Goal/Objective 4:** *Prepare bidding packages for each task in accordance with the procedures of the West Virginia Purchasing Division of the Administration Section.*

**CTLs Approach to Reach Goal:**

CTL Engineering's construction services department will provide the necessary services needed to prepare bidding packages for each task in accordance with the procedures of the West Virginia Purchasing Division of the Administration Section. These services will include the preparation of bid specifications, construction contract drawings and management of each phase of the bidding process. CTL will also review bids received and offer recommendations for contractor selection based upon contractor qualifications and their ability to complete the project efficiently and economically.

# CTL Engineering, Inc.

*An Employee Owned Company*

CTL Engineering, Inc. (CTL Engineering) is a full service consulting engineering, testing, inspection, and analytical services company. CTL Engineering, formerly known as Columbus Testing Laboratory, was established in 1927 as an independent engineering testing laboratory serving the local community. During the early years, our expertise focused mainly on soils, foundation engineering, and construction testing and inspection services.



*Business First Journal* regularly lists CTL Engineering, Inc. as one of the top engineering firms in Central Ohio in terms of employees and revenues generated. *The Engineering News-Record* ranked CTL Engineering, Inc. among top 500 architectural and engineering firms in the nation. CTL Engineering maintains a staff of over 200 employees, including registered engineers, architects, chemists, environmental scientists, geologists, hydrologists, wetland scientists and technicians.

Today, CTL Engineering regularly performs services throughout all of West Virginia and in a majority of Mid-Atlantic and Midwestern states.

## YEARS of SERVICE

*CTL Engineering Inc. has been in business since 1927 and has been providing quality engineering consulting services for over 77 years. CTL Engineering of West Virginia is celebrating its 21<sup>st</sup> anniversary this year.*

CTL Engineering, Inc. provides *consulting engineering services, testing and inspection services and offers a full-services analytical laboratory in-house.* CTL also provides Geotechnical Engineering, Environmental Engineering Civil Engineering, Mining Engineering, Construction Inspection and Testing, Nondestructive Testing and Inspection, Forensic Science, Accident Re-Construction, Roofing Consulting, Product Testing, Laboratories, Analytical Chemistry, Materials Testing, and Metallurgy Services.

## FOR MORE INFORMATION CONTACT US:

### CTL Engineering of West Virginia, Inc.

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

510 C Street  
S. Charleston, WV 25303  
(304) 746-1140 Phone  
(304) 746-1443 Fax

[www.ctleng.com](http://www.ctleng.com)





# CTL Engineering of West Virginia, Inc.

*An Employee Owned Company*

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

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

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

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

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

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

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

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







www.ctleng.com

# Professional Services

## Analytical Chemistry

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

## Computer Technology

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

## Construction Administration

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

## Construction Monitoring

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

## Environmental

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

## Existing Structure Evaluation

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

## Forensic Science

- Roofing Failures
- Building Failures

- Legal Testimony
- Product Liability

## Investigations

- Landslide, Soil and Foundation Failures
- Accident Reconstruction

## Geotechnical

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

## Ground Penetrating Radar

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

## Materials Testing

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

## Metallurgy

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

## Mining Engineering

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

## Nondestructive Testing & Inspection

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

## Pavement Management

- Budgeting
- Prioritization

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

## Product Testing

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

## Roofing Engineering & Building Envelope Services

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

## Roof Management System

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

## Security & Safety Systems

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

## Site/Civil Engineering

- Commercial Land Development
- Infrastructure Planning
- Residential/Community Planning

## Surveying & Mapping

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

## Telecommunication Services

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

## Office Locations

2860 Fisher Road  
**Columbus, OH 43204**  
Phone: (614) 276-8123  
Fax: (614) 276-6377

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

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

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

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

510 C Street  
**So. Charleston, WV 25303**  
Phone: (304) 746-1140  
Fax: (304) 746-1143

102 Commerce Dr.  
**Wapakoneta, OH 45895**  
Phone: (419) 738-1447  
Fax: (419) 738-7670

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

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

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

## Welding & Quality Control

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





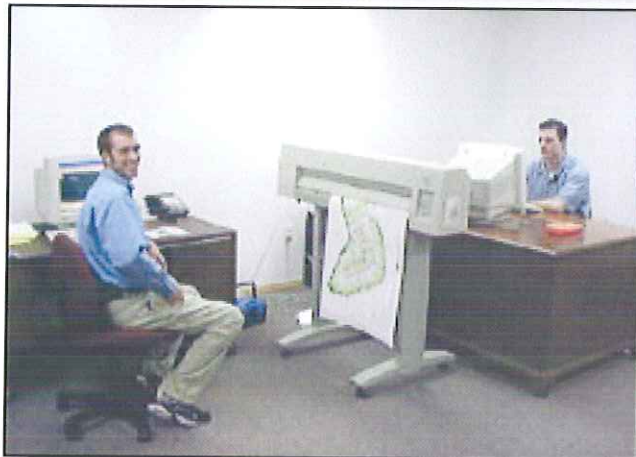
**C**TL Engineering's in-house staff provides a full array of services, with support from our Site/Civil Department, including mapping and surveying services.

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

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

**Services Include:**

- Commercial Land Development
- Residential / Community Planning
- Infrastructure Planning & Design
- Pavement Design and Management
- Conceptual Designs / Presentations
- Recreational Resort / Facility Planning
- Erosion & Sediment Control Design
- Storm Water Management Systems
- Preliminary Cost Estimates / Feasibility Analyses



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

CTL Engineering has the professional staff and the latest equipment to support (3) full survey crews, including a Global Positioning System (GPS), 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.

## Professional Services:

- Property Surveying and Boundary Determination
- Topographic Mapping Development
- Aerial Mapping Layout and Control
- Global Positioning System (GPS)
- Construction Layout
- Settlement Plate Monitoring
- Micrometer Leveling
- Flood Plain Determination and Certification
- Wetland Delineations

## Project Synopsis:

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





# Construction Administration & Daily On-Site Inspections



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

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

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

## CTL Engineering provides the following Construction Administration Services:

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

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

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





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

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

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

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

**We provide complete testing of the following:**

#### **Aggregates**

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

#### **Soils**

- Classification
- Compaction Parameters
- Permeability Tests

#### **Concrete**

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

#### **Asphalts**

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

#### **Clay-brick, Pipe & Tile**

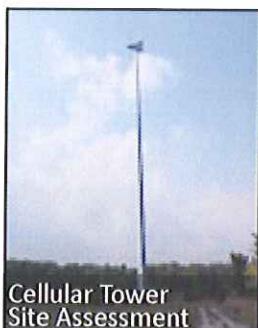
- Compressive Strength
- Absorption
- Freeze-thaw
- Efflorescence
- Dimensional Analysis
- Acid resistance

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





In-Situ Remediation



Cellular Tower  
Site Assessment



Underground Storage Tank  
Removal



Friable Asbestos  
Pipe Insulation



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

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

## Other Environmental Related Services:

### Real Estate Related Services

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

### Building Evaluation Services

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

### Ecological Services

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

### Underground Storage Tank Services

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

### Hydrogeologic Services

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

### Permitting/Compliance

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

### Waste Management Services

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

### Geophysical Surveys

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

### Transportation Related Services

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





**C**TL Engineering is adding value and services for their clients by growing into more ecologically based service lines. Architects, developers, engineers, governmental agencies, land trusts and others use CTL Engineering for an array of established services and also for the growing list of ecologically sound services to successfully complete their projects, while meeting the regulatory requirements. The delicate balance between society and the environment has our attention and we intend to advance along with the ever changing criteria that constitute sustainable development. CTL Engineering's qualified and experienced staff can assist in conducting field work, obtaining Permits with the Army Corp of Engineers or coordinating with the US Fish & Wildlife Service for Section 7 Consultation, etc.

### **Endangered Species**

CTL staff provides these services under the 1973 Endangered Species Act (ESA). A timely survey can avoid causing "harm" to Threatened & Endangered (T&E) species and result in cost and time savings by designing the project accordingly. Habitat Assessments for the following Species and more can be performed:

- Indiana Bat
- Small Whorled Pogonia
- Running Buffalo Clover
- Virginia Spiraea
- Eastern Massassuga

### **Ecological Related Services:**

- **Ecological Inventory**  
Knowing what exists in a natural area is the first step towards preserving natural habitat and managing it properly.
- **Stream/Wetland Determination**  
A cost effective approach is to first identify whether jurisdictional waters of the U.S., including wetlands may be a concern for the project.
- **Stream/Wetland Delineation**  
Studying and marking the boundaries of potentially jurisdictional waters to assess their extent and effect.
- **Permitting Services**  
Should the proposed project impact Streams or Wetlands, CTL staff can assist in the 404/401 permitting process, and help coordinate with State & Federal Agencies.
- **Compensatory Mitigation Services**  
CTL can assist in meeting the mitigation requirements by selecting a cost effective option, i.e., Off-site or On-site mitigation, Enhancement, Restoration, or Protection.
- **Mitigation Monitoring**  
Regulations require three to five years of monitoring for mitigated sites and CTL staff provides these services in an efficient and cost effective manner to assist meeting long term mitigation goals.
- **Stream Assessments**  
Is the proposed project crossing a stream? Is it Jurisdictional? Let CTL assist in navigating through the permitting process with the Army Corp of Engineers.





**C**TL Engineering is adding value and services for their clients by providing more cost effective strategies to their growing list of ecologically based service lines. Architects, developers, engineers, governmental agencies, land trusts and others use CTL Engineering for an array of established services to successfully complete their projects, while keeping costs in mind and meeting regulatory requirements.

The Preliminary Wetland Screening Service is a prudent first step in determining a sites affinity to contain wetlands & streams. This is valuable information to those needing quick information on potentially sensitive areas, but are not yet ready for wetland delineation or assessment reports. Screening may alert developers early in negotiations to potential concerns or may even eliminate the need for a costly delineation.

### Benefits

- A Wetland Screening may reveal if an on-site investigation (determination or delineation) is necessary.
- Gain knowledge about your site's available hydrological resources
- Quicker turn-around time for on-site investigations since most of the background research is done

### Limitations

- In order to make a wetland determination three factors must be evaluated: Hydrology, Soils, and Vegetation.
- Wetland Screenings are a means to view hydrology & soils using available geospatial data and should never replace a site visit by a nationally certified Professional Wetland Scientist (PWS).
- Wetland Screenings are not a guarantee that wetlands are present, they're only a tool to gauge a sites affinity to contain wetlands.

### Preliminary Wetland Screening Service:

- **Quick** – Results in 24 – 72 hours.
- **Cost Effective** – Call or visit our website
- **Information you need** – Our nationally certified Professional Wetland Scientists (PWS) can provide a package of information including a professional screening report explaining the findings, to assist in your early project planning efforts.

### What's included in a Wetland Screening package?

- **USGS Topographic Map**  
This map will identify established Jurisdictional water ways.
- **National Wetlands Inventory (NWI) map**  
Identifies areas that may need extra scrutiny
- **Aerial Photographs of your site**  
(if available)
- **FEMA Flood Plain map**  
Riparian wetlands tend to be located within flood plains.
- **Hydric Soils list**  
Hydric soils on your site may be an indication of wetlands.
- **NRCS Soil map**  
Determines areas where the wetland potential may be for your property
- **A site specific screening report** with a professional opinion & recommendation of your site

*CTL is EDGE Certified and is ODOT Pre-Qualified for Ecological Surveys, CE document preparation, ESA Screening, Phase I & II ESAs, Geotechnical Engineering Services, Geotechnical Testing Laboratory.*







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

### Drilling Services

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

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

### Analytical Laboratory

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

### Geotechnical Services:

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

### CTL Engineering routinely provides subsurface investigations on the following:

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

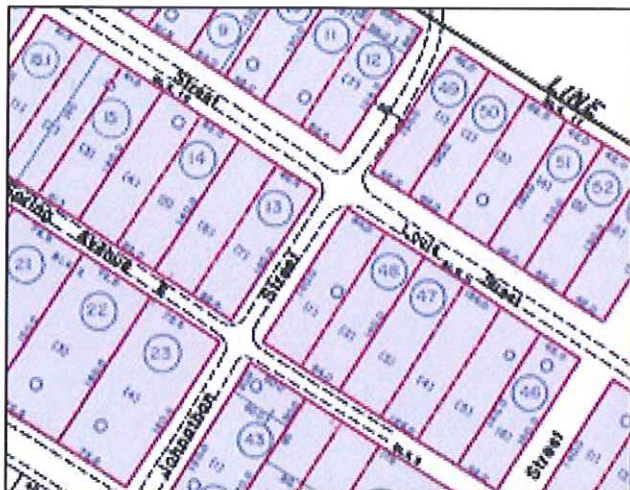


*Drilling in Rugged Terrain*



*Drilling on Flat Terrain*





**T**oo often sanitary and water utilities discover that paper maps and drawings are seriously outdated, incomplete, or even nonexistent. The problem is usually related to turn over of employees or engineers. The beginning of a utility database begins with GIS mapping of the infrastructure. Detailed base mapping can be created by scanning existing maps, importing CAD drawings, working from aerial photos, and surveying the location of infrastructure and utilities.

Every sector of a municipality can benefit from GIS mapping. CTL creates a phased mapping program that will reduce staff time, improve decision making, eliminate redundant data collection, improve record keeping and allow better asset management. CTL uses the latest version of ArcMap which allows importing of all current data formats to build a comprehensive database for the future. This database can be maintained and developed to enhance emergency response when public water/wastewater service is an issue. Also, planning and funding of new projects can be effectively prioritized.

CTL's GIS professionals use recent aerial photography and existing utility maps for base maps in order to direct surveying activities. We also add location specific supporting information from a variety of sources. Over time, CTL can create precise mapping which will allow your municipality to plan accordingly for the challenges and changes you will face.

**GIS services:**

- Global Positioning Systems (GPS) Field Inventory
- Geodatabase Design
- Data Creation Services
- GIS/IT Integration

**GIS Technology can benefit these industries:**

- Infrastructure
- Water, Wastewater
- Storm Water
- Oil and Gas
- Mining
- Wetlands
- Electric utility
- Transportation
- Land/Urban Planning
- Strategic Planning
- Public Safety
- Emergency Management
- Forestry
- Facilities Management
- Forensics

**Supporting Services:**

- Surveying/ Mapping
- Civil/ Site Design
- Environmental
- Geotechnical
- Construction Management
- Materials Testing
- Analytical Laboratory







## Construction Services: Structural Tests and Special Inspections



**C**TL has a solid working knowledge of the Ohio Building Code with respect to Chapter 17, Structural Tests and Special Inspections. We routinely perform these services on many building construction projects. We also communicate regularly with key officials of the Division of Industrial Compliance, Board of Building Standards and Bureau of Building Code Compliance regarding the specific implementation and enforcement requirements of the Code.

A project's construction phase requires reliable testing and inspection services. Building owners, architects, engineers, and contractors choose CTL Engineering for this work, knowing that we are accurate, dependable, and perform our services in a timely manner.

CTL Engineering examines existing structures to evaluate potential problems. Failed structures are analyzed to determine the cause and extent of damage. We evaluate structural integrity during initial construction and at regular intervals after completion. CTL Engineering routinely evaluates metal and concrete pipes.

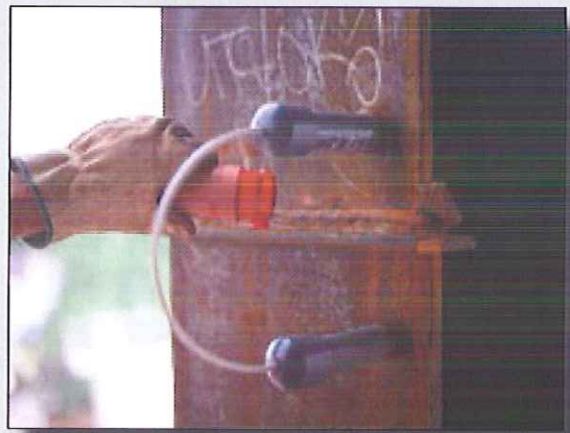
We perform audio/video surveys, sonic velocity testing, x-ray examinations, half-cell potential, and other destructive and nondestructive tests.

### CTL Engineering provides testing and inspection of the following:

- Sitework
- Foundations
- Air Barrier Testing
- Reinforced Concrete
- Structural Steel
- Masonry
- Sprayed-on Fire Proofing
- Roofing Systems
- Single & Multi-Story Building Structures
- Bituminous & Portland Cement Concrete Paving
- Highway and Airport Pavements
- Parking Garages & Bridges
- Water & Wastewater Treatment Facilities & Associated Piping Systems

### CTL Engineering's technicians maintain the following certifications and/or training:

- ACI (American Concrete Institute) Level I
- NICET Certification, Level I, II, III or IV
- Hazardous Materials Certification
- Confined Space Entry Training
- Radiation Safety Training
- WVDOT, ODOT, and NCDOT Certification





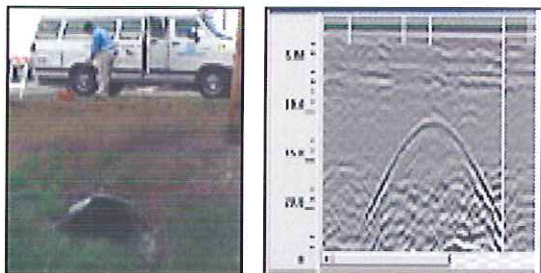


**G**round Penetrating RADAR is the best technology in non-destructive investigations of the Earth and concrete structures.

### How does GPR work?

- It uses pulsed Electromagnetic waves similar to aircraft radar.
- GPR sees changes in electrical properties such as conductivity.
- Best at seeing sharp contrasts (reflection).
- Measures Time to target, and back, as well as the strength of the return signal.
- Metal targets reflect 100% of signal.

### What does data look like?



2D Data 4' Steel Pipe - 10 ft Deep



4 Pipes in a Trench

### Uses:

- Utility Detection and Mapping
- Concrete Inspection and Evaluation
- Geology and Geophysics
- Highway Inspection
- Bridge Inspection
- Archeology
- Railroad Inspection
- Airport Inspection
- Forensics
- Precision Farming
- Environmental
- Architectural Facades Inspection
- Snow/Ice Thickness Measurement
- University Research
- Detecting Minerals/Mining

### Aspects of GPR:

- Frequencies from 16 MHz – 3 GHz
- Average radiated power is approximately 1% of cell phone transmitted power.
- Practical Limits
  - to 36 inches in concrete
  - to 30 feet deep in Earth
  - to 100 feet to detect water table and bedrock in Earth
  - to 1,000 feet in ice

### StructureScan Advantages

- Easily inspects floors, walls, decks, slabs, tunnels, balconies and garages.
- Accurately locates rebar, tension cables, conduits (PVC and metal), voids and measures slab thickness.
- Locates targets to depths of 18 inches.
- Thousands of square feet of concrete can be inspected in a day.
- Faster, safer and lower cost than radiography (X-ray).
- Only single-sided access needed.
- Fully FCC compliant.
- Built with pride in the USA.



# CTL Engineering of West Virginia, Inc.

**Patrick Gallagher, P.E.,  
CPGS, WV PS**  
President

**Trisha Miner  
Christina Flowers**  
Administrative Assistant

**Royden Loucks  
Charles Harman**  
Business Development

## Construction Services & Materials Laboratory

**James Gowarty, Jr.**  
Department Manager

**Benjamin G. Campbell**  
Department Manager  
(Charleston)

**Charles Huff**  
Department Supervisor

**Robert Adams**  
Lab Manager

**8 Field Technicians**

## Geotechnical Engineering/Drilling Services

**Carl Selfridge**  
Department Manager

**Charles Waltz, P.E.**  
Project Engineer

**3 Drilling Rigs  
& Drill Crews**

## Civil Site Design / Surveying Services

**Tim Darrah**  
Department Manager

**David Moore, P.E.  
Greg Foreman, P.E.  
Joseph Stanley  
Ruben Mick**  
Project Engineers

**Bucky Nicholson**  
Staff Engineer

**Danny Wolfe  
Hilary Gale  
Julie Frazee**  
CAD Designers

**J B Chambers**  
Survey Party Chief

**4 Survey Crews**

## Environmental Engineering Services

**Ronald Cross, P.E.**  
Department Manager

**Mark Wigal  
Corry Thalhofer  
Ben Farkas-Worthy**  
Environmentalists

## Natural Stream Engineering

**Tim Darrah**  
ROSGEN NSD



**PATRICK E. GALLAGHER, P.E., C.P.G.S.***President***Expertise:**

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

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

**Education**

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

**Professional Registration / Certifications**

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

**Career Experience:**

CTL Engineering, Inc. — 30 years  
Other — 7 years

**Project Experience:****Water/Wastewater*****Water Treatment Facility Expansion; Morgantown, West Virginia***

- CTL Engineering of West Virginia, Inc. provided surveying and geotechnical services for the expansion of the Morgantown Utility Board Water Treatment Facility located in Morgantown, West Virginia

***Palisades Place; Morgantown, West Virginia***

- For this project CTL Engineering of West Virginia, Inc. was responsible for providing surveying, design engineering, and construction services in support of the installation of a waste water treatment plant

***City of Fairmont; Fairmont, West Virginia***

- CTL Engineering of West Virginia, Inc. provided various engineering services for this water treatment plant corrective action design project. Some of these services included a geotechnical investigation and recommendations as well as various design services



*Client*

*Teamwork*

*Leadership*

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

*President*

### *Charles Pointe Storm Water Ponds; Bridgeport, West Virginia*

- Project Executive for this work in which CTL was responsible for completing a variety of testing and inspection services for the development of the above storm water ponds

### Education

#### *WVU Wise Library*

- Project Manager/Engineer providing geotechnical oversight of investigations for the building foundation systems on the construction of a new six (6) story library, which included the design of an extensive tie-back/soldier pile wall system

#### *WVU Life Sciences Building*

- Project Manager/Engineer providing geotechnical oversight of the drilling and Investigations as well as recommendations needed for the construction of the Life Sciences Building

### Healthcare

#### *Mon General Hospital Retaining Wall; Morgantown, West Virginia*

- Project Manager responsible for assessing and making recommendations for reconstruction of a collapsed retaining wall

#### *WVU Eye Institute*

- Project Manager/Engineer providing geotechnical oversight for the geotechnical investigations and foundation recommendations performed for this \$5 M dollar patient care facility

#### *Physicians Office Center, WVU Hospital*

- Project Engineer responsible for the oversight of the geotechnical drilling and site investigations for this project

### Power Facilities

#### *Harrison Power Station Cell A Repair; Haywood, West Virginia*

- CTL provided a variety of services throughout the duration of this project including but not limited to testing and inspection services including site work, concrete, aggregate testing, compaction, and cylinders for the repair of a sedimentation pond
- CTL also provided quality assurance, certifications, and as built drawings for a large landfill expansion on site

### Building Development

#### *Federal Corrections Institution - Hazelton; Hazelton, West Virginia*

- As president of CTL Engineering, Mr. Gallagher was directly involved in this project which included testing and inspection services of concrete, bituminous concrete, foundations, aggregate testing, compaction, site work, and cylinders



*Client*

*Teamwork*

*Leadership*

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

*President*

### *Hazelton Prison – Phase II*

- Under Phase II of the Hazelton Prison project CTL performed a subsurface geotechnical investigation to support the design and construction of numerous additions to the prison

### *Grand Central Apartments; Morgantown, West Virginia*

- For this project, CTL provided a subsurface geotechnical investigation consisting of eight test borings and recommendations in support of the design and construction of new apartment buildings

### *RDR Lakeview Villas; Morgantown, West Virginia*

- Project Manager/Project Engineer responsible for providing structural design services consisting of an onsite review and preconstruction structural drawing evaluation for the proposed townhouse development

### *Cheat Road, LLC Development; Morgantown, West Virginia*

- Project Manager responsible for providing engineering related planning services including site design and layout for a low rise shopping center

### *Transportation*

#### *I-81 North Martinsburg to Marlowe Interchange – Design Build; Martinsburg, West Virginia*

- Project Manager/Senior Engineer for this project which consisted of a subsurface geotechnical investigation, slope stability analysis, laboratory testing, and foundation recommendations for this interchange

#### *PENNDOT, Open-End Contract, Pennsylvania*

- Project Manager/Engineer responsible for overseeing geotechnical investigations for 30 separate transportation projects

#### *WVDOH Open-End Contract*

- Project Manager/Engineer providing geotechnical support to 40 separate projects including new roads and landslides

### *Other*

#### *Cheat Neck Landslide; Monongalia County, West Virginia*

- CTL Engineering was responsible for providing the client with services comprising of surveying and reconnaissance, subsurface investigation, design drawings and specifications in order to redesign the slope where the failure took place

#### *Esther Clark Landslide; Wetzel County, West Virginia*

- Project Manager for this job which included inspection services throughout the remediation of a slide near a fracking well

#### *Williams Refuse Area #2; Enterprise, West Virginia*

- CTL provided the following services for this turnkey project: refuse removal plan, field reconnaissance, ash backfill design, permits preparation, and environmental sampling





*Client*

*Teamwork*

*Leadership*

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

*President*

### ***Farmington United Methodist Church/WVDEP AML; Farmington, West Virginia***

- CTL conducted a subsurface geotechnical investigation to determine the root cause of the subsidence occurring at the above church
- Upon discovering an open mine void, CTL presented the WVDEP with recommendations going forward

### ***Mine Seal Certification; Morgantown, West Virginia***

- For this project CTL conducted the necessary inspection work required to provide the client with Mine Seal Certifications

### ***Eccles and MacArthur Subsidence; Beckley, West Virginia***

- CTL provided surveying services and completed a subsurface geotechnical investigation for this project in order to determine whether or not a crack in the related parking lot was the result of mine subsidence

*Client*

*Teamwork*

*Leadership*

## TIMOTHY A. DARRAH

*Civil Site and Survey Department Manager*

### Expertise:

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

### Education

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

### Professional Registration / Certifications

- West Virginia Dept. of Highways Compaction Technician
- West Virginia Department of Highways Concrete Technician
- Fundamental Land Surveyor (FLS)

### Career Experience:

CTL Engineering, Inc. — 22 years

### Project Experience:

#### Healthcare

##### *WVU Animal Facility Annex; Morgantown, West Virginia*

- For this project CTL engineering provided geotechnical and surveying services to document and evaluate site conditions for the proposed Animal Facility Annex addition at the current WVU Hospital Facilities

#### Power Plants

##### *Conveyor Grading Redesign; Monongalia County, West Virginia*

- Project Manager responsible for conducting reconnaissance, surveying, developing a grading plan, and performing slope stability analysis for the Longview Power Plant conveyor grading redesign

##### *Harrison Power Station Cell A Repair; Haywood, West Virginia*

- CTL provided a variety of services throughout the duration of this project including but not limited to testing and inspection, surveying, and design services
- CTL also provided quality assurance, certifications, and as built drawings for a large landfill expansion on site





Client

Teamwork

Leadership

## TIMOTHY A. DARRAH

*Civil Site and Survey Department Manager*

### Water/Wastewater

#### *Palisades Place; Morgantown, West Virginia*

- Department Manager for this project which CTL Engineering provided surveying, design engineering, and construction services in support of the installation of a waste water treatment plant

#### *Doresy Knob Public Service District; Morgantown, West Virginia*

- Under Mr. Darrah's direction, CTL Engineering of West Virginia, Inc. provided an As Built Survey for this project

#### *Monongahela Soil Conservation District; Farmington, West Virginia*

- As Project Manager, Mr. Darrah was responsible for overseeing all services provided for this culvert design project including but not limited to dredging studies, design work and surveying

#### *Ridgepoint, LLC; Morgantown, West Virginia*

- For this project Mr. Darrah and CTL Engineering of West Virginia, Inc. provided design and surveying services for the client
- The surveying services included a stake out of a road, waterline, catch basins, and as-built drawings of the water lines involved in the project

#### *Morgantown Utility Board; Morgantown, West Virginia*

- As Project Manager, Mr. Darrah was responsible for overseeing the timely completion of various surveying services provided for the Osage water tank property

#### *Farmington Culvert Design; Farmington, West Virginia*

- Project Manager whose work consisted of providing dredging studies and design as well as surveying, platting, mapping and flood plain studies for the installation of a box culvert extension in Little Laurel Run in Farmington, WV

### Building Development

#### *Hornbeck Road Development; Morgantown, West Virginia*

- Project Manager responsible for overseeing the completion of land surveying services as well as a subsurface geotechnical investigation for a number of proposed residential building lots

#### *Beitzel Development Parcel 6 at Mylan Business Park; Morgantown, West Virginia*

- Project Manager responsible for providing civil site design including grading plans, utility locations outside the structures, stormwater design for parking area, and a subsurface geotechnical investigation for this proposed development

#### *Mountain View Apartments—Phase 1 & 2 ALTA Survey; Monongalia County, West Virginia*

- Project Manager responsible for completing Phase I and Phase II ALTA Surveys for Mountain View Apartments



Client

Teamwork

Leadership

## TIMOTHY A. DARRAH

*Civil Site and Survey Department Manager*

### *West Run Development Complex; Morgantown, West Virginia*

- Project Manager responsible for overseeing a geotechnical investigation including laboratory analysis and recommendations as well as limited environmental services for this proposed housing development

### *Clinton Hill Developments; Morgantown, West Virginia*

- CTL Engineering provided surveying and geotechnical services in support of the Clinton Hills Developments

### *District Apartments—ALTA Surveying; Morgantown, West Virginia*

- Project Manager responsible for providing oversight of ALTA Surveying for the District Apartment complex

### *Mountaineer Property Company—Surveying; Morgantown, West Virginia*

- Project Manager in charge of providing topographic surveying and mapping services

### *Suburban Extended Stay Hotel; Morgantown, West Virginia*

- Project Manager for this assignment which comprised of design build preparation services including compaction testing and retaining wall design

### Other

### *Shinns Run Portals & AMD; Harrison County, West Virginia*

- Project Manager responsible for providing surveying, reclamation design, and subsurface investigations for this WVDEP project

### *Fairmont Subsidence Project; Fairmont, West Virginia*

- Project Manager responsible for providing and overseeing surveying, reclamation design, and subsurface investigations for this WVDEP AML project

### *Farmington Culvert Design; Farmington, West Virginia*

- Project Manager whose work consisted of providing dredging studies and design as well as surveying, platting, mapping and flood plain studies for the installation of a box culvert extension in Little Laurel Run in Farmington, WV

### *Cheat Neck Landslide; Monongalia County, West Virginia*

- Project Manager responsible for providing the client with services including surveying and reconnaissance, subsurface investigation, design drawings and specifications in order to redesign the slope where the failure took place

### *McDowell County Ream Refuse Piles; McDowell County, West Virginia*

- Project Manager for this ream refuse pile project consisting of surveying and reconnaissance, a subsurface investigation and testing, laboratory testing, design drawings, and slope stability analyses





Client

Teamwork

Leadership

## TIMOTHY A. DARRAH

*Civil Site and Survey Department Manager*

### *St. Clair Portals; Monongalia County, West Virginia*

- Project Manager for this AML project which consisted of the construction of wet mine seals in seventeen mine entries, regrading and covering coal refuse, backfilling highwalls, removing impoundments, and upgrading a stream

### *Scotts Run Settlement House; Morgantown, West Virginia*

- Project Manager for this assignment in which CTL provided surveying services for a water line and an access road

### *MedMark LLC—Phase I ESA & Asbestos Inspection; Marion County, West Virginia*

- Project Manager responsible for providing and overseeing a Phase I Environmental Site Assessment as well as an asbestos inspection quantifying and qualifying all ACM in the structure

### *Morning Star Baptist Church Subsidence--AML; Marion County, West Virginia*

- Project Manager responsible for providing engineering services including surveying, mapping, and reconnaissance, subsurface investigation and testing, as well as Preliminary Mine Subsidence Evaluation Report for the above church which has been adversely affected by mine subsidence

### *Farmington United Methodist Church/WVDEP AML; Farmington, West Virginia*

- CTL conducted a subsurface geotechnical investigation to determine the root cause of the subsidence occurring at the above church
- Upon discovering an open mine void, CTL presented the WVDEP with recommendations going forward

### *Eccles and MacArthur Subsidence; Beckley, West Virginia*

- Project Manager for this assignment in which CTL provided surveying services and completed a subsurface geotechnical investigation in order to determine whether or not a crack in the related parking lot was the result of mine subsidence

### *Mylan Park - Various Designs; Morgantown, West Virginia*

- Project Manager responsible for providing construction management services for various designs at Mylan Park

### *North American Drillers; Monongalia County, West Virginia*

- Project Manager responsible for providing the client with surveying and mapping, erosion and sedimentation control plans, and site design and layout services



*Client*

*Teamwork*

*Leadership*

## **JAMES P. GOWARTY, JR.**

*Construction Services Manager*

### **Expertise:**

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

Mr. Gowarty has served as CTL Engineering's Corporate Safety Officer since fall of 2008 and is currently CTL's USNRC Safety Officer.

### **Education**

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

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

### **Professional Registration / Certifications**

#### **Safety:**

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

#### **Other:**

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

### **Career Experience:**

CTL Engineering, Inc. — 21 years

### **Project Experience:**

#### **Power Facilities**

- Harrison Power Station Phase V Step 1, Harrison County, WV
- Tunnel Ridge Coal, Wellsburg, WV
- ICG Tygart #1, Grafton, WV





*Client*

*Teamwork*

*Leadership*

## **JAMES P. GOWARTY, JR.**

*Construction Services Manager*

- First Energy Phase V Step II Landfill, Harrison County, WV
- Harrison Power Station Slope Stability Assessment, Harrison County, WV
- Hatfield Power Station, Masontown, PA
- Albright Power Station, Albright, WV
- Pleasants Power Station Landfill, Willow Island, WV
- Blackoak Substation, Allegany County, WV
- Fort Martin Power Station, Morgantown, WV
- Linden Substation, Front Royal, VA
- Malden Substation, California, PA
- Graymont Substation, Pleasant Gap, PA
- Grable Substation, Washington, PA
- Meadowbrook Substation, Stephens City, VA
- Maidstone Substation, Berkeley County, WV
- Lamberton Substation, Ellenboro, WV
- Lake Lynn Power Station, Lake Lynn, PA
- Mitchell Substation, Monongahela, WV
- Fayette Energy Facility, Masontown, PA
- Warrior Run Company, Generation Plant, Cumberland, MD
- Harrison Power Station, Haywood, WV
- John Amos Power Plant, Nitro, WV
- Grant Town Power Plant, Marion County, WV

### **Water/Wastewater**

- Water Treatment Plant Corrective Action Design, Fairmont, WV
- Water Treatment Facility Expansion, Morgantown, WV
- Cherry Wood, Morgantown, WV
- Olive Water Tank, Harrison County, WV
- Hornbeck Road Development, Morgantown, WV
- Clarksburg Water Plant, Clarksburg, WV

### **Transportation**

- I-81 North Martinsburg to Marlowe Interchange, Martinsburg, WV
- Monongahela Blvd, Morgantown, WV
- Fairmont Airport, Fairmont, WV
- Benedum Airport, Bridgeport, WV
- Route 7, Morgantown, WV



*Client*

*Teamwork*

*Leadership*

## JAMES P. GOWARTY, JR.

*Construction Services Manager*

- Route 7, Morgantown, WV
- Various Projects for WVDOT, WV
- Colonial Drive Roadway Evaluation, Waynesburg, PA
- I-79 Paving, Morgantown, WV
- Clarksburg Streetscape, Clarksburg, WV
- High Street Streetscape, Morgantown, WV
- Mont Chateau Road Paving, Cheat Lake, WV
- Route 50 Paving, Preston County, WV
- Route 72 Paving, Preston County, WV
- WVU Research Park Roadway, Morgantown, WV
- Route 250 Gradations, Fairmont, WV
- Hunter Lane Paving Project, Morgantown, WV
- WVU Route 705, Morgantown, WV
- Route 20 Utility Compaction, Pineville, WV
- Osage Bridge S331-19-01.98, Morgantown, WV
- WVDOT Bridge Replacement, Grant Town, WV
- Mon Fayette Expressway, Cheat Lake, WV
- Morgantown Airport, Morgantown, WV
- Marshall County Airport, Moundsville, WV
- Blue Sulphur Bridge, Ona, West Virginia

### Education

- WVU Health Sciences Center Animal Facility Annex, Morgantown, WV
- Alderson-Broaddus College Football Stadium Survey, Barbour County, WV
- South Jefferson High School, Charles Town, WV
- Waynesburg College Eberly Hall, Waynesburg, PA
- Waynesburg College Benedum Hall, Waynesburg, PA
- Petrograph West Taylor Elementary School, Flemington, WV
- Clay Battelle School, Blacksville, WV
- WVU Wise Library, Morgantown, WV
- WVU Life Sciences Building, Morgantown, WV
- WVU Student Recreation Facility, Morgantown, WV
- Suncrest Junior High School Construction Project, Morgantown, West Virginia



*Client*

*Teamwork*

*Leadership*

## JAMES P. GOWARTY, JR.

*Construction Services Manager*

### Building Development

- Charles Pointe, Bridgeport, WV
- Kohl's Shopping Center, Pavement Coring, Clarksburg, WV
- Super Wal-Mart, Fairmont, WV
- Eastpointe Commercial Development, Harrison County, WV
- Avery Church, Morgantown, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Rite Aid, Westover, WV
- FedEx Ground Facility, Clarksburg, WV
- Centra Bank, Westover, WV
- Bridgeport Development, Bridgeport, WV
- Little Caesars, Washington, PA
- GA Brown Hi Tech Building, Fairmont, WV
- Super Wal-Mart, Kingwood, WV
- Japanese Steakhouse, Morgantown, WV
- United Federal Credit Union, Mount Pleasant, PA
- Kroger, Suncrest Town Center, Morgantown, WV
- Hampshire County Judicial Center, Romney, WV
- Evergreen Technology Park, Waynesburg, PA
- Beckley Federal Courthouse, Beckley, WV
- Glenmark Centre, Morgantown, WV
- Newpointe Center, Clarksburg, WV

Client

Teamwork

Leadership

## RONALD E. CROSS, PE *Environmental Services Department Manager*

---

### Expertise:

As Environmental Department Manager for CTL Engineering of WV, Inc., Mr. Cross is responsible for overall management of the environmental department, allocating department resources to ensure quality work is completed on time and on budget. His current responsibilities include technical review of reports and assisting with permitting and site investigations.

### Education

1989, B.S., Chemical Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania

### Professional Registration / Certifications

- Registered Professional Engineer — PA #056894E; OH #71092

### Career Experience:

CTL Engineering, Inc. — 2013-Present

Cardinal Resources, LLC — 7 years

The RETEC Group, Inc. — 14 years

### Project Experience:

#### Environmental

##### *Confidential Client, Multiple Locations Globally*

- Mr. Cross served as project engineer for site investigations; remediation systems design, installation, start-up, and troubleshooting; remediation system permitting; wastewater treatment plant evaluation and troubleshooting; and monitored natural attenuation sampling and reporting. These sites, located throughout the United States, Brazil, China, and India, were contaminated with chlorinated and non-chlorinated solvents and siloxanes.

##### *Multiple Clients Throughout the United States*

- Mr. Cross provided engineering support to the investigation and remediation of former Manufactured Gas Plant sites, including soil and water treatability testing, site investigations, feasibility studies, site remediation, and site management cost estimation (using decision tree analysis and Monte Carlo techniques) for litigation support.

#### Water/Wastewater

##### *City of Steubenville, Steubenville, Ohio*

- Mr. Cross served as construction site supervisor for the remediation of a raw water pumping station to meet design criteria. The scope of work included the installation of a new raw water pump, upgrades to the existing raw water pumps to meet flow/head requirements, and upgrades to the SCADA controls system. The work was completed on a fast track with no interruption of service from the city's only raw water pumping station.





*Client*

*Teamwork*

*Leadership*

## **RONALD E. CROSS, PE**     *Environmental Services Department Manager*

---

### *Multiple Clients Throughout the United States*

- Mr. Cross completed numerous bench and pilot scale treatability tests of physical, chemical, and biological process, process designs for several activated carbon-based wastewater treatment systems, and start-up and troubleshooting of activated sludge biological treatment systems.

### *Cardinal Resources LLC, Pittsburgh, PA*

- Mr. Cross was lead engineer for the development and testing of a patented water treatment system named Red Bird. The Red Bird systems were designed to provide drinking water to third-world communities. They were self-contained, operated solely on solar power but could be run on grid power or a generator if available, and required little operation and maintenance.

### **Mining**

#### *Beazer East, Multiple Locations, PA*

- Mr. Cross served as systems engineer manager, providing engineering support to the operation and maintenance of acid mine drainage collection and treatment systems. His duties included evaluating treatment processes and making recommendations to improve long-term operability and reduce operation and maintenance costs, updating the operation and maintenance manuals and site-specific health & safety plans, and ensuring compliance with SPDES discharge permits.

#### *Confidential Client, Multiple Locations, AZ*

- Mr. Cross served as project engineer in support of a mine tailings sampling program, a solar pumping system to provide water for dust control and the heap leaching process, a pump and treat system for mine dewatering with the treated water used for dust control, and an off-grid solar energy system evaluation to power the mine office building.

Client

Teamwork

Leadership

## CARL G. SELFRIDGE

*Geotechnical & Drilling Services Manager*

### Expertise:

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

### Education

1996-1999, Graduate Studies, Civil Engineering (Geotechnical) Rensselaer Polytechnic Institute, Troy, New York

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

1994, A.S., Engineering Science, Adirondack Community College, Queensbury, New York

1991, A.A.S., Mechanical Technology—Design & Drafting, Adirondack Community College, Queensbury, New York

### Career Experience:

CTL Engineering, Inc. — 5 years

Other — 8 years

### Project Experience:

#### Transportation

##### *Surveying Mepco Overland Conveyor, CCC Group, Inc.*

- Project Engineer responsible for performing geotechnical investigations to evaluate the current site conditions and to propose design and recommendations for crane pads for a proposed truck-mounted crane with a telescoping hydraulic boom and outriggers

##### *WV DOH—Dick Henderson Bridge; Kanawha County, West Virginia*

- Geotechnical Services Manager for this project which included 6 over water borings, 5 land borings on the St. Albans side, and 5 land borings on the Nitro side of the river for a total of 16 borings and 2 bag samples

##### *Benedum Airport Lighting Towers; Harrison County, West Virginia*

- Project Manager responsible for providing foundation design for the GP-1 Tower located at the North Central West Virginia Airport

##### *Morgantown Airport Alternative Access Road; Morgantown, West Virginia*

- Project Manager responsible for conducting a geotechnical investigation to provide evaluation and recommendations based on the subsurface conditions encountered at the site for the design and construction of an access road alignment connecting WV-857 and the South Eastern portions of the Morgantown Airport





*Client*

*Teamwork*

*Leadership*

## CARL G. SELFRIDGE

*Geotechnical & Drilling Services Manager*

### *I-81 North Martinsburg to Marlowe Interchange; Martinsburg, West Virginia*

- Geotechnical Services Department Manager for the design build project which included field reconnaissance, exploratory borings, laboratory analysis of core boring, geotechnical report, slope stability analysis, and perform field inspection and testing/QC for the duration of the construction project

### *Healthcare*

#### *WVU Animal Facility Annex; Morgantown, West Virginia*

- Project Manager responsible for overseeing this project consisting of geotechnical and surveying services to document and evaluate current site conditions for the Animal Facility Annex addition at the current WVU Hospital Facilities

#### *West Virginia University Hospitals Data Center; Morgantown, West Virginia*

- Project Manager in charge of providing construction observation and testing, and engineering services for the site preparation, earthwork, and construction of the foundation system for the WVU Hospitals Data Center

#### *Davis Memorial Hospital Addition; Davis, West Virginia*

- Project Manager responsible for conducting a geotechnical field investigation, laboratory testing services, and preliminary geotechnical investigation report for an addition to the existing Davis Memorial Hospital

### *Water/Wastewater Treatment Plants and Water Tanks*

#### *Water Treatment Plant Corrective Action Design, City of Fairmont*

- Project Manager responsible for providing and overseeing geotechnical subsurface investigations, laboratory testing services, as well as a Geotechnical Investigation Report of Findings and recommendations for the Water Treatment Plant Corrective Action Design in Fairmont, West Virginia

### *Building Development*

#### *Hazelton Prison Phase II; Hazelton, West Virginia*

- Project Manager whose duties consisted of overseeing a subsurface geotechnical investigation for the new construction phase of the Federal Correctional Institution facility

#### *Morgan Place Apartment Complex, Morgantown, West Virginia*

- Project Manager responsible for providing a geotechnical investigation, laboratory testing and recommendations for the construction of a new apartment complex

#### *Mountain Valley Apartments, Phase II; Morgantown, West Virginia*

- Project Engineer for this job which included 10 geotechnical test borings, laboratory testing and analysis, and recommendations for the development of several multi-unit three to four-story slab-on-grade apartment buildings



Client

Teamwork

Leadership

## CARL G. SELFRIDGE

*Geotechnical & Drilling Services Manager*

### *Proposed University Town Centre Car Dealership, Morgantown, WV*

- Project Manager responsible for managing a geotechnical investigation to provide evaluation and recommendations of the subsurface conditions encountered at the site for the design and construction of a new automotive dealership facility for Premier Chevrolet Buick GMC

### *Suncrest Town Centre Building; Morgantown, West Virginia*

- Project Manager for this job responsible for providing client with structural design services and recommendations

### *Quiet Dell United Methodist Church; Harrison County, West Virginia*

- Project Manager responsible for overseeing a total of six geotechnical test borings and laboratory testing services for the proposed development as well as providing recommendations for that development

### *Pillar Office Building; Morgantown, West Virginia*

- Project Manager responsible for providing subsurface geotechnical services for the construction of a two-story, slab-on-grade office building
- Duties also included providing recommendations drawn for the geotechnical investigation results

### Telecommunication

#### *Verizon – Various Locales*

- CTL has provided geotechnical investigation as well as site and foundation recommendations to over 150 cell tower sites

### *Raccoon Branch PCS / Spinks; Danville, West Virginia*

- Project Manager in charge of providing Verizon Wireless with a two-man drilling crew to conduct a geotechnical investigation of the site
- From the information gathered in the above activities Mr. Selfridge was responsible for supplying Verizon with a Preliminary Mine Subsidence Evaluation Report as well as recommendations

### Other

### *Hughes Creek Landslide; Kanawha County, West Virginia*

- Project Manager responsible for overseeing the geotechnical investigation comprising of 34 borings, including six over water borings

### *Ridge Point Development Slope Investigation and Recommendations; Morgantown, West Virginia*

- Department Manager responsible for providing drilling, engineering, and surveying services in order to investigate, evaluate, and provide recommendations for the Ridge Point Development Pond Embankment Distress





*Client*

*Teamwork*

*Leadership*

## **CARL G. SELFRIDGE**

*Geotechnical & Drilling Services Manager*

### ***Buzzard Pond Dam; Marshal County, West Virginia***

- Project Manager for this project which included a geotechnical field investigation, stability analysis, laboratory testing services, and a geotechnical investigation report

### ***Tunnel Ridge Slurry Cell A / Piezometer Installations; Ohio County, West Virginia***

- Project Manager responsible for providing geotechnical services to investigate, document, and evaluate the current site conditions for the construction of a 200 ton refuse bin and radial stacker

### ***BFS – Charles Point; Bridgeport, West Virginia***

- Project Manager responsible for overseeing an office review, site reconnaissance, subsurface exploration, laboratory testing, geologic and geotechnical data review, engineering evaluation and analysis and preparation/development of the preliminary geotechnical findings and recommendations report for the proposed site preparation and earthwork

### ***Gateway Development; Monongalia County***

- Geotechnical Services Manager for the project consisting of site reconnaissance, subsurface exploration, laboratory testing, geologic and geotechnical data review, mining history, as well as, engineering evaluation and analysis for the preparation and development of the preliminary geotechnical services report

### ***Immaculate Conception Church Parish Center; Clarksburg, West Virginia***

- Project Manager responsible for administering a geotechnical investigation to provide evaluation and recommendations based on the subsurface conditions encountered at the site for the design and construction of a new parish center for the church

### ***Elkins Aggregate Quarry; Elkins, West Virginia***

- Geotechnical Services Manager for this project which consisted of providing highwall evaluation services

### ***Gawthrop Greens - Charles Pointe; Bridgeport, West Virginia***

- Project engineer (Geotechnical) for this project which consisted of reviewing and making recommendations pertaining to a distressed retaining wall

Client

Teamwork

Leadership

## DAVID E. MOORE, P.E.

*Charleston, West Virginia Branch Manager*

### Expertise:

Mr. Moore has thirty three years experience in design and construction in the fields of planning, civil engineering, structural engineering, geotechnical engineering, general contracting, expert testimony, land development, surveying, landscape architecture, project management, business management, construction and engineering management.

Presently Mr. Moore manages the CTL Engineering South Charleston WV office. This office performs consulting engineering in the fields of civil engineering, mining engineering, environmental engineering, geotechnical engineering and construction testing.

### Education

1984, M.S., Civil Engineering, Colorado University, Boulder, Colorado

1978, B.S., Civil Engineering, West Virginia University Institute of Technology, Montgomery, West Virginia

### Professional Registration / Certifications

- Registered Professional Engineer: Maryland; Nevada; West Virginia; Wyoming; Colorado; Alberta Canada; Kentucky; Ohio; Virginia; and NCEES No. 30791. LSI: Colorado.

### Professional Affiliations

- American Society of Civil Engineers
- American Institute of Architects
- Home Builders Association
- Society of American Military Engineers

### Publications

Mr. Moore published "Union and Non Union Construction in Colorado" in 1984 a Master's Thesis commissioned by the Associated General Contractors of Colorado.

### Career Experience:

2009 – Present CTL Engineering

1999 – 2009, Owner, Alliance Consulting Engineers & Surveyors, Arvada & Longmont, CO

1991 – 1999, Vice President, Jehn Engineering, Arvada, Colorado

1986 – 1991, Associate, KCI Technologies, Westminster, Maryland

1983 – 1986, Vice President, Haese Corporation, Boulder, Colorado

1981 – 1983, Research Assistant, University Of Colorado, Boulder, Colorado

1976 – 1981, Civil Construction Engineer, Fluor-Daniel Inc., Irvine, California

### Project Experience:

#### Water and Sewer Distribution Projects

- International Fiber Water Main Extension, Nitro West Virginia
- Ralston Creek Water and Sewer Main Extensions, Arvada, Colorado





*Client*

*Teamwork*

*Leadership*

## DAVID E. MOORE, P.E.

*Charleston, West Virginia Branch Manager*

- Clearview Sewer Main Extension, Johnstown, Colorado
- Tucker Lake Water Intake and Pipeline, Jefferson County, Colorado
- Ralston Reservoir 20" Water Main, Arvada, CO

### Water Resources and Drainage Projects

- Ralston Creek/Croke Canal Overpass, Arvada, Colorado
- Farmers Highline Canal Realignment, Arvada, Colorado
- Church Ditch Flow Limiter, Arvada, Colorado
- Ralston Creek LOMAR, Arvada, Colorado
- Drainage Reports, Plans and Storm Drain Designs on all projects

### Utility Projects and Pump Stations

- Hillandale Well, Water Tank and Distribution System (Design Build), Finksburg, Maryland
- Hillandale Sewer Pump Station and Wastewater Treatment (Design Build), Finksburg, Maryland
- West Woods Golf Course Non Potable Water Pump Station/Distribution System, Arvada, CO
- City of Arvada Church Ditch/Arvada Reservoir Potable Water Pump Station, Arvada, Colorado
- Town of Johnstown Regional Sewerage Pump Station, Johnstown, Colorado

### Residential Subdivisions

- VEPCO Bath County Worker Housing (Design Build), Bath County, Virginia
- Chevron Carter Creek Worker Housing (Design Build), Evanston, Wyoming
- Heritage Heights Single Family Subdivision, Westminster, Maryland
- Hewitt Farms Single Family Subdivision, Baltimore, Maryland
- Clearview Single Family Subdivision, Johnstown, Colorado
- Candlelight Ridge Single Family Subdivision (Design Build), Erie, Colorado

### Environmental Projects

- Burke Parsons Bowlby Monitoring Well/Environmental Testing, Spencer, WV
- International Fiber Storm Water and Ground Water Protection, Nitro, West Virginia
- Sigman Industrial Park Environmental Clean-up, Arvada, Colorado
- AutoZone Site Remediation, Westminster, Colorado

### Gas Projects

- Chevron Carter Creek Gas Project, Evanston, Wyoming (500 million dollar project)
- Ridgeview Estates Oil and Gas Layout, Design and Surface Agreements, Adams County, CO
- Massey Farms Oil and Gas Layouts and Surface Agreements, Weld County, Colorado



*Client*

*Teamwork*

*Leadership*

## DAVID E. MOORE, P.E.

*Charleston, West Virginia Branch Manager*

### Senior Housing

- Golden Pond Apartments, Assisted Living and Alzheimer's Facility, Golden, Colorado
- Highland Trail Retirement, Broomfield, Colorado
- Arvada Estates Retirement, Arvada, Colorado
- Orchard Gardens Senior Facility, Arvada
- Oberon House Assisted Living Facility, Arvada, Colorado

### Commercial Sites

- Koon's Toyota Car Sales Facility, Westminster, Maryland
- Empire Lakewood Nissan, Lakewood, Colorado
- Remax Alliance Office Building, Westminster, Colorado
- Comfort Inn Suites, Longmont, Colorado
- Eagle National Bank, Broomfield, Colorado
- Columbine Professional Plaza, Arvada, Colorado

### Golf Courses

- Flatirons Pro Shop at Flatirons Golf Course, Boulder Colorado
- 18 Hole West Woods Golf Course, Arvada, Colorado
- 9 Hole West Woods Golf Course Addition, Arvada, Colorado

### Landscape Architecture

- Ralston Creek Trail Design, Arvada, Colorado
- Melody Farms/Candlelight Ridge Regional Park (Design Build), Erie Colorado
- Boulder County Trail System, Boulder County, Colorado
- Jefferson County Trail Access and Parking Lot, Westminster, Colorado
- Ryan Ranch Trail System and Landscaping (Design Build), Jefferson County, Colorado

### State Highway Road Design

- 2 Miles of US Route 60, Johnstown, Colorado
- One Mile of US Route 119, Black Hawk, Colorado
- Highway 52, Boulder County, Colorado
- US 119 Road Improvements, Longmont, Colorado

### Land Development

- Owner Developer of Ridgeview Estates, Adams County Colorado
- Owner Developer of Moore Estates, Jefferson County Colorado
- Owner Developer of Candlelight Estates, Erie, Colorado





*Client*

*Teamwork*

*Leadership*

## DAVID E. MOORE, P.E.

*Charleston, West Virginia Branch Manager*

### Structural Engineering

- Sheridan College Dormitories and Community Buildings, Sheridan Wyoming
- Quaker Street and Ralston Creek Bridge (Design Build), Arvada, Colorado
- Platte Canyon Road Box Culvert (Design Build), Littleton Colorado
- Powerhouse Unloading Bay Superstructure, Warm Springs, Virginia
- 108<sup>th</sup> Commercial Office Building, Westminster, Colorado
- Colorado Horse Rescue Offices, Barn and Riding Arena (Design Build), Boulder County, Colorado
- Ryan Ranch Retaining Wall Design and Build, Jefferson County, Colorado
- General Residential Foundation Design and Inspections
- Structural Inspections and Reports

### Mining Projects

- Williams Mine AML Coal Reclamation Project, Enterprise, West Virginia
- Williams 2 Surface Mine, Enterprise, WV
- Owl Creek Surface Mine, Monongahela County, WV
- Mays Run Surface Mine, Monongahela County, WV
- Limestone, Aggregate and Sand Quarry, Warm Springs, VA
- Aggregate and Concrete Plant Engineer, Bath County, Virginia

### Power Projects

- Bath County Pumped Storage Hydroelectric Project, Bath County, Virginia
- Wolf Creek Nuclear Power Project, Coffey County, Kansas

### General Contracting

- City of Federal Heights Municipal Building, Federal Heights, Colorado
- Mesa Village Subdivision, Louisville, Colorado
- Christian Science Reading Room, Pearl Street Mall, Boulder, Colorado
- Sunrise Apartments, Scottsdale, Arizona
- Flatirons Golf Course Pro Shop, Boulder Colorado

### Geotechnical Projects

- WVDOH South Mineral Wells Bridge, Parkersburg WV
- Cornwell Residence Landslide, Huntington WV
- WV BRIM Mine Subsidence Projects, South Charleston, WV



*Client*

*Teamwork*

*Leadership*

## **Gregory L. Foreman, P.E.**

*Project Manager – Water Systems*

### **Expertise:**

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

Throughout Mr. Foreman's professional career he has directly involved in and personally provided design services for numerous water and wastewater system projects. These projects include sanitary sewer improvements, waterline extension and replacement projects, system evaluations and recommendations, and system layout.

### **Education**

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

1989, Associates of Science (Mechanical), Fairmont State College, Fairmont, West Virginia

1989, Associates of Science (Drafting and Design), Fairmont State College, Fairmont, West Virginia

### **Professional Registration / Certifications**

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

### **Career Experience:**

CTL Engineering, Inc. — 6 years

Other — 18 years

### **Project Experience:**

#### **Water/Wastewater**

##### ***Palisades Place; Morgantown, West Virginia***

- Project Manager responsible for providing surveying, design engineering, and construction services in support of the installation of a waste water treatment plant

##### ***City of Fairmont; Fairmont, West Virginia***

- Mr. Foreman and CTL Engineering of West Virginia, Inc. provided various engineering services for this water treatment plant corrective action design project. Some of these services included a geotechnical investigation and recommendations as well as various design services

##### ***Mountaineer Area Council; Monongalia County, West Virginia***

- CTL Engineering of West Virginia, Inc. provided engineering services related to the drainage remediation for the Mountaineer Area Council Boy Scout Camp located on Mountaineer Road
- Some of CTL's services included providing a Topographic Survey, Grading Plans, Erosion and Sedimentation Control Plans and Storm Water Management plans, as well the development of a construction plan

##### ***Mountain State Blue Cross Blue Shield; Parkersburg, West Virginia***

- Project Manager responsible for providing the client with surveying, site investigation and field reconnaissance, storm water design and plans, as well as site design and grading plans





*Client*

*Teamwork*

*Leadership*

## **Gregory L. Foreman, P.E.**

*Project Manager – Water Systems*

### ***WVDEP Feasibility Studies—AML; Marion County, West Virginia***

- Project Manager responsible for seeing that the initial field reconnaissance, technical investigation & research, field investigations, sampling, water analysis, and mapping are all properly completed for the clients proposed water line

### **Power Facilities**

#### ***Pipeline Remediation—Harrison Power Station; Harrison County, West Virginia***

- Project Manager responsible for presenting a site remediation plan for repairing the pipe supports as well as seeing that environmental permits are in place for the construction activity

### **Building Development**

#### ***Immaculate Conception Church; Harrison County, West Virginia***

- Project Manager responsible for providing completing an initial topographic and feature location survey and providing construction documents including grading plans, utility design/relocation, and construction plan development

#### ***Hornbeck Road Development; Morgantown, West Virginia***

- For this project CTL provided geotechnical engineering services to investigate a number of proposed residential building lots

#### ***Quiet Dell United Methodist Church; Harrison County, West Virginia***

- Project Manager responsible for providing civil site design services for the proposed construction of a recreational center to coincide with the church

#### ***Premier Chevrolet; Fairmont, West Virginia***

- For this project CTL provided various site design and layout services for the construction of a new building

#### ***Fire Department Foundation Repair; Fairmont, West Virginia***

- Project Manager responsible for overseeing the completion of this project that consisted of geotechnical drilling services and structural evaluation for the remediation of a structural crack at the Fire Station

#### ***Mountain State Blue Cross Blue Shield; Parkersburg, West Virginia***

- Project Manager responsible for providing the client with surveying, site investigation and field reconnaissance, storm water design and plans, as well as site design and grading plans

### **Other**

#### ***WVDEP Feasibility Studies—AML; Marion County, West Virginia***

- Project Manager responsible for seeing that the initial field reconnaissance, technical investigation & research, field investigations, sampling, water analysis, and mapping are all properly completed for the clients proposed water line



*Client*

*Teamwork*

*Leadership*

## **Gregory L. Foreman, P.E.**

*Project Manager – Water Systems*

### ***Miller Hill Development Road Permitting; Morgantown, West Virginia***

- Project Engineer for this project in which CTL provided various road permits for entrance to the new development

### ***WVDEP Feasibility Study for Office of AML; Hancock County, West Virginia***

- Project Manager Project Manager responsible for seeing that the initial field reconnaissance, technical investigation & research, field investigations, sampling, water analysis, and mapping are all properly completed for the proposed water line

### ***Stone Energy Corporation-Mason Colon Unit 1; Wetzel County, West Virginia***

- Professional Engineer on this project in which CTL provided a variety of engineering services including environmental impact studies

### ***Small City Block Grant; Monongalia County, West Virginia***

- Project Engineer for this project in which CTL provided the client with surveying, mapping, design, right of ways, and permitting services during our time monitoring and investigating an existing sanitary sewer line

### ***Charles Pointe Storm Water Ponds; Bridgeport, West Virginia***

- Project Engineer for this project in which CTL was responsible for completing a variety of testing and inspection services for the development of the above storm water ponds

### ***Mylan Park-Variou Designs; Morgantown, West Virginia***

- Project Engineer for this project in which CTL provided construction management services for various designs at Mylan Park

### ***West Run Flood Plain; Morgantown, West Virginia***

- Project Engineer for this job in which CTL conducted surveying, platting, mapping, and flood plain studies for a large apartment complex in Morgantown, West Virginia

### ***Stone Energy Marcellus Shale Gas Development- Various, WV***

- Project Engineer responsible for Impoundments and Pad Design

### ***Atlas Energy Resources Marcellus Shale Gas Development- Various, WV***

- Project Engineer responsible for Impoundments and Pad Design





Client

Teamwork

Leadership

## KATHLEEN J. O'BRIEN

MS4 Consultant/Civil Site Designer

### Expertise:

Ms. O'Brien serves as a Civil Site Designer and MS4 Consultant for the CTL Engineering civil department in the Morgantown, WV office. She handles the design, mapping and permitting of drinking water systems, sewage collection and treatment systems. She is involved with site design, erosion and sedimentation permitting, storm water permitting, WVDOT permitting, specification writing, project costing and bid package preparation. She is currently involved in the mapping of the storm water and sewage systems for the Town of Star City and the Town of Granville. Ms. O'Brien has developed MS4 Storm Water Management Program for Star City and is currently working on implementing and expanding the program.

### Education

2004, A.S., Drafting and Design, Fairmont State College, Fairmont, West Virginia

1975, B.S., Biology, Fairmont State College, Fairmont, West Virginia

### Professional Registration / Certifications

- S-1 Sewage Operator Certificate
- Chief Class II Drinking Water Operator from 1980 to 1989 for 11 non-community systems
- Computer Aided Drafting Skill Certificate from Fairmont State College, 2004
- Attended the Stormwater Runoff Reduction Spreadsheet Tool training session 9-28 & 29-2010

### Career Experience:

2004 – CTL Engineering of WV, Inc.

1998 – 2001 R & K Enterprises

1978-1996 Consolidation Coal Company, Northern West Virginia Region

### Project Experience:

#### Listing of Ms. O'Brien's current relevant project experience includes:

##### *Town of Granville; Morgantown, West Virginia*

- Storm Water mapping is in progress and the sanitary mapping is complete and will be upgraded as needed. The Town's sanitary lines have been investigated by an in-line camera and the system smoke tested. Ms. O'Brien has conducted localized dye and smoke testing to pin point the areas of concerns and to assist residents in determining what repairs are needed on private property to keep storm water out of the sanitary system. The Town is offering residents an option of being part of a joint project to make repairs rather than leaving residents to make repairs themselves. CTL will run this project, as each repair must be approved before the repairs are made, CTL will supervise the repairs and sign off on them when completed. Each resident under the project would be responsible for the cost of the project on their property.
- A written report has been developed with details on each sanitary manhole, in-line camera reports on lines and complete maintenance records, the same is being created for the storm water system.



**KATHLEEN J. O'BRIEN***MS4 Consultant/Civil Site Designer**Town of Star City; Morgantown, West Virginia*

- Ms. O'Brien is the MS4 Consultant for the Town of Star City and has developed the MS4 Storm Water Compliance Program. She is writing storm water articles for the Town newsletter and Web Site as part of the Public Education and outreach. She has written proposed changes & upgrades to the existing Storm Water Ordinance and submitted a Illicit Discharge Ordinance, both are currently under consideration. She has been asked to run Public Meetings concerning Storm water issues and proposed Ordinances.
- Ms. O'Brien is currently working with the Town on the mapping of the sanitary, drinking water and storm water lines. She is currently working on the written report detailing each manhole, inlet, storm water line, sanitary line, and retention and/or detention system within the town. Maintenance records logs, Illicit Discharge logs and training for the Town's maintenance crews are being implemented.
- Ms. O'Brien is part of the CTL team that reviews any new construction coming into the town for storm water system compliance.

*Hawthorne Village Subdivision*

- Ms. O'Brien has completed the design for Phase 1 which will consist of 36 single family home lots. Ms. O'Brien has obtained the entrance, sanitary and storm water permits. Ms. O'Brien has worked on the design for the roads, grading, utility and storm water for this project. This project is complete and lots are currently being sold.

*Harvest Ridge Sewage Project*

- Ms. O'Brien designed and permitted portions of the sewage collection system. She has designed and permitted the 150,000 GPD Sewage Treatment plant that serves Harvest Ridge and Hawthorne Village. Ms. O'Brien has designed and permitted the first lift station for the Harvest Ridge subdivision.

*Ashton Estates Final Phase*

- Ms O'Brien designed and permitted the up-grade of the Ashton Sewage Plant from 37,500 GPD to 91,000 GPD with the addition of an equalization chamber. The project included the design and permitting of the final phase of the subdivision collection system.

*Canyon Mobile Home Park Sewage Plant Up-grade*

- Ms O'Brien designed and permitted the project adding two new sand filters, sludge holding and an equalization chamber.

*WVU Area 81 Ponds & Parking Lot Improvements, Area 85 Lower East Parking Lot Construction*

- Ms O'Brien drafted the Area 81 improvements, prepared the bidding documents and project specifications, conducted the Pre-Bid Meeting, and assisted with the construction supervision.



Client

Teamwork

Leadership

## KATHLEEN J. O'BRIEN

MS4 Consultant/Civil Site Designer

### *Maple/Ogden Avenue Gateway Revitalization Project for the City of Fairmont, WV*

- Ms. O'Brien designed the retaining walls and prepared the construction drawings, bid documents, specifications and conducted the Pre-Bid meeting. This project was completed in 2004

### *General Engineering Services for the City of Westover*

- Ms. O'Brien has reviewed and commented on sanitary projects proposed for the city.
- Pleasant Hills Main Line Extension
- New Rite Aid Site Sanitary Main Line Upgrade
- Corwin Estates Main Line Extension
- Microtel Main Line Extension
- Ridge Point Main Line Extension

### *Dent' Run Sanitary Upgrade Project for the City of Westover*

- Ms. O'Brien handled the design, permitting, bidding and construction of Phase I of the Dent's Run Force Main Project that alleviated the dumping of untreated sewage from the manhole at the end of Pennsylvania Avenue and from the CSO manhole on Pennsylvania Avenue.
- Ms O'Brien completed the design and permitting of the second phase of this project and was issued a Permit to construct. The second phase extended the force main under a railroad trestle and State Route 100 to connect the force main to pump Station # 1.

### *Braden Place Subdivision for Vision Homes*

- Ms. O'Brien finalized the lot layout for 20- 1-acre lots, designed and permitted the storm water plan, prepared the grading, utility layout and subdivision plat.

### *Zachery Place Subdivision for Vision Homes*

- Ms. O'Brien design the layout for 12-patio home lots, designed and permitted the storm water plan, prepared the grading, utility layout and subdivision plat.

### *Valley Elementary School, Arthurdale, WV Sewage plant Upgrade (12,000 GPD)*

- Ms. O'Brien designed, permitted and handled the construction supervision of the system Upgrade. This upgrade incorporated an up-flow gravity tertiary filter, the first approved for use in this state, the addition of an equalization chamber, a re-circulation chamber and a new chlorine contact chamber. Construction of the plant modifications is complete. The plant is being enclosed in a 20' by 70' pole building. Ms. O'Brien designed the building, prepared the bid documents and handled bidding process and supervised the construction.

### *Abandoned Mine Lands and Reclamation Projects*

- Ms. O'Brien has been writing specifications and preparing engineering cost estimates for various abandoned mine lands and reclamation projects for the West Virginia Department of Environmental Protection. These projects include coal refuse pile stabilization, coal mine related land slides, subsidence crack repairs and water line feasibility studies.



Client

Teamwork

Leadership

## KATHLEEN J. O'BRIEN

MS4 Consultant/Civil Site Designer

### *City Water Line Extensions, Monongalia, Marion & Harrison counties*

- Ms. O'Brien was in charge of city water line extensions for Consolidation Coal Company in numerous areas affected by mine subsidence. She obtained DOH Utility permits, worked with rural Public Service Districts and was the designer and project manager for the construction of miles of city water line extensions.

### *City Water Line Extension Brewer Hill, Daybrook, West Virginia*

- Ms. O'Brien designed and permitted the city water line extension up Brewer Hill, the system involved a storage tank and booster station.

### *City Water Surging Systems, Blacksville #1 Mine, Blacksville # 2 Mine and Well's Portal of the Arkwright # 1 Mine.*

- Ms. O'Brien designed, permitted and was the project manager for construction of city water surging systems for mine bathhouses. The city water lines in those areas could not handle the demand of the bathhouses during shift change. The systems installed involved pulling water from the lines during times other than shift change and storing it in tanks that could gravity feed the bathhouses during shift change.

### *Drinking Water Plant Operator for the Dent's Run Mine, the Jones Run Portal of the Robinson Run Mine, the Miracle Run Portal of the Loveridge Mine.*

- Ms. O'Brien was the project manager for the installation of the above mentioned plants. Once installed she operated and maintained said plants.

### *Sugar Run Portal / Loveridge Preparation Plant Drinking Water Plant, Fairview, WV*

- Ms. O'Brien designed and permitted the 100 GPM drinking water plant, potable storage tank and related facilities.



## PROJECT EXPERIENCE PROFILE

**Project:**

Sewage Plant Evaluation &  
Wetland Delineation

**Owner:**

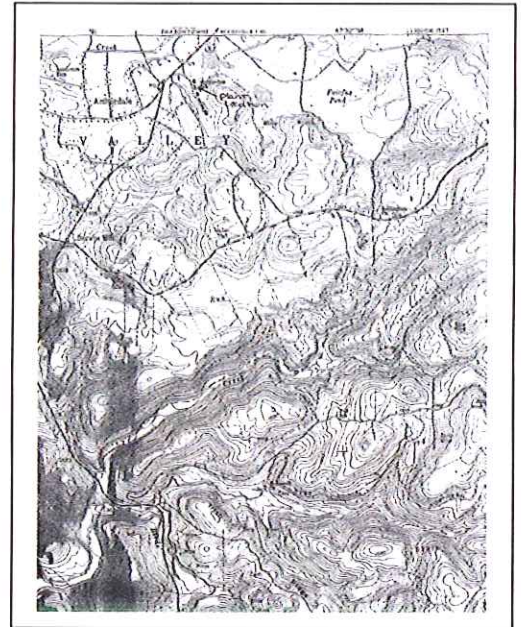
Preston County Board of Education

**Location:**

Preston County,  
West Virginia

**Project Manager:**

Gregory Foreman – [gforeman@ctleng.com](mailto:gforeman@ctleng.com)



### PROJECT FEATURES

CTL Engineering of West Virginia, Inc. was selected to provide professional engineering services to support the addition of a middle school to the existing Valley Elementary School in Preston County, West Virginia. The addition will increase the population of the two schools to a combined 800 students. Part of CTL Engineering's role in this project was to evaluate and upgrade the existing sewage treatment plant to be able to support the increased capacity of the new school. CTL Engineering also provided a variety of environmental services to bring this project into fruition. This included contacting and working with numerous state agencies and completing a wetland delineation and the related reporting.

**Client Reference:**

Neil Likens  
Preston County Board of  
Education  
(304) 329-0580

**ONGOING**

## PROJECT EXPERIENCE PROFILE

**Project:**

Aker Longview Coal Pile & Pond Liner

**Owner:**

American Civil, Inc.

**Location:**

Grant County, West Virginia

**Project Manager:**

Ruben Mick, Jr. – [rmick@ctleng.com](mailto:rmick@ctleng.com)



### PROJECT FEATURES

CTL Engineering of West Virginia, Inc. was contracted to professional engineering services to provide pond design and liner implementation for the Longview Power Plant. CTL provided full circle engineering services for this project comprising of permitting, design services and specifications, and monitoring/inspection services. CTL worked directly with the pond liner manufacturing company to design and fit the liner to the pond taking into consideration all special fitting measures and design specifications. Once the liner was in place, CTL was contracted for a set period of time to provide leak monitoring services.

**Client Reference:**

CNX Center, Material and  
Supply Chain Management  
Garrett Huffman  
1000 Consol Energy Drive  
Canonsburg, PA 15317-6506

**Project Duration:**

2010



## PROJECT EXPERIENCE PROFILE

**Project:**

Pee Wee Hill  
Water Supply Replacement

**Owner:**

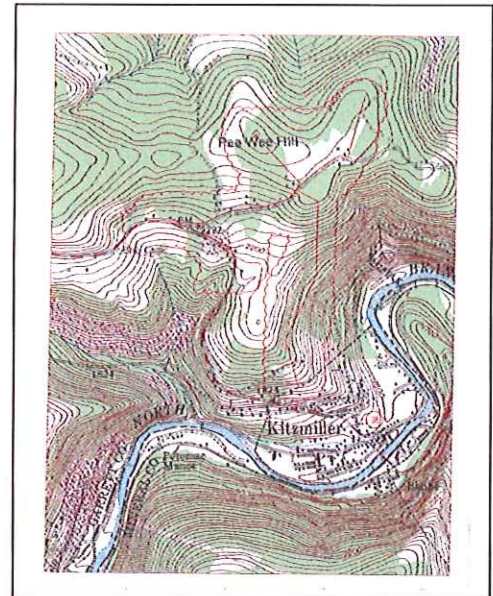
Maryland Abandoned Mine Land Division

**Location:**

Garrett County,  
Maryland

**Project Manager:**

J.B. Chambers – [jchambers@ctleng.com](mailto:jchambers@ctleng.com)



Project location Map

### PROJECT FEATURES

CTL Engineering of West Virginia, Inc. provided Engineering Design Services, and layout for the design of a public water line extension to serve 22 residential customers. The project entailed the design of 13,555 L.F. of water line, a booster pump station, the addition of a 105,000 gallon Water tank and all related fittings, valves and appurtenances. Plans and specifications were developed for the project with complete erosion and sediment control details. The project required the delineation of any streams and/or wetlands in the project area but none were found within the target area.

**Client Reference:**

Tim Miller-  
Maryland Department of the  
Environment  
(301)689-1465

**Project Completed  
December 2011**

## PROJECT EXPERIENCE PROFILE

**Project:**

Wetzel County Landfill

**Owner:**

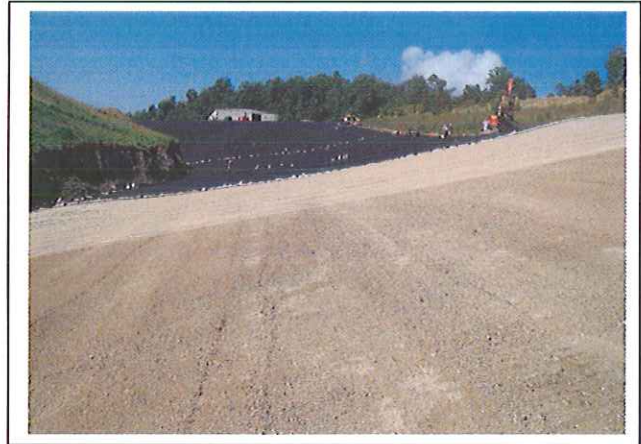
Wetzel County Landfill

**Location:**

Wetzel County, West Virginia

**Project Manager:**

John Nock



### PROJECT FEATURES

CTL Engineering of West Virginia, Inc. was selected to conduct construction quality assurance and reporting for the Wetzel County Landfill project. CTL also provided compaction testing and laboratory services for this project. The above mentioned services were provided insure that all work went as planned during the liner installation process. CTL also completed the necessary work to award various liner certifications to the client throughout the liner installation process.



**Client Reference:**

Mr. Adam Finley  
Wetzel County Landfill  
Route 1 Box 156A  
New Martinsville, WV 26155

**Project Duration:**

6/2009 to 12/2009



## PROJECT EXPERIENCE PROFILE

**Project:**

Wastewater Treatment and  
Collection Design

**Client:**

Various Private Developers

**Location:**

Various Locales throughout  
West Virginia

**Project Manager**

Various Project Managers



### PROJECT SUMMARY

CTL Engineering of West Virginia, Inc. has provided engineering services and specialized investigations for several private residential and commercial developers.

- Canyon Mobile Home Park – System Upgrade
- Greentree Village – Infiltration Investigation and Upgrade
- Foxwood Estates – Infiltration Investigation & Upgrade
- Sunshine Estates – Infiltration Investigation & Upgrade
- City of Westover – Evaluation of Private System prior to city takeover
- Pierpont Property Development – Package Plant and Collection System
- Glenmark Development – Package Plant
- Kinsley Construction – Package Plant and Collection System
- GENCO Land and Development – Package Plant and Collection System
- Sheetz Convenience Store – Package Plant and Collection System
- Silver Tree Estates – Package Plant and Collection System
- B & H Properties – Package Plant and Collection System
- Morgantown Utility Board, Cheat Lake – Sewer Line Extension and Plant Expansion
- Morgantown Utility Board, Chaplin Hill – Sewer and Water Line Extension and Upgrade

## PROJECT EXPERIENCE PROFILE

**Project:**

Palisades Place

**Owner:**

Idlewood Enterprises

**Location:**

Morgantown, West Virginia

**Project Manager:**

Greg Foreman – [gforeman@ctleng.com](mailto:gforeman@ctleng.com)



### PROJECT FEATURES

CTL Engineering of West Virginia, Inc. was responsible for performing a variety of services in support of the construction of this housing complex. Some of these services included a topographical survey, design services, sediment and erosion control plans and permits, and preparation of construction plans for the site. CTL also provided surveying and engineering services for the installation of a waste water treatment plant to be constructed with the housing complex community.



**Client Reference:**

Mr. Mottie Pavone  
Idlewood Enterprises  
928 Suncrest Place  
Morgantown, WV 26505



## PROJECT EXPERIENCE PROFILE

**Project:**

Cheat Lake Waste Water Treatment Plant  
Expansion

**Client:**

Morgantown Utility Board

**Location:**

Cheat Lake, West Virginia

**Project Manager:**

Tim Darrah – [tdarrah@ctleng.com](mailto:tdarrah@ctleng.com)



### PROJECT FEATURES

CTL conducted work for the Morgantown Utility Board (MUB) on a \$10M dollar Sanitary Sewer Improvement Project, located in Eastern Monongalia County. CTL provided 1 on-site engineer and 3 full-time engineering technicians for the project. The project included Quality Control Construction Observation Services for a new Waste Water Treatment Plant and Regional Collection System.

Phase I of this project involved expanding the current treatment plant facility from an operating capacity of 250,000 gallons/day to 750,000 gallons/day in addition to a new pump station along with associated pipeline work. This increase enabled the Board to bring public sewer service to over 1,000 people living in the nine subdivisions surrounding the Cheat Lake area of Morgantown, thus eliminating numerous privately owned treatment plants throughout the subdivisions.

Phase II of this project will bring sewer service to the homes in the rural areas outlying the subdivisions. Our client is the Morgantown Utility Board, who has requested that CTL provide this oversight observation service.

**Client Reference:**

Morgantown Utility Board

**Mr. Tim Ball**

(304) 292-8443



## PROJECT EXPERIENCE PROFILE

**Project:**

Hornbeck Road  
Residential Development

**Owner:**

Adrian Enterprises, LLC

**Location:**

Morgantown, West Virginia

**Project Manager:**

James Gowarty [jgowarty@ctleng.com](mailto:jgowarty@ctleng.com)



## PROJECT FEATURES

CTL Engineering of West Virginia, Inc. has been providing the Hornbeck Road Development with engineering related services since 2005. Some of the services CTL has provided over the years include but are not limited to surveying, site layout, stormwater calculations, compaction testing, permitting, and mapping. The development, which lies just outside of the city of Morgantown, is comprised of residential single family homes.

**Client Reference:**

Mr. Glenn Adrian  
Adrian Enterprises, LLC  
1109 Van Voorhis Rd., Suite 201  
Morgantown, WV 26505

**Project Duration:**

9/2005 to Ongoing



# *Professional References*

## *Client*

### **Maryland Department of the Environment**

Land Management Division

Mining Program

**Michael Garner**

(301) 689-1460

[mgarner@mde.state.md.us](mailto:mgarner@mde.state.md.us)

### **West Virginia Department of Environmental Protection**

601 57th Street SE

Charleston, WV 25304

**Gregg Smith**

(304) 457-5271

### **Town of Star City, WV**

370 Broadway Avenue

Star City, WV 26505

**Bobby Lloyd, Comptroller**

(304) 599-3550

[blloyd@starcitywv.com](mailto:blloyd@starcitywv.com)

### **Morgantown Utility Board**

278 Green Bag Road

Morgantown, WV 26507-0852

**Timothy L. Ball, P.E.**

(304) 292-8443

[tball@mub.org](mailto:tball@mub.org)

### **West Virginia Conservation Agency**

Morgantown Field Office

201 Scott Avenue

Morgantown, WV 26508

**Gene A. Saurborn**

(304) 285-3118

[gsaurborn@wvca.us](mailto:gsaurborn@wvca.us)



# CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

*The West Virginia State Board of Registration for Professional Engineers  
having verified the person in responsible charge is registered in  
West Virginia as a professional engineer for the noted firm, hereby certifies*

**CTL ENGINEERING OF WV, INC.**

**C00103-00**

**Engineer in Responsible Charge: PATRICK GALLAGHER - WV PE 009297**

*has complied with section §30-13-17 of the West Virginia Code governing  
the issuance of a Certificate of Authorization. The Board hereby notifies you of its  
certification with issuance of this Certification of Authorization for the period of:*

**July 1, 2013 - June 30, 2014**

*providing for the practice of engineering services in the State of West Virginia.*

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE,  
PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.



IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF  
REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA  
UNDER ITS SEAL, AND SIGNED BY THE PRESIDENT OF SAID BOARD.

BOARD PRESIDENT



WEST VIRGINIA  
BOARD OF PROFESSIONAL SURVEYORS

*Certificate of Authorization*

ISSUED TO:

**CTL ENGINEERING OF  
WEST VIRGINIA, Inc.  
(Morgantown, WV)**

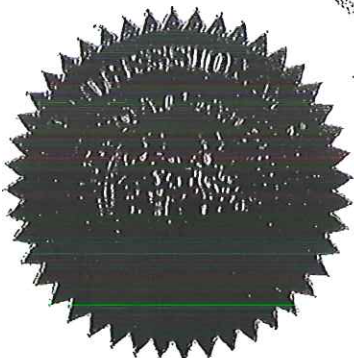
CERTIFICATE OF AUTHORIZATION No. **13-5076**

This certificate is issued by  
the West Virginia Board of Professional Surveyors  
in accordance with West Virginia Code § 30-13A-20

The person or organization identified on this certificate is licensed to  
conduct professional surveying and mapping services  
in the State of West Virginia for the period  
**January 7, 2013 through December 31, 2013**

This certificate is not transferrable and must be displayed at the location for which issued.

In witness whereof, I have put my hand,  
this 8<sup>th</sup> day of January, 2013



  
ROY E. SHREWSBURY, II, Chairman

  
NELSON B. DOUGLASS, Secretary



# CONTRACTOR LICENSE

Authorized by the

**West Virginia Contractor Licensing Board**

**Number:**

WV010770

**Classification:**

SPECIALTY

CTL ENGINEERING OF WEST VIRGINIA IN  
DBA CTL ENGINEERING OF WEST VIRGINIA IN  
733 FAIRMONT RD  
MORGANTOWN, WV 26501-4003

**Date Issued**

JANUARY 31, 2013

**Expiration Date**

JANUARY 31, 2014

WEST VIRGINIA  
CONTRACTOR  
LICENSING  
BOARD

Authorized Company Signature

*Michael A. Carl*

Chair, West Virginia Contractor  
Licensing Board

This license, or a copy thereof, must be posted in a conspicuous place at every construction site where work is being performed. This license number must appear in all advertisements, on all bid submissions and on all fully executed and binding contracts. This license cannot be assigned or transferred by licensee. Issued under provisions of West Virginia Code, Chapter 21, Article 11.



Client#: 101489

CTLENG

ACORD™

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/15/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> <b>Huntington Insurance, Inc.</b> <b>440 Polaris Parkway</b> <b>Westerville, OH 43082</b> <b>888 576-7900</b>		<b>CONTACT NAME:</b> Ivy Hughes <b>PHONE (A/C, No, Ext):</b> 614-899-8538 <b>FAX (A/C, No):</b> 877-829-4531 <b>E-MAIL ADDRESS:</b> Ivy.hughes@huntington.com	
<b>INSURED</b> <b>CTL Engineering of WV Inc.</b> <b>733 Fairmont Road</b> <b>Morgantown, WV 26501</b>		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Cincinnati Insurance Company <b>NAIC #</b> 10677 <b>INSURER B:</b> <b>INSURER C:</b> <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	

## COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.


INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> BI/PD Ded:4,000 GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			CPP0895397	01/01/2013	01/01/2014	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			CPP0895397	01/01/2013	01/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$0 <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE	X	X	CPP0895397	01/01/2013	01/01/2014	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		X	WC1861217	01/01/2013	01/01/2014	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A	<b>Leased/Rented Inst. Fltr</b>			CPP0895397	01/01/2013	01/01/2014	\$200,000/\$2,500 Ded \$800,000/\$1,000 Ded

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Automatic Additional Insured including Waiver of Subrogation and Primary and Noncontributory included under General Liability per form GA233, where required by written contract, Automatic Additional Insured provided under the Auto per form AA4171, Blanket Waiver of Subrogation provided under the Auto per form AA4172, Blanket Waiver of Subrogation provided under the WC per form WC000313 (not applicable in KY), Broad form Employers Liability (code 23-4-2) Included for West Virginia per form WC9906 140 per written contract.

## CERTIFICATE HOLDER

## CANCELLATION

<b>For Information Only</b>	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 





# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/7/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> STA, a Division of Oswald Companies 3401 Enterprise Parkway, Suite 101 Beachwood OH 44122		<b>CONTACT NAME:</b> Patricia Cholewa <b>PHONE (A/C, No, Ext):</b> 216-839-2807 <b>FAX (A/C, No):</b> 216-839-2815 <b>E-MAIL ADDRESS:</b> pcholewa@oswaldcompanies.com	
<b>INSURED</b> CTL Engineering of W.V., Inc. 733 Fairmont Road Morgantown WV 26501		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Evanston Insurance Company <b>INSURER B:</b> <b>INSURER C:</b> <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	
CTLEN-1		NAIC # 35378	

**COVERAGES**

CERTIFICATE NUMBER: 1221639039

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDE INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <b>EXCESS LIAB</b> <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A						WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Claims Made Retro Date: 1/1/1927	N	Y	AE822501	12/31/2012	12/31/2013	Each Claim \$2,000,000 Aggregate \$2,000,000 Pollution Liability Included

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Waiver of Subrogation as designated above is provided when required of the Named Insured by written contract or agreement.

**CERTIFICATE HOLDER****CANCELLATION**

Specimen Certificate for Insurance  
Evidencing Purposes Only  
733 Fairmont Rd  
Morgantown WV 26501

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Patricia A Cholewa*



**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**CTL ENGINEERING OF WEST VIRGINIA INC  
733 FAIRMONT RD  
MORGANTOWN, WV 26501-4003**

**BUSINESS REGISTRATION ACCOUNT NUMBER: 1038-4322**

This certificate is issued on: 06/15/2011

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.  
This certificate shall be permanent until cessation of the business for which the certificate of registration  
was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new  
certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.  
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of  
this certificate displayed at every job site within West Virginia.