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## Header 1

[List View](#)

## General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 762738

SO Doc Code: CEOI

Procurement Type: Central Purchase Order

SO Dept: 0603

Vendor ID: VS0000019973

SO Doc ID: ADJ2100000004

Legal Name: DIEFFENBAUCH &amp; HRITZ LLC

Published Date: 7/31/20

Alias/DBA:

Close Date: 8/20/20

Total Bid: \$0.00

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Response Time: 11:41

Solicitation Description: Installation Energy and Water Plans

Total of Header Attachments: 1

Total of All Attachments: 1



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

State of West Virginia  
 Solicitation Response

Proc Folder : 762738  
 Solicitation Description : Installation Energy and Water Plans  
 Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2020-08-20 13:30:00	SR 0603 ESR08202000000001123	1

VENDOR
VS0000019973 DIEFFENBAUCH & HRITZ LLC

Solicitation Number: CEOI 0603 ADJ2100000004

Total Bid : \$0.00                      Response Date: 2020-08-20                      Response Time: 11:41:14

Comments:

FOR INFORMATION CONTACT THE BUYER

Tara Lyle  
 (304) 558-2544  
 tara.l.lyle@wv.gov

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Installation Energy and Water Plans				

Comm Code	Manufacturer	Specification	Model #
81101508			

**Extended Description :** Provide professional engineering consulting services per the attached documentation.



DIEFFENBAUCH & HRITZ

**DIEFFENBAUCH & HRITZ, LLC**  
1095 Chaplin Road, Suite 200  
Morgantown, WV 26501  
Office: 304-985-5555  
Fax: 304-985-5557

August 20, 2020

Ms. Tara Lyle  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

Sent Via wvOASIS

**RE: Response to Centralized Expression of Interest (CEOI) – 0603 ADJ2100000004  
Installation Energy and Water Plans  
West Virginia Army National Guard**

Dear Ms. Lyle:

Dieffenbach & Hritz, LLC (D&H) and CDMG are pleased to present this qualifications package to the West Virginia Army National Guard (WVANG) in response to their centralized expression of interest (CEOI) notice of professional engineering consulting services contract for Installation Energy and Water Plans within West Virginia. The attached package provides an overview of the services and capabilities our team offers.

D&H is a small business (less than 60 employees) headquartered in Morgantown, West Virginia with offices in Bridgeport, West Virginia, Washington, Pennsylvania, Abingdon, Virginia, and Wrightsville Beach, North Carolina. We are proposing as the prime contractor for civil engineering, surveying, mechanical engineering, and system planning services. We are teaming with CDMG, our subcontractor, to fulfill the electrical engineering service needs of the contract.

We derive a bulk of our experience from the Oil and Gas industry within the Appalachian Basin. We have participated in the phenomenal success story that has provided the United States with energy independence and global energy exports. This strategic industry, a vital component to our National Security, has always demanded the highest level of expertise and productivity from its service consultants. Though honed in the private sector, we believe our staff experience and service lines closely match the professional services profile outlined in the WVANG CEOI. When coupled with CDMG, a large company with a local office in Canonsburg, Pennsylvania, there is no capability required by the WVANG that is not fully incorporated in our team.

We hope you agree with us that our team is what you will need for your anticipated project load in the years to come. We thank you for your consideration and look forward to hearing from you soon.

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If you have any questions or comments on any aspect of this response, please contact me at (304) 985-5555 or email at [estewart@dandhengineers.com](mailto:estewart@dandhengineers.com).

Very truly yours,  
DIEFFENBAUCH & HRITZ, LLC

A handwritten signature in blue ink, appearing to read "Eric N. Stewart". The signature is fluid and cursive, with a large loop at the end.

Eric N. Stewart, P.E.  
Engineering Manager

Attachments:   CORPORATE SUMMARY OF D&H  
                          ORGANIZATIONAL CHART  
                          KEY D&H PERSONNEL RESUMES  
                          CORPORATE SUMMARY OF CDMG  
                          KEY CDMG PERSONNEL RESUMES

## **CORPORATE SUMMARY OF D&H**



## I. INTRODUCTION

### Who We Are

Dieffenbach & Hritz, LLC (D&H) is a team of professionals providing engineering, survey, environmental and construction services to federal agencies, private developers, oil and natural gas companies, and coal companies located in West Virginia, Pennsylvania, Virginia, Ohio and North Carolina. We are an operating small business and have previously partnered with contractors to successfully complete federally funded projects. Our well-qualified engineers and scientists have years of local and national experience in the design, permitting and construction of water and sewer facilities, storm water management facilities, erosion and sediment control facilities, and transportation facilities, and bring extensive knowledge and depth of understanding how to develop and execute successful projects.

### Our History

D&H began in 2005 with the opening of our Morgantown, WV office. The initial focus of the company centered on providing engineering services to the transportation and coal industries. Since then the company has broadened the services provided to include survey, environmental and construction services and expanded its client base to include companies in the oil and gas industry, private developers, and other public agencies. D&H presently has five offices with over 50 engineers and scientists and provides services in WV, PA, VA, OH and NC.

### Our Mission

Our mission is to provide a superior level of service to our clients through the timely delivery of professional services that meet the client's expectations and results in successful projects. We utilize innovative engineering design methods and technology, along with proven procedures and techniques, to take the client's ideas and turn them into reality. We are dedicated to building long-term relationships with clients through the delivery of exceptional professional services in a cost-effective and responsive manner.

We are committed to achieving excellence in everything we do. We value teamwork, communication, integrity and pride in performance of our work and consider these elements essential to our success. We believe that continuous quality improvement is the foundation of our performance, competitiveness, and profitability. We are committed to the concept that quality is defined by the client and we must be vigilant and unwavering in our leadership to understand, serve, and perform to and beyond our clients' expectations.



## II. APPROACH TO THE PROJECT

### Project Understanding/General Statement of Work

Our understanding of the project is based on our review of the Centralized Expression of Interest (CEOI) for Engineering and Planning Services Solicitation No. ADJ2100000004 for the development of Installation Energy and Water Plans within West Virginia dated July 31, 2020. The project consists of the planning and design of two Installation Energy and Water Plans, one at Camp Dawson and a second plan for the locations listed in Section Three of the CEOI request by the West Virginia Army National Guard (WVANG). The intent of these plans is to allow the installations to have independent access to sustainable and reliable sources of energy and water. The following is a summary of D&H's project design approach.

### Project Approach

The principal tasks of the project are to process existing resource data, develop a preliminary installation energy and water plan for each location, and finalize the plans based on the practicality of the plans.

#### *Process existing resource data*

- Coordinate with the WVANG and their working partnerships to collect existing plans, procedures, and configurations.
  - D&H and CDMG (electrical design sub-contractor) will rely on the individual expertise of each firm to assess the existing plans in place for current operations
    - D&H will assess the civil, mechanical, and environmental portions of the plans, and CDMG will assess the electrical portions of the plans
  - Based upon the findings of the preliminary assessment, we will present a preliminary draft study
    - Provide a holistic solution, prioritizing energy and water resiliency while staying within the project budget
    - Verify expectations of final product with WVANG

#### *Develop Preliminary Installation Energy and Water Plan*

- Develop preliminary layout of the energy and water plan for the WVANG Installation. Consider alternative layouts and system impacts of additional loads and versus critical loads.
- Produce cost estimates for preliminary layouts and consider practicality of plan construction
- Submit optimal layouts for goals previously established between the WVANG and the contractor to obtain approval of preliminary layout and discuss key design issues for proposed configuration.



- Upon approval by WVANG, proceed with developing and finalizing Installation Energy and Water Plan.

#### *Finalize Installation Energy and Water Plan*

- Prepare technical specifications to be included as a part of the contract documents if required.
- Verify the constructability and practicality of the installation plan
- Verify the installation plan meets the previously established budget
- Prepare quantity takeoff of the proposed construction.
- Provide any electronic and hard copy plan files requested by the WVANG
- Complete any minor adjustments requested by the WVANG to complete the installation plans

#### **D&H and CDMG**

This partnership between D&H and CDMG has the experience and staff to provide timely results for Installation Plan development. D&H will provide civil, mechanical, and environmental services and CDMG will provide electrical design services. These two regional companies will be fully present throughout the design of these installation plans and will be able to work in close collaboration to achieve an optimal product. As a partnership, we are prepared to support the WVANG with efficient and sustainable design. With our combined expertise and dedication to providing responsive, cost-effective solutions, we believe we can deliver the desired results.



### **III. PAST PERFORMANCE AND KEY PERSONNEL**

D&H staff has extensive experience planning and completing energy and water infrastructure projects. We will utilize our Morgantown, West Virginia office staff from that location to complete this project. The design team will be led by Retired Colonel Kevin Gregory. Mr. Gregory has 29 years of experience completing projects while serving in the U. S. Army. Below is a summary of his project experience while serving in the U. S. Army and resumes of additional key staff members who will be working on the project have been attached to this Expression of Interest.

With Mr. Gregory's understanding of the Army mission requirements and the supporting engineering staff, we feel D&H can provide valuable insight and assistance to the U. S. National Guard on this project. We understand the importance of energy and water resiliency and the mission critical nature of the requested services. Mr. Gregory will be able to assist D&H in preparing timely installation plans that can be implemented within budget. With his valuable experience in the Army, we are confident that Mr. Gregory will allow D&H to successfully support the WVANG's mission of sustainability.

#### **Key Local Staff Experience**

Retired Colonel Kevin Gregory will be the Senior Project Manager and Design Lead for this project. Mr. Gregory has 29 years of leadership experience in the U. S. Army. Mr. Gregory served as Garrison Commander from 2012 to 2015 and managed the development of an installation energy program. The energy program supported NetZero Sustainability practices and led to funding to support micro-grid planning. As Garrison Commander, Mr. Gregory also supervised 4,000 employees providing housing, energy, and training infrastructure for over 120,000 personnel and managed the team within budget. Mr. Gregory held numerous additional positions in the U. S. Army, including Battalion Commander (Senior Manager), Chief of Strategic Communications (Public Relations and Marketing), and Chief of Staff (Vice President for Advancement, Finance and Personnel).



#### **IV. REFERENCES**

Mary Smakula, PE  
Facilities Engineer – US Forest Service  
[Mary.Smakula@usda.gov](mailto:Mary.Smakula@usda.gov)  
(304) 635-4470

Robert Wirks  
Design Manager – Antero Resources  
[rwirks@anteroresources.com](mailto:rwirks@anteroresources.com)  
(304) 842-4401

Joe Mallow  
Managing Director, Permitting and Civil – EQT Corporation  
[Joe.mallow@eqt.com](mailto:Joe.mallow@eqt.com)  
(412) 395-3221

#### **V. ORGANIZATIONAL CHART**

We have provided an organizational chart for review.

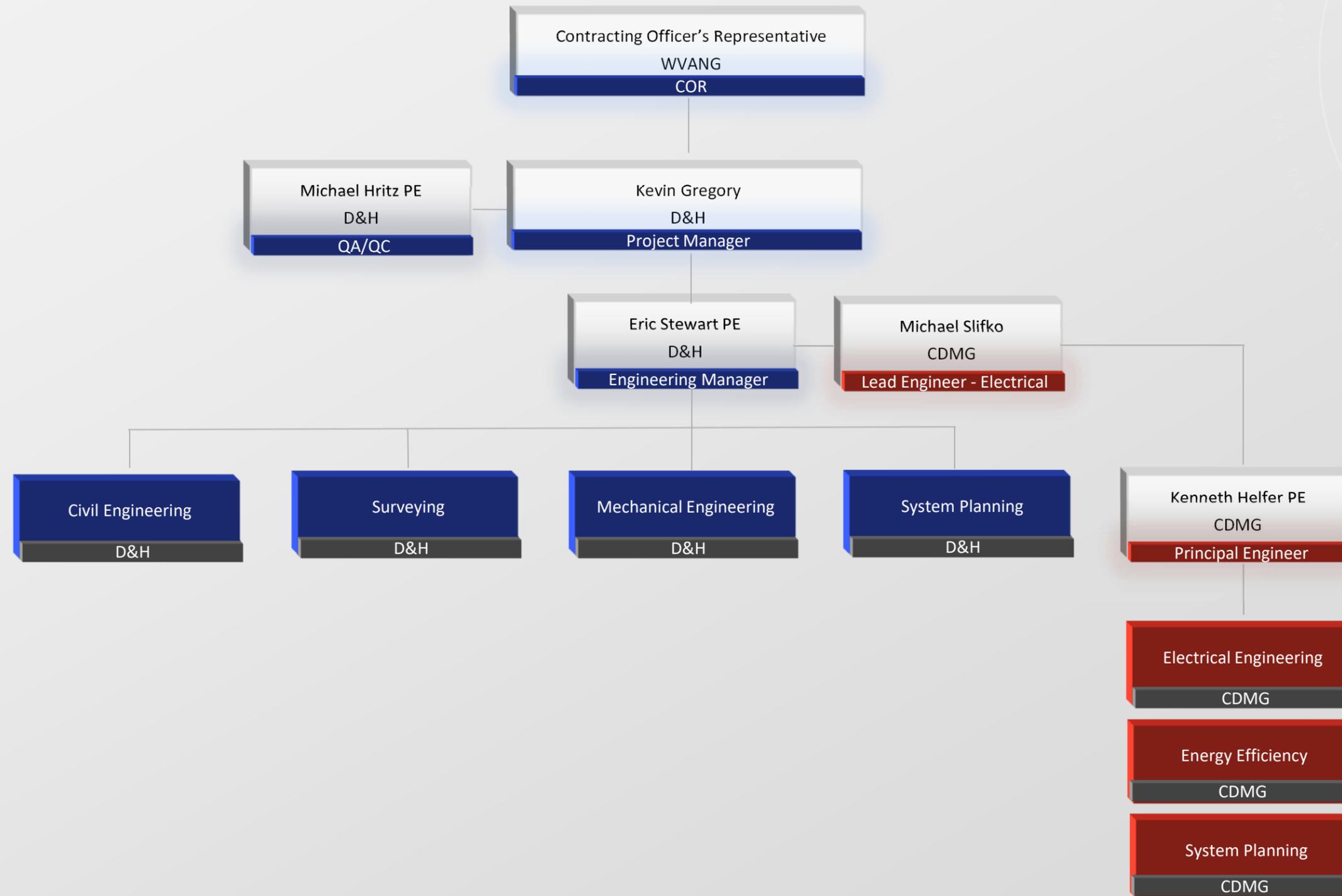
#### **VI. KEY PROJECT STAFF RESUMES**

We have provided key project team staff resumes for review.

## **ORGANIZATIONAL CHART**

# ORGANIZATIONAL CHART OF PROPOSED TEAM

## WEST VIRGINIA ARMY NATIONAL GUARD



**KEY D&H PERSONNEL RESUMES**

**YEARS OF EXPERIENCE: 29**

**EDUCATION:**

Master of Arts in Strategic Studies, U.S. Army War College, Carlisle Barracks, PA  
Executive Master of Business Administration, Touro University International, New York, NY  
Bachelor of Science in Criminal Justice, Fairmont State University, Fairmont, WV  
Associates of Science in Criminal Justice, Georgia Military College, Milledgeville, GA  
Senior Executive Course, Kansas University  
U.S. Army War College, Carlisle, PA  
Strategic Communications Course, Georgetown, University  
Tactical Leaders Development Course, Combined Arms Center, Fort Leavenworth, KS  
Joint Fires and Effects Course, Fort Sill, Oklahoma  
Command and General Staff College, Combined Arms Center, Fort Leavenworth, KS  
Heavy Tactical Fire Course, Field Artillery School, Fort Sill, Oklahoma  
Captain's Career Course, Field Artillery School Fort Sill, Oklahoma  
Officer Basic Course, Field Artillery School Fort Sill, Oklahoma

**SUMMARY OF EXPERIENCE:**

**Garrison Commander – USAG Fort Stewart/Hunter Army Air Field.** Supervised 4,000 employees providing the housing, retail, energy, infrastructure and training facilities for over 120,000 personnel while remaining within the allotted annual budget. Served as a senior liaison between the base and national, state and local leaders resulting in improved support for the installation. Supervised the development of the installation energy program to support the NetZero Sustainability practices resulting in the additional funding for a 200 Acre Solar Field and Micro-grid planning. Supervised the completion of over 100 projects while maintaining organizational priorities and meeting organizational milestones with a primary focus on sustainability.

**Chief of Staff – USA Cadet Command and Fort Knox,** Served as the Chief of Staff of Fort Knox supporting the Senior Commander by synchronizing and coordinating training, programs, projects and public/media relations with the installation tenant organizations and the Garrison Commander.

**Battalion Commander – U.S. Army,** Conducted the preparations, resourcing, and deployment of 495 personnel to Baghdad, Iraq. Oversaw the security of the U.S. Embassy to Iraq, the Iraqi National Assembly (Parliament), and majority of the Iraqi Government. Supervised the fixed site and facility security for three square miles incorporating over 600 additional personnel without a security breach for 15 months. Negotiated security, resources and personnel with the U.S. State Department, the Iraqi Government, the British Army, Georgian Army and multiple national and international agencies resulting in a safe and secure environment.

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**YEARS OF EXPERIENCE:** 28

**EDUCATION:**

B.S., Civil Engineering, The Pennsylvania State University

**PROFESSIONAL REGISTRATIONS:**

P.E.: Pennsylvania - [REDACTED]  
West Virginia - No. 1 [REDACTED]  
Ohio - No. [REDACTED]  
North Carolina - No. [REDACTED]

**SUMMARY OF EXPERIENCE:**

**H Area Water and Sewer Project, Fort Bragg, NC.** Responsible for the survey, design, permitting, and construction services related to the installation of approximately 25,200 LF of replacement water main and 12,700 LF of replacement sewer line in the H Area of Fort Bragg, North Carolina. Coordinated activities between disciplines, performed design calculations, prepared contract documents, reviewed and evaluated bids, and provided construction administration services.

**Normandy Water and Sewer Replacement Project, Fort Bragg, NC.** Responsible for the survey, design, permitting, and construction services related to the installation of approximately 29,000 LF of replacement water main and 21,000 LF of replacement sewer line in the Normandy Area of Fort Bragg, North Carolina. Coordinated activities between disciplines, performed design calculations, prepared contract documents, reviewed and evaluated bids, and provided construction administration services.

**Wastewater Collection and Treatment System Design, Sutersville, Westmoreland County, PA,** Sutersville-Sewickley Municipal Sewage Authority. Project Manager responsible for the design, permitting and funding of a 0.19 mgd sewage treatment plant and collection system to serve the communities of Sutersville, Lowber, Gratztown, and Scott Haven. Treatment plant equipment included pumps, a sequential batch reactor with ultraviolet (UV) disinfection and aerobic sludge digesters. The sewage collection system included approximately 65,000 linear feet of gravity and pressure sewers and three remote pump stations.

**Annual Engineering Services, Fredericktown, PA,** East Bethlehem Township Municipal Authority. Project Manager responsible for performing required engineering services for the Authority's 0.3 mgd wastewater treatment plant and sewage collection system. Services include attending monthly meetings, preparing annual Chapter 94 reports, assisting with and evaluating the authority budget, and completing various engineering tasks requested by the Authority.

**Sludge Handling Facility, Clarksburg, WV,** Clarksburg Water Board. Project Manager responsible for planning and designing a sludge handling facility to process clarifier waste sludge and filter backwash water from the 10 mgd Clarksburg Water Treatment Plant. Treatment processes include sludge and backwash water settling basins and a belt filter press. Performed sludge quantity and hydraulic calculations, developed site

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layouts, selected process equipment, developed project cost estimates, and prepared construction plans and specifications.

**Aeration System Upgrades, Grove City, PA**, Borough of Grove City. Project Manager responsible for providing design and construction-phase services for the replacement of the first-stage and second-stage aeration systems at the 3.0 mgd Grove City Wastewater Treatment Plant.

**Belt Filter Press Installation, Grove City, PA**, Borough of Grove City. Project Manager responsible for providing design and construction-phase services for the installation of a belt filter press to replace an existing vacuum filter, and the installation of an effluent water pumping system to replace the existing system at the Borough's 3.0 mgd wastewater treatment plant.

**Tinicum Industrial Park Water System Improvements, Lester, PA**, Cushman & Wakefield of Pennsylvania, Inc. Project Engineer responsible for the hydraulic modeling and evaluation of the fire service system, selection of replacement water pumps, preparation of plans and specifications for construction, and bidding and award phase services for modifications to the Tinicum Industrial Park fire service system. Modifications included replacing three vertical turbine pumps and installing interconnections between the two fire service systems.

**Headworks Screen Evaluation, City of Johnstown, PA**, City of Johnstown. Project Engineer responsible for the evaluation of screening methods to replace existing channel monster comminutors in the City's 12 mgd wastewater treatment plant headworks. Installation of rotary bar fine screens, fine step screens, fine band screens, and other screening technologies were evaluated. A preliminary report containing information on manufacturers evaluated, the installation requirements of each alternative, cost estimate for each of the alternatives, and selection of a recommended alternative was prepared.

**Water System Master Plan, Harrison County, WV**, Clarksburg Water Board. Project Manager responsible for the preparation of a water system master plan that evaluated system facilities, identified system improvements, estimated capital project costs for those improvements, and established a recommended plan for implementing the improvements over the 20-year planning horizon. Performed data collection activities, inspected system facilities, projected water demands, evaluated system performance, and developed a recommended capital improvements program.

**Second Street Tank Project, Harrison County, WV**, Clarksburg Water Board. Project Manager responsible for the survey, hydraulic calculations, design, permitting, bidding and award, and construction administration for a 2 Mgal precast, prestressed concrete water storage tank. Coordinated activities between disciplines, performed design calculations, and prepared permitting and contract documents.

**YEARS OF EXPERIENCE: 16**

**EDUCATION:**

B.S., Civil Engineering, West Virginia University

**PROFESSIONAL REGISTRATIONS:**

P.E.: West Virginia – No. [REDACTED]

Pennsylvania – No. [REDACTED]

Ohio – No. [REDACTED]

**SUMMARY OF EXPERIENCE:**

**Antero Clearwater Treatment Facility, Doddridge County, WV**, Antero Midstream. Construction Manager/Engineer responsible for interpreting plans, preparing contracts and managing schedules for a water treatment facility in Doddridge County, WV. The project is being constructed as part of advanced wastewater treatment facility that will process 41,000 barrels of wastewater per day, separating water, salt and radioactive particles, providing an alternative solution to current water disposal methods.

**Stuart Recreational Area Waterline, Elkins, WV**, US Forest Service. Engineering Manager responsible for the completion of survey, engineering, permitting and construction services associated with the installation of approximately 2,500 LF a 6" HDPE waterline to service the Stuart Recreational Area in Randolph County West Virginia. Coordinated activities between disciplines, performed design calculations and provided construction administration services.

**Sand Hill Compressor Station Expansion, Wheeling, WV**, Access Midstream. Engineering Manager responsible for the design and construction of three additional 1,400 horsepower compressor skids. The compressor additions also required a new building design and installation, slug capacity finger skid, dehy tower, reconcentrator, and a blast wall for the existing control room. Performed design calculations, prepared contract documents, reviewed and evaluated bids, and provided construction oversight.

**Oliver East Temporary Waterline, Allegany County, PA**, EQT Production Company. Engineering Manager responsible for hydraulic models, pump curve analyses, surge calculations and hydrostatic testing parameters associated with the installation of approximately 11,800 LF of 12" HDPE DR11 waterline located in Allegany County, Pennsylvania.

**Battle Run Compressor Station Electrical Expansion, Wheeling, WV**, Access Midstream. Engineering Manager responsible for the electrical design and installation for three gas compressors, one dehy, regen skid and one BTEX unit. Also provided electrical for a compressor building to enclose the compressors. Performed design calculations, prepared contract documents, reviewed and evaluated bids, and provided construction oversight.

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**CORPORATE SUMMARY OF CDMG**



## **I. Introduction**

CDMG is a multi-discipline industrial engineering firm based in Canonsburg, PA. We have been serving the metals, natural gas, chemical, glass, power and manufacturing industries since 1991. CDMG is part of the Stevens Engineers & Constructors Family of Companies. Engineering disciplines include mechanical, piping, electrical, automation, civil/structural, and facility planning.

Our Electrical Group has a strong history of working with customers on power upgrades and reliability programs; taking projects from the planning stages all the way through detailed construction engineering and commissioning. Our engineers and designers are used to taking projects from initial plans and 3D designs out into the field to installation. Some past projects that show our experience and capabilities are outlined below:

## **II. Summary of Experience**

### **Titanium Metals Corporation (Toronto, OH) - 69kV upgrades**

This metals producer had reliability and safety concerns due to aging transformer protection. CDMG worked with the customer's operation team to develop a conceptual plan and project budget. We performed the detailed engineering incorporating SF6 circuit breakers into the power system to protect the facility's main substations, previously all main transformers were protected with one common oil circuit breaker. The project consisted of rerouting 69kV aerial cables and included the design of elevated steel structures to house the equipment. This project was installed in a 100-year old facility that did not have a lot of space for equipment additions. The project improved process reliability by providing individual transformer protection and reduced the overall arc flash hazard.

### **Titanium Metals Corporation (Toronto, OH) - MV Substation Addition**

TIMET was not able to expand due to limitations with its power supply. CDMG was hired to develop a conceptual plan, budget and then the detailed engineering to add a new MV distribution substation. The project consisted of a 69kV 10MVA transformer, 2400V Arc Resistant switchgear, all associated interconnecting cabling, and the required civil/structural infrastructure to support the equipment, aerial lines and buss work.

### **Allegheny Technologies (Natrona Heights, PA) - MV Substation Replacement**

Metals producer had reliability problems due to aging equipment. CDMG worked with ATI operations and maintenance groups to develop a conceptual plan, budget and then the detailed engineering to replace MV distribution substation. The project equipment consisted of a 27kV 10MVA transformer, 2400V Arc Resistant switchgear, all associated interconnecting cabling and the required civil/structural infrastructure to support the equipment, aerial lines and buss work.



### **Kronospan (Clarion, PA) – 20MW Natural Gas CoGen**

CDMG developed 20 MW of electrical generation for parallel operation with the local electric supplier, limiting plant dependence on the power grid to 1MW per month while increasing overall electrical reliability to the wood products plant in the snow belt of Pennsylvania.

#### **Project Highlights**

35kV power Distribution including the following:

- (4) 4.5 MW Natural Gas generators
- 13.kV – 15kV step up Substation (non-Paralleling)
- 35kV Switchyard - Including Plant Overcurrent Protection and isolation switching
- Power Equipment Specification and Procurement Support
- 35kV Duct bank and Aerial design
- Relay interface with the local utility
- Control interface with Generator and utility
- Foundation and Structural Engineering

### **Slippery Rock University (PA) – Energy Reliability Plan**

CDMG was retained by the University to develop a campus wide power grid reliability plan. This included upgrading the underground medium voltage distribution and all associated switchgear and transformers. Extensive investigation was completed to determine the existing cable routes, manhole locations and other utilities. Upon completion, CDMG provided a scope document that allowed the university to budget and plan for the recommendations from the report. These documents were submitted to the state for approval of the capital project.

### **Wheeling-Nisshin (Follansbee, WV)**

Wheeling-Nisshin Steel was looking to upgrade drives controlling motors on their Continuous Galvanizing Line. This scope of work involved the civil/structural and electrical engineering required for the 800kVA Dual Secondary, Drive Rectifier Transformer to be installed before the IGBT Converter. CDMG designed the transformer installation including all electrical connections and associated foundations including the oil containment system.



### **III. References**

Richard Young  
Sr. Principal Engineer – Allegheny Technologies (ATI)  
[richard.young@atimetals.com](mailto:richard.young@atimetals.com)  
(412) 337-3210

Robert Emhoff  
Project Engineer – Sonneborn (previously with Kronospan)  
[robert.emhoff@sonneborn.com](mailto:robert.emhoff@sonneborn.com)  
(814) 229-0794

Mark Marino  
Manager – Project Engineering – Titanium Metals Corporation (TIMET)  
[mark.marino@timet.com](mailto:mark.marino@timet.com)  
(740) 537-5725

### **IV. Key Project Staff Resumes**

We have provided key project team staff resumes for review.

**KEY CDMG PERSONNEL RESUMES**



**MICHAEL J. SLIFKO**

***Lead Engineer - Electrical***

**Education**

B.S., Electrical Engineering Technology  
Pennsylvania State University  
The Behrend College

OSHA  
10-Hour Safety and Health Training Certification

**Areas of Special Competence**

- Drive Upgrades
- Material Handling Systems
- Power Distribution
- Electrical Control
- Raceway & Cable Design
- Busway & Cable Bus
- Energy Conservation (ASHRAE 90.1)
- Electrical Clearances & Equipment Arrangements
- NFPA 70 – National Electrical Code
- NFPA 70E – Electrical Safety
- FM Global – Property Loss Prevention
- UL508A – Industrial Control Panels

**Summary of Experience**

Mr. Slifko has over 20 years of experience with electrical power distribution, controls, instrumentation and construction engineering for industrial, chemical, gas processing, and glass facilities. He has worked with power distribution equipment and drives, and control equipment of various manufacturers. As a lead engineer responsibilities include material specification / procurement, project supervision, engineering coordination, construction engineering estimates and construction field support.



**MICHAEL J. SLIFKO**

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**Summary of Experience** [cont.]

**CDMG - Canonsburg, PA (2006 – Present)**

*Lead Engineer – Electrical*

Responsible for the electrical design and estimating of various projects. Duties consist of vendor / contractor coordination, equipment and material specifications / procurement, single line diagrams including sizing of motor starters, over-current protection, transformers and MCCs, elementary diagrams, interconnection diagrams, power / control / grounding, indoor/outdoor / emergency lighting, layout and circuiting of power distribution including high voltage, medium voltage and low voltage, raceway and cable design and sizing, conduit and cable schedules, electrical equipment design, including equipment arrangements with proper working clearances. Projects of note include:

- Clarion Industries
  - 20 MW Co-Generation Facility
  - Medium & Low Voltage Substation
  - Utility Connection Interface
  
- Timet - Toronto, OH
  - MV Substation T5 Installation & Project Coordination
  - 69kV Power Distribution Upgrade
  - Shot Blaster Construction Engineering
  - Plant Power Study
  - Plant Arc Flash Study
  - Power Distribution Upgrade Proposals
  
- Timken Company – Vertical Caster
  - Medium & Low Voltage Power Distribution Equipment Specifications & System Design
  - Design of Critical Power System & Associated Components
  - Design of Plant Control Panels
  
- Vista Gathering
  - Patton Station Electrical Design including Hazardous Classification & Associated Electrical Installation Methods
  - Patton Station Power System Design
  - Cygrymus Station Compressor Addition
  - Patton Station Electrical Compression Feasibility Study



**MICHAEL J. SLIFKO**

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**Summary of Experience** [cont.]

**CDMG** [cont.]

- MarkWest
  - 5,000 HP VFD Feasibility Study
  - Fire Eye Gas Detection Location Study
  - VRU Stand-By Power
  - Compressor Study
  
- Calgon Carbon Corporation - Various Projects
  - Design & Procurement Power System Equipment
  - Design of Conduit & Cabling for All Power, Control & Instrumentation
  - Design of Various Remote I/O and Control Panels
  - Design of Electrical Rooms Required for Increased Power & Control Requirements
  - Plant Power Upgrade, Feasibility Study & Detailed Design
  
- Kuraray
  - Washington Works – Electrical and Controls Upgrade
  
- Nova Chemicals
  - Main Substation Replacement
  - Load Center Replacement
  
- PPG Industries
  - M.V. Service Switchgear EPC Specification
  
- Elliott Company - Jeannette, PA
  - Plant Arc Flash and Power Study
  - Plant Power Distribution Upgrade (Utility Line to Low Voltage Distribution)
  - Substation Replacement and Consolidation
  - 24 MW Drive Installation
  
- Westinghouse Electric Company
  - AP1000 Plant Raceway Design
  - Cable Routing and Scheduling
  - 480V Distribution Upgrade
  - Stand-By Generators



**MICHAEL J. SLIFKO**

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**Summary of Experience** [cont.]

**CDMG** [cont.]

- United Spiral Pipe - Pittsburg, CA  
New Pipe Mill Construction Engineering Project
  - Building Services (Lighting, HVAC, Miscellaneous Power)
  - Underground Electrical
  - Exposed Conduit / Tray Design
  - Power Distribution
  - Field Support
  - Equipment Interconnection
  - Permit Assistance
  
- Allegheny Ludlum - Brackenridge, PA  
Equipment Replacement Projects
  - MV and LV Substations
  - MV Distribution Breakers
  - Installation Design
  - Field Support
  
- Alcoa - Qinhuangdao, CHINA  
Bohai Expansion Project
  - Cable Scheduling
  - Field Support
  
- Dunn Road Builders - Laurel, MS  
Material Handling System Project
  - Equipment Arrangements
  - Electrical Controls
  - Conduit / Tray Design
  - Power Distribution
  
- Henry F. Teichmann, Inc. - Richmond, IN
  - Glass Furnace Upgrade – Richmond, IN
  - Fuyao Cold Repairs – China and Illinois
  
- Logan Aluminum - Russellville, KY  
Drives Upgrade Project
  - Construction Management



**MICHAEL J. SLIFKO**

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**Summary of Experience** [cont.]

Heraeus Electro-Nite - Pittsburgh, PA (2000 – 2006)

*Project Engineer*

Responsible for new product development and existing product improvement and support. Products consisted of liquid metal sensors and the hardware required to use them.

SMS Demag - Pittsburgh, PA (1999 – 2000)

*Electrical Engineer*

Responsible for the design, development, and commissioning of rolling mill automation systems.

Project of Note:

- Norandal Aluminum - Huntingdon, TN
  - Quantum Leap Project



**KENNETH A. HELFER, P.E.**

***Principal Engineer***

**Education**

B.S., Electrical and Electronic Engineering Technology  
Capitol College

A.S., Electrical and Electronic Engineering Technology  
Pennsylvania State University

OSHA  
10-Hour Construction Safety and Health Training Certification

**Professional Engineer Registration**

- Pennsylvania
- Ohio
- West Virginia
- Maryland
- North Carolina

**Areas of Special Competence**

- Industrial Electrical Design and Installation
- Power Distribution and Electrical Control
- Substation Design / Grounding
- UPS Power Systems
- Stand-By Power Systems
- NFPA 70 – National Electrical Code
- Arc Flash – NFPA 70E
- FM Global Electrical Requirements
- Electrical System Check-Out and Trouble Shooting
- Electrical Load Studies
- Construction Assistance and Installation
- Electrical Field Investigation
- Electrical Equipment Specifications
- Hazardous Classified Locations
- Instrumentation Systems
- Turbine-Generator Systems Engineering
- Plant Electrical Maintenance



**KENNETH A. HELFER, P.E.**

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**Summary of Experience**

Ken has over 35 years experience in industrial electrical design, design supervision, systems engineering and plant electrical maintenance. His background has involved electrical engineering design responsibilities for the installation of process equipment and facilities in metals, glass, power generation and power co-generation facilities. He has had extensive experience with power distribution systems and in the writing of electrical equipment specifications for a broad range of projects and electrical distribution and control equipment.

Collateral experience has included the direct supervision of in-plant electrical maintenance activities associated with the manufacture of turbine-generator sets and the installation of plant capital projects to facilitate such manufacturing. Ken has previously served as Electrical Design Engineer, Turbine-Generator Systems Engineer, Plant Engineer and Electrical Maintenance Supervisor.

**CDMG - Canonsburg, PA (1991 – Present)**

***Manager of Engineering / Lead Electrical Engineer***

Responsible for all design activities performed within the Electrical and Engineering Department. Participates in and supervises the production of all Electrical Engineering activities which entail calculations, specifications, drawings, studies, engineering estimates, construction estimates, manpower, staffing and proposals. Coordinates the design and layout of electrical construction installation drawings such as power distribution single line diagrams, temporary power systems, bus bar and cable tray systems, embedded and exposed conduit, date-based conduit and cable schedules, H.V. pole line structures, electrical control rooms, control consoles, heat trace systems, hi-bay and auxiliary lighting systems.

The following lists some representative projects:

- Clarion Industries
  - 20 MW Co-Generation Facility
  - Medium and Low Voltage Substations
  - Utility Connection Interface
  
- Elliott Company – Jeannette, PA
  - Turbo Expander / 35 MV Generator
  - 138 KV Incoming Power Line
  - Plant Power Distribution Upgrade
  
- Allegheny Ludlum Steel Corporation – Brackenridge, PA
  - Replacement of 26.5 / 6.9 / .480 KV Substation
  - Replacement of 2.4 KV – 480 Volt Unit Substation



**KENNETH A. HELFER, P.E.**

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**Summary of Experience** [cont.]

**CDMG** [cont.]

- Allegheny Ludlum Steel Corporation – Vandergrift, PA
  - Annealing/Pickle Line
  - Skin Pass Mill
  - Z-Mill Power Distribution Upgrade
  
- First Energy – Eastlake, OH
  - Rapid Discharge / Unload Facility and Conveyor System
  
- Henry F. Teichmann, Inc. / PPG
  - Float Glass Lines 69 KV Substation and Distribution - China
  - Batch House Instrumentation and Control – Philips Glass
  - Fuyao Cold Repairs – China and Illinois
  
- Titanium Metals Corporation
  - 69 KV Plant Power Distribution
  - Arc Flash Study and Equipment Labels
  - Plant Power Distribution Study
  
- Consumer Energy – Thetford, MI
  - Control Upgrade of Nine (9) Gas Turbine / Generators
  
- Ohio Coatings Company – Yorkville, OH
  - Tin Plating Line
  
- Thomas Steel Strip – Warren, OH
  - 25 KV Pole Line
  - Reversing Cold Mill
  - Nickel Plating Line
  - Slitter / Packaging line
  
- National Steel Corporation – Portage, IN
  - No. 3 HDG Line (Mitsubishi Heavy Industries)



**KENNETH A. HELFER, P.E.**

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**Summary of Experience** [cont.]

**CDMG** [cont.]

- PPG Industries, Inc. – Pittsburgh, PA
  - Vinyl Line – Tipton Works
  - Cold Cutting Line – Mexico
  - 3 Cell Cutting Line – Evansville Works
  - Lehr Electrical Upgrade – Creighton Works
  - Cold Repair – Carlisle Works
  - Glass Facilities Arc Flash Study

**Comstock Engineering, Inc., Pittsburgh, PA**

*Staff Electrical Engineer*

- Stelco Steel – Hamilton, Ontario, Canada
  - 72-Inch Wide Hot Dip Galvanizing/Annealing Line
- Eastern Stainless Corporation – Baltimore, MD
  - Power Study for Annealing and Pickling Line
- Allegheny Ludlum Steel Division – Vandergrift, PA
  - Power Distribution System for Installation of 52-Inch Sendzimir Mill
- USS Division – USX Corporation – Pittsburgh, PA
  - Greenfield Galvanizing Line Project Development
- LTV Steel – Cleveland, OH
  - Continuous Anneal Line

**PPG Industries, Inc.**

*Plant Electrical Engineer*

- Bending Lehr Electrical Upgrade
- Boiler Replacement



**KENNETH A. HELFER, P.E.**

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**Summary of Experience** [cont.]

Elliott Company

*Plant Electrical Maintenance*

- Radio Control Crane
- Heavy Test – Electrical and Instrumentation

United States Steel Corporation

*Electrical Design Engineer*

- USS – Baytown Texas Works
  - Two Strand Continuous Caster, Baghouse, Reheat Furnace and Plate Mill Facility