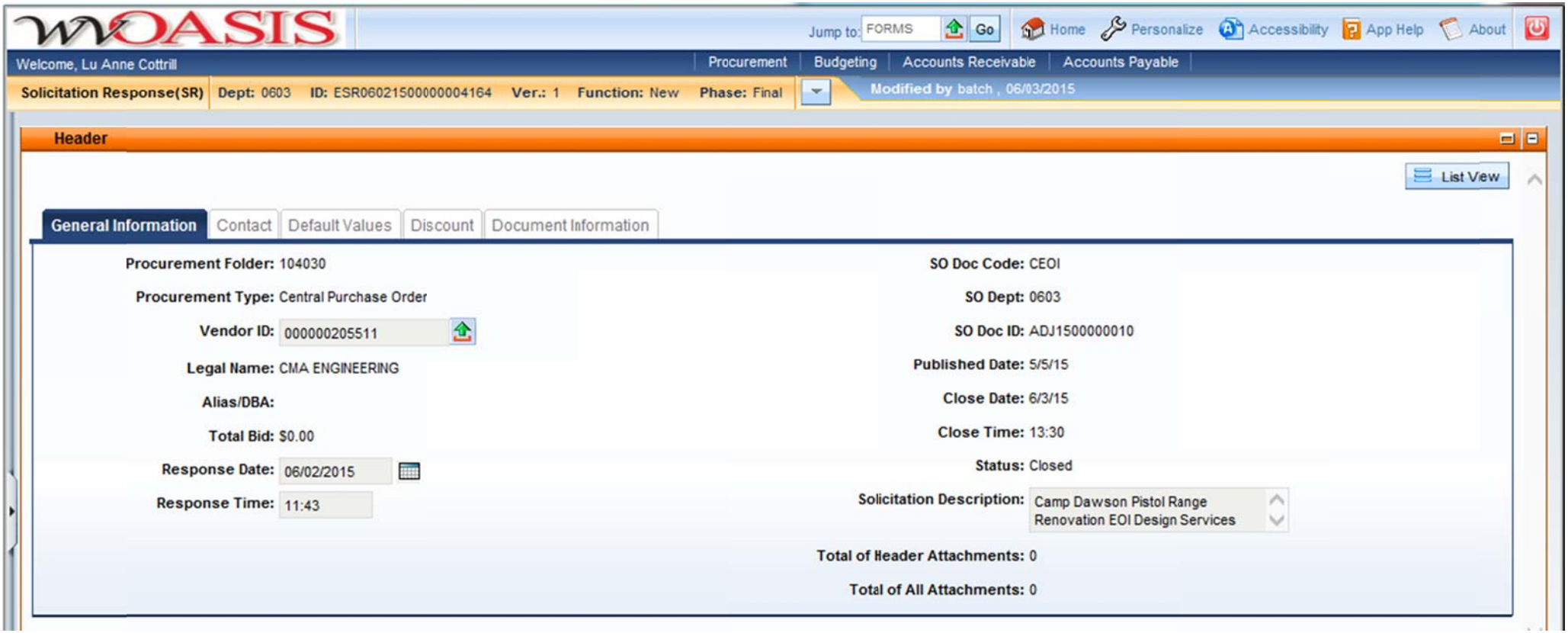
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


WVOASIS
Jump to: FORMS Go
Home
Personalize
Accessibility
App Help
About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 0603 ID: ESR06021500000004164 Ver.: 1 Function: New Phase: Final
Modified by batch , 06/03/2015
Header
List View
General Information
Contact
Default Values
Discount
Document Information
Procurement Folder: 104030
Procurement Type: Central Purchase Order
Vendor ID: 000000205511
Legal Name: CMA ENGINEERING
Alias/DBA:
Total Bid: $0.00
Response Date: 06/02/2015
Response Time: 11:43
SO Doc Code: CEOI
SO Dept: 0603
SO Doc ID: ADJ1500000010
Published Date: 5/5/15
Close Date: 6/3/15
Close Time: 13:30
Status: Closed
Solicitation Description: Camp Dawson Pistol Range Renovation EOI Design Services
Total of Header Attachments: 0
Total of All Attachments: 0

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

State of West Virginia
Solicitation Response

Proc Folder : 104030

Solicitation Description : Camp Dawson Pistol Range Renovation EOI Design Services

Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation No	Version
	2015-06-03 13:30:00	SR 0603 ESR06021500000004164	1

VENDOR

000000205511

CMA ENGINEERING

FOR INFORMATION CONTACT THE BUYER

Tara Lyle

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

Signature X **FEIN #** **DATE**

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	Camp Dawson Modernize Combat Pistol Qualification Course				

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description :

The WV Purchasing Division for the agency, WV Army National Guard - Division of Engineering and Facilities, is soliciting expression of interests for professional engineering design services to develop construction documents to provide for the renovation, upgrade and modernization of the Combat Pistol Qualification Course and other upgrades at the Camp Dawson facility located near Kingwood, WV 26537.

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

State of West Virginia
Centralized Expression of Interest
02 — Architect/Engr

Proc Folder: 104030

Doc Description: Camp Dawson Pistol Range Renovation EOI Design Services

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2015-05-05	2015-06-03 13:30:00	CEOI 0603 ADJ1500000010	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

CMA Engineering
824 Cross Lanes Drive
Charleston, WV 25313
(304) 343-0316

FOR INFORMATION CONTACT THE BUYER

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

Signature X Daniel L. Ellar **FEIN #** 55-0659239 **DATE** June 2, 2015

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

CERTIFICATIONAND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, 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, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

CMA Engineering
(Company)

Daniel Lee Ellars
(Authorized Signature) (Representative Name, Title)

(304) 343-0316 (304) 343-5146 June 2, 2015
(Phone Number) (Fax Number) (Date)

RFQ No. ADJ1500000010

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

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

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

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: CMA Engineering

Authorized Signature: Daniel L. Ellam Date: June 2, 2015

State of WV

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 2 day of June, 2015

My Commission expires September 16, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC Cindy Looney

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
CINDY LOONEY
CMA ENGINEERING
[illegible] LANES DRIVE
CHARLESTON, WV 25313
My commission expires September 16, 2020

CMA ENGINEERING

Clingenpeel/McBrayer & Associates, Inc.

Expression of Interest
To Provide
Professional Engineering Services
to Modernize, Upgrade, Renovate Combat Pistol Qualification Course
At Camp Dawson
CEOI ADJ1500000010

June 3, 2015

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Table of Contents

1	Letter of Interest
2	CMA Corporate Profile
3	CMA Resumes
4	CMA Project Experience
5	Potesta & Associates

TAB 1

CMA
ENGINEERING

Clingenpeel/McBrayer & Associates, Inc.

May 28, 2015

Ms. Tara Lyle
Buyer Supervisor
2019 Washington Street East
Charleston, WV 25305

Re: Expression of Interest– CEOI ADJ1500000010

Dear Ms. Lyle:

CMA Engineering is pleased to submit, for your consideration, our qualifications and experience in providing engineering services for the modernization, upgrades and renovations at the combat pistol qualification course at Camp Dawson.

CMA Engineering has provided mechanical and electrical engineering services on numerous projects during our twenty-nine years, and we feel this is an excellent opportunity for our firm to assist you in successfully completing this project. Our design professionals are educated in the latest technological and industrial standards and work closely with the owner and contractor from start to finish assuring that the project is completed on time and within budget.

CMA Engineering will act as Prime Consultant on this project and will utilize the professional expertise of Potesta & Associates for any civil engineering design needed.

We appreciate your consideration of our firm and look forward to presenting a more comprehensive statement of our qualifications in a personal interview.

Sincerely,

CMA Engineering

Timothy L. Cox, P.E.
Principal

enclosures

TAB 2

CMA
ENGINEERING

Clingenpeel/McBrayer & Associates, Inc.

Firm Profile

824 Cross Lanes Dr. Charleston, WV

5 Riddle Court, Morgantown, WV

Services

CMA Engineering is a West Virginia based small business firm, providing services in the areas of HVAC, plumbing, fire protection and electrical engineering. Incorporated in 1986, our firm has always believed that a successful project requires a comprehensive approach. This includes all facets of project development, starting with master planning, working closely with the client, developing the completed construction documents, and working with contractors during the bidding and construction administration phases. However, our depth of expertise goes far beyond the traditional design/bid/build service. CMA Engineering is a proven leader in the design/build delivery method. From developing the performance design criteria for owners to designing the mechanical, electrical and plumbing systems for contractors, CMA has an impressive portfolio of design/build experience.

CMA Engineering maintains its reputation of design and service quality by keeping informed of the latest innovations and technical trends regarding energy-efficiency and sustainability in mechanical, electrical and plumbing design. CMA is the engineer on record for the design/build team for the new West Virginia Consolidated DEP Office Building, the first LEED certified building in the State. Our staff includes an accredited professional for the Leadership in Environmental and Energy Design (LEED) and we incorporate the most efficient and sustainable "green" designs in all of our projects.

History

CMA Engineering has provided engineering design services on numerous projects of varying size and complexity. Clients include architects, industrial companies, governmental agencies, contractors, engineers, developers and private organizations. With offices strategically located in Charleston and Morgantown, our professional staff can provide clients with exceptional hands-on services for planning, meetings, site visits and construction administration without effecting the project's budget.

WVARNG Experience

For over 28 years, CMA has provided electrical and mechanical design and contract administration services to various WVARNG facilities covering the State. These facilities and projects range from the smallest renovations of existing armories and readiness centers to construction of new reserve centers and even combination facilities like 911 centers and maintenance garages. Many times, special site-related issues have complicated design due to remote locations, poor water quality or pressure, unreliable local power systems, etc. Many new armories we have designed include distance learning auditoriums, secure telecommunications rooms, firing ranges, weapon simulations rooms, firearm vaults, drill halls, large kitchens, equipment storage, bunk rooms, and expandable classrooms. CMA has consistently met the challenges and exceeded expectations by customizing design to address all concerns while staying within project schedules and budgets. We are proud of our service to the West Virginia Army National Guard.

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

(top) **Ruby Memorial Hospital—Morgantown, WV**
HVAC Exhaust System

(middle) **Memorial Ice Rink—South Charleston, WV**
Refrigerant Pressure Gages

(bottom) **Alderson Federal Correctional Facility—Alderson, WV**
Steam Plant

M E C H A N I C A L

CMA Engineering experience includes:

- Constant Volume Air Handling Systems
- Variable Volume Air Handling Systems
- Demand Control Ventilation Systems
- Natatorium Dehumidification Systems
- Building Energy and Management Control Systems
- Industrial Ventilation and Exhaust Systems
- Steam and Condensate Systems
- Cooling Plants and Distribution
- Heating Plants and Distribution
- Energy Recovery Systems
- Water Source Heat Pump Systems
- Low, Medium and High Pressure Air Distribution Systems
- Direct Digital, Pneumatic and Hybrid Control Systems
- Kitchen Ventilation and Exhaust Systems

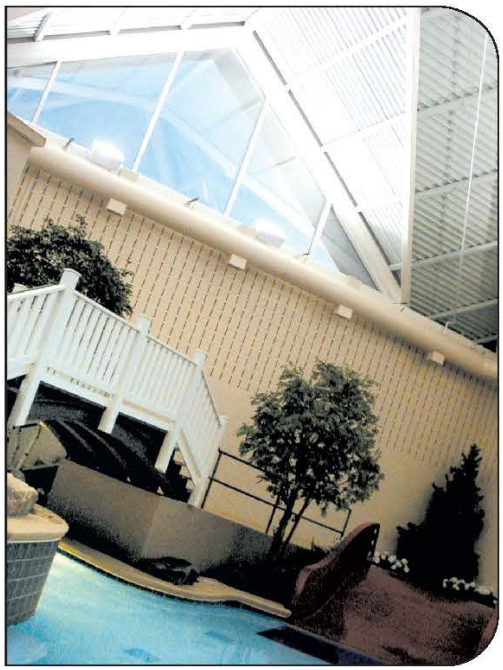
CMA ENGINEERING

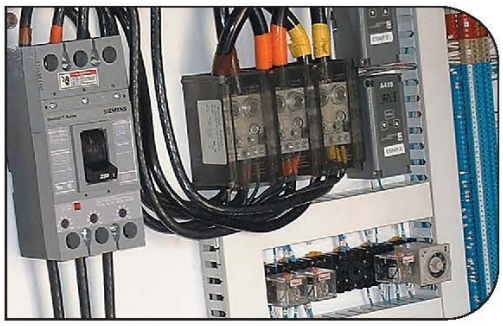
Clingenpeel/McBrayer & Associates,Inc.

824 Cross Lanes Drive
Charleston, West Virginia 25313
(304) 343-0316 tel
(304) 343-5146 fax

5 Riddle Court
Morgantown, West Virginia 26505
(304) 598-2558 tel
(304) 598-2472 fax

www.cmawv.com





(above) **Split Rock Pools—Snowshoe, WV**
Indirect Lighting System

(below) **Memorial Ice Rink—South Charleston, WV**
Chiller Power and Control Panel

E L E C T R I C A L

CMA Engineering experience includes:

- Underground Ducts and Utility Structures
- Intrusion Detection
- Closed Circuit Television
- Cable and Master Antenna Television
- Medium Voltage Distribution and Substations
- Secondary Voltage Distribution
- Engine Generators and Battery Inverters
- Transient Voltage Suppression
- Interior Lighting
- Exterior Lighting
- Sports Lighting
- Theatrical Lighting
- Lighting Control
- Uninterruptible Power Supply Systems
- Lightning Protection
- Intercommunications Systems
- Nurse Call
- Voice and Data Systems
- Fire Detection Systems

CMA
ENGINEERING

Clingenpeel/McBrayer & Associates,Inc.

824 Cross Lanes Drive
Charleston, West Virginia 25313
(304) 343-0316 tel
(304) 343-5146 fax

5 Riddle Court
Morgantown, West Virginia 26505
(304) 598-2558 tel
(304) 598-2472 fax

www.cmawv.com

(top) **Split Rock Pools—Snowshoe, WV**
Piping & Pump Room

(middle) **Memorial Ice Rink—South Charleston, WV**
Piping & Chilling

(bottom) **Alderson Federal Correctional Facility—Alderson, WV**
Steam Piping

PLUMBING & PIPING

CMA Engineering experience includes:

- Sanitary Sewer Systems
- Storm Sewer Systems
- Natural Gas Distribution
- LP Gas Distribution
- Fuel-Oil Distribution
- Compressed Air Systems
- Vacuum Systems
- Chemical Waste Systems
- Process Water Systems
- Deionized Water Systems
- Domestic Water Systems
- Helium Distribution Systems
- Domestic Water Pumping Systems
- Sewage Pumping Systems
- Water Heating
- Automatic Fire Sprinkler Systems
- Standpipe Systems
- Fire Pumps, Storage Tanks, Service Mains
- Medical Gas Systems

CMA ENGINEERING

Clingenpeel/McBrayer & Associates,Inc.

824 Cross Lanes Drive
Charleston, West Virginia 25313
(304) 343-0316 tel
(304) 343-5146 fax

5 Riddle Court
Morgantown, West Virginia 26505
(304) 598-2558 tel
(304) 598-2472 fax

www.cmawv.com

CMA ENGINEERING

References

Clingenpeel/McBrayer & Associates, Inc.

Mylan Pharmaceuticals
P.O. Box4310
Morgantown, WV 26505
Contact: Mr. J. J. Dotson
(304) 599-2595

Concord University
P.O. Box 1000
Athens, WV 24712
Contact: Mr. John Ferguson
(304) 384-5233

Yeager Airport
100 Airport Road
Charleston, WV 25311
Contact: Mr. Rick Atkinson
(304) 344-8033

West Virginia University
P.O. Box 0877
Morgantown, WV 26505
Contact: Mr. John Thompson
(304) 293-3625

Davis Memorial Hospital
P.O. Box 1484
Elkins, WV 26241
Contact: Steve Johnson
(304) 637-3129

Kanawha County Schools
3300 Pennsylvania Avenue
Charleston, WV 25302
Contact: Mr. Charles Wilson
(304) 348-6148

State of West Virginia
1900 Kanawha Blvd, East
Bldg. 1, Room MB-60
Charleston, WV 25305
Contact: Mr. Robert Kilpatrick
(304)558-0250

Harrison County Schools
P.O. Box 1370
Clarksburg, WV 26302
Contact: Mr. Neil Quinn

TAB 3

Timothy L. Cox, P. E., CBCP

President
Mechanical Engineer
(304) 598-2558
tcox@cmawv.com

Education

University of Colorado

Boulder, Colorado

Bachelor of Science in Mechanical Engineering

Registrations/Professional Affiliations

Registered Professional Engineer in WV, VA, MD, KY

Association of Energy Engineers-CBCP

CPD (Certified in Plumbing Engineering)

Member of ASHRAE

American Society of Plumbing Engineers

National Association of Fire Protection Engineers

WV Society of Healthcare Engineers

WV Chapter of A.I.A.

Experience

Timothy Cox, President and Senior Mechanical Engineer of CMA Engineering, brings 32 years of mechanical and plumbing design experience to our clients. Timothy is a Certified Building Commissioning Professional through Association of Energy Engineers.

Project Experience

Design/Build-Criteria Development

Morgantown Events Center

West Virginia University Intermodal Parking

Marshall University Parking Facility

Yeager Airport Facility

Educational Facilities K-12

New Rainelle Elementary School

Salem Middle School Classroom Addition

South Harrison High School HVAC Replacement

South Harrison Middle School HVAC Upgrades

West Virginia University-Open End Contract since 1999

Coliseum Life Safety Renovations

New Soccer Stadium

New Wrestling Training Facility

Military Experience

New Moorefield Readiness Center

New Elkins Readiness Center

Gassaway Armory Addition & Renovations

St. Albans Armory Addition

Clarksburg/Weston Armory Renovations

Mylan Pharmaceuticals, Morgantown, WV

Various projects including HVAC plumbing, fire sprinkler and controls for new North Plant expansion, office building, fluid bed addition, parking garage and weighing and packaging

Daniel L. Ellars, P. E., AP BD+C

Principal
Electrical Engineer
(304) 343-0316
dellars@cmawv.com

Education

West Virginia University Institute of Technology

Montgomery, WV

Bachelor of Science in Electrical Engineering

West Virginia State University

Institute, WV

Bachelor of Science in Business Administration

Registrations/Professional Affiliations

Registered Professional Engineer in WV, PA

Leadership in Energy & Environmental Design-

Accredited Professional-Building Design and Construction

U..S. Green Building Council

Member of ASHRAE

National Fire Protection Association

Institute of Electrical & Electronics Engineers

WV Chapter of A.I.A.

Experience

Daniel Ellars, senior electrical engineer, brings 25 years of electrical design and project management experience to our clients. Mr, Ellars had 17 years of experience with American Electric Power providing advice and coordination for new construction, additions, renovations and energy audits. Dan also served as the project manager for AEP's prime and emergency power systems program to provide on-site power generation to small and large, commercial and industrial customers across AEP's seven state territory.

Project Experience

Military Experience

New Moorefield Readiness Center

New Elkins Readiness Center

St. Albans Armory-Addition and Renovations

Gassaway Armory-Addition and Renovations

Welch Armory-Electrical Upgrades

Bluefield Armory-Electrical Upgrades

Dunbar Armory-Electrical Upgrades

Mylan Pharmaceuticals

New Office Building

North Plan Expansion

Recreational Facilities

Summit Bechtel National Scout Reserve

Canaan Valley Ski Resort

WV Department of Transportation

New District 1 Administration Building

New District 8 Administration Building

Interstate Lighting Upgrades

WVDOH-Utility Study for all 10 Districts

Educational Experience

New Talcott Elementary School

New Fairdale Middle School

Chamberlain Elementary-Elevator Addition

Matthew C. Corathers, P.E.

Mechanical Engineer
(304) 598-2558
mcorathers@cmawv.com

Education

West Virginia University

Morgantown, WV

Bachelor of Science in Mechanical Engineering

Registrations/Professional Affiliations

Registered Professional Engineer in WV

Member of ASHRAE

WV Society of Healthcare Engineers

Experience

Matthew Corathers, mechanical engineer, joined CMA's professional staff in 2008. He has since become registered as a mechanical engineer and has been involved in numerous projects starting from development of fees, design, bidding and construction administration services developing as a complete engineer. He is also cross training between disciplines of plumbing, electrical, and fire sprinkler to provide more complete services to our clients.

Project Experience

West Virginia University

New Daycare and Nursery Facilities

Engineering Science Building– Laboratory Renovations

Hospital Experience

Davis Memorial Hospital-New Addition

Monongalia General Hospital-Renovations to IT Workroom Cooling

United Hospital Center-New MRI facility

VA Hospital, Clarksburg, WV-Renovations to Dental Lab

Mercer County Nursing Home-Addition

Court Houses

Randolph County Courthouse-Mechanical design for completion of two-story addition and modifications of the existing second floor to be used by the Family Court

Monongalia County Family Court-Renovations

Educational Facilities

Harrison County Schools-Fire Alarm replacement at Robert C. Byrd High School, Nutter Fort Elementary and Lost Creek Elementary

University High School-HVAC Upgrades for use as a middle school

New Rainelle Elementary School-HVAC Design

Aurora Elementary School Addition-Mechanical Design

Military Experience

Elkins Armed Forces Reserve Center

Clarksburg/Weston Armory Renovations

Larry A. Weese

Plumbing Designer
(304) 343-0316
lweese@cmawv.com

Education

West Virginia University
Morgantown, WV
Master of Science, Bachelor of Science-
Division of Forestry

Professional Development

Various seminars and technical sessions

Experience

Larry Weese brings 25 years of mechanical and plumbing design and project management experience to our clients. Larry brings cross training between electrical, mechanical and plumbing/fire sprinkler systems to provide a more complete and thorough representation to each of our clients' projects.

Project Experience

Military Experience

Elkins Armed Forces Reserve Center
Moorefield Readiness Center
St. Albans Armory Renovations & Additions
Gassaway Armory Renovations & Additions

Emergency Response Facilities

Randolph County 911-New Facility
Mason County 911-New Facility
Raleigh County 911-New Facility
Orchard Manor Fire Station-New Facility

I

ndustrial Experience

Standard Laboratories-Laboratory Addition
Dow Process Control-New Facility
Diamond Electric-Expansion

Commercial Experience

Bobcat of Advantage Valley-New Facility
Allegheny Springs Restaurant

Educational Facilities K-12

New Sissonville Middle School
New Lewisburg Elementary School
New Talcott Elementary School
New Fairdale Elementary School
Nitro High School Toilet Renovations

TAB 4

Moorefield Readiness Center

Project Location:	Moorefield, WV
Project Description:	CMA Engineering provided design pf HVAC, plumbing, fire alarm and fire sprinkler systems, and electrical systems for the new 57,100sf armory facility including an on-site, standby emergency power system designed to provide 100% of the overall power requirements to the facility in addition to an electrically- driven fire pump. The building consists of an armory combined with a 911 center. Facility also included a vehicle maintenance bay, a distance learning center and classrooms. Designs included a coordination of the campus's complete underground medium-voltage power and telecommunications systems and separation of the armory's and 911 center's telecommunication networks.
Project Owner Contact:	Major Rocky Hodges WV Army National Guard (304) 561-6353 Rocky.Hodges@us.army.mil
Completion Status:	Completed in 2014

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Elkins Armed Forces Reserve Center

Project Location: Elkins, WV

Project Description: CMA Engineering provided design pf HVAC, plumbing, fire alarm and fire sprinkler systems, and electrical systems for the new 54,500sf all-electric armory facility including an on-site, standby emergency power system designed to provided about 40% of the overall power requirements of the facility in addition to an electrically driven fire pump. Plans were provided to allow an additional engine/generator set to be installed to more than double the system's capacity in the future. Designs included a portable on-site, standby emergency power system for the facility's lift station, and coordination of the campus' complete underground medium-voltage power and telecommunications systems.

CMA complied with the latest requirements of the West Virginia Army National Guard to provide door access security at selected entrances including card readers with magnetic locks or electric hinge locks and door contacts for access monitoring. The fire alarm system was interconnected with a mass notification system for customized procedures in response to various emergency and threat conditions. Power and raceway designs were provided to support the Guard's elaborate security systems to safeguard their weapons vaults.

Project Owner Contact: Major Rocky Hodges
WV Army National Guard
(304) 561-6353
Rocky.Hodges@us.army.mil

Completion Status: Completed in 2012

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Clarksburg/Weston Armories

Clarksburg Armory

Weston Armory

Project Location: Morgantown, WV

Project Description: CMA Engineering provided mechanical, electrical and plumbing design and is currently providing construction administration services for the renovation of the existing restrooms and locker rooms at the WV Army Reserve National Guard facilities in Clarksburg and Weston. Renovations included new lighting and receptacles, upgraded hot water heating radiators and additional ventilation (exhaust fans and intakes only).

Completion Status: To be completed in 2015

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Gassaway Armory

Project Location: Gassaway WV

Project Description: CMA Engineering provided mechanical, electrical and plumbing, design services for the renovation of 24,170 square feet of a single story structure including a 10,900 square feet drill hall and the addition of a new 4,180 sf single story facility to house lockers, storage space, a lobby, corridors and office space. The design included upgrades to plumbing and electrical utilities as well as new HVAC systems and controls for the addition and renovated areas; new power, lighting and communications design; and modifications to the fire alarm, fire sprinkler, security and other systems.

Construction was accomplished while the facility was fully occupied.

Completion Status: Completed in 2010

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

St. Albans Armory

Project Location: St. Albans, WV

Project Description: CMA Engineering provided mechanical, electrical and plumbing, design services for the renovation of 16,407 sf of a single story facility and a single story addition of 13,940 sf composed primarily of office space, storage space, a lobby and corridors. The project also included the addition of a free-standing, insulated metal building (approximately 1,760sf) divided into three bays for vehicular storage. A new electric fire pump and associated water storage tank were added to address low water pressure problems at the site. Construction was accomplished while the facility was fully occupied.

Completion Status: Completed in 2011

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Bluefield Armory

Project Location: Bluefield, WV

Project Description: CMA Engineering provided mechanical, electrical and plumbing design and contract administrative services for replacement and upgrade of the existing underground power service and addition of a new stand-by, emergency engine/generator set with a new automatic transfer switch for the armory. The new emergency power system was designed to support the existing armory's loads while the new distribution panel was designed to support future HVAC loads anticipated to be added in future projects. The future HVAC loads are not to be supported by the generator.

Completion Status: Completed in 2014

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Dunbar Armory

Project Location: Dunbar, WV

Project Description: CMA Engineering provided design and contract administration services for replacement and upgrade of the existing overhead power service to a new underground service and the addition of a stand-by, emergency engine/generator set with a manual transfer switch for the armory. The engine/generator set was an available, existing military grade field unit and the transfer switch was re-used from another armory that had upgraded its service. The emergency power system was designed to support the existing armory loads while the new main distribution panel was designed to support future HVAC loads anticipated to be added in future projects. The future HVAC loads are not to be supported by the generator. CMA also provided design and contract administrative services for replacement and upgrade of the telecommunications systems service entrance and general upgrade of the facility's telephone and data systems.

Completion Status: Completed in 2014

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

Welch Armory

Project Location: Welch, WV

Project Description: CMA Engineering provided design and contract administration services for replacement and upgrade of the existing overhead power service and addition of a standby, emergency engine/generator set with a new automatic transfer switch for the armory. The engine/ generator set was re-used from another armory that had upgraded its service. The new generator was modified to change its voltage to suit the new application. The emergency power system was designed to support the existing armory's loads while the new main distribution panel was designed to support future HVAC loads anticipated to be added in future projects. The future HVAC loads are not to be supported by the generator.

Completion Status: Completed in 2014

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

CMA ENGINEERING

New Construction

Eleanor Maintenance Center

CMA Engineering provided mechanical, electrical and plumbing design services for a 132,000sf maintenance facility to house combined support maintenance shop and Class IX USPFO warehouse. CMA has continued to provide engineering services for the addition of the paint booth, entrance guard house, MCOFT pad, and covered storage.

Eleanor Readiness Center

CMA Engineering provided engineering services for the design of mechanical, electrical and plumbing systems for the new 80,000sf readiness center, including a 16,000sf section that is utilized by the United States Navy.

Summersville Readiness Center

CMA Engineering provided engineering services for the design of mechanical, electrical and plumbing systems for the 42,000sf readiness center. This facility also features areas for use by the City of Summersville for events

Lewisburg Readiness Center

CMA Engineering provided mechanical, electrical and plumbing design services for a 37,000sf readiness center that includes a vehicle maintenance bay.

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

CMA
ENGINEERING

Summit Bechtel National Scout Reserve

CMA Engineering provided the electrical designs and specifications for the recently completed Summit Bechtel National Scout Reserve (SBNSR) at Mount Hope, WV. SBNSR is to serve as the new permanent home and headquarters for the Boy Scouts of America (BSA) for their quadrennial National and World Jamborees and for their annual High Adventures and other various activities and events. CMA was instrumental in the early design phases of the project to ascertain the specific needs of the BSA for the facility, to identify required power loads, and to prioritize these loads in order of their necessity. Working closely with the BSA, with a host of their national and international consultants, and with American Electric Power (AEP), CMA compiled load data and made calculations of various power scenarios for the campus. A maximum of 7 MegaWatts was allowed for the facility and the designs were completed based on value. As a result, over 20 miles of single-phase and three-phase medium-voltage cables and the associated conduits were installed underground along the roadways for the new campus comprising six different campsites and a core area spread over more than 1,000 acres. When completed, the core area is to include an amphitheater, bus terminals, visitor's center, zip-line stations, and a museum and headquarters office building for the BSA. Three separate medium-voltage circuits were provided to the west end of the site by AEP and a switching station was set up at the east end to serve the dozens of loop-fed, pad-mounted transformers which were distributed around the site at key locations to minimize voltage drop and to provide a high level of power reliability. All power and telecommunications cabling and conduits are underground. Six cellular towers on the site work in conjunction with 125 individual wireless stations at the campsites to provide wireless capabilities to all of the occupants. CMA also provided lighting and power design for the 375 bath houses on site and coordinated the interconnections between them and the campus infrastructure. The BSA christened the site in the summer of 2013 with its first National Scout Jamboree.

Owner Contact: Ken Davis
(817) 694-3042
ken@kdatexas.com

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

CMA
ENGINEERING

Canaan Valley Ski Resort

CMA Engineering provided the electrical designs and specifications for the recently completed renovations and upgrades for the winter ski facilities at Canaan Valley Resort and Conference Center. The improvements included interior remodeling of three of the existing buildings for skier services and support adjacent to two of the three main lift stations, plus a new skier warming and rest station for the relocated tube run park. Interior remodeling work included lighting, HVAC and plumbing fixture replacements. Exterior work included renovations of an outdoor plaza for skiers with pole lights and a fire pit. Two new skier conveyors were added at the site, one for a new beginners slope area and one for the new tube run park. Exterior, weatherproof, pad-mounted 480-volt, three-phase switchgear was installed at the base of the two main lifts to serve the new conveyor, site lighting and new snow making equipment for the ski slopes and at a water booster pumping station at the mid-point elevation. Similar switchgear and a transformer were installed to serve the new buildings at the tube run park, site lighting, conveyor and snowmaking equipment for the tube run slopes. New exterior lighting fixtures and hinged poles were installed adjacent to the new conveyors to provide night use of the facilities. Two existing 208-volt, three-phase power services were upgraded for the improvements. Power services for the existing buildings were upgraded to provide both ground-fault and surge protection. CMA worked closely with Monongahela Power, the local power utility, on the power services and improvements and coordinated with another electrical design consultant at the site to provide new fiber-optic telecommunications services between the ski area facilities and the Park's main lodge while other renovations were in progress at the lodge.

Owner Contact: Bradley S. Leslie, P.E.
WV Division of Natural Resources
(304) 558-2764 Ext. 51823

Clingenpeel/McBrayer & Associates, Inc.

824 Cross Lanes Drive Charleston WV, 25313
(304) 343-0316 phone (304) 343-5146 fax

5 Riddle Court Morgantown, WV 26505
(304) 598-2558 phone (304) 598-2472 fax

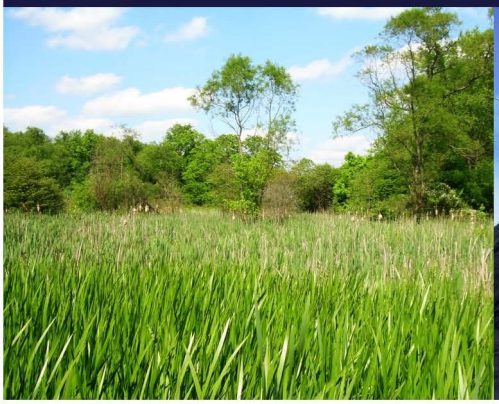
TAB 5

POTESTA
Engineers and Environmental Consultants

CORPORATE PROFILE

Providing Innovative, Timely, Cost-Effective Engineering and Environmental Solutions

Engineering • Mining • Remediation • Oil & Natural Gas • Environmental



Offices in:

CHARLESTON
7012 MacCorkle Avenue, SE
Charleston, WV 25304
(304) 342-1400

MORGANTOWN
125 Lakeview Drive
Morgantown, WV 26508
(304) 225-2245

WINCHESTER
15 South Braddock Street
Winchester, VA 22601
(540) 450-0180

CAMBRIDGE
841 Steubenville Avenue
Cambridge, Ohio
(740) 432-6555

Company Overview

FIRM HISTORY

Potesta & Associates, Inc. (POTESTA) was founded in 1997 as a full service engineering and environmental consulting firm headquartered in Charleston, West Virginia. We have now expanded to a diverse staff of more than 100 experienced engineers, scientists, and support personnel with branch offices in Morgantown, West Virginia, Winchester, Virginia and Cambridge, Ohio. Our clients include mining, manufacturing and chemical companies; utility companies; waste management companies; colleges/universities; land developers; attorneys; financial institutions; insurance companies; local, state and federal agencies; construction companies and architects.

SERVICES

- Air
- Biological and Toxicological
- CADD/GIS
- Civil Engineering and Design
- Coal Supply and Procurement
- Construction Monitoring
- Environmental Site Assessment
- Geotechnical Engineering
- Groundwater
- Hydrology and Hydraulics
- Landfills and Solid Waste
- Litigation Support
- Marcellus Shale
- Mining
- Occupational Safety and Health
- Oil and Natural Gas Consulting
- Permitting
- Remediation
- Roadway Engineering
- Sampling
- Site Design
- Surveying and Mapping
- Water and Wastewater
- Wetlands

Experienced Professionals

POTESTA's staff is committed to delivering innovative, cost-effective solutions to meet our client's complex requirements. The firm's environmental department consists of biologists, geologists, chemists, environmental scientists and environmental engineers, many with advanced degrees (Masters and Ph.D. level). POTESTA's engineering department includes civil, geotechnical, environmental, mining and mechanical engineers. Our registered professional engineers have over 300 years experience among them and are supported by a capable team of engineers, designers, surveyors and landscape architect.

Our firm is managed by three principals driving POTESTA forward with their experience and emphasis on exceeding expectations. Ronald R. Potesta, President, is a former Director of the West Virginia Division of Natural Resources and Dr. L. Eli McCoy, Vice President of Environmental, is a former Director of the West Virginia Department of Environmental Protection. Dana L. Burns, P.E., Vice President of Engineering, has more than 30 years experience with civil, geotechnical, mining and environmental engineering projects.

Additional information on our services and capabilities can be found on our corporate website: www.potesta.com.

FIRM HIGHLIGHTS:

Established in 1997

Staff of More Than 100

Corporate Office in Charleston, WV

Regional Offices in Morgantown, WV Winchester, VA Cambridge, OH

Primarily Serve Clients East of the Mississippi River

Carry a Full Line of Insurance Coverage

Stringent Internal Quality Control System

POTESTA & ASSOCIATES, INC.

Construction Monitoring

Potesta & Associates, Inc. (POTESTA) provides construction monitoring and construction management services to assist clients in achieving regulatory and contractual compliance, to document that contractor activities are in compliance with design requirements, and to serve as an extension of clients' staff. POTESTA can provide full-time or part-time field services utilizing one or more engineers or technicians.

Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA can assist clients in observation of construction activities and documenting compliance. Our typical involvement in such projects includes:

- Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.

- Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.

- POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.

- Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.

- Preparation of summary of construction reports, including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.

- Preparation of certifications as may be required.

POTESTA

POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com
Regional Offices: Morgantown, West Virginia and Winchester, Virginia

POTESTA & ASSOCIATES, INC.

Surveying and Mapping

Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions), ALTA surveys, control surveys, flood certificate surveys, well location surveys, construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse research, preparation of right-of-way plans, and verification of property owners. Potesta & Associates, Inc. (POTESTA) has licensed professional surveyors registered in West Virginia, North Carolina, South Carolina, Ohio, Virginia, and Pennsylvania. Their total combined surveying experience comes to well over 50 years.

POTESTA's surveyors use state-of-the-art equipment such as Topcon total stations, Trimble R-8 GNSS, and SMI data collectors with SMI software. Autodesk Civil 3D reduction and design software is used.

POTESTA is equipped with modern surveying instruments, allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field-to-office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products. These products can be supplied to our clients in AutoCAD and/or Microstation format.

Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography.

POTESTA can provide the necessary surveying required for establishing ground control for aerial mapping. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.

Surveys completed by POTESTA are performed by or under the direction of a professional licensed surveyor. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.

Our staff is experienced in global positioning surveys (GPS). GPS equipment, Trimble R-8 GNSS, and existing base stations are among POTESTA's surveying tools. Based upon the site location and ultimate use of the survey information, a recommendation is made to the client as to whether or not traditional survey or GPS is most applicable to their project.

POTESTA

POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com
Regional Offices: Morgantown, WV; Winchester, VA; and Cambridge, OH

POTESTA & ASSOCIATES, INC.

Civil Engineering and Design

Potesta & Associates, Inc. (POTESTA) helps clients evaluate and plan projects by completing the following types of preliminary evaluations and analyses.

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations Including Soil, Bedrock, and Groundwater Characterization
- Foundation Recommendations
- Monitoring Well Systems and Site Characterization Plans
- Boundary, Topographical and Photogrammetric Surveys
- Utility Planning
- Earthwork Evaluations Including Volume Analysis
- Opinion of Probable Costs/Engineer's Construction Cost Estimates

Once the project has been determined feasible, POTESTA's design professionals complete preliminary and final designs. Frequent communication is made with the client and any other design professionals to review completed activities and obtain input for the design process. Our goal is to provide our services to achieve or exceed our clients' expectations.

Our design services include:

- Erosion and Sediment Control Plans
- Earth Retaining Structures Design
- Geometric Site Layout
- Grading and Drainage Plans, Including Excavation and Fill Optimization
- Access Road Design
- Hydraulic Structure Design
- Water and Sewer Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications and Contract Document Preparation

POTESTA offers experienced environmental engineers and scientists to prepare applications for various environmental permits that may be required. These services include:

- Stormwater Management Permit/Erosion and Sediment Control Plans
- Office of Air Quality Permit to Construct
- Wetland Delineation and Permits
- National Pollutant Discharge Elimination System (NPDES) Permits
- Floodplain Management Permits
- Groundwater Protection Plans
- Spill Prevention, Control and Countermeasure Plans
- Environmental Site Assessments
- Environmental Impact Statements

POTESTA routinely provides professional services throughout construction of our projects. These services include survey layout, construction management, construction monitoring, record drawing preparation, and bid evaluation assistance.

POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com
Regional Offices: Morgantown, WV; Winchester, VA; and Cambridge, OH

POTESTA & ASSOCIATES, INC.

Geotechnical Engineering

Potesta & Associates, Inc.'s (POTESTA) engineers and geologists have extensive experience related to the geotechnical engineering and geological disciplines. These areas include subsurface explorations, monitoring well and piezometer installations, foundation design recommendations, slope stability analysis, retaining walls, and remedial designs as they relate to construction, mining, waste disposal, environmental remediation, and other projects.

SUBSURFACE EXPLORATIONS

POTESTA's diverse staff of engineers and geologists is experienced in the many different facets of subsurface explorations. Our usual procedure is to attend an initial meeting with the client to establish requirements and expectations, conduct a preliminary site reconnaissance, and develop a recommended exploration program for your review and approval. Supplemental information from the local area is then obtained from readily available sources to assist the engineer or geologist in making final recommendations.

POTESTA can provide field engineers and geologists who are knowledgeable using the latest technologies to assist in collecting and analyzing samples. Our knowledge of the proper procedures and familiarity with local conditions allows office and field personnel to adjust the exploration plan if unanticipated field conditions are found.

Our staff is familiar with the following items which can be associated with subsurface exploration:

- Drilling and Rock Coring Techniques (augers, rotary bits, Geoprobe™, etc.)
- Sample Collection Methods (split spoons, shelby tubes, Geoprobe™ sleeves, etc.)
- Classification and Logging of Soil and Rock Samples
- Monitoring Well and Piezometer Installation

SLOPE STABILITY ANALYSIS AND REMEDIAL DESIGN

Slope stability is often a major concern during the design and construction phases of many projects, especially those located in the Appalachian terrain. POTESTA's engineers are familiar with the various methods utilized to predict slope stability and are capable of performing the related analyses. Slope stability is critical for many projects such as analysis of existing or proposed soil embankments, rock fills, dam analysis and design, landfill design and operation, assessing the causation of slope failure, and designing remedial measures. Analyses can involve circular or sliding block methods, interface friction angles, and estimation of the strength parameters of the soil or rock. Slope stability analyses are performed on one of the most technologically advanced computer programs available and can be modified using site specific data.

POTESTA's engineers can also develop preventive measures during initial project design or recommendations to repair slope failures. Based upon the project circumstances, our engineers will consider various remedial measures such as regrading the site to obtain more suitable conditions, management of groundwater, and design of retaining structures. Our staff is familiar with a wide variety

POTESTA
POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com
Regional Offices: Morgantown, WV; Winchester, VA; and Cambridge, OH

of retaining structures, including gabion baskets, soldier beam and lagging walls, sheet piles, reinforced concrete and reinforced earth slopes.

FOUNDATION DESIGN RECOMMENDATIONS

POTESTA's staff has experience with various types of foundations and will recommend the appropriate type of foundation given the anticipated application and site conditions. The different types of foundations with which our staff is familiar are spread and strip footings, steel piles, auger-cast concrete piles, drilled piers, and reinforced mats.

Preliminary foundation design recommendations and cost analyses are commonly performed during the initial phases of a project to assist in determining project feasibility. As project planning progresses, the preliminary alternatives will be revised into a final recommendation which can then be incorporated into the project's construction documents or developed as an independent package for presentation to the contractor.

The final recommendation can include construction drawings, technical specifications, recommendations for allowable bearing capacity, engineer's construction cost estimate, and contractor's bid sheet.

POTESTA

POTESTA & ASSOCIATES, INC.
7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304
Phone: (304) 342-1400 • Fax: (304) 343-9031 • www.potesta.com
Regional Offices: Morgantown, WV; Winchester, VA; and Cambridge, OH

TIMOTHY M. RICE, E.I.T.

Senior Engineer

EDUCATION

B.S. Civil Engineering, 1982
West Virginia University

EMPLOYMENT HISTORY

2014-Present	Potesta & Associates, Inc.
2006-2014	Hatch Mott MacDonald
1987-2006	CTL Engineering
1978-1987	George E. Pigott & Associates

PROFESSIONAL REGISTRATIONS

Engineer in Training – West Virginia

TRAINING/RELEVANT COURSE WORK

Natural Stream Channel Design Levels I-IV

AREAS OF SPECIALIZATION

Civil, environmental, surveying, and geotechnical engineering experience with an emphasis in project management and coordination of environmental permitting/compliance, hydraulic and hydrological analysis, slope stability analysis, geotechnical design, Phase I environmental audits, stormwater management, municipal water and sewer design, civil site design, water resources analysis/design, and construction monitoring/observation.

PROFESSIONAL EXPERIENCE

Civil/Site Design

Senior Engineer/Project Director with experience on numerous civil/site design projects involving various aspects of site development for residential, commercial, and public development projects.

Lake Floyd Homeowners – Senior Engineer on dredging project for remediation of lake sedimentation at Lake Floyd. Project includes wetland and stream delineations, Section 404 Permit, sediment disposal area design, and coordinating bidding and construction phases of project.

American Campus Communities Student Housing – Senior Engineer for civil/site portion of this project at West Virginia University, Morgantown, West Virginia. Project includes geotechnical investigations, survey, permitting, construction specifications, design drawings, city planning, and project coordination.

Davis and Elkins College – Senior Engineer for civil site project at Davis and Elkins College in Elkins, West Virginia for the site development and permitting associated with a proposed amphitheater on campus.

Cirrus Energy Group – Project Director responsible for coordination and oversight of field and office activities associated with risk assessment study, environmental permitting, preliminary engineering studies, and conceptual planning for a 1,100 acre data center complex in Fox and Horton Townships in Elk County, Pennsylvania.

Harrison County Planning Commission - Project Director responsible for the coordination and design of Phases 1 – 3 of the Rail Trail project in Harrison County, West Virginia. Project included engineering design, modeling, permitting, and construction observation services.

Construction Monitoring

Project Manager/Senior Engineer with an understanding of construction observation on public, private and government construction projects.

Camp Dawson – Quality Control Manager for the construction of the Student Training Facility at Camp Dawson, Kingwood, West Virginia. The project included all quality control and construction monitoring for the six building facility along the airstrip at Camp Dawson.

University Place, LLC – Senior Engineer responsible for coordination of the construction monitoring and testing of the concrete and soils at this parking garage at West Virginia University, Morgantown, West Virginia.

Oil & Gas

Project Director for shale gas and pipeline projects in West Virginia, Ohio, and Pennsylvania. Projects include facility pad designs, access road design, impoundment design, geotechnical, slope stability issues, surveying, permitting, and environmental compliance services.

Dominion Transmission, Inc. – Clarington Project in West Virginia and Ohio – Project Manager for the

environmental tasks associated with the additional compression at two existing compressor station sites, upgrade at an existing meter station, and one new meter station. This FERC regulated project includes preparation of resource reports 1 through 12, stream/wetland/T&E field surveys, wetland delineation reports, and earth disturbance permits.

Columbia Gas Transmission, LLC – Rockport Efficiency Project – Project manager responsible for the engineering and design services, including construction drawings and specifications for 13 different sites. These sites include the plugging and abandonment at existing wells, valve replacement, access road modifications, and well pad construction.

Williams Northeast G&P – Grassy Run Pipeline Project – Project Director responsible for oversight of the environmental field and permitting activities associated with a 6,447 feet proposed gas line installation, to include: RTE species review, Cultural Resources review, wetland/stream delineations, soil sampling, Chapter 105 permit application, ESCGP-2 permit application, E&S controls and inspection, and hydrostatic test permit application in Fayette County, Pennsylvania.

Consol Energy – Well Assessment Study – Project Director responsible for oversight of approximately 400 existing gas and oil well assessments to determine the Greenhouse Gas inventory and general environmental condition of the well sites in West Virginia and Pennsylvania.

Stream/Wetland Delineation, Permitting and Mitigation

Dominion Transmission, Inc. – Post Wetland Monitoring and Reporting – Project Director responsible for the oversight of the post wetland monitoring services for five FERC-certified projects sites in West Virginia and Pennsylvania for three years to measure the revegetation success of wetlands impacted during the construction of natural gas pipeline in the area.

Pennsylvania General Energy – Project reviewer responsible for various wetland/stream delineations, US Army Corps, Chapter 105 permit application, ESCGP-2 permit application, Erosion & Sediment controls and inspections for the Fisk Hollow Pipeline Project in Porter County, Pennsylvania.

Cabot Oil & Gas – Project engineer on Superior Modular Site responsible for U.S. Army Corps of Engineers 401 permitting, WV Public Lands permit, and WVDNR Stream Enhancement plan utilizing Natural Stream Design techniques.

Consol Energy – Stream Mitigation and Remediation – Project Manager responsible for coordination and oversight of field and office activities associated with the mitigation of approximately 55,000 linear feet of streams affected by longwall mining in Greene County, Pennsylvania. Responsibilities include mitigation planning, construction management, permitting, and augmentation plans. This project utilized shallow low-pressure grouting and minimal stream modifications necessary to improve flow characteristics and stream stability.

US Steel – Project liaison responsible for assembling the in-house team and initial client negotiations for a 500 acre Palisades Wetlands banking project in Duluth, Minnesota.

J.F. Allen Company – Stream Restoration – Project Engineer responsible for WVDEP permitting associated with a stream restoration plan utilizing natural stream design techniques in Bowden, West Virginia.

Mining

Project Director/Project Manager for surface and deep mining activities associated with coal and aggregate mining facilities. Projects include civil site design, geotechnical, surveying, environmental compliance, permitting, stream monitoring, and mitigation services.

Consol Energy – Project director responsible for oversight of approximately 400 existing gas and oil wells assessments to determine the Greenhouse Gas inventory and general environmental condition of the well sites in West Virginia and Pennsylvania.

Consol Energy – Impoundment Mitigation – Project Manager responsible for the coordination and oversight of field and office activities associated with the mitigation of an existing private impoundment affected by longwall mining in Wetzel County, West Virginia. This project included dewatering of the existing impoundment, shallow low-pressure grouting within the dewatered area and placement of a bentonite liner on the bottom of the impoundment to control the impacts of mine subsidence.

Consol Energy – Stream Monitoring and Regulatory Compliance – Project Manager for monitoring and regulatory compliance of areas above longwall coal mining operations in Greene County, Pennsylvania. This project included monitoring and data collection of surface and ground water using sub-foot Trimble GPS units, Marsh McBirney Flo-mate 2000 flow meters, and digital cameras. This project also included the management of data to determine trends, historical frequencies, and predictive modeling.

Shannopin Materials, LLC – Shannopin Dock Site, Dilliner – Project Manager responsible for the PADEP permitting necessary for the re-opening of an abandoned stockpile area, dock site, and rail load-out facility in Greene County, Pennsylvania.

Dana Mining Company – 4-West Mine, Eisenhower Shaft Site – Project Manager responsible for PADEP permitting, necessary for the installation of a mine shaft at the 4-West Deep Mine in Mt. Morris, Greene County, Pennsylvania.

Dana Mining Company – Prime No. 1 Deep Mine – Project Manager responsible for PADEP permit revisions necessary for an extension of the mining limits and effected area of an existing deep mine facility in Mt. Morris, Greene County, Pennsylvania.

Coresco, LLC – Cobra Refuse Dump #4 – Project Manager responsible for the PADEP permitting necessary for the development and operation of a coarse coal refuse disposal site in Greene County, Pennsylvania. This site also included the land application of alkaline material.

Abandoned Mine Lands

Project Director/Senior Engineer for 80 abandoned mine lands projects in West Virginia, Maryland, Ohio, and Pennsylvania. These projects include: reclamation design, mine fire and burning refuse pile extinguishment, impoundments, slope stability, mine sealing, acid mine drainage abatement, subsidence investigations and stabilization plans, landslides, water feasibility studies, and watershed studies. These services also included detailed design drawings and specifications for construction, as well as assisting with the bidding and any construction issues of each individual project.

West Virginia Department of Environmental Protection – Project Manager responsible for reclamation design and stream remediation of an abandoned surface mine in Pendleton Creek Strip, Thomas, Tucker County, West Virginia. Geosynthetic liners and Natural Stream Design techniques were used to prevent headwater base flows from entering an abandoned deep mine through mine voids and subsidence features. Existing wetlands were protected utilizing staged culvert and low water crossings. This project also included ARRI reforestation techniques and riparian habitat replacement.

West Virginia Department of Environmental Protection – Taylor Creek Impoundment – Project Manager responsible for reclamation of a 120-acre burning refuse pile and a 24-acre impoundment in Clay County, West Virginia. This work involved the reclamation and extinguishment of the burning refuse pile, dewatering of the impoundment, subsurface investigation of burning material to depths of approximately 110 feet and the design and reconstruction of approximately 3,400 feet of Taylor Creek.

West Virginia Department of Environmental Protection – Blackwater River Beaver Creek Treatment Project – Project Manager responsible for the rehabilitation of an existing concrete dam, the installation of rotating drums, and a limestone slurry treatment facility on the Blackwater River in Tucker County, West Virginia. This was a cooperative project with WVDEP and WVDNR, and has been recognized by "Trout Unlimited" and "Outdoor Life". This project has successfully transformed a formerly dead section of the Blackwater River into a high quality trout fishery and was recognized by the US Department of Interior, Office of Surface Mining, as the 1999 Appalachian Region Award Winner.

West Virginia Department of Environmental Protection – Decker's Creek Watershed Study, Monongalia and Preston County, WV - Project Manager responsible for a comprehensive study of the watershed to determine if improvements can produce a sustainable fishery. Graphic Information Systems (GIS), stream invertebrate data, water quality data, and in-stream limestone sand test sites were used to complete the investigation. The Decker's Creek Watershed has a 60 square mile drainage area impacted by both abandoned surface and abandoned deep mines causing the upper reaches of the stream to be net acidic, with elevated concentrations of iron.

West Virginia Department of Environmental Protection – Brushy Fork Waterline Feasibility Study – Project Manager for the hydrologic study of a mine-impacted watershed for the design of a public waterline extension

to serve the rural community in Harrison County, West Virginia. The study included documentary, field assessment, and laboratory review of conditions to determine eligibility.

West Virginia Department of Environmental Protection – Amigo Smokeless Refuse Pile – Project Manager for the stabilization of a 300 foot high coal slurry impoundment and refuse pile in Wyoming County, West Virginia. This pile was placed using an aerial tram and consisted mainly of coarse refuse. The primary drainage structures had failed and the slope was deteriorating. A number of residences and active railroads were within the breach zone.

West Virginia Department of Environmental Protection – Moundsville Water Supply Study – Project Manager responsible for an investigative study of the fresh water well field for the City of Moundsville situated along the Ohio River in Wood County, West Virginia. Increasing levels of manganese contamination were deteriorating the quality of this aquifer. A site investigation study was performed to determine the location and effects of mining activities on the local groundwater aquifers. Existing mine maps, geologic information, and background data were reviewed. Geotechnical investigations and aquifer testing were performed to determine the location, depth, and extent of the potential contaminants.

Maryland Department of the Environment – Shallmar Limestone Doser – Project Manager responsible for the design of an AquaFix doser treating AMD runoff from a reclaimed surface mine discharging to the Potomac River basin in Garrett County, Maryland. Design included silo, foundation, and maintenance provisions for this water-driven doser.

Maryland Department of the Environment – Jackson Mountain Mine Fire – Project included engineering design services and construction documents necessary to determine the location and characteristics of a mine fire and then design of an excavated cutoff barrier to prevent the crop line fire from encroaching on the roadway and an existing high pressure gas line in Alleghany County, Maryland. Additional services included the stabilization of an existing landslide that had occurred as a result of the mine fire.

Maryland Department of the Environment – Kingsland Mine Pool Investigation – This project included an engineering assessment of the existing conditions of a flooded, abandoned deep mine and its blowout potential as related to public safety concerns of the local residents in Alleghany County, Maryland.

Water Lines, Water Storage Tanks, and Water Treatment Plants

Preston County Public Service District No.1 – Nine County Roads Waterline Extension Project – Project Director responsible for the coordination and oversight of a waterline extension project in Arthurdale, Preston County, West Virginia. Project included permitting, design, bidding, and construction coordination.

Short Line Public Service District – Tenmile Waterline Extension Project – Project Director responsible for the coordination and oversight of a waterline extension project in Harrison County, West Virginia. This project also included the initial stages of cost analysis and feasibility evaluations, and system improvement analysis to help minimize water losses.

DAVID B. SHARP, P.E.

Branch Manager

PROFESSIONAL REGISTRATION

Registered Professional Engineer
- West Virginia, Pennsylvania, Maryland, and Ohio

PROFESSIONAL CERTIFICATION
- 40 hour Hazardous Waste Site Operations and Superfund Worker Protection Training
- Troxler Nuclear Densometer Certification
- American Red Cross Standard First Aid and CPR Training

EDUCATIONAL BACKGROUND

M.S. Civil Engineering, 1995
West Virginia University
B.S. Civil Engineering, 1993
West Virginia University

EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.
2000-2003 CTL Engineering, Inc.
1997-2000 Potesta & Associates, Inc.
1994-1997 Terradon Corporation

HONORS
- Chi Epsilon Civil Engineering Honorary
- American Society of Civil Engineers - Associate Member and Former Outstanding Senior Civil Engineering Student

PUBLICATIONS

Burns, Dana; Hemme, James; and Sharp, David; (1997), "Geogrid Reinforced Slope Design Provides Unique Solution for Landfill Expansion," Geotechnical News, vol.15, pp.25-29

AREAS OF SPECIALIZATION

Involved with many aspects of civil engineering with a special interest in the geotechnical/environmental aspects. Responsibilities have included projects involving Civil Site Design, Geotechnical Design; Solid Waste Management Facility Design including geosynthetic applications; hydrologic, hydraulic design; transportation/highway projects, including geotechnical and right-of-way plans; and municipal water and wastewater projects.

PROFESSIONAL EXPERIENCE

Miscellaneous Foundation Projects

Engineer responsible for performing subsurface investigations, preparation of geotechnical reports, coordinating laboratory analysis programs, providing recommendations for lateral earth pressures, bearing capacities, modulus of subgrade reactions, settlements, and construction specifications for multi-story structures. Foundations considered have included steel H-piles, auger-cast piles, drilled piers, spread footings, and mat foundations.

- WVU Potomac State Building Addition, Keyser, West Virginia
- West Run Student Housing, Morgantown, West Virginia
- Fairmont Federal Credit Union, Bridgeport, West Virginia
- Morgantown Waterfront Marina, Morgantown, West Virginia
- WVU Engineering Sciences, East Wing Addition, Morgantown, West Virginia
- Residence Inn, Morgantown, West Virginia
- Suncrest Executive Office Plaza and Parking Garage, Morgantown, West Virginia
- WVU Luxury Box for Mountaineer Field, Morgantown, West Virginia
- WVU Research Park, Morgantown, West Virginia
- View at the Park Apartment Complex, Morgantown, West Virginia
- Three 3-story Apartment Complex, Morgantown, West Virginia
- Baptist Church, Morgantown, West Virginia
- Marriott Hotel, Morgantown, West Virginia
- Bucks Tavern, Morgantown, West Virginia
- Stouts Run United Methodist Church Addition, Parkersburg, West Virginia
- Fairfield Inn Hotel, Fairmont, West Virginia
- Wendy's Restaurant, Morgantown, West Virginia
- Sunoco Service Station, Robinson Township, Pennsylvania
- Numerous Residential Geotechnical Projects, Morgantown and Charleston, West Virginia
- St. Stephens Baptist Church, Morgantown, West Virginia
- Islamic Center, South Charleston, West Virginia
- Oak Hill Public Library, Oak Hill, Ohio
- Westside High School, Oceana, West Virginia
- WVARNG Readiness Center, Summersville, West Virginia
- Library/Information Center, Student Center Addition, Jomie Jazz Center, and Child Care Center - Marshall University, Huntington, West Virginia
- U.S. Equipment Distributors, Huntington, West Virginia
- PC WV #2 and #3, Pace Carbon Fuels, Summersville and Eckman,

West Virginia
- Mid-Ohio Valley Center, Marshall University, Point Pleasant, West Virginia
- Student Housing Facility and Parking Garage, Marshall University, Huntington, West Virginia
- Arbor Terrace Assisted Living Facility, Charleston and Huntington, West Virginia

Laurita Excavating, Inc., Morgantown, West Virginia
Engineer responsible for the structural design of a temporary soldier beam and lagging retaining wall to be utilized during the installation of a storm sewer as part of the construction activities being performed for the Star City/Osage roadway project for the West Virginia Department of Transportation.

Miscellaneous Slope Stability Projects
Responsible for the coordination of subsurface investigation, laboratory testing program, slope stability analysis and preparation design documents associated with the repair of landslide at various site throughout West Virginia. Representative designs have included soldier beam and lagging retaining walls, gabion basket retaining walls, segmental block retaining walls, rock toe keys and buttresses, and drainage improvements. The following provides a list of representative projects:

- Columbia Gas Transmission, Well #7331 Slide Repair, Elkview, West Virginia
- Cline Tower Landslide, Winfield, West Virginia
- Wellford Tower Landslide, Clendenin West Virginia
- Massie Ridge Tower Landslide, Camp Creek, West Virginia
- Fisher Landslide, Elkview, West Virginia
- Kennawa Landslide, Charleston, West Virginia
- Burlew Landslide, Charleston, West Virginia
- Lee Landslide, South Charleston, West Virginia
- Fairmont North Tower Landslide, Fairmont, West Virginia
- 6th Street Tower Landslide, Huntington, West Virginia
- Joyce Landslide, Chesapeake, Ohio
- WVAML Tuppers Creek Emergency Landslide, Tuppers Creek, West Virginia
- Schmidt Landslide, Gallipolis, Ohio
- Disposal Service, Inc. Landslide, Hurricane, West Virginia
- Ferguson, Sammons, Olivero, and Paraschos, Lavalette, West Virginia
- Wellston High School Landslide Repair, Wellston, Ohio

Geotechnical Projects for Department of Transportation
Involved with the layout of the boring plan, staking borings in the field, preparation of the boring contract documents, soliciting bids, awarding drilling contracts, monitoring of drilling operations, coordination of laboratory testing programs, preparation of boring diagrams, and preparation of subsurface exploration report foundation recommendations and slope reviews for various West Virginia Department of Transportation Projects:

- Platinum Drive Urban Connector, Bridgeport, West Virginia
- Segment of WV State Route 2, Moundsville, West Virginia
- Segment of National Road, Wheeling, West Virginia
- Segment of North Bridgeport Bypass, Bridgeport, West Virginia
- Corridor H, Section IV, Davis, West Virginia
- Sulphur Springs Bridge, Hundred, West Virginia
- Dry Run Interchange, Martinsburg, West Virginia

- Interstate 81 Hainesville, Bessemer & Tuscorora Creek Bridges, Martinsburg, West Virginia

Materials Testing Laboratory Manager
Served as the Manager responsible for equipping and staffing a fully operational soils and concrete material testing laboratory to be used in support of construction observation projects. The laboratory became validated by the U.S. Army Corps of Engineers to perform approximately 45 ASTM test methods will under Mr. Sharp's direct supervision. Representative test methods included standard and modified proctors, Atterburg limits, grain size determination, aggregate sieve analysis, specific gravity, organic matter, lightweight particles, soil classification, compressive strength, and moisture content determinations. Establishment of the laboratory also included the preparation of a site specific quality systems manual in accordance with ASTM guidelines.