

State of West Virginia
Centralized Expression of Interest

**A/E Services for Improvements to the WV
Army National Guard
CEOI 0603 ADJ1900000011**

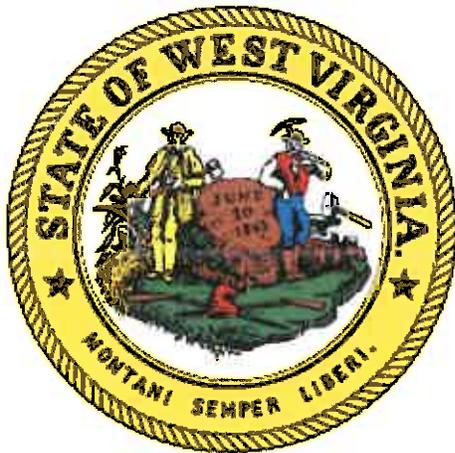
NOVEMBER 26, 2018

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WV PURCHASING
DIVISION

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Gale Associates, Inc.
800 Corporate Drive | Suite 301 | Stafford, VA 22554-4889
P 703-383-0815 F 703-884-4001
www.galeassociates.com

November 26, 2018

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

Attn: Ms. Stephanie Gale, Senior Buyer
P: (304) 558-8801 / Stephanie.L.Gale@wv.gov

Re: Architectural / Engineering Services for Improvements to the West Virginia Army National Guard (WVANG) Martinsburg Facility, CEOI 0603 ADJ1900000011

Dear Ms. Gale:

Gale Associates, Inc. is pleased to submit our qualifications in response to the above-referenced Centralized Expression of Interest (CEOI). Enclosed is one (1) original of our proposal.

Established in 1964, Gale is a 110-person consulting firm of engineers, architects, and planners specializing in the repair, renovation and adaptive reuse of existing buildings, infrastructures, and sites. Gale evaluates, designs solutions, and provides construction administration for exterior building enclosure renovations (roofs, walls, windows/glazing, and waterproofing), structural support systems, and site improvements. Our Stafford, VA and Towson, MD offices comprise our Mid-Atlantic Office. Staff from these locations routinely collaborate on projects in West Virginia and Virginia.

Gale has provided design and consulting services, including ATPF (anti-terrorism force protection) for a number of Department of Defense and National Guard projects in Rhode Island, Massachusetts, New Hampshire, and Connecticut. We have been providing exterior building enclosure and structural engineering design and consulting to the State Department Embassies worldwide.

For this contract, Gale will utilize the following firms. Gale has utilized these firms on previous renovation projects with excellent success.

- Century Engineering, Inc. providing mechanical, electrical, plumbing, HVAC & fire protection engineering
- Waldon Studio Architects & Planners, PC (MBE) providing architectural design services
- Compliance Environmental International, Inc. (SVOBE) providing hazardous materials consulting and industrial hygiene
- TTL Associates, Inc. providing geotechnical engineering

We have reviewed the above-referenced CEOI and understand West Virginia Army National Guard's required scope of services and goals for this project. In regard to the terms and conditions of the contract, Gale takes exception to the word "defend" in line 1 of Article 36, Indemnification.

CELEBRATING 50 YEARS

Ms. Stephanie Gale
State of West Virginia
Re: WVANG Martinsburg Facility, CEOI 0603 ADJ1900000011
November 26, 2018
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We have the experience, knowledge, staff, and commitment necessary to meet your requirements. We look forward to the opportunity to work with the West Virginia Army National Guard. Thank you for considering Gale.

Best regards,
GALE ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Steven J. Bohlen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Steven J. Bohlen, P.E., RRC, RWC, BECxP
Associate

Architectural / Engineering Services for Improvements to the West Virginia Army National Guard
Martinsburg Facility
Proposed Staffing Plan

State of West Virginia



Jon F. Lindberg, P.E., RRC
Principal/Contract Manager

**Steven J. Bohlen, P.E.,
RRC, RWC, BECxP**
Associate/ QC

**Paul D. Askham, P.E.,
BECxP, QEWI**
Sr. Project Manager

Subconsultants

Edwin D. Eckard, II, RRC
*Senior Designer
Roofing Specialist*

Derek J. Ziese, P.E.
*Senior Engineer
Exterior Enclosure Specialist*

Carolyn E. DuBois, ASLA
Sr. Landscape Architect

Century Engineering, Inc.
*Mechanical, Electrical, Plumbing, HVAC,
Fire Protection Engineering Consultant*

Sherre L. Bartlett, CDT
Senior Staff Designer

Shayan A. Amin, P.E.
Structural Engineer

John Perry, P.E.
Civil Engineer

**Waldon Studio Architects
& Planners, P.C. (MBE)**
Architectural Consultant

**Compliance Environmental
International, Inc. (SVOBE)**
*Hazardous Materials/
Industrial Hygiene Consultant*

TTL Associates, Inc.
*Geotechnical Engineering
Consultant*

JON F. LINDBERG, P.E., RRC

PRINCIPAL/CONTRACT MANAGER

EDUCATION

Lesley College, Cambridge, MA, Master of Science Business Management
University of Maine, Orono, BSCE

POSITION

As a Principal of the Corporation, Mr. Lindberg is responsible for the administration and coordination of business operations. Employed at Gale since 1980, his primary technical expertise is in exterior building envelope (roofs, walls, windows, waterproofing) performance. He provides technical consulting and project management services to public and private clients nationally.

RELEVANT EXPERIENCE

Appalachian Fruit Research Station, Kearneysville, WV

Evaluation, design assistance, and construction phase services for roof replacement project

Walter Reed Army Medical Center, Washington, DC

Design-build steep slope slate and metal roof replacement, historic cupola, window, and masonry restoration.

Lebanon VA Medical Center, Lebanon, PA

Design and construction phase services for façade restoration (Buildings 1 & 17)

University of Virginia Jordan Hall, Charlottesville, VA

Evaluation of brick masonry wall and window systems and repair/replacement recommendations

Smithsonian National Air and Space Museum, Washington, DC

Structural analysis of existing aluminum curtain wall framing systems and steel connections. Feasibility study for new curtainwall and sloped glazing.

YEARS RELATED

With this firm: 38

Other Firms: 1

EXPERIENCE

REGISTRATIONS/

CERTIFICATIONS

- Registered Professional Engineer – WV, [REDACTED] (MD, VA, PA, DC)
- National Council of Examiners for Engineering and Surveying (NCEES Certified [REDACTED])
- Registered Roof Consultant (RRC 108)
- Air Barrier Association of America (ABAA) – Auditor Certification for Sprayed Polyurethane Foam – 2006
- Confined Space Entry Certified (per 29 CFR 1910.146)

MEMBERSHIPS

- National Institute of Building Sciences (NIBS)
- American Society for Testing and Materials (ASTM)
- Society of American Military Engineers (SAME) Past Post President,
- Air Barrier Association of America (ABAA)

STEVEN J. BOHLEN, P.E., RRC, RWC, BECxP
 ASSOCIATE/QC MANAGER

EDUCATION

Pennsylvania State University
 B.S. Structural Design and Construction Engineering Technology

PRESENT POSITION

Mr. Bohlen oversees building enclosure (roof, wall, window, and waterproofing) evaluation and design services for the Mid-Atlantic Region. He is responsible for the quality control related to deliverables including reports, technical specifications, drawings, and construction phase services. Mr. Bohlen's expertise is in exterior enclosure performance, defined as roofing and waterproofing systems, wall and window systems, and air barrier systems.

Over the past 25-plus years, his clients have included public school systems; colleges and universities; local and state government agencies; federal agencies; and private entities.

RELEVANT EXPERIENCE

Fifth Regiment Armory, Baltimore, MD
 Evaluation and design of roof replacement

First Regiment Armory, Glen Burnie, MD
 Evaluation, design, and construction phase services for roof replacement project

Walter Reed Army Medical Center, Washington, DC
 Design-build steep slope slate and metal roof replacement, historic cupola, window, and masonry restoration.

Appalachian Fruit Research Station, Kearneysville, WV
 Evaluation, design assistance, and construction phase services for roof replacement project

National Center for Cool and Cold Water Aquaculture, Kearneysville, WV
 Building enclosure evaluation

Robert A. Roe Federal Building, Paterson, NJ
 Evaluation of building enclosure, design assistance for Repair Documents, and construction phase services

Department of State, 2201 C Street, NW, Suite 1827, Washington, DC
 Evaluation of building enclosure

GSA Weaver and Markey Buildings, Washington, DC
 Roof replacement design on both buildings with new photovoltaic and vegetative roof systems.

YEARS RELATED EXPERIENCE

With this firm: 26 Other Firms: 3

REGISTRATIONS/CERTIFICATIONS

- Registered Professional Engineer (VA, MD, PA, DE)
- Registered Roof Consultant [REDACTED]
- Registered Waterproofing Consultant [REDACTED]
- Building Enclosure Commissioning Process Provider (BECxP)
- National Council of Examiners for Engineering and Surveying (NCEES) [REDACTED]

MEMBERSHIPS

- Society of American Military Engineers (SAME)
- RCI, Inc.
- Air Barrier Association of America (ABAA)

PAUL D. ASKHAM, P.E., BECXP, QEWI

SENIOR PROJECT MANAGER

EDUCATION

Bachelor of Engineering (Honors), B.Eng. Structural Engineering with Architecture.
University of Manchester, Manchester, England. (1993)

Associate Degree (Honors), B.Tec. Construction and Land Use Management.
Sheffield Polytechnic, Sheffield, England. (1989)

PRESENT POSITION

Mr. Askham has over 23 years of experience as a structural engineer and building enclosure consultant. He specializes in building structures and exterior building enclosure renovations, forensic architectural and structural engineering evaluations, project management, and construction administration.

RELEVANT EXPERIENCE**Fire Station 26, Bethesda, MD**

Evaluation of building enclosure systems and driveway concrete slabs-on-grade.

4th District Wheaton Glenmont Police Station, Wheaton, MD

Evaluation of building enclosure systems.

Washington Suburban Sanitary Commission, Hyattsville, MD

Building façade assessments (286 buildings).

Long Branch Library, Silver Spring, MD

Evaluation of cracked masonry.

Germantown Library, Germantown, MD

Evaluation, design, and construction phase services for retaining wall systems.

MCC1 Data Center, Manassas, VA

Peer review and construction phase services for building enclosure commissioning services.

American University East Campus, Washington, DC

Peer review and construction phase services for building enclosure commissioning services.

University of Virginia Jordan Hall, Charlottesville, VA

Evaluation of brick masonry wall and window systems and repair/replacement recommendations

American University Nebraska Hall, Washington, DC

Evaluation of windows. Provided report of findings and recommendations. Designed repair mock-up. Provided ongoing consultation during construction of mock-up.

Dulles Discovery Phase 4, Chantilly, VA

Design assistance, peer review, and construction phase services for building enclosure.

**YEARS RELATED
EXPERIENCE**

With this firm: 4 Other Firms: 20

**REGISTRATIONS/
CERTIFICATIONS**

- Registered Professional Engineer (NY)
- Building Enclosure Commissioning Process Provider (BECXP)
- Qualified Exterior Wall Inspector (QEWI)/2016

DEREK J. ZIESE, P.E.

EXTERIOR ENCLOSURE SPECIALIST

EDUCATION

Virginia Polytechnic Institute and State University
 Bachelor of Science, Civil Engineering (Structures)

New Jersey Institute of Technology
 Master of Science, Civil Engineering (Structural Engineering)

Johns Hopkins University
 Master of Civil Engineering (Structural Engineering)

PRESENT POSITION

Mr. Ziese performs evaluations of building enclosure (roof, wall, window, and waterproofing) and structural systems, to include measure-up, defect documentation, and coordination/observation of field testing performed by Gale staff and others. He routinely develops engineering studies, reports, cost estimates, specifications, and drawings.

He provides construction administration services, to include review of submittals and shop drawings; attendance at pre-construction and progress meetings; review of requests for information, change order requests, and payment requests from the contractor; attendance and review of mock-ups and field testing; punchlist evaluations; and project closeout.

RELEVANT EXPERIENCE

US Naval Academy MacDonough Hall, Building 102, Annapolis, MD

Evaluation and design for wall and copper roof repairs (constructed in the early 1900's under the supervision of Ernest Flagg).

Department of Health and Human Services Colesville Center, Silver Spring, MD

Evaluation, design, and construction phase services for roof and window replacement.

US Naval Academy Bancroft Hall, Annapolis, MD

Building enclosure restoration project for this facility listed on the National Register of Historic Places. Performed evaluation, design, and construction phase services for façade and roof renovations. Performed analysis of existing structural systems for construction loads (constructed circa 1906).

Francis C. Hammond Middle School, Alexandria, VA

Evaluation and design of window system replacement and wall repairs, and construction period services

George Washington Middle School, Alexandria, VA

Evaluation, design, and construction phase services for façade renovation (constructed circa 1934).

EPA Headquarters, Washington, DC

Evaluation of historic clay tile, slate, and copper roofing (constructed in 1934).

Smithsonian National Air and Space Museum, Washington, DC

Structural analysis of existing aluminum curtain wall framing systems and steel connections. Feasibility study for new curtainwall and sloped glazing.

YEARS RELATED EXPERIENCE

With this firm: 7 Other Firms: 1

REGISTRATIONS/CERTIFICATIONS

- Professional Engineer (VA, MD)

PROFESSIONAL ORGANIZATIONS

- American Society of Civil Engineers (ASCE)
- Structural Engineering Institute (SEI)
- Architectural Engineering Institute (AEI)
- Association for Preservation Technology International (APT International)
- Preservation Maryland

EDWIN D. ECKARD, II, RRC

SENIOR DESIGNER

PRESENT POSITION

Mr. Eckard performs evaluations of building enclosure (roof, wall, and window) systems, develops reports and provides specifications and drawings for corrective measures. He provides construction administration services, including supervision and scheduling of technicians performing construction observation.

Mr. Eckard is knowledgeable regarding the installation and performance of various roof, waterproofing, and air and thermal barrier system types: built-up roofing (BUR), modified bitumen, single-ply (PVC, TPO, EPDM), kettle modified, fluid applied, spray applied foam systems, and various sloped roof systems (shingles, metal, slate, etc.).

RELEVANT EXPERIENCE

Lebanon VA Medical Center, Lebanon, PA

Design and construction phase services for façade restoration (Buildings 1 & 17)

Naval Supply Activity Building 6, Mechanicsburg, PA

Evaluation, design, and construction phase services for roof replacement

Martin Luther King Courthouse, Newark, NJ

Design for window replacement and precast concrete façade restoration

Walter Reed Army Medical Center, Washington, DC

Design-build steep slope slate and metal roof replacement, historic cupola, window, and masonry restoration.

Meade Middle School, Fort Meade, MD

Evaluation, design, bid, and construction administration services for roof and monitor window replacement.

Public Safety Headquarters, Bethesda, MD

Evaluation, design, and construction administration services for roof replacement.

Germantown-Kingview Fire Station #22, Germantown, MD

Below grade waterproofing, wall evaluation, design, and construction administration services.

USDA National Agricultural Library, Beltsville, MD

Roof and waterproofing evaluation, design assistance, and construction administration

US Dept of State Chancery Office Building & Annex, Brasilia, Brazil

Roof replacement design services.

US Dept of State Chancery Roof & Chief of Mission Residence, Lima, Peru

Roof replacement design services

**YEARS RELATED
EXPERIENCE**

With this firm: 19

Other Firms: 8

**REGISTRATIONS/
CERTIFICATIONS**

- Registered Roof Consultant [REDACTED]
- Air Barrier Association of America Licensed Field Auditor #10058

MEMBERSHIPS

- RCI, Inc.

SHAYAN A. AMIN, P.E.

STRUCTURAL ENGINEER

EDUCATION

The Pennsylvania State University
Bachelor of Science, Civil Engineering (Structural)

Johns Hopkins University
Master of Civil Engineering, (Structural and Preservation)

PRESENT POSITION

Mr. Amin specializes in building structure and façade assessments and designs for renovations. He performs evaluation, design, and construction phase services related to the building enclosure systems on existing facilities.

RELEVANT EXPERIENCE

Pennsylvania Military Museum, Boalsburg, PA

Façade evaluation and design

Smithsonian National Air and Space Museum, Washington, DC

Structural analysis of existing aluminum curtain wall framing systems and steel connections. Feasibility study for new curtainwall and sloped glazing.

Northrop Grumman – BWI West Campus, Baltimore, MD

Structural design of new rooftop walkway including evaluation and structural analysis of existing roof framing and augmentation of existing rooftop structures.

Francis C. Hammond Middle School, Alexandria, VA

Evaluation and design of window system replacement and wall repairs, and construction phase services.

Council Office Building, Rockville, MD

Evaluation and peer review for curtainwall renovation components. Also provided construction phase services.

Johns Hopkins University School of Medicine Ross Building, Baltimore, MD

Evaluation, design, and construction phase services for curtainwall repair

New South County Regional Recreation and Aquatic Center, Silver Spring, MD

Building enclosure peer review and construction phase services for new construction

Holiday Park Senior Center, Germantown, MD

Evaluation and design for replacement of window and storefront systems

YEARS RELATED EXPERIENCE

With this firm: 2 Other Firms: 4

REGISTRATIONS/ CERTIFICATIONS

- Professional Engineer (MD)

SHERRE L. BARTLETT, CDT

SENIOR STAFF DESIGNER

EDUCATION

University of Maryland, College Park
Bachelor of Science in Architecture

PRESENT POSITION

Ms. Bartlett performs evaluations, design, and construction phase services related to the building enclosure (roof, wall, window, waterproofing) systems. She is experienced in preparation of engineering studies, reports, cost estimates, specifications, and drawings.

She provides construction administration services, to include attendance at pre-construction meetings and progress meetings; review of product submittals, shop drawings, and construction schedules; preparation and review of field reports and deficiency logs, and review of project closeout.

Ms. Bartlett is knowledgeable regarding the installation and performance of various roof, waterproofing, and air and thermal barrier system types: built-up roofing (BUR), modified bitumen, single-ply (PVC, TPO, EPDM), kettle modified, fluid applied, spray applied foam systems, and various sloped roof systems (shingles, metal, slate, etc.). She is familiar with various façade and curtain wall systems: brick masonry; concrete block; metal wall panel; composite wall sheathing on concrete, wood and steel framed buildings; and glass and metal curtain walls.

RELEVANT EXPERIENCE**Fifth Regiment Armory, Baltimore, MD**

Evaluation and design of roof replacement

National Gallery of Art, West Building, Washington, DC

Evaluation, design, and preparation of plans and specifications for masonry repair and roof replacement

Howard County Government 4 Facilities, Howard County, MD

Evaluation and design of roof replacement

Germantown-Kingview Fire Station #22, Germantown, MD

Below grade waterproofing and wall evaluation and preparation of plans and specifications for repairs

Meade Middle School, Ft. Meade, MD

Design and preparation of plans and specifications for roof and window replacement

Howard County Detention Center, Jessup, MD

Evaluation of courtyard walls and preparation of plans and specifications for repairs

Rockville Fire Station #33, Silver Spring, MD

Design and preparation of plans and specifications for roof replacement

With this firm: 4 Other Firms: 4

■ Construction Document Technologist [REDACTED]

**YEARS RELATED
EXPERIENCE
REGISTRATIONS/
CERTIFICATIONS**

CELEBRATING 50 YEARS

CAROLYN E. DUBOIS, ASLA

SENIOR LANDSCAPE ARCHITECT

EDUCATION

West Virginia University, BSLA Landscape Architecture

POSITION

Ms. DuBois is a Senior Landscape Architect for Gale. She is responsible for project management, client interface, technical QA/QC reviews, and public presentations. Ms. DuBois is a Registered Landscape Architect with over 34 years' experience in land planning and site design for multiple market segments. She has a comprehensive understanding of the permitting processes and actively participates in coordination of project approvals with local and state agencies.

RELEVANT EXPERIENCE

Saint John's Catholic Prep, Buckeystown Pike, MD

Planning, design, permitting and construction administration for athletic facility improvements, including concessions/storage building, ADA parking and pedestrian walkways.

St. Mary's College of Maryland, St. Mary's, MD

Provided civil/landscape architectural design and consulting services as part of a "design-build" procurement for improvements to the College Campus.

Montgomery College - Rockville, Rockville, MD

Planning, permitting, and design of a NCAA Division I athletic facility including synthetic turf fields, lighting, grandstands with press box, restroom/concessions/storage building, fencing and pedestrian walkways.

Rollins College, Winter Park, FL

Design, permitting and construction period services for renovations to the NCAA varsity baseball facility which included updates to the playing field, new bullpens, new batting cages, fencing improvements, netting, new parking and landscape improvements.

Indian Creek Upper School, Crownsville, MD

Total athletic campus and site renovations.

YEARS RELATED EXPERIENCE

With this firm: 2 Other Firms: 32

REGISTRATIONS/ CERTIFICATIONS

- Registered Landscape Architect (VA MD, PA)

MEMBERSHIPS

- American Society of Landscape Architects (ASLA)
- American Sports Builders Association (ASBA)
- Synthetic Turf Council
- Sports Turf Managers Association (STMA)

JOHN M. PERRY, P.E.

CIVIL ENGINEER

EDUCATION

Northeastern University, MBA
Merrimack College, BSCE

POSITION

Mr. Perry is a Senior Civil Engineer for Gale. He is responsible for project management and engineering services including site layout, grading, stormwater management and utilities design. Mr. Perry is a Registered Professional Engineer and has over 15 years of direct site design and permitting of land development projects. He has been involved with multiple projects requiring federal, state and local permitting for commercial and retail developments, residential subdivisions, urban redevelopments, universities, health centers, government and state-owned facilities and town and city municipalities.

RELEVANT EXPERIENCE

Prince George County Public Schools, Prince George County, MD

Detailed assessment of four parking facilities within Prince George County, and detailed design plans and specifications, permitting and construction administration for the redevelopment of the parking facilities

Curry College, Bell Hall, Milton, MA

Civil/site engineering and construction administration for a 100-space parking lot, two ADA-compliant entrances, retaining walls, landscape buffers, stormwater management systems and new site utilities; project is LEED Silver Certified and included bioretention areas, permeable pavers, stone trenches, grass pavers, infiltration chambers and LED site lighting

Carriage Grove, Belchertown, MA

Design and permitting for a 2,000 linear feet roadway to facilitate mixed-use development at the former Belchertown State School; roadway includes stormwater and utility design, traffic circle, and infiltration basin

Massachusetts Army National Guard, Natick, MA

Site design and permitting of a new Emergency Readiness Center, including a full hydrologic study, LID drainage, utility layout and 130-car parking lot

Naval Power Plant, Cutler, ME

Extensive drainage improvements, low-impact development stormwater practices, new culverts and new grass and rock lined channels and a new 20-car parking lot for a historic 1940s naval power plant

YEARS RELATED EXPERIENCE

With this firm: 8 Other Firms: 5

REGISTRATIONS/CERTIFICATIONS

- Registered Professional Engineer (CT, FL, MA, ME, NH, NY, RI, VT)
- National Council of Examiners for Engineering and Surveying (NCEES Certified [REDACTED])
- OSHA 10-Hour Construction Course

Mr. Jardieu is a Principal Mechanical Engineer for the design of projects which include HVAC, chilled water, heating water, water source heat pump, underground utility distribution, steam/chiller/boiler plants and domestic plumbing (sanitary, stormwater, domestic water).

MOSALATTI MEDICAL OFFICE BUILDING, Bridgeport, WV. Principal for 100,000 square feet in a five-story (high-rise) medical office shell building and fit outs. Design included the application of a Water Source Heat Pump (WSHP) system which includes a 400-ton cooling tower, three 500MBH gas-fired condensing boilers, and WSHP piping loop.

ABERDEEN PROVING GROUND, BLDG 4305, Aberdeen, MD. Principal. The project includes the replacement of several package rooftop units and renovation of various spaces within building. The design included the application of Variable Air Volume (VAV) system. Existing ductwork and VAV terminal units were also replaced. Load calculations were performed to verify existing duct sizes and air distribution as adequate for the new space usage. All necessary HVAC calculations, system layout, equipment selection, duct design, plumbing layout, and specifications were provided.

NBACC FIT-OUT FORT DETRICK, Frederick, MD. Principal. The project includes the renovation of the NBACC building (approximately 6,000 square feet). The design included the application of Variable Air Volume (VAV) system. The building existing HVAC system consists of a variable air volume air handling unit with hydronic piping for reheat. New VAV terminal units were provided along with new air distribution system. Exhaust system was also designed in the restroom to provide general ventilation and comfort. Plumbing layout design were also provided for the additional restrooms. All necessary HVAC calculations, system layout, equipment selection, duct design, plumbing layout, and specifications were provided.

INDIAN HEAD BLDG 1576, Indian Head, MD. Principal for HVAC design for a building expansion for an office occupancy and paper processing room. Design included ground mounted packaged rooftop unit with direct expansion cooling and steam heat. Air is distributed via ducted supply and return. The paper processing room involved the design of providing an HVAC system that can control proper temperature and humidity accurately in the space. Plumbing design included addition of emergency wash system in the space. Performed all necessary heating, cooling, and ventilation calculations, system layout, equipment selection, and specifications.

UHG FIT-OUT, Woodlawn, MD. Principal. Renovation of an existing 27,000 sq. ft. office space in a three-story building. Design included the application of two existing variable-air-volume (VAV) rooftop packaged units to serve all three floors. Design included the addition of VAV terminal units to each zone based on space usage and location in the building. New duct layout was provided for the whole system. Design also included plumbing for the existing restroom renovation/addition and for other new plumbing fixtures. Performed all necessary heating, cooling, and ventilation calculations, system layout, equipment selection, duct design, plumbing layout, and specifications.

A.I. SOLUTIONS FIT-OUT, Lanham, MD. Principal. The project involved the tenant fit-out in an existing 4-story office building. A.I. Solutions is a company that designs software for NASA. The space consists of offices, conference rooms, kitchen, and amenity spaces for a typical office space. Provided design for a new ductwork layout for the space to accommodate the new floor plan. This included new and existing ductwork. The design also included plumbing design layout for the new core restrooms and individual toilets. Aided junior designers in preparing construction documents. Responsible for coordinating schedules with the architect and ensure the project was completed on time and within the budgeted time. Mechanical provided necessary field investigation, system layout, and specifications.

Active Registration

1996 P.E. West
Virginia Registered

**Education/ Training/
Certification**

1969 A.E. Engineering
Science,
Mohawk Valley
Community College
1971 B.S.
Aerospace
Engineering,
Syracuse University
1972 B.S. Mechanical
Engineering, Syracuse
University

Years Experience

48

Jason Borowski has established himself as a designer and engineer who is able to tackle complex HVAC, plumbing and mechanical and electrical issues, and provide the efficiency in design support expected of the firm. He works with our engineers in evaluating existing conditions to determine scope of work, meeting with architects and owners, producing contract documents, and assisting in resolution of construction issues during the construction phase. Mr. Borowski works with clients, contractors and vendors during the entire design/ construction process and has developed a thorough problem-solving style. He has been involved in projects ranging from retail tenant fitouts to office buildings and large laboratory and manufacturing facilities, and is knowledgeable on sustainable design practices including LEED and energy modeling.

DUVAL HIGH SCHOOL RENOVATIONS, Lanham, MD. The project consisted of the renovation of several class rooms, including the creation of an interactive media production lab, and renovation of the existing culinary arts café. The renovation work included new lighting fixtures and layout, modification of the existing life safety systems, modification of the existing power distribution system, and the addition of a rooftop unit to serve the café.

MERCERSBURG ACADEMY HEALTH CENTER, Mercersburg, PA. Energy Modeler for the renovation of the schools on campus health center. A whole building simulation energy model was generated, and several mechanical systems were evaluated both in terms of annual energy consumption and first cost of installation, ultimately resulting in the academy making use of the existing campus' chilled and heating water loops adjacent to the building. The renovation also included the creation of an isolation ward, which was provided with a once through mechanical system which maintained the isolation area at a negative pressure to the surrounding areas to help keep the area contained.

VISIONIST EXPANSION, Howard County, MD. This expansion project was a small tenant improvement of a 4,705 square foot secure office space, including a secure communication room, conference room, enclosed offices, and an open area. As the engineer of record for this project, our services included design of MEP systems to serve the fit-out, contract documents, and construction phase services.

KEYW CORP TELEGRAPH ROAD OFFICE, Anne Arundel County, MD. Project Manager/ Lead Mechanical Engineer for the complete renovation of a 30,000 SF office/ warehouse space to serve as a security consultant facility. The new space included Sensitive Compartmented Information Facility space and admin. areas. Due to the increase power density, the electrical service to the building needed to be upgraded. HVAC system needed to accommodate various spaces with pressure relationships, clean facilities, and hazardous exhaust.

NORTHROP GRUMMAN, Harford County, MD. MEP Engineering Services for the interior fit-out of 20,000 sf for Northrop Grumman's Information Services sector. The space includes multiple labs with IT equipment racks fed by UPS power, a 60-seat Conference/ Training room, a large Demonstration Room with multi-media capability and special lighting control, and general office space.

EAST DONEGAL TOWNSHIP MUNICIPAL FACILITY, East Donegal, PA. MEP Engineering Services for a major renovation of approx. 10,000 s.f and an addition of approx. 2,000 s.f. The renovation provided an updated office space, improved law enforcement facilities, improved meeting space for community use and more efficient MEP services. Services included MEP systems to serve the facility, contract documents and construction phase services.

Active Registration

2010 P.E. Maryland

Registered [REDACTED]

2010 P.E. Pennsylvania

Registered [REDACTED]

2015 P.E. Virginia

Registered [REDACTED]

Education

B.S. 2005 Architectural
Engineering,
Pennsylvania State
University

Years Experience

16

Mr. Menegatti has experience working on many different types of electrical engineering projects which include the design of indoor and outdoor medium and low voltage power distribution, indoor and outdoor lighting, fire alarm and security systems, and other miscellaneous special systems.

FT. MEADE GREENING OF THE BURGIN BUILDING, Ft. Meade, MD. Project manager and electrical engineer on a project at the Burgin Building at NSA near Ft. Meade. The project involved the replacement of existing lighting fixtures throughout the building in the common areas and hallways. It involved the installation of a photovoltaic system to be installed on the roof that will be designed by a third party. Two roof top HVAC units will be replaced and associated VAV boxes will be added in some corresponding spaces throughout the building.

FT. MEADE BUILDING 4552 & 4553 HVAC UPGRADE, Ft. Meade, MD. Project manager and electrical engineer. The project involved the installation of split system ductless units with condensers to be installed on the balcony in three offices in building 4553. It involved the creation of the new corridor and office along with a new ductless split system HVAC unit for the space. Power has been provided from nearby panels that are located in the building.

FT. BELVOIR BLDG 235, VA. Project manager duties for demolition of lighting power and power in the entire building. Provided new lighting and power and upgrade of the electrical system. Replacing the HVAC system with split system units. One system will be for the server room and one for the general office space.

ANDERSON COE & KING TENANT FITOUT, Project manager and electrical engineer on a 12,000 square foot office fitout in a downtown building. The office space included offices, conference rooms, server room, and lounge area. The HVAC is served by a core Air Handling unit and individual VAV boxes with individual thermostats in each office area. Electrically the spaces utilized lighting which included linear fluorescent lighting which was powered by a 277V panel. Receptacles were fed from 120/208V panels in the core area. Data and telephone outlets were also installed in office spaces.

SECURITY VESTIBULE UPGRADES, RIVA ROAD AND ARUNDEL CENTER OFFICE BUILDINGS, Anne Arundel County, MD. Project Manager and Electrical Engineer on two projects involving vestibule upgrades. The Arundel Center in Annapolis involves an expansion of the lobby into the existing outdoor patio area. The expansion was to accommodate new security equipment and desk and visitor sign in area. This work includes coordinating power to the new equipment, providing new lighting and connecting new HVAC equipment. The Riva Road Site includes the expansion and modification of the 4 different buildings on the site. Similar to the Arundel Center, the expansion was to accommodate new security equipment and a security desk including power and lighting coordination and design. Both designs also included coordination of the low voltage connections, telephone and security connections at the doors and desks.

Active Registration

2006 P.E.
Maryland Registered

2004 LEED
Accredited Professional
(LEED A.P.)

Education

BS 1992
Electrical Engineering,
Virginia Polytechnic
Institute and State
University

Years Experience

24

WALDON STUDIO ARCHITECTS



EDUCATION

BA, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, 2008

CERTIFICATIONS

MAY 2018, ARCHITECT, MARYLAND [REDACTED]

APRIL 2010, LEED AP, [REDACTED]

YEARS EXPERIENCE

10

YEARS WITH WSA

10

AMY FINDLEY, AIA, LEED AP BD+C

PROJECT ARCHITECT

Amy serves as a Project Manager and Interior Designer at WSA on a variety of community, interiors, educational, and government projects. Amy has always felt a calling to allow others to fulfill their purpose and flourish in life through creative design and volunteerism. Her career in architecture, combined with her service activities, has allowed her to fulfill her goals of elevating humanity through the built environment. Maintaining a highly technical focus in her architectural and interior design work, Amy is inspired by placemaking and the interaction of shapes, colors, patterns, textures, and the details that enliven the places that we occupy every day.

RELEVANT EXPERIENCE

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

WORKPLACE TRANSFORMATION - PART I, WASHINGTON, DC

Staff Architect/Interior Designer for the program and planning of all areas in their 500 C Street SW facility as were necessary to consolidate an additional 550 personnel from two other buildings. Services included blocking and stacking, interior design, test-fits, design intent documents, relocation management, swing space analysis, field surveys, limited construction administration, furniture inventories and furniture installation plans and a bill of materials. WSA also purchased and installed nearly \$2M in furniture. (Total Project Cost: \$20.8 Million, includes Construction/Design/Furniture) Size: 180,000 SF

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

WORKPLACE TRANSFORMATION - PART II, WASHINGTON, DC

Project Manager for the programming and planning of two new floors in their 400 C Street SW facility. Responsible for consolidating approximately 900 employees from two existing buildings onto two new floors in a new building. Services included blocking and stacking, interior design, test-fits, design intent documents, construction documents, and construction administration. Cost: \$7.3M Size: 90,000 SF

NATIONAL INSTITUTE OF HEALTH | INFRASTRUCTURE READINESS CONTROL CENTER & EMERGENCY RESPONSE CENTER (IRCC), BETHESDA, MARYLAND

Staff architect for this IDIQ contract with NIH. WSA designed a technical operations center, in Building 13, for campus facility management engineers. This 3,200 SF space serves to observe status of day-to-day operations and as a crisis management center when critical building systems to hospitals, labs, animal labs and office buildings have been compromised. The WSA team performed full service AE design including full service audiovisual system design. The acoustic design of the operations center was vital to make the space work for both daily and crisis operations. Cost: \$4.5 Million Size: 3,200 SF

JOINT BASE ANDREWS | DISTINGUISHED VISITOR'S LOUNGE

JOINT BASE ANDREWS, MARYLAND

Interior designer who worked with the contractor on this design/build project to complete construction documents for the project and led the interior design efforts. This work involved upgrading finishes and furniture in the distinguished visitor's lounge at the air terminal at Joint Base Andrews. Work was also completed in the associated restrooms, a few office spaces, and the vestibule going out to the tarmac. Construction administration services were also provided. Cost: \$960,000 Size: 4,700 SF

U.S. ARMY CORPS OF ENGINEERS | PHILADELPHIA NAVY SHIPYARD BUILDING 1000 RENOVATION, PHILADELPHIA, PENNSYLVANIA

Staff architect who surveyed existing space and provided a new space plan for an area of the building to house open office space and conference rooms. Worked with MEP engineers to provide a new LAN room, kitchenette, and coordinate new lighting layouts for all new spaces. Size: 7,350 SF

WALDON STUDIO ARCHITECTS



EDUCATION

BA, VIRGINIA POLYTECHNIC INSTITUTE AND
STATE UNIVERSITY, 2008

CERTIFICATIONS

MAY 2018, ARCHITECT, MARYLAND
LEED AP, BD+C

YEARS EXPERIENCE

10

YEARS WITH WSA

10

AMY FINDLEY, AIA, LEED AP BD+C

RELEVANT EXPERIENCE (CONTINUED)

VETERAN'S ADMINISTRATION | EYE CLINIC

WILMINGTON, DELAWARE

Staff architect/interior designer for the architectural design of this new eye clinic on the VA medical center campus in Wilmington, Delaware. Working as a sub-consultant to Apogee Consulting Group, WSA was responsible for programming, site surveys, schematic design, design development, construction documents, interior design and space planning, and specifications. Cost: \$4.7M Size: 10,000 SF

DEPARTMENT OF VETERAN AFFAIRS | MEDICAL MEDIA STORAGE

RENOVATION, PERRY POINT, MARYLAND

Staff Architect for the renovation of an existing single story, 8,000 SF building. Goal was to modernize the facility and to upgrade and repair the building envelope, MEP/FP, life safety and energy management systems, architectural finishes, asbestos abatement and exterior drainage system. The renovation was designed to meet LEED Silver with no formal certification. Cost: 2.1M Size: 8,000 SF.

VETERAN'S ADMINISTRATION | HOSPITAL GENERATOR UPGRADES

PITTSBURGH, PENNSYLVANIA

Staff architect providing architectural design and engineering coordination in planning and design efforts aimed at updating emergency generator systems at the Veteran Affairs Pittsburgh Health System's University of Pittsburgh campus. Scope of work included field surveys and planning for generator room/building expansion, existing infrastructure coordination and relocation resulting from building expansion, site planning concepts, and structural engineering coordination. Life safety analysis of existing spaces was needed to ensure that the new work complied with the overall building life safety plan. Cost: \$4.5M Size: 7,500 SF

U.S. ARMY HERITAGE EDUCATION CENTER EXHIBIT

CARLISLE, PENNSYLVANIA

Interior designer for this turnkey project which resulted in a 7,000 SF interactive museum dedicated to telling the stories of soldiers from past wars to current. WSA worked closely with sub-consultant to develop themes and stories, period concepts, and interactive components. Provided a building information model for the entire exhibit and created a 3-d animated walk-through of the space to convey the design to the client. Cost: \$2.6M Size: 7,000 SF

MDOT/SHA | SOUTH MOUNTAIN WELCOME CENTER (SILVER LEED CERTIFIED)

FREDERICK, MARYLAND

Staff architect for two visitor/welcome centers on the east and west bound lanes of I-70 just north of Frederick, Maryland. Responsible for construction documents, LEED documentation, finish selections, and coordinated space plans for future furniture purchase. Waldon Studio Architects provided all architectural design, design project management, interior design, and contract administration. This building is Silver LEED Certified. SF: 25,000 SF Cost: \$40,000,000

NATIONAL INSTITUTES OF HEALTH | THE CHILDREN'S INN, BUILDING 62

BETHESDA, MARYLAND

Interior designer providing finish selection services for the renovation of one wing of the Children's Inn. This 57 unit, stand alone, lodging facility is located on the campus of the National Institutes of Health and used to house children and their families while undergoing treatment at the National Institutes of Health. Waldon Studio Architects provided construction documents for the renovation of the bathrooms in 37 of the resident rooms including coordination with MEP engineers. Cost: \$1.76M Size: 31,000 SF

WALDON STUDIO ARCHITECTS



EDUCATION

MASTER OF ARCHITECTURE, STATE UNIVERSITY OF NEW YORK AT BUFFALO, 1994

BACHELORS OF SCIENCE, UNIVERSITY OF MARYLAND, 1991

REGISTRATIONS

MARYLAND, ARCHITECT, [REDACTED]

YEARS EXPERIENCE

24

YEARS WITH WSA

1.5

LINDA M. GILBERT, RA, NCARB

PROJECT MANAGER

Linda has long-term experience working as a Project Architect and Project Manager with a focus on client services and relationships. Linda is passionate about digging into the details of her projects with the clients and stakeholders she serves, in order to meticulously design the best possible space to suit their needs. She has completed many complex projects including veterinary hospitals, government computer facilities, and historic preservation approvals, involved from initial inception through project closeout. Linda has acquired a strong knowledge of building, life safety and accessibility codes and regulations (including IBC, NFPA, ADA and UFC codes). Member of National Council of Architectural Registration Boards, 2011

RELEVANT EXPERIENCE

U.S. DEPARTMENT OF THE NAVY (NAVFAC) | MARINE BARRACKS BUILDING HISTORIC PRESERVATION, WASHINGTON, DC

Staff Architect for the Design/Build 48,000 SF Building 8 of office space originally built between 1902 and 1906 as Enlisted Bachelor Quarters. The current project modernizes the infrastructure of the building MEP systems to comply with current codes. The interior is being reworked to provide more open office areas and an internal hallway connecting the entire building. Accessibility upgrades include installation of a new elevator and ramp along the exterior arcade. The existing masonry and concrete structure is being retrofitted to conform to current federal AT/FP requirements. In collaboration with Michael Baker Associates and in conjunction with John Cullinane, WSA is assisting in documenting and obtaining all required historic commission approvals and guidance to the project team when dealing with the remaining historic fabric of this National Historic Landmark. Cost: \$17 Million.

CITY OF GAITHERSBURG | CONSUMER PRODUCTS SAFETY COMMISSION (CPSC) PARK DEVELOPMENT, BOWIE, MARYLAND

Project Manager - WSA is responsible for the repurposing of an existing warehouse building located at the former Consumer Products Safety Commission (CPSC) to meet their program. Provide construction administration services for the above design services. Project is a \$6 million in Capital Improvement Project Funds for the complete design and construction of a new park and renovation of the existing building. Size: 18,000 SF.

ARUNDEL COMMUNITY DEVELOPMENT SERVICES | WILEY H. BATES HERITAGE PARK SENIOR CENTER AND BOYS AND GIRLS CLUB, ANNAPOLIS, MARYLAND*

Project Architect on the team, coordinating consultants, preparing construction documents and assisting with the construction administration. Scope of Work for the project was to renovate the existing historic building while observing the historic easement on the exterior of the building. All windows were replaced, new canopies were added, existing canopies were stabilized. The old shop spaces were converted into a senior center while the cafeteria and gym were used for a boys' and girls' club. Cost: \$25 Million Size: 40,000 SF

NAVAL ACADEMY ATHLETIC, TERWILLIGER CENTER ANNAPOLIS, MARYLAND*

Project manager, coordinating all consultants, overall document preparation and specification writing. The Project consists of third story addition over the existing Ricketts Hall weight training area at the United States Naval Academy. The requirements of the Project required limited intrusion on the first floor and construction phasing to maintain use of the training room. Because the Project was on the Naval Academy Yard, all documentation was completed under Naval Facilities Engineering Command requirements and their submittal process. Cost: \$18,000,000 Size: 22,000 SF

* work completed with a previous firm

WALDON STUDIO ARCHITECTS



EDUCATION

MASTER OF ARCHITECTURE, STATE UNIVERSITY OF NEW YORK AT BUFFALO, 1994

BACHELORS OF SCIENCE, UNIVERSITY OF MARYLAND, 1991

REGISTRATIONS

MARYLAND, ARCHITECT, [REDACTED]

YEARS EXPERIENCE

24

YEARS WITH WSA

1.5

LINDA M. GILBERT, RA, NCARB

RELEVANT EXPERIENCE (CONTINUED)

U.S. NAVAL ACADEMY, THE CLASS OF 1963 CENTER FOR ACADEMIC EXCELLENCE, ANNAPOLIS, MARYLAND*

Project Architect, verifying the provide program met the Users' requirements for this classroom/tutoring facility. The program required the integration of the work surfaces with the demountable partitions. All surfaces and systems furniture were hung from the wall system. Included in the Project was specifying all furniture for bidding. The Project was located within the Levy Center on the Yard of the Naval Academy was subject to the requirements of the Naval Facilities Engineering Command submission process and requirements. Cost: \$1,500,000 Size: 12,000 SF

U.S. NAVAL ACADEMY ATHLETIC ASSOCIATION | BRIGADE SPORTS COMPLEX ANNAPOLIS, MARYLAND

Staff Architect on the Project Team to develop all required documents for the new sports facility. The Project includes six indoor tennis courts, one hockey rink with seating, a fitness center, locker rooms and facility support spaces with offices. Cost: \$2,500,000 Size: 40,000 SF

CITY OF ANNAPOLIS | PIP MOYER COMMUNITY RECREATION CENTER ANNAPOLIS, MARYLAND*

Staff Architect on the team, generating documents for the project as well as assisting in the interiors. The new building replaced an undersized building, adding a running track, climbing wall, basketball courts, classrooms and support space for the staff. The building was self-certified to meet LEED Silver requirements. Cost: \$10,000,000 Size: 80,000 SF

PRINCE GEORGE'S COUNTY | CIRCUIT COURT ANNEX UPPER MARLBORO, MARYLAND*

Project Architect for the renovation of the 4 story Circuit Court office space. For this project, Ms. Gilbert worked with each user to determine their programmatic requirements, design the space and provide construction administration for the duration of the project. The building was reconfigured to meet the needs of licensing, land records and drug court staff. In addition, all public space and corridor finishes were upgraded to be compatible with the standard set for the County Courthouse. Cost: \$1,500,000 Size: 32,000 SF

PRINCE GEORGE'S COUNTY | MARBURY WING EXPANSION UPPER MARLBORO, MARYLAND*

Project Architect on the team in collaborating with the expansion Architect to finalize the space plan for the new wing. The Scope of Work included inventorying all furniture and developing space plans for each user. The space plans were utilized by the County staff during the move into the space.

NEWDAY FINANCIAL | NEWDAY USA HEADQUARTERS FULTON, MARYLAND*

Staff Architect for the Project, for the fast-paced production of Construction documents for five floors of tenant build-out including workstations, private offices, support space, conference rooms and training facilities. To provide flexibility for the Owner, demountable partitions and systems furniture were utilized. Cost: \$3,000,000 Size: 140,000 SF

* work completed with a previous firm

ARCHIE M. BARRETT, JR. CIEC, CMC
President

Mr. Barrett founded Compliance Environmental International, Inc. in 1993. As President of CEI, Mr. Barrett oversees the administrative, management, and technical operations. He is an active member of the Environmental Information Association, and a past Certification Board member of the American Indoor Air Quality Council. Mr. Barrett is a Board Certified Indoor Air Quality Consultant, a Board Certified Microbial Consultant, and a Board Certified Microbial Remediation Supervisor. He has over 25 years of experience in the environmental health and safety field.

EDUCATION

Nuclear Power Plant Health Physics Technician, IRM Inc., Sept 1986
Advanced Engineering, USCG Engineering School, Jan 1981

CERTIFICATIONS / QUALIFICATIONS

- Board Certified Indoor Environmental Consultant (CIEC), American IAQ Council
- Board Certified Microbial Consultant (CMC), American IAQ Council
- Board Certified Microbial Remediation Supervisor (CMRS), American IAQ Council
- ASHE Healthcare Construction Certificate 2009
- EPA/AHERA Certified Asbestos Inspector, Management Planner, & Project Designer
- OSHA 40 hour Hazardous Waste Operations and Emergency Response

WORK EXPERIENCE

1993 to Present	Compliance Environmental International, Inc. (Glen Burnie, Maryland) President / Environmental Consultant
1991 to 1993	Environmental Hazards Services, Inc. Vice President of Southern Operations / Environmental Consultant
1988 to 1991	International Academy of Hi-Tech Services, Inc. Vice President of Operations / Environmental Consultant
1986 to 1987	Institute for Research Management, Inc. Health Physics Technician
1983 to 1986	Ted Gibson Therapy Oxygen, Inc. Assistant Service Manager
1979 to 1983	United States Coast Guard Machinery Technician / Fire Marshal



TIMOTHY M. DUFFY, CIH, PE, RS
Vice President of Engineering

Timothy Duffy serves as the Senior Engineer, Certified Industrial Hygienist, and Registered Sanitarian for CEI. Mr. Duffy possesses over 25 years of experience performing industrial hygiene and engineering assessments of real estate, health care and business operations. His work has included: exposure assessments, cause and origin investigations, remediation designs, and engineering control implementation. Mr. Duffy's experience includes expert witness testimony in court cases involving the principles of engineering and industrial hygiene.

Mr. Duffy directs the environmental engineering and industrial hygiene activities of Compliance Environmental International, serving clients which include local government agencies, property management companies, insurance companies, attorneys, and corporate clients

EDUCATION

M.S. Environmental Engineering, Columbia Southern University, 2001
B.S. Biology, Towson State University, 1976
OSHA Competent Person, Certified OSHA Trainer, Asbestos Certifications

CERTIFICATIONS / QUALIFICATIONS

- Professional Engineer License – (States: [REDACTED] MD; [REDACTED] VA, [REDACTED] DC, [REDACTED] – NC, [REDACTED] -GA)
- Certified Industrial Hygienist (CIH) – [REDACTED] (ABIH - 1992)
- Registered Environmental Sanitarian [REDACTED] MD 1982)
- ASHE Healthcare Construction Certificate 2008
- Certified Spore Analyst I – [REDACTED] (PAACB - 2006)
- OSHA 40 hour Hazardous Waste Operations and Emergency Response

WORK EXPERIENCE

2007 to present	Compliance Environmental International – Senior Engineer Vice President of Engineering
1987 – 2007	Datanet Engineering, Inc. (Baltimore, Maryland) Vice-President / Sr. Industrial Hygienist
1983 – 1987	Baltimore County Dept. of the Environmental/Recourse (Baltimore, Maryland) Environmental Sanitarian
1978 –1983	San-Serv (Baltimore, Maryland) Environmental Sanitarian

Loren Barrett
Project Manager

Loren Barrett serves as a Senior Project Manager performing project monitoring on abatement projects with an emphasis on OSHA compliance in asbestos, lead-based paint and mold abatements. Loren is qualified to perform lead and asbestos inspections as well as water sampling for the state of Maryland.

EDUCATION

- Attended Chesapeake Community College from September, 2010 to December 2012.

CERTIFICATIONS/QUALIFICATIONS

- Asbestos Abatement Supervisor, January 2014, *Cardno ATC*
- Asbestos Building Inspector, November 2013, *Cardno ATC*
- Collecting and Analyzing Asbestos Air Samples – A NIOSH 582 Equivalent Course, January 2014, *Cardno ATC*
- Virginia Project Monitor, January 2014, *Cardno ATC*
- Certified Microbial Remediation Supervisor, February 2013 *Compliance Environmental International, Inc.*
- Construction in Healthcare Training®, December, 2013 *Compliance Environmental International, Inc.*
- Lead Inspector, December 2013, *AMA, Inc.*
- Lead Abatement Supervisor, December 2015, *AMA, Inc.*
- Lead Abatement Project Designer, December 2015, *AMA, Inc.*
- OSHA 30 Hour – Construction Safety and Health, October 2014, *IPS, LLC*
- Thermo Scientific Niton XRF Analyzer Operator's Training, May 2014
- Mold Inspection and Assessment, June 2015, *AMA, Inc.*
- Water Damage Restoration Technician, March 2016, *IICRC*

LICENSES

- License Lead Inspector for the State of Maryland, Common Wealth of Virginia & District of Columbia
- License Asbestos Inspector for the State of Maryland & Common Wealth of Virginia
- Maryland Certified Drinking Water Sampler # [REDACTED], *Maryland Department of the Environment*

WORK EXPERIENCE

2014 to present Compliance Environmental International – Senior Project manager



Environmental, Geotechnical
Engineering & Testing

Curtis E. Roupe, P.E. Vice President

www.tlassoc.com

Education

- B.S., Civil Engineering, Rose Hulman Institute of Technology

Registrations/Licenses

- P.E., Ohio, [REDACTED]
- P.E., Michigan, [REDACTED]
- P.E., Pennsylvania, [REDACTED]
- P.E., Indiana, [REDACTED]
- P.E., Illinois, [REDACTED]
- P.E., Virginia, [REDACTED]
- P.E., West Virginia, [REDACTED]
- P.E., Alabama, [REDACTED]
- P.E., Mississippi, [REDACTED]
- P.E., Minnesota, [REDACTED]
- P.E., South Carolina, [REDACTED]
- P.E., North Carolina, [REDACTED]
- P.E., Louisiana, [REDACTED]
- P.E., Florida, [REDACTED]
- P.E., Maryland, [REDACTED]
- P.E., Delaware, [REDACTED]
- P.E., Maine, [REDACTED]
- P.E., Kansas, [REDACTED]
- P.E., Missouri, [REDACTED]
- P.E., Wisconsin, [REDACTED]
- P.E., Kentucky, [REDACTED]
- P.E., Texas, [REDACTED]
- P.E., Idaho, [REDACTED]
- P.E., Oklahoma, [REDACTED]
- P.E., New Mexico, [REDACTED]
- P.E., Nebraska, [REDACTED]
- P.E., Montana, [REDACTED]
- P.E., South Dakota, [REDACTED]
- P.E., Washington, [REDACTED]

Training/Certifications

- Army Corps of Engineers, Construction Quality Management for Contractors

Summary of Experience

Mr. Roupe has 29 years of extensive experience in the management and execution of a broad range of geotechnical, construction testing, and inspection projects with a varied background in testing services in several school districts, municipalities, and airfields. He also has a working knowledge of applicable federal, state, and local laws. Mr. Roupe has prepared geotechnical reports for a variety of projects including new and rehabilitated pavements, shallow foundation design, and deep foundation design with piles, caissons, and auger cast piles. Mr. Roupe is responsible for supervising and coordinating a staff of 50 technical, professional, and laboratory associates in three departments.

Relevant Project Experience

Indefinite Delivery Architect Engineer (A-E) Contract for the Chicago District and Detroit District, US Army Corps of Engineers. Program Manager and Senior Geotechnical Engineer for USACE Contract which includes traditional geotechnical analyses in soil and rock, groundwater modeling, developing plans and specifications, and providing Construction Quality Assurance oversight on geotechnical features. Mr. Roupe responds to requests for proposals, negotiates Task Orders, prepares invoices, tracks budget and funding, reports to the government, serves as the primary point of contact for all contractual issues for the USACE, assigns new Task Orders to TTL personnel, ensures compliance with contract terms, and oversees/implements QC processes. Mr. Roupe also performs technical review and oversight. Thirty TOs have been awarded to date.

VA Battle Creek, Ambulatory Care Expansion, Building 2, Battle Creek, Michigan

Lead Geotechnical Engineer and Lead Testing Professional for this project which constructed 16,000 SF of additional space directly adjacent to the existing Primary Care Outpatient Clinics and Pharmacy in Building 2, while also renovating 7,000 SF of existing Primary Care clinic space. Work has included the creation of additional exam rooms and support space, including reception and waiting areas, restrooms, and physicians' offices. Renovation work includes all necessary modifications to access the new space from the existing areas along with the correction of several existing space deficiencies.



Environmental, Geotechnical
Engineering & Testing

Christopher P. Iott, P.E. Senior Geotechnical Engineer

www.ttlassoc.com

Education

- M.S., Civil Engineering, The University of Toledo
- B.S., Civil Engineering, The University of Toledo

Registrations/Licenses

- P.E., Ohio # [REDACTED]

Training/Certifications

- LRFD for Highway Bridge Substructures and Earth Retaining Structures
- Subsurface Investigation Qualification
- Subsurface Investigations – Geotechnical Site Characterizations
- Trenching and Excavation Safety Competent Person Training
- ODOT Visual Classification for Geological Logging of Soil and Rock Stratum

Affiliations

- American Society of Civil Engineers
- American Society of Highway Engineers
- National Society of Professional Engineers
- Ohio Society of Professional Engineers
- Toledo Society of Professional Engineers

Summary of Experience

Mr. Iott has 18 years of experience working on state, county, and municipal projects involving bridges, roadways, culverts, and MSE retaining walls. He has directed numerous geotechnical subsurface investigations for a variety of projects that involve drilling and laboratory testing, as well as bearing capacity and settlement evaluations for shallow and deep foundation design, embankments, MSE walls, and pavements.

Relevant Project Experience

Proposed VA National Cemetery Sites, Leon County and Brevard County, Florida

Provided project direction and senior geotechnical engineering for these Preliminary Geotechnical Subsurface Investigations at three sites being considered by the VA for development as national cemeteries. Investigations were performed at a 318-acre site in Brevard County and sites approximately 250 acres and 450 acres in Leon County. The investigations included field location and performance of a total of approximately 200 borings, which were extended to depths on the order of 8 to 10 feet below existing grades.

VA Outpatient Clinic, Medical University of Ohio, Toledo, Ohio

Geotechnical engineer assisting with the geotechnical investigations for the proposed outpatient clinic located at the Medical University of Ohio campus. The investigation included soil borings and test pit excavations to investigate the depth, consistency, and environmental concerns of the buried fill material suspected to have been backfilled on site during the demolition of approximately 10 former structures found on two separate lots.

ODOT District 2 Geotechnical Engineering Services Task Order Contract. TTL performed task orders for District 2 under their Geotechnical Engineering Services Contract. TTL performed 8 task orders to date and our services have included both drilling and laboratory testing services. The services were performed for slope repairs, noise walls, retaining walls, and culverts. TTL performed borings to evaluate existing subgrade conditions. Many of the slope repair projects were performed under emergency repair funding which required expedited delivery of services in difficult access and high traffic areas requiring good communication and coordination with local ODOT garages. All of these projects have been delivered on time and at or under the approved project budget.

Fifth Regiment Armory

Roof Replacement Design, Bid, and Construction Phase Services

Baltimore, MD



PROJECT INFORMATION

Completed: Ongoing

Cost: \$2,000,000 - \$5,000,000

Client:

MD Department of General Services
Mike Dinkelman, Project Manager
410-767-4007

The Problem

- The existing roof consists of 43,000 sf of built-up roofing and 66,000 sf of white single ply roofing. This Military Facility, listed on the National Register of Historic Places, is a highly utilized, occupied facility which will remain operational during the roof replacement project. The multi-story building consists of various roof elevations. The interior spaces consist mostly of offices at the building perimeter surrounding a two-to three-story drill hall in the center of the complex. Available Construction Drawings indicate that roof replacement and repair projects were performed in the mid 1990s.

Gale's Solution

- Performed a roof evaluation including tests cuts to document existing details and as-built conditions.
- Performed an engineering analysis to establish roof design criteria including structural snow load capacity.
- Prepared a report outlining our findings and recommended roof replacement system.
- Developed specifications and drawings for roof replacement.
- Project is currently in the Bid Phase.
- Gale will provide Construction Phase Services to include review of contractor submittals; attendance at the pre-construction meeting; site meetings to review contractor progress; and Post-Construction Services.



View of main roof area.



Unique copper louver enclosures to be refurbished



Existing skylights to be replaced throughout.

Appalachian Fruit Research Station

Roof Replacement Evaluation, Design Assistance & Construction Phase Services

Kearneysville, WV



The Problem

- Gale provided design assistance to Waldon regarding the design of the roof replacement for these facilities under a term contract with USDA. The Farm Center Complex has 4 separate roofing systems (total of 16,230 sq ft of single-ply EPDM firestone black roofing membrane). The existing roofs have experienced leaks in numerous areas, and were in need of replacement.

Gale's Solution

- Attended site visit with Waldon to meet with on-site Government representative to coordinate work.
- Evaluated existing conditions and roof replacement options.
- Prepared chosen roof replacement design.
- Coordinated roof design with HVAC upgrades.
- Provided Construction Phase Services for the Main Building and Farm Complex including review of contractor submittals, site meetings to observe contractor progress, general consultation related to the roof construction, and final site visit to observe completed work.

PROJECT INFORMATION

Completed: 2016

Cost: \$81,500 (ECC)

Client:

Waldon Studio Architects & Planners

Christa Kerrigan, AIA, LEED AP BD+C

Principal

410-290-9680



Before construction.



Before construction.



Single-ply replacement progress photo

DHHS Colesville Center

Roof Replacement and Façade Restoration

Silver Spring, MD



The Project

- Under our term contract, Gale was retained to develop roof replacement and façade restoration to include window replacement design documents for this occupied facility. The Colesville Center is a dual use health center and Montessori School. The center is a single-story building with brick veneer and an overall roof area of approximately 29,000 sf.

Gale Services

- Performed a visual evaluation of the roofing, wall, and window systems.
- Observed removal of roof and masonry components to document representative existing details and as-built conditions.
- Evaluated the roof and façade components and related accessory construction for general conformance with industry standards.
- The work consisted of:
 - Brick veneer repairs and repointing.
 - Window replacement including precast sill replacement and window head flashing replacement.
 - Roof replacement.
- Designed the chosen construction measures and prepared drawings and technical specifications suitable for soliciting contractor bids for the work.
- Assisted with the solicitation of contractors, attended the pre-bid meeting, and reviewed bids prior to contract award.
- Provided Construction Phase Services to include: attendance at the preconstruction meeting; attendance at construction site meetings; review of payment requests/RFI's; and site visit at job completion.

PROJECT INFORMATION

Date: 2017 - Ongoing

Client:

Montgomery County
Silver Spring, MD
Maurice Betaharon
240-777-5364

Budget: \$1,473,000

Gale Design Fee: \$68,500

Gale CPS Fee: Time & Expense

Change Order Percentage: 1.6%

Montgomery County states: *"I just wanted to take a minute and thank all the staff that I have worked with over the years; I can honestly say one of the best and most qualified organizations I have ever been involved with."*



Partial view of existing windows and walls.



Installation of replacement roof system.

Francis C. Hammond Middle School

Evaluation and Design BPS and CPS:
Roof and Window Replacement
Alexandria, VA



The Project

The 120,000 sf roof system on this school reached the end of its service life and required replacement. Gale performed an evaluation and design, then provided a 3 phase project which was completed in the summers of 2014, 2016, and 2017.

Provided Construction Phase Services, to include submittal reviews, onsite observations of construction, construction site meeting attendance, review/response to RFIs/Applications for Payment, and site visit to observe completed work.

Roof

The original proposed contract time for the design phase was extended due to unforeseen conditions that were discovered during the initial evaluation. Issues were identified related to the roof deck on the canopy roofs. At the time of our evaluation, it was discovered that the canopy roof "deck" consisted of thin gage metal form deck that is not typical of the type of structural substrate needed to support engineered roof assemblies. As a result, additional evaluation, to include roof test cuts and test cuts at the existing stucco soffits, was required. Gale incorporated re-design of the roof decking and augmentation of support framing to provide adequate substrates for new roof systems on the canopy areas into the overall roof replacement design. The project included raising all rooftop mechanical equipment and augmenting the existing steel rooftop supporting structures.

Gale also provided assistance during the Bid Phase and provided Construction Phase services during the roof replacement, which included submittal and shop drawing review, attendance at meetings, field observations of the contractor's work, review of payment applications from the contractor, and final punchlist.

Windows

The school was also experiencing issues with water intrusion through the glass block façade and window systems. Gale evaluated the conditions and provided replacement options to include renderings for partial and total replacement. ACPS elected to pursue total replacement of the glass block and existing window assemblies below the block with an aluminum curtainwall assembly. The project has been awarded with construction scheduled for the summers of 2018 and 2019.

PROJECT INFORMATION

Date:

Roof: 2014-2015

Windows: 2017-2019

Client:

Alexandria City Public Schools

Alex Alexander

(703) 619-8300

Gale Project Manager:

Steven J. Bohlen, P.E., RRC, RWC,

BECxP



Glass block schedule for removal.



Existing conditions



Rendering of proposed system.

George Washington Middle School

Roof Replacement and Façade Repairs

Evaluation, Design, Bid, and Construction Phase Services

Alexandria, VA



Roof

The project was 2 phases and consisted of preparing Design Documents for removal and replacement of the existing low slope roof systems with single-ply thermoplastic roof membrane system. Phase 1 of the project also included removal and replacement of the existing HVAC curbs and ductwork.

- Performed an evaluation of the roofing and HVAC systems.
- Designed the chosen construction measures and prepared plans, details, and specifications suitable for soliciting contractor bids for the work.
- Provided assistance during the Bid and Construction phases.

Facade

ACPS requested Gale to evaluate the façade at the George Washington Middle School. The original 1907 portion of the building is a multi-wythe brick and lime stone masonry façade with glass block and punched windows. Multiple additions have been constructed over the years consisting of masonry cavity walls, curtainwall assemblies, punched windows, EIFS, and cast stone panels.

- Gale assessed the exterior facade components to identify problematic conditions and provided recommendations for systemic repairs.
- Gale designed the chosen construction measures and prepared drawings and technical specifications and assisted with the solicitation and bidding process.
- Construction will be completed in the summer of 2018. Gale is currently providing Construction Phase Services to include submittal review, observations of the contractor's work, and construction site meetings.

PROJECT INFORMATION

Date:

Roof: 2013-2017

Facade: 2017-2018

Client:

Alexandria City Public Schools

Alex Alexander

Facilities Engineer

703-619-8300

Cost: Phase 1: \$1,185,400

Phase 2: \$877,000

Size: Phase 1: 45,000 sf

Phase 2: 52,500 sf



View of façade.



Limestone columns and façade.



Intricate limestone detailing

Lebanon VA Medical Center Buildings 1, 17, 19 & 22

Facade Evaluation and Design Assistance

Lebanon, PA



PROJECT INFORMATION

Date: 2013 - 2015

Owner:

U S Dept of Veterans Affairs

Client:

AE Works

Rick Witt

(814) 242-0489

The Project

- This project involves Façade Evaluation and Design Assistance for the Lebanon Veterans Affairs Medical Center, constructed circa 1950. Gale was retained by the Project Architect to perform a full Façade Study of Buildings 1, 17, 19, and 22. We provided Design Assistance to AE Works for Buildings 1 and 17. The Lebanon VA Hospital Historic District is listed on the National Register of Historic Places.

Gale Services

- Buildings 1, 17, 19 & 22: Provided Field Evaluation of façade and Condition Reports. These 3 story buildings are constructed of brick masonry (mass wall) with single punched windows, limestone parapet caps, cornices, and details. Roofs were both low slope and steep slope.
- ▼ Buildings 1 & 17: We provided Design Assistance for lintel replacement and precast ornamental restoration to include preparation of key details and drawings and review of technical specification sections prepared by AE Works.
- Historic preservation standards and special considerations were utilized to maintain the historic consistency pertaining to the mass wall configuration, brick size and shape, and mortar composition.
- ▼ Special considerations were made to protect patient health and safety during construction sequence plans. Such considerations included noise, dust, and general disruption.



Bancroft Hall, U.S. Naval Academy

Building Enclosure Renovation – Design/Build

Annapolis, MD

PROJECT INFORMATION

Date: 2013

Client:

Reilly Construction Group
Jodi Phifer
703-547-4453

Owner:

Department of the Navy



The Project

- Bancroft Hall is the largest dormitory in the world with 1,700 rooms, 4.8 miles of corridors, 33 acres of floor space and its own zip code. The original sections were built under the supervision of Ernest Flagg in the early 1900s and represent his most well recognized work in the Beaux Arts style of architecture. Other wings were added in the 1920s, 1930s and 1960s. It is listed on the National Register of Historic Places. Reilly Construction Group retained Gale to design the needed repairs to granite walls, mortar joints, slate roofing and copper gutters.

Gale Services

- Evaluation of façade and roof to document conditions and to address deficiencies in granite façade, building sealant joints, and slate roofing.
- Sampled and analyzed mortar to match original mortar and maintain the historic fabric of building.
- Designed chosen construction measures and prepared technical specifications and drawings for stone façade and slate roof repairs in accordance with Navy requirements.
- Prepared Historic Preservation and Planning Commission Submission and attended meetings before the Commission and Maryland Historic Trust.
- Provided quality assurance observations and construction administration services.

Army National Guard Readiness Center

Site Engineering and Permitting

Natick, MA



Gale worked with the Massachusetts Army National Guard and the Division of Capital Asset Management and Maintenance (DCAMM) to design, bid and build a new state-of-the-art Readiness Center in Natick, MA.

Gale's Services:

- Performed a detailed hydraulic analysis of the 28± acre parcel
- Design added 5.5± acres of impervious area to the site that abuts Lake Cochituate and also lies within a Zone II aquifer district; the challenge was to mitigate peak runoff rates while maintaining natural vegetation and respecting the sensitive environmental features
- Design considerations include two (2) subsurface infiltration systems with mechanical stormwater quality units; design also includes culvert analysis and outlet stabilization measures
- Conducted a full topographic and property line survey, as well as detailed wetlands delineation
- Coordinated and assisted with a full geotechnical investigation for drainage and foundation purposes
- Other design aspects include site layout for Anti-Terrorism Force Protection, 300 parking spaces, site lighting, site landscaping and complete utility infrastructure design

PROJECT INFORMATION

Completed: 2014

Cost: \$12,000,000

Client:

DHK Architects

Mr. Wayne Gething Jr., LEED® AP

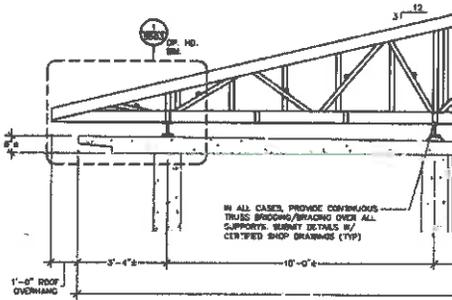
(617) 267-6408



Massachusetts Army National Guard

Indefinite Quantity Contract – Structural Engineering and Associated Services

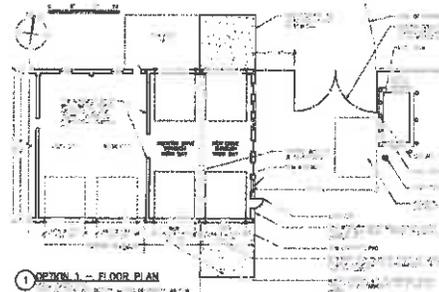
Multiple Facilities State-Wide



C TRUSS TYPE 'C' - STRUCTURAL GABLE TRUSS
 SCALE: 1/2" = 1'-0"
 GABLE TRUSS MUST BE MINIMUM 2-PLY FULLY AND CONTINUOUSLY FASTENED TOGETHER, AS DETAIL BY THE METAL TRUSS MANUFACTURER-TYPICAL



MANG, Field Maintenance Shop, Brockton, MA



PROJECT INFORMATION

Completed: 2015-Present

Client:

Massachusetts Army National Guard
 Camp Edwards
 Mr. Jason Obrebski
 (508) 968-5806



MANG, Field Maintenance Shop, Brockton



MANG, Field Maintenance Shop, Brockton



Armory, Ayer



Camp Edwards, Shaw Hall Dining Facility

Various Projects to Date

- Camp Edwards – Flat roof conversion to sloped metal on four buildings
- Camp Edwards, Shaw Hall – Due diligence analysis and LEED certification review for interior dining hall renovations, MEP upgrades, structural augmentation, civil upgrades, window/door replacement, accessibility for compliance with Massachusetts 521 CMR: Architectural Access Board Massachusetts (MAAB) (subconsultant – GGD)
- Brockton Armory – Feasibility study to expand the Field Maintenance, study included options to remove the existing latrine to provide separate male and female areas, for compliance with MAAB
- Ayer Armory – Roof replacement design services

Naval Station Newport – Term Contract

Building Envelope Consulting Services

Newport, RI



Building 27



Representative Projects under Term Contracts include the following:

- Historic Building 10 – Roof replacement and porch repair
- McCarty Little Hall – Roof replacement and wall cladding system
- Strategic Maritime Research Center (SMRC) – Roof investigation and repair – Phase 1 and 2
- Colbert Hall – Plaza waterproofing replacement
- Building 114 – Brett Hall – Various exterior repairs including foundation waterproofing and sub-grade drainage system, new basement windows that are Anti-Terrorism Force Protection (ATFP) rated, replaced damaged ceiling tiles and floor tiles
- Historic Building 302 – Roof, window, and wall renovations
- Building 370 – Exterior repairs to including new wall claddings, brick masonry, concrete, and sealant renovations
- Building 656 – Exterior repairs including rebuilding of exterior walls, application of roof coatings and structural augmentation of window openings to accept Anti-Terrorism Force Protection (ATFP) rated windows
- Building 690 – Roof and wall panel replacement
- Building 1172 – Chapel of Hope – Exterior repairs including recladding of exterior walls, structural augmentation of wood framing system to accept new Anti-Terrorism Force Protection (ATFP) rated windows, and associated work
- Building 1269 – Building envelope evaluation for repairs to the Senior Enlisted Academy
- Building 1288 – Roof replacement and associated work
- Building 678 – Facade restoration and exterior repairs

PROJECT INFORMATION

Completed: 2000 – Present

Client:

Department of the Navy
Naval Station Newport, RI
Mr. Gerard Montani, P.E.
(401) 841-7614



Colbert Plaza, Bldg. 686



Building 302



Chapel of Hope



Century provided design services for this 80,000 SF tenant fitout. Electrical work included power design for work stations and general office space, A/V coordination, IT & security equipment. Power was provided for a new gym on the 1st floor, and new robotics labs on the 2nd floor. The gym and robotics labs are to be used to help rehabilitate our injured veterans. Lighting was designed to optimize light output while meeting ASHRAE 90.1 requirements of 1 W/SF. High efficiency lighting was used for this purpose. Occupancy sensors were provided in an effort to provide an automatic shut off of lighting on all floors. Power distribution work included reconfiguring existing fire pump feeds in order for them to meet code, splitting up generator loads as required to place them on separate transfer switches, and providing power equipment for new mechanical loads.

A new roof top generator was provided along with a new UPS (uninterruptible power supply) unit inside for the VA's server equipment loads. UPS requirements including battery run time and future expansion were coordinated with the tenant (the VA). The UPS was provided with an "Energy Savings System" which will allow more than 99% efficiency in operation. The generator required structural coordination, fuel piping design, and fuel source/ tank coordination.

Plumbing work included new water heaters and risers as required for new bathrooms and sinks throughout the tenant space. New vent stacks were provided in coordination with the new risers. The fire pump controller was replaced in an effort to get a combination controller/ transfer switch mechanism. This allowed the fire pump to be placed on the existing generator. There were also new sump pumps installed in the elevator pits as per code.

Mechanical work included ductwork and VAV box reconfiguration throughout the fitout spaces as required for the new layouts. It included adding economizers on air handlers of each floor, and placed the return air fans with new motors on new variable frequency drives. New computer room air conditioning units (CRAC units) were installed to cool the server room equipment and UPS. The crac units were provided with Hot Gas Bypass in order to provide high efficiency temperature control and provide high performance at low load conditions. Main duct risers from the ground floor to the first floor were relocated as needed for the new gym/ track layout. Hydronic piping was added or reconfigured as required for baseboard heating changes for the spaces. New exhaust fans were added on the roof as needed for the addition of bathrooms on all the floors. A new sequence of operations was developed to help integrate new equipment into the existing building management system.

This project came with some significant challenges. The largest of which was an accelerated schedule. This schedule required that all trades be closely coordinated, and it caused much of the information required by the tenant to be received late. All of the late information and numerous requests for work outside of our scope necessitated strenuous documentation and record keeping.

Another challenge involved attempting to reduce the construction costs in order for the tenant to be able to pay for what was required. This involved a great deal of value engineering work involving developing alternative designs for the generator (concept for placing in the basement), review of plumbing vent stacks, and redesign of the electrical receptacles and circuitry.

At the permit level of design, it was determined that the team would need to adhere to Baltimore City's new Green Building Standard. Our team was one of the first in the city to have to implement much of this new standard. Several "Green" changes were required to the plans in order to attain building permits. Changes included ductwork revisions to provide outside air, plumbing fixture changes, and lighting power density coordination. Our team worked diligently with the owner, architect and contractor in order to implement the changes at a late stage of project development.

Services

MEP Engineering

Owner

Veterans
Administration
Melissa Bayard,
410.605.7000 ext.
5889

Construction Cost

\$4,027,000

Completion Date

4/ 2011

This project involved the remodeling of the space located in the NBACC building on Fort Detrick. The space is approximately 6,000 s.f. The space includes an open office area, restroom, break room, and other typical office amenities.

Mechanical:

The design included the addition of Variable Air Volume (VAV) terminal units with hydronic reheat to the existing mechanical system and design of the air distribution for the space layout. Existing VAV terminal units were also utilized to reduce construction cost. The space was carefully zoned to provide the most thermal efficient condition for the client. The existing system was also verified to ensure proper ventilation and air changes per hour were being provided to comply with ASHRAE 62.1 and local code. The challenge on this job was the limited amount of ceiling space. The ductwork were carefully laid out and coordinated with existing piping to ensure proper fitment above the ceiling.

Plumbing:

Domestic water and sanitary piping design was provided for this project. Low-flow water fixtures were specified to reduce water consumption and reduce hot water demand. This approach helps the reduction in both water consumption and energy usage. Plumbing fixtures were selected also to match existing plumbing fixtures in the building.

Electrical:

The existing 120/208 volt services were redistributed throughout the building. Design for lighting, electric, telephone, cable television, and fire alarm were provided for the entire space. Coordination with the architect and owner was necessary to achieve the client's requirements. The lighting plan was coordinated with the Architect. Lighting fixtures were carefully selected in order to maintain appropriate lighting levels for each space usage while keeping the light density in accordance to International Energy Code Conservation. Power outlets were located in accordance to the client's requests. Emergency lighting and exit signs were designed to meet requirements of NFPA 101. Receptacles, telephone, and cable television outlet layouts design for a typical office building were provided in cooperation with the architect. Fire alarm system for each space were designed. Fire alarm strobes and horns were provided in accordance to NFPA 72 and ADA guidelines and connected to the central building fire alarm equipment.

Services

Mechanical,
Electrical and
Plumbing
Consultation

Owner

Fort Detrick
110 Thomas
Johnson Drive
Frederick, MD
21702

Mr. Paul Johnson
301.682.9984
johnson@nbacc.net

Construction Cost
\$ 703,000

Completion Date

Design:
4/2015-5/2015
Construction:
6/2015-10/2015

Century is the prime and responsible for the Mechanical, Electrical and Plumbing greening modifications to a 20,000 square foot building. Century also coordinated the architectural work with a sub consultant architectural firm. They were responsible for providing the architectural backgrounds, a reflected ceiling plan, and specification of window film on the south building façade to reduce solar heat gain. Overall the project involved the replacement of two HVAC rooftop units, the replacement of lighting in all common areas and the installation of a photovoltaic array on the roof.

Mechanical: Century received drawings that were provided in the RFP that were completed to a design development level. This design involved the replacement of two constant volume roof top units serving the building with variable air volume (VAV) type. Century reviewed the current design and performed load calculations to determine if the RFP design was correct. The existing proprietary variable volume terminal (VVT) units and integral linear diffusers were removed. New VAV boxes with electric reheat coils were provided and were connected to existing high-pressure duct mains. The layout of low-pressure ductwork was provided and the location of new diffusers was indicated. Century provided information on how the new system and new VAV boxes were to be controlled. Century provided details as to how the new roof top units would be connected to the existing high-pressure ductwork system.

Century visited the site to verify the existing locations of equipment shown on the design development drawings.

Electrical: The electrical work on the project involved the replacement of lighting on the second floor in the common areas, the installation of a photovoltaic array on the roof and associated electrical connections to the new HVAC roof top equipment. Century performed a site visit to verify the location and condition of all existing equipment.

The existing lighting on the second floor of the building in the public areas were removed and replaced with more energy efficient lighting which included 2x2 and 2x4 fluorescent fixtures. New emergency lighting was also included in the design. Lighting calculations were performed for the new lighting layout.

A new solar array consisting of 72 modules (6 strings of 12) for a combined nominal capacity of 15 kilowatts (KW) was provided on the roof of the building. The array provides on-site renewable energy to offset utility service, with each module providing 224 watts in a nominal 3' by 5' panel size. Polycrystalline silicon cells were utilized in the modules to provide an efficiency of approximately 14% and to produce a maximum of 8 amps at 30 volts DC (VDC), so that a series connected string produced 360 VDC. Three inverters were provided in a new dedicated electrical closet on the second floor of the building, with each accommodating two dc circuits and therefore connected to two strings. Each inverter was rated nominal 5 KW with AC output rated at 277 volts +/- 10%, with an efficiency rating of 95% +. A dedicated load center was provided to interface the output of the rectifiers with the building electrical distribution system. The load center was located in the new electrical closet adjacent to a new branch circuit panel. The load center was rated 480/277 volts, 3-phase, 4-wire and each inverter was connected to a 1-pole, 25 amp circuit breaker in the load center.

Services
Mechanical and
Electrical Engineering

Owner
Army Corps of
Engineers
Real Property Services
Field Offices
133 National Business
Parkway, Annapolis
Junction, MD 21701
Mr. Tom McClellan
410.854.0722

Construction Cost
\$1,121,000

Completion Date
Design:
9/2009-2/2010
Construction:
2/2010-5/2010

U.S. NAVY - CUTLER BASE

NAVAL COMPUTER AND TELECOMMUNICATIONS STATION RENOVATION



LOCATION

Buildings 103, 121, 123, 124
Cutler, Maine

CONTRACT NUMBER

N40085-11-D-7207

AWARD DATE

July 27, 2011

PROJECT START

2012

ACTUAL COMPLETION DATE

September 14, 2016

SIZE

50,000 SF

TOTAL COST

\$5 Million

Waldon Studio Architects [WSA] was Gale Associate's consultant for this project. The project provided a significant renovation to the existing power plant complex at the Naval Computer and Telecommunications Station in Cutler, Maine. Repairs or replacement were performed to the building exterior walls, windows and doors, structure and MEP systems. Site modifications and repairs were also performed to remedy existing issues.

WSA responsibilities were to design accessibility upgrades, perform a LEED analysis, and assist in development of exterior renovation architectural renderings. The accessibility upgrades included a new exterior entry ramp, accessible restrooms and showers, interior ramp and door hardware.



U.S. DEPARTMENT OF THE NAVY (NAVFAC) P008 MARINE BARRACKS WASHINGTON BUILDING 8 | HISTORIC PRESERVATION



LOCATION
Washington, DC

AWARD DATE
August 29, 2016

PROJECT COMPLETION
Estimated 2020 (currently undergoing State Historic Preservation Office (SHPO) approval)

SIZE
47,893 SF

COST
\$17 Million

CONSULTANTS
In collaboration with Michael Baker Associates (Prime)

John Cullinane - Historic Architect (subconsultant)

Design/Bid/Build Project N40080-11-D-0499 - Historic Preservation / Window Door Design / Masonry and Mortar Analysis / Fireplace Paint Removal Analysis

The Marine Barracks Washington, DC was established by President Thomas Jefferson and Lt. Col. William Ward Burrows in 1801 and is the oldest active post in the Marine Corps. The post serves as both ceremonial and security missions in Washington, DC. The post is home to the Silent Drill Platoon, the Marine Corp Drum and Bugle Corps, the Marine Band, the official Marine Corps Color Guard and the Marine Corps Body Bearers. Located at 8th and I Street, the project sits within the Capitol Hill Historic District. Along with the Commandant's Residence, the complex is registered as a national historic landmark.

Building 8 is approximately 48,000 SF of office space originally built between 1902 and 1906 as an Enlisted Bachelors Quarters. During the 1950's the structure was converted from housing to the installation's administrative headquarters. Except for ad-hoc modifications since its conversion, the building has remained unchanged. The current project will modernize the infrastructure of the building- mechanical, electrical and plumbing systems, to comply with current codes and better serve the current needs. Along with this work, the interior spaces will be reworked to provide more open office areas and an internal hallway connecting the entire building. Accessibility upgrades will include installation of a new elevator and a ramp along the exterior arcade. The existing masonry and concrete structure will be retrofitted to conform to the current federal AT/FP requirements.

Working in conjunction with John Cullinane, Waldon Studio Architects is assisting in documenting and obtaining all required historic commission approvals and guidance to the project team when dealing with the remaining historic fabric of the building.



Figure 1: Architectural site plan showing proposed future use areas (shaded in yellow) and existing buildings (shaded in grey).

Ambulatory Care Expansion Building 2, VA Medical Center Battle Creek, Michigan

In support of the construction of two additions to the existing ambulatory care facility, TTL's scope of services for this project included a geotechnical subsurface investigation, a hazardous materials survey and construction materials testing and inspection.

TTL conducted a geotechnical subsurface investigation and provided recommendations for design and construction of foundations, floor slabs, and pavements. As part of the investigation, borings, field and laboratory soil testing, and a geotechnical engineering evaluation of the test results was performed. TTL also provided recommendations concerning soil- and groundwater-related construction procedures such as site preparation, earthwork, foundation and pavement construction.

TTL conducted construction materials testing and inspection services during construction of the VA Building 2 East expansion at the VA Battle Creek medical facility. TTL provided materials testing and inspection during the excavation and backfill operations using visual inspection methods along with in-place field testing utilizing portable nuclear density gauges. Concrete placements and masonry were tested by TTL to verify that concrete, mortar and grout materials were being used that were in general conformance with the project specifications. Structural steel erection was monitored to insure connections and structural members were properly installed and connected. ASTM E 325 bolted connections, fillet welds and metal decking puddle welds were included in this inspection. TTL also performed visual examination on the rubber membrane roof. Lastly, sprayed-on insulate fireproofing material was applied to the new structural steel framing forming the First Floor of the Building 2 East addition. During the installation of these materials, TTL applied test fixtures in order to test newly installed fireproofing materials for cohesion and adhesion. Testing was performed in accordance with ASTM E 736, Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members.

TTL conducted a NESHAP asbestos verification survey, a lead-based paint survey, a visual hazardous materials survey, prepared detailed asbestos and hazardous material abatement specifications, and provided management and oversight of the abatement work. State of Michigan certified asbestos inspectors verified the presence of previously identified ACM and collected samples of previously unidentified suspect ACMs for laboratory analysis. Painted surfaces were screened with an XRF unit and then collection of paint chip samples for verification was completed. The visual hazardous materials survey provided an inventory of the fluorescent light bulbs, suspect PCB light ballasts, radioactive sources (emergency lighting) and suspect mercury switches. TTL personnel conducted air monitoring during asbestos abatement activities and collected baseline, environmental, and clearance samples for PCM analysis.

Owner/Client: Department of Veterans Affairs/SSOE Group

Contact: Eric Murrell, Master Architect, SSOE, (248) 686-3166

Year Completed: 2014

Project Cost: \$165,000

VA Community-Based Outpatient Clinic, Medical Colleges of Ohio Campus, Toledo, Ohio
TTL provided due diligence and remedial design services from 2009 through 2012 for the new VA Outpatient Clinic in Toledo, Ohio. The work included Phase I and Phase II ESAs and VAP Phase I and Phase II PAs, a buried steam line asbestos investigation, a geophysical investigation, test pit investigations, a geotechnical investigation to evaluate the engineering properties of the underlying soils, a topographic survey, remedial design and cost preparation, and preparation of an application for a COAF Grant for the \$920,000 cleanup of the property that was awarded in 2011. TTL oversaw and monitored the remedial efforts.

TTL utilized a combination of geophysical and test pit investigations to determine the areas and estimated volumes of fill associated with formerly demolished building basements in order to obtain detailed information for the preparation of a RAP for removal and off-site disposal of buried building and steam line demolition debris and associated contaminated fill. In addition, over 1,500 linear feet of asbestos associated with buried steam lines was abated.

Having completed standard due diligence services per VA requirements, TTL identified an opportunity for obtaining State COAF funding for the majority of the cleanup costs necessary to develop the proposed VA Outpatient Clinic. By swiftly conducting VAP Phase I and II PAs and preparing a RAP and Project Assumptions and Cost Estimate (PACE) in the summer and fall of 2010, TTL was able to prepare an application for COAF cleanup funding on behalf of the Toledo and its development partner, TVAC. TTL's expedited performance of the VAP Phase I and Phase II PAs allowed for the October COAF application submittal timed so that cleanup can proceed in the Spring of 2011, enabling TVAC to meet its goal of a new Outpatient Clinic opening in the summer of 2012.

TTL was able to interest Toledo in applying for COAF cleanup funding for this Project and facilitate a Development Agreement between the City and TVAC, the development company which received the award from the VA for the development of the new Outpatient Clinic. TTL brought these parties together with Clean Ohio Fund officials to discuss the cleanup project and demonstrate to the State that the awarding of funds will assist in the redevelopment of the property.

Client: Department of Veterans Affairs

Contact: Jay Miller, Ann Arbor Healthcare System, (734) 769-7100

Year Completed: 2012

Estimated total costs: \$219,975

Contract No. VA-251-P-0495



Architectural / Engineering Services for Improvements to the West Virginia Army National Guard (WVANG) Martinsburg Facility

Proposed Project Approach / Scope

Based on our review of the Expression of Interest (RFP) documents and facility visit on November 16, 2018, we have a clear understanding of the project requirements.

The Martinsburg Facility is a brick masonry building with both sloped and low-sloped roofs. The structural deck appears to be cementitious wood fiber panels typically supported on open web bar joists and/or steel beams. Please note interior access was not available at the time of Gale's site visit. Typically, construction of this type includes minimal insulation, which will be addressed with renovations. The windows appear to be steel-framed, single-glazed assemblies, which appear to be original construction. The main exterior doors appear to have been replaced; however, other pedestrian and overhead doors require upgrades.

The WVANG is requesting architectural/engineering services to complete an interior and exterior renovation and upgrade to the Martinsburg Facility. Key design elements include complete restoration of the facility including office areas, hazardous materials evaluations/remediation (for lead and asbestos), power load assessment, new roof systems, new HVAC systems, new and more energy-efficient windows and exterior doors, and new interior and exterior LED lighting. The project will also include the assessment and rehabilitation of paving, landscaping and site drainage. The project renovations must comply with current building and military codes.

Gale's services will include the coordination of several subconsultants to assist with interior renovations, MEP/fire and HVAC, geotechnical engineering and hazardous materials remediation. Gale will provide full evaluation, design, bid and construction phase services for the exterior building enclosure systems (roofs, walls, windows and doors), structural engineering, exterior site improvements for paving, drainage and landscape improvements.

Our general team approach will be as follows:

1. Attend a design team/WVANG startup meeting at the Martinsburg Facility to review the project's mission and goals. Gale will generate an agenda, prepare meeting minutes and distribute to all stakeholders. The meeting will include a summary of the milestone schedule for performance and deliverables. Available background information will be compiled from the WVANG at this time.
2. The design team will participate in meetings to present and obtain the required regulatory approvals from local and ANG officials in the review of the project's intent. They team will conduct the appropriate programming, field evaluations to determine as-built conditions, forensics, review of existing drawings and documentation, inspections and testing as required to develop conceptual drawings and narrative for the WVARNG review. The design team will present and review the conceptual submission and distribute a memorandum of understanding to summarize the design direction.



3. Based on the results of the 10% conceptual submission for review and approval by the WVANG, the design team will proceed with the development of drawings and specifications. The design team will prepare document submissions at 35%, 50%, 90% and 100% completion of the design. Construction cost estimates will be included with each submission.
4. The design team will meet with the WVANG after each submission and prepare/distribute meeting minutes for each.
5. The designs, specifications and contract documents will be suitable for public bidding in accordance with state and federal agencies, as required. We will assist with the notification and prequalification of contractors, if requested by the WVANG.
6. During the bid phase, we will schedule and attend pre-bid meetings on site with contractors, attend bid openings, review the results, and provide a written summary of the bidders' qualifications and results to the WVANG for consideration and award.
7. Construction Phase Services, if requested by the WVANG, will commence upon execution of a contract with the successful bidder and, if authorized, would include both administration and on-site observations of construction activities. Construction contract administration services include review of shop drawings and submittals, scheduling and attendance at preconstruction and site meetings, review of requests for payment, providing clarifications, issuing change-orders if required, and completing project close-out documentation. Construction observations/resident engineering can be provided upon request and includes full- or part-time on-site observations of the construction activities by a resident engineer. Gale's team includes staff and resident engineers and architects to assist with construction observations and onsite consultation. Reports are provided for each field visit documenting the job progress. These daily reports provide a summary of construction activities including methods and materials of construction, work location, work crew size, non-compliances with the contract and resolution, visitors to the site, weather conditions, etc. Photographic documentation is provided to augment each daily report.



Purchasing Division
 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: 513928

Doc Description: Addendum #1 Martinsburg Facility Renovation Design

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-26	2018-11-27 13:30:00	CEOI 0603 ADJ1900000011	2

BIDDING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Stephanie L. Gale
 (304) 558-8801
 stephanie.l.gale@wv.gov

Signature X

Steven J. Bohlen

FEIN #

042319385

DATE

11/26/18

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

Steven J. Bohlen, P.E., RRC, RWC, BEC, P
 Associate
 Page: 1

FORM ID : WV-PRC-CEOI-001

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



(Name, Title)

Steven J. Bohlen, P.E., RRC, RWC, BECXP, Associate

(Printed Name and Title)

800 Corporate Drive, Suite 301 Stafford, VA 22554

(Address)

703-383-0815 / 703-884-4001

(Phone Number) / (Fax Number)

sjb@gainc.com

(email address)

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

Gale Associates, Inc.

(Company)



(Authorized Signature) (Representative Name, Title)

Steven J. Bohlen, P.E., RRC, RWC, BECXP, Associate

(Printed Name and Title of Authorized Representative)

11/26/18

(Date)

703-383-0815 / 703-884-4001

(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

- Addendum No. 1
- Addendum No. 2
- Addendum No. 3
- Addendum No. 4
- Addendum No. 5

- Addendum No. 6
- Addendum No. 7
- Addendum No. 8
- Addendum No. 9
- Addendum No. 10

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

Gale Associates, Inc.

Company



Authorized Signature Steven J. Bohlen, P.E., RRC, RWC, BECxP, Associate

11/26/18

Date

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

STATE OF WEST VIRGINIA
Purchasing Division
PURCHASING AFFIDAVIT

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

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

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

DEFINITIONS:

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

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

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

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Gale Associates, Inc.

Authorized Signature: *Steven J. Boblen* Date: 11/26/18
Steven J. Boblen, P.E., RRC, RWC, BECxP, Associate

State of Maryland

County of Baltimore, to-wit:

Taken, subscribed, and sworn to before me this 26 day of November, 2018

My Commission Expires May 18, 2021, 20



NOTARY PUBLIC *Dana E. Degrafft*