



February 25, 2019

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

Opened to Date

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2019 FEB 25 AM 9:47
WV PURCHASING
DIVISION

Attn: Guy Nisbet, Buyer

RE: Expression of Interest to provide Architectural/Engineering Services for Water Line Replacement at Various State Parks
AMT File No. P19-0108

Dear Mr. Nisbet:

A. Morton Thomas and Associates, Inc. (AMT) is pleased to submit this Expression of Interest for the West Virginia Division of Natural Resources' project for the replacement of water lines at Babcock, Chief Logan, North Bend, and Watoga State Parks.

For 63 years, AMT has provided engineering and professional services relating to water line replacement for state and municipal agency clients. Within the past five (5) years, AMT has provided design services for public utilities that have involved the design and rehabilitation of more than 75 miles of water lines involving new systems, replacements, and replacements involving trenchless systems. AMT has successfully worked with municipal clients through similar on-call contracts, annual service agreements, and stand-alone projects on both small and large assignments. Our growing list of clients includes over 50 separate counties, service authorities, cities, towns and other municipalities.

AMT is comprised of over 510 highly qualified planners, engineers, scientists, landscape architects, and support personnel. Our Project Manager, Jerry Kavadias, PE, LEED AP, has 35 years of engineering and management experience and will lead the relationship and project management efforts for this project. He is supported by discipline leaders with specifically relevant experience with water resources projects. Additionally, AMT has included GAI Consultants on the team to provide geotechnical engineering and environmental services. GAI has offices in Charleston and Bridgeport, WV, and has provided services to the Division of Natural Resources since 1991.

We appreciate your consideration of our qualifications and look forward to the next stage of your selection process.

Kindly,

A. Morton Thomas and Associates, Inc.

Jerry Kavadias, PE, LEED AP
Project Manager
jkavadias@amtengineering.com

Michael J. Wiercinski, PE, PLS
Principal-in-Charge
mwiercinski@amtengineering.com

SECTION 1: QUALIFICATIONS AND EXPERIENCE

TEAM INTRODUCTION

A. Morton Thomas and Associates, Inc. (AMT), an *Engineering News-Record Magazine* Top 250 Design Firm, has been providing water and wastewater engineering services throughout the Mid-Atlantic Region for 63 years. AMT is an employee-owned firm employing over 510 engineers, biologists, ecologists, planners, surveyors, construction managers and inspectors and other support personnel. AMT has served and continues to serve numerous state and municipal agencies through 20 offices throughout the mid-Atlantic Region including Parkersburg, West Virginia. Our Associate-in-Charge, Tim Kirk, PE, PTOE, is extensively familiar with providing professional services for a wide range of projects throughout West Virginia and previously served as an engineer with the West Virginia Department of Transportation. As an Associate with AMT in our Parkersburg office, his emphasis is on scoping, scheduling, planning, and monitoring project execution and budgets for transportation-oriented projects.

AMT has many years of experience designing new, replacement and rehabilitated water and sewer pipelines. AMT provides expert experience in designing for all materials types (typically, ductile iron, PVC and reinforced concrete) and associated appurtenances such as air and pressure release valves, valve vaults, blow-offs, fire hydrants, standard and junction manholes. The AMT team is experienced with hydraulic analysis, cathodic protection design, structural design, soil analysis, environmental analysis, alignment studies, specification writing, surveying and right-of-way acquisition, tunnel design, preparation of extensive traffic control plans, construction administration and inspection services, government and local jurisdiction permitting, and strong public outreach capabilities.

AMT has vast experience in the design of water lines and associated appurtenances. These design services have been provided for lines sized from 8-inch to 60-inch. The AMT team brings recent regional experience from similar contracts for a number of clients including, but not limited to:

- St. Mary's County Metropolitan Commission (METCOM)
- Washington Suburban Sanitary Commission (WSSC)
- District of Columbia Water and Sewer Authority (DC Water)
- City of Baltimore
- Howard County
- Loudoun Water

Having designed over 60 miles of water and sewer pipeline in the past five (5) years, AMT is proficient at working with the specifications, policies and procedures of many governments and agencies in the region. Our team has thorough knowledge of area water and sewer CAD standards and presentation standards for design plans. Jerry Kavadias, PE, LEED AP, AMT's Project Manager, has over 35 years of water and sewer design experience of all types and sizes.

AMT has a significant amount of experience in a variety of projects throughout West Virginia. AMT recently completed design services for the Bonds Creek Bridges and the Proctor Creek Bridge, which required the relocation of water mains, and are currently serving the WVDOH with construction phase services for both projects. We recently completed the District Three & Six Roadway Departure Study for the WVDOH and provided design services for the renovation of the Mineral Wells weigh station near Parkersburg through the Statewide Engineering Contract. We are currently providing design services to District Three for three small bridge replacements, adding a left turn lane on WV 2 at Corbitt Hill Road in Wood County, and improving pedestrian accommodation at the intersection of WV 68 with WV 14 in Parkersburg under the District Three IDIQ District Design Assistance Contract.

AMT is also currently serving as Prime Engineer to Kelly Paving for Airport Bridge, Kevin Rux Bridge, and the McClanahan +1 Bridge project. We recently completed several Design Build ADA improvement projects with Kelly Paving and are nearing completion on five additional projects. AMT is currently collecting traffic data on the interstate system statewide through the On-Call Traffic Data Collection contract with Planning Division. AMT is also serving as a subconsultant to Mead & Hunt to prepare the TMP for the I-64 widening project from Exit 15 to Exit 18 in Cabell County and to Modjeski & Masters for the Rock Cliff Design Build Bridge in Berkeley County. In addition, we are serving WV Paving to provide Temporary Traffic Control (TTC) design services for the I-64 reconstruction project in Putnam County and the I-77 reconstruction project in Mercer County.

AMT also has a pending task to prepare the Van Voorhis Road PIE Study in Morgantown, as well as the US 340 PIE Study in Harper's Ferry.

AMT WATER LINE EXPERIENCE

AMT has provided similar services related to water line replacement and permitting for a variety of projects in recent years. Below is a sampling of some of the projects AMT has recently completed.

Project Name	Waterline Length (feet)	Waterline Length (miles)	Total WHCs
Chillum Road 8"-16" Water Main	11,098	2.10	112
College Heights 4"-16" Water Main Replacement	17,312	3.28	200
Daniel Park 4"-16" Water Main Replacement/Relocation	14,989	2.84	301
Diamondback Drive 12"-24" Water Mains	1,500	0.28	1
Glenmont Forest 8"-12" SEU Water Main Replacement	4,000	0.75	111
Gold Kettle Drive 8"-12" Water Main Replacement	3,380	0.64	158
Gordy Road Transmission Main	5,300	1	n/a
Kenilworth Avenue 4"-12" Water Main Relocation	6,100	1.16	n/a
New Carrollton Water Main Replacement	11,535	2.18	260
Palmer Park Water Main Replacement	9,950	1.89	300
San Juan 4"-10" Water Main Replacement	18,073	3.42	307
Seabrook Road 4"-12" Distribution Main	13,620	2.58	205
Kemp Mill Park 4"-8" Water Main Relocation	18,117	3.43	359
Woodhaven 4"-10" Water Main Relocation	17,375	3.29	274
Thornapple 4"-16" Water Main Relocation	10,645	2.02	191
Locksley 4"-12" Water Main Relocation	18,281	3.46	284
Northgate Parkway 8"-12" Water Main Relocation	11,372	2.15	194
Randolph Street 4"-12" Water Main Relocation	7,531	1.43	160
Piscataway 4"-12" Water Main Relocation	19,141	3.63	178
Riverdale I 4"-8" Water Mains	11,155	2.11	220
Riverdale II 8" Water Mains	10,660	2.02	191
Riverdale III 4"-10" Water Mains	7,750	1.47	162
Tantallon I 4"-10" Water Mains	11,369	2.15	205
University Park II 8" Water Mains	6,320	1.20	128
MD 5 8"-12" Water Main and Sewer Relocations	1,611	0.49	20
TOTAL OF REPRESENTATIVE PROJECTS	268,184	50.97	4,213

SUBCONSULTANTS

GAI Consultants, Inc. (GAI) will provide geotechnical engineering and environmental services. GAI has been serving the state of West Virginia since 1958. GAI is an industry leader in addressing the broad spectrum of engineering issues associated with the behavior of earth materials. GAI's geotechnical engineers and geologists are highly proficient in the fundamentals of engineering, soil and rock mechanics, foundation and slope engineering, seismic analyses, underground and surface mining, mine fires, and mine subsidence.

GAI's environmental professionals guide clients through the complexity of federal, state, and local agency environmental and permitting regulations. Through established agency relationships and precise study processes, GAI can efficiently advance both large regional projects as well as small projects to ensure timely completion. GAI's environmental professionals identify issues to avoid and minimize impacts where practical, prepare permit applications, and develop mitigation plans for unavoidable impacts. Cost-effective solutions are developed to meet regulatory requirements while keeping projects on schedule.

GAI maintains offices throughout the United States and will serve this project from their office in Charleston with support from nearby offices in the mid-Atlantic region. GAI has a long history of serving the WVDNR and has been a steward of numerous noteworthy projects, including an economic impact study on the effect of West Virginia's 35 state parks for the WVDNR Department of Parks and Recreation.

HISTORY OF PROJECT SCHEDULES AND BUDGETS

The table below provides a sampling of recent projects completed by AMT along with information on the design contract amount, construction contract amount, and design schedule for each project.

Project	Design Contract Amount (\$)		Construction Contract Amount (\$)		Design Schedule (months)	
	Original	Final	Original	Final	Baseline	Actual
Kemp Mill 4-8" Water Main Replacement	\$201,179	\$201,179	\$3,630,130	\$3,702,982	7	7
Seabrook Road Distribution Main	\$255,814	\$255,814	\$2,698,313	\$2,654,603	8	8
Woodhaven 4-8" Water Main Replacement/Relocation	\$198,848	\$198,848	\$3,055,334	\$3,015,772	10	9
Daniel Park 4-8" Water Main Replacement/Relocation	\$229,100	\$229,100	\$3,121,435	\$2,888,840	7	7
Murdock Street 12" Water Main	\$101,000	\$101,000	\$150,000*	\$150,000*	8	8
Pleasant Grove Phase II 12" Extension	\$179,100	\$179,100	\$1,100,000*	\$1,100,000*	11	11

* - These projects were completed as part of a larger project scope. These amounts are estimates, but did not change significantly between the original and final construction contract amounts.

STAFFING PLAN

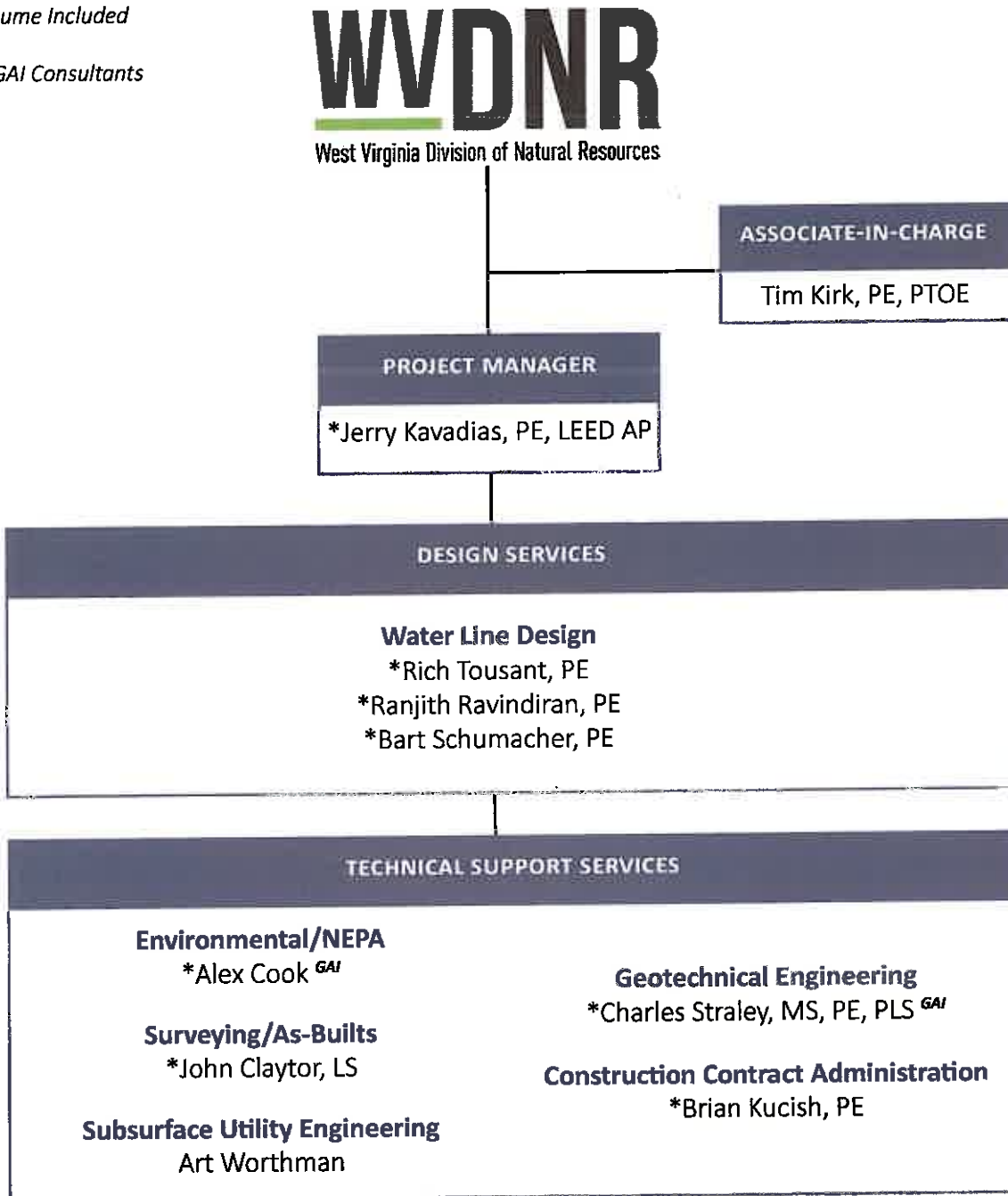
AMT will provide almost all of the required services for this contract in-house, including any required additional services that may arise. AMT will be joined by GAI Consultants, who will provide geotechnical engineering and environmental services. We propose the following team organization plan to WVDNR for this project.

Resumes for key staff are provided on the following pages.

Key:

* - Resume Included

GAI - GAI Consultants





Jerry Kavadias, PE,
LEED AP
 Principal



PROJECT MANAGER

EDUCATION

BS / 1984 / Civil Engineering /
 University of Maryland

REGISTRATIONS

Professional Engineer: WV
 ([REDACTED])

YEARS OF EXPERIENCE

With Firm: 28
 Total: 35

Mr. Kavadias has 35 years of civil engineering experience including water infrastructure systems and projects involving new systems, extensions, replacements, and projects involving trenchless methods. Work has included replacement/relocations of small and large diameter water mains, and meter vaults. He has been involved in more than 60 water related projects that included assessments, design and construction phase services. Many of these projects have included alignment studies, preparation of reports and preparation of information for public presentations.



REPRESENTATIVE PROJECTS

Rosalind Avenue Waterline Replacement – Roanoke, VA: Principal in Charge for design to replace a failing, galvanized steel waterline in Rosalind Avenue between 23rd Street and 27th Street (approximately 1,800 LF of new 8-inch water main). The project requires new water services (40 residential) per Western Virginia Water Authority’s standard detail, as well as replacing the existing fire hydrant at the intersection of 27th Street and Rosalind Avenue and providing new fire hydrants along Rosalind Avenue to the proposed terminus at 23rd Street with a 500’ radius (for residential areas) covering all dwellings in the project vicinity.

WV Route 2 over Proctor Creek Bridge Water Main Relocation, WV: Provided QA/QC services for the relocation of 1,325 feet of 2- to 8-inch water main as part of the Route 2 Bridge Replacement. Due to environmental and construction concerns, 287 feet of 2-inch main was installed utilizing a horizontal directional drill trenchless method. This method greatly reduced the impact to the surrounding stream and was a cost-effective approach versus a standard open cut installation.

Loudoun Water 36” Water Main Route 7 Ashburn Village Boulevard to Route 607 – Loudoun County, VA: Principal in Charge for task under Basic Ordering Agreement. Task consisted of the preparation of 60% design plans for approximately 2,960 LF of 36-inch high pressure transmission water main along Route 7 between Ashburn Village Boulevard and Loudoun County Parkway. Project includes a trenchless crossing of Route 7 (median divided with 6 through lanes and 4 auxiliary lanes) and a trenchless crossing of Lexington Drive (5 lanes).

MWAA Water Mains – Dulles, VA: Project Engineer for the design of water extensions associated with various construction projects at Washington Dulles International Airport. This included utility surveys, utility field inspection, design and permitting for over 8,500 feet of water main ranging from 6” to 8” in diameter. Also designed 6,200 feet of 24” and 9,000 feet of 14” water mains. Horizontal and vertical alignment required careful coordination with numerous utility crossings within the apron areas including electrical, storm drain, sanitary sewer, telecommunications, and gas and fuel lines. Detailed coordination, phasing and planning was provided to account for future projects and to allow for construction within active airfield areas. Coordination with utility companies and maintenance of traffic were part of the projects as well as permit coordination with VDH was provided.

24” Water Line – Fairfax and Loudoun Counties, VA: Task Manager for preparation of plan and profiles for over 3500 LF of 24” DFS and 12” domestic water line at Dulles Airport. Project used boring and jacking methods for taxi lane crossings. Alignment was just west of Taxiway J and required extensive coordination with existing utilities and OFA setbacks.

Water Line Replacement/Relocation Services Basic Ordering Agreement – Montgomery County and Prince George’s Counties, MD: Principal-in-Charge for WSSC BOA PM0002A07 (10 tasks) and PM0008A11 (11 tasks) bid ready documents. The contracts are in various stages of construction. The tasks involve the replacement of about 35 miles of water mains, and 3500 services. Approximately 20% of this length is relocation. In addition, the tasks include 9 large outside meter vaults, 3 inside large meters, 3 jack & bored casings, and public meetings.

Seabrook Road Water Main Replacement – Prince George’s County, MD: Principal-in-Charge for the replacement of approximately 13,750 feet of 4, 8, and 12-inch water main and replacement of approximately 290 feet of 8-inch sanitary sewer. The design effort included utility designating locations of service and utilities, survey, replacement and relocation design, sequences of construction, thrust blocking and joint restraint calculations and sizing, hydrant and valve spacing, detailed County traffic control plans.



Ranjith Ravindiran,
PE
 Senior Project Manager



WATER LINE DESIGN

EDUCATION

MS / 1997 / Civil Engineering
 (Water Resources) / Tufts
 University

BS / 1993 / Civil Engineering
 (Environmental Engineering) /
 Carnegie Mellon University

REGISTRATIONS

Professional Engineer, MD

YEARS OF EXPERIENCE

With Firm: 2
 Total: 25

Mr. Ravindiran's experience spans 25 years of progressive engineering including seven (7) years as the water engineering discipline leader. His background in water distribution systems includes the preparation of documents for a wide range of sizes and materials (CI, DI, PVC, HDPE, VCP, Brick) for both pipelines and manhole structures. Within the last six (6) years, he has led the design of replacement and rehabilitation of more than 26 miles of water distribution mains, located in Prince George's County, Baltimore City, Baltimore County, and Montgomery County, ranging in size from 4- to 24-inch.



REPRESENTATIVE PROJECTS

Design and Replacement of Small Diameter Water Mains, Project 1133E Task Order 2 — Baltimore, MD: Project Manager and Engineer of Record for the replacement of approximately 3.3 miles of 6- to 12-inch cast iron distribution water mains with ductile iron pipe. Two (2) separate water contract documents were prepared to be bid to reflect the grouping of project areas in various parts of the City. Responsibilities included managing the scope of work, schedule and workflow for two subconsultants tasked with topographic survey, meter vault inspections and environmental permitting involving the Department of Public Works and the Maryland Department of the Environment (MDE).

Beachcraft Water Main Replacement, WSSC Contract BR6241A17 — Temple Hills, Prince George's County, MD: Project Manager from initial design phase to the submittal of the 100% design documents for the installation of approximately 2.12 miles of 8- to 12-inch ductile iron pipe (DIP) distribution mains. The project also included two stream crossings; approximately 40 LF of 12-inch DIP installation in one location, and approximately 65 LF of 8-inch DIP installation in another location, both using bore-and-jack methods.

Queens Water Main Replacement, WSSC Contract BR6151A16 — Prince George's County, MD: Project Manager and Engineer of Record from initial design phase to the submittal of the Bid Ready documents for the installation of approximately 1.96 miles of 6- to 10-inch DIP distribution mains. The project also included an option to either CIPP line or pipe-burst (& upsize to 8-inch) approximately 217 LF of 6-inch cast iron pipe due to site constraints preventing outright replacement.

Wilkens Avenue & Fairway Avenue 16" Water Transmission Main Replacement — Baltimore County, MD: Project Manager and Engineer of Record for finalizing the design package for approximately 1,365 LF of 16" DIP transmission main installation in Wilkens Avenue (MD- 372) and 1,345 LF of 8" DIP distribution main in Fairway Avenue, located from Wilkens Avenue to its northern dead-end. One of the large service connections from the transmission main in Wilkens Avenue provides water service to the University of Maryland, Baltimore County (UMBC) campus.

Bartlett Park II Water Main Replacement, WSSC Contract BR6030A16 — Prince George's County, MD: Project Manager and Engineer of Record from initial design phase to the submittal of the Bid Ready documents for the installation of approximately 1.83 miles of small diameter DIP distribution mains to replace old cast iron pipes. The project was located in the Town of Brentwood and City of Mt Rainier near Washington DC and presented a utility-rich environment with a number of abandoned gas mains, large storm drains and gravity sewers located in project streets with a narrow public right-of-way. Maintenance of traffic, the need for temporary bypass piping and the location of an elementary school in the project area all factored in selecting either same-trench or relocation approach on a street-by-street basis to renew the existing water main.



Rich Tousant, PE
Project Manager



WATER LINE DESIGN

EDUCATION

BS / 2007 / Civil Engineering /
Clarkson University

REGISTRATIONS

Professional Engineer: VA, DC,
MD

YEARS OF EXPERIENCE

With Firm: 12
Total: 12

Mr. Tousant has 12 years of experience providing water distribution engineering services for public utility and municipal improvement projects. He has conducted water main design for large and small diameter pipelines. His pipeline background includes the preparation of construction documents for water distribution and transmission mains from 4 to 36-inch in diameter and reports for various pipelines. He has designed replacement and rehabilitation of over 35 miles of water distribution mains as well as 15 large meter vaults, providing both management and design. Additional pipeline engineering experience includes assisting with hydraulic modeling of both large and small pipelines, master planning, pipeline capital improvement projects, pipeline rehabilitation, field observation/verification, mapping, and GIS applications.



REPRESENTATIVE PROJECTS

Rosalind Avenue Waterline Replacement – Roanoke, VA: Project Engineer for design to replace a failing, galvanized steel waterline in Rosalind Avenue between 23rd Street and 27th Street (approximately 1,800 LF of new 8-inch water main). The project requires new water services (40 residential) per Western Virginia Water Authority’s standard detail, as well as replacing the existing fire hydrant at the intersection of 27th Street and Rosalind Avenue and providing new fire hydrants along Rosalind Avenue to the proposed terminus at 23rd Street with a 500’ radius (for residential areas) covering all dwellings in the project vicinity.

Loudoun Water On-Call Engineering and Surveying Services – Loudoun County, VA: Project Engineer for a Basic Ordering Agreement contract with Loudoun Water. Assisted in the design of 60% plans for approximately 2,960 LF of 36-inch high pressure transmission water main. Another task under this contract involved the design and coordination for the preparation of construction documents for 12,500 LF of 30-inch water main that will run along Willard Road and through southern portion of Dulles International Airport (DIA).

Seabrook Road Water Main Replacement – Prince George’s County, MD: Designer/Lead Engineer for the replacement of approximately 13,750 feet of 4, 8, and 12-inch water main and replacement of approximately 290 feet of 8-inch sanitary sewer. The design effort included utility designating locations of service and utilities, survey, replacement and relocation design, sequences of construction, thrust blocking and joint restraint calculations and sizing, hydrant and valve spacing, detailed County traffic control plans.

Chillum Road 8” to 16” Water Main Replacement/Relocation – Prince George’s County, MD: Lead Engineer for preliminary and final design for 11,700 LF of water main replacement consisting of 8,880 LF of 16” water main, 125 LF of 12” water main, 2,060 LF of 10” water main, 635 LF of small diameter water mains, 154 WHC reconNECTIONS ranging from 1”-diameter to 6” diameter along Chillum Road (MD 501), Sheridan Street, Knollbrook Drive, and Sargent Road.

College Heights 8” to 16” Water Main Replacement/Relocations – Prince George’s County, MD: Designer/Lead Engineer for this task involving the relocation of approximately 15,200 feet of 8, 10 and 12-inch water main and 1,800 feet of 16-inch water main. Also coordinated geotechnical pavement coring investigations, subsurface utility designation and a corrosion design. Provided permitting services including traffic control plans per Prince George’s County DPIE requirements. Also included the preparation of an alignment report, specifications, cost estimates, and construction time estimates.

Glenmont Forest SEU Water Main Relocation/Replacement – Montgomery County, MD: Designer/Lead Engineer for replacement and relocation of 4,000 linear feet of 8, 10 and 12-inch water mains located in the neighborhood of Glenmont Forest. Project schedule was expedited to complete construction prior to a Montgomery County repaving project. Also coordinated geotechnical pavement coring investigations, subsurface utility designation, and provided permitting services including traffic control plans in accordance with Montgomery County DPW&T requirements.



Bart Schumacher, PE
Senior Project Manager



WATER LINE DESIGN

EDUCATION

BS / 1993 / Civil Engineering
/ West Virginia Institute of
Technology

REGISTRATIONS

Professional Engineer - WV

YEARS OF EXPERIENCE

With Firm: 3
Total: 24

Mr. Schumacher offers 24 years of contract management and construction administration experience across a variety of projects throughout West Virginia. Mr. Schumacher is keenly aware of WVDNR design standards and protocols. He has experience as project manager and review support for projects ranging from new roadways on new alignment, roadway approach modifications for bridges, addition of turn lanes to improve traffic flow, upgrade of signal systems, pedestrian improvements, and maintenance of traffic during construction. As Senior Roadway Engineer in West Virginia, Mr. Schumacher leads our roadway services group of AMT projects in the state.



REPRESENTATIVE PROJECTS

WV Route 2 over Proctor Creek Bridge – Wetzel County, WV: Roadway project manager for Proctor Bridge Replacement. The project included the relocation of electric, telephone, and cable lines and poles as well as waterline relocation plans. Waterline relocation plans involved coordination with the Public Service District as well as the Division of Highways. 1325 feet of 2- to 8-inch water lines were installed. The waterline included encased lines under the WVDOH roadways as well as a road bore underneath Proctor Creek. Coordination also involved completing form EG-5 for the West Virginia Department of Health and Human Resources. Hydraulic calculations were performed for fire hydrant pressure. A left turn lane was added as well as widening the roadway to tie into the wider bridge. Radii at a major intersection were improved to accommodate large trucks. Prepared MOT plans to construct the bridge half at a time while keeping adjacent intersections open. Detailed MOT plans were developed with multiple phases. Temporary signal plans were necessary due to sight distance concerns at Proctor Creek Road. Temporary lighting plans were completed to add visibility to work zone transitions. Emergency detour plans were developed and coordinated with the Ohio Department of Transportation since the best alternate route required the use of Route 7 in Ohio. The project included a directional bore under Proctor Creek. Pavement marking plans were developed and signage was upgraded on the project.

Corbitt Hill Turn Lane – WV 2 Wood County, WV: Project manager and designer for project to add a left turn lane on WV 2 and improve the alignment with Corbitt Hill Road in Wood County. Full maintenance of traffic plans were developed as part of full contract and right of way plans for the project. The project required relocation of waterline and utility poles. Waterline relocation plans were developed, and the project required coordination with the WV Division of Highways and well as the local Public Service District.

Mineral Wells I-77 NB and SB Weigh Station Renovations, Wood County, WV: Design leader for project to demolish and construct new weigh station facilities. Old buildings were demolished and replaced with new larger facilities. Roadway plans were developed to improve the bypass lanes as well as repair the existing concrete pavement on the project. Floor plans complete with mechanical, electrical, and plumbing details were completed as well as site plans for the site. Drainage was improved at the site. Coordination with a future pre-pass system was required and conduit and junction boxes were added to accommodate the system without causing future damage to the roadway. The scales were replaced, and project lighting was modified to improve nighttime visibility at the scales. Concrete pads were added to place future outbuildings. The project required utility coordination as well as coordination with the State Fire Marshall.

4th Street Intersection Improvement – Wood County, WV: Project Manager and design leader for a project to realign and improve capacity through downtown Parkersburg. MOT plans were designed in accordance with the West Virginia Manual on Temporary Traffic Control for Streets and Highways. The project was located at a congested intersection in downtown Parkersburg. Care was taken to accommodate vehicles and pedestrians while providing workers a safe work area.

Green Street with Dual Right Turn Lanes – Wood County, WV: Project Manager and design leader for an improvement project to add dual right turn lanes and upgrade signal to increase capacity at the subject intersection. The radius was designed to allow two large trucks to enter the lanes simultaneously. MOT plans were designed in accordance with the West Virginia Manual on Temporary Traffic Control for Streets and Highways. The project was located at a congested intersection in downtown Parkersburg. Care was taken to accommodate vehicles and pedestrians while providing workers a safe work area.



Brian Kucish, PE
Associate



**CONTRACT MANAGEMENT /
CONSTRUCTION
ADMINISTRATION**

EDUCATION

BS / 1997 / Civil Engineering /
West Virginia University

REGISTRATIONS

Professional Engineer, WV
[REDACTED]

YEARS OF EXPERIENCE

With Firm: 1
Total: 21

Mr. Kucish offers more than 21 years of experience in West Virginia, of which eighteen (18) years was with WVDOH. During that time, he provided management of inspection staff and oversight for a wide variety of transportation projects. These projects included corridor expansions, bridges, roadway construction, intersections, piling walls and traffic signals. Mr. Kucish has served as a contract manager on the Statewide Construction Inspection Contract and the District Specific Contract both with the WVDOH. He offers extensive knowledge and use of WVDOT-DOH Standards, specifications, WVDOH Traffic Control Manual, and Materials Certification and testing procedures. Mr. Kucish understands and has implemented the Division of Highways expectations regarding staff assignment, budget and schedule control, quality assurance, public interaction and successful project delivery. Mr. Kucish has access to an inspection staff of 35 well-seasoned and experienced field inspectors and engineers to use of service to this contract. He has also worked with other agencies such as the WVDEP and FEMA.



REPRESENTATIVE PROJECTS

WVDOH Statewide Construction Inspection: Contract Manager for the construction inspection across the state of West Virginia. Contracts included:

- **Kingwood Streetscape project, Preston County, WV:** Inspection and oversight of the contractor and subcontractors work on several different items. The work items were milling existing pavement, paving, sidewalk repairs, curb ramps, and pavement markings.
- **Glade Run Drainage Structure, Preston County, WV:** Inspection services for the drainage structure under I-68 near Bruceton Mills, WV. The project consisted of removing the existing invert of an 120" structural plate pipe and then establishing a new invert.
- **Laurel Run Drainage Structure, Preston County, WV:** Inspection services for the drainage structure under I-68 near Cooper's Rock State Forest. The project consisted of removing the existing invert of a 78" X 66" steel structural plate pipe and then establishing a new invert.
- **District 5 Resurfacing Inspector, Burlington, WV:** Inspection and oversight for the resurfacing department in District 5.

WVDOH District Specific Construction Inspection: Contract Manager for construction inspection in Districts 3 and 5 of the WVDOH.

- **Augusta Church, Hampshire County, WV:** Construction inspection services for the project near Romney, WV. The project consists of installing a 1000 ft piling wall with concrete lagging and widening the existing road to install a turn lane. The inspector verified that all work was done according to the specifications and the project plans. Daily activities were documented in Site Manager.

ADA Design-Build Projects: Construction Manager for the inspection of ADA curb ramp sidewalk projects in three WVDOH Districts. The inspection of these projects consisted of verifying the contractor performed the work according to specifications and enter daily reports into Site Manager. Project locations were:

- **Paden City ADA +2,** Tyler and Wetzel Counties WV
- **North Wheeling ADA,** Ohio County WV
- **Wellsburg ADA +2,** Brooke County WV
- **Weirton ADA,** Brooke and Hancock Counties WV
- **Barbour County ADA,** Barbour County WV
- **Downtown Parkersburg ADA + 3,** Wood County WV
- **South Parkersburg ADA,** Wood County WV
- **Grand Central ADA,** Wood County WV



John Claytor, LS
Survey Manager



SURVEYING/AS-BUILTS

EDUCATION

*Land Surveying Technology,
Austin Community College*

REGISTRATIONS

Professional Surveyor: WV

YEARS OF EXPERIENCE

*With Firm: 6
Total: 36*

Mr. Claytor has 36 years of progressive experience related to survey field, office, and management tasks. His experience includes aerial and field-run topographic surveys, GPS and conventional survey control networks, GPS-RTK surveys, hydrographic and bathymetric surveys, environmental surveys, construction stakeout, utility surveys, supplemental field surveys for aerial base mapping, merging of aerial and field survey data into a seamless CAD environment, and creating digital terrain models (DTM's) using AutoCAD, Carlson and Bentley software. Mr. Claytor is well versed in current technologies to produce efficient and cost-effective surveys.



REPRESENTATIVE PROJECTS

WV Route 2 over Proctor Creek – Wetzel County, WV: Project Surveyor for the replacement of the 3-span, about 230 feet in length, bridge carrying WV 2 over Proctor Creek. Project included the relocation of approximately 1,325 feet of 2-inch through 8-inch water main impacted by the bridge replacement. The survey and mapping included approximately 35 individual properties adjacent to the public right of way and coordination with WVDOH staff to apply information contained in archive mapping. AMT design services involve bridge deck and superstructure design, modification of existing abutments to joint-less abutments, roadway widening design plans and maintenance of traffic.

Route 1 at Fort Belvoir – Fairfax County, VA: Project Surveyor for a design/build project including improvements to US Route 1 (Richmond Highway) from the Telegraph Road intersection with US Route 1 to the intersection of New Mulligan Road with US Route 1 and Mt. Vernon Highway, a distance of approximately 3.68 miles. The roadway was widened from four lanes to six, including left and right turn lanes at intersecting roadways, along with other improvements. Surveying services included RTK-GPS and project control set-up, supplemental surveying in areas that have been modified, Subsurface Utility Engineering (locating and designating), and design survey quality control and quality assurance.

US 460 Bypass/Southgate Drive Interchange – Blacksburg, VA: Surveyor in support of the engineering design team for this project involving substantial improvements to the roadways, a new interchange, and Huckleberry Trail relocation. Services included Quality Control investigations of survey base mapping provided by others and field verification of survey features.

Water Main Replacement – Colonial Heights, VA: Provided construction layout for the replacement of water distribution lines from the main running along U.S. Route 1 (Jefferson Davis Turnpike) and the distribution mains feeding each block over a 20 block are west of U.S. Route. The project was staked at 50 feet interval including all principle points.

Shiloh Park Access Road and Parking Lots – King George County, VA: Survey Project Manager for a 33-acre county park, including a recreational access road, new parking lots with bus parking and ADA accommodations, and recreational facilities. Surveying services included a compiled boundary and supplemental topographic surveying based on county-provided mapping.

On-Call Engineering for Virginia Department of Game and Inland Fisheries (DGIF) –Statewide, VA: Survey Manager supporting civil engineering tasks through this on-call contract. Surveys have included establishing control and benchmarks, ebb/flood elevation studies, wetland delineations, and site topographic surveys. Recent sites have included Briery Creek Lake (Prince Edward Co.) and the new Morris Creek Launch Facility (Charles City Co.), and West Point Boat Ramp and Launch Facility (Town of West Point). Topographic and bathymetric surveys were also performed for the West Point Boat Launch.



Charles Straley, MS,
PE, PLS



GEOTECHNICAL ENGINEERING
(GAI CONSULTANTS)

EDUCATION

MS / 1988 / Geotechnical Engineering / University of Akron

BS / 1986 / Civil Engineering / University of Akron

REGISTRATIONS

Professional Engineer: WV, KY, IN, OH

YEARS OF EXPERIENCE

Total: 32

Mr. Straley is GAI's proposed Geotechnical Engineer for this Contract, and is located out of GAI's Charleston, WV office. He is a registered Professional Engineer (PE) and Professional Land Surveyor (PLS) in WV with over 32 years of experience specializing in aspects of subsurface exploration; laboratory testing; foundation and embankment design; slope stability; material and construction specifications; and construction administration, management, and monitoring. He has provided geotechnical engineering services and has performed numerous dam inspections for the WVDNR. In the role of Geotechnical Engineer, he will coordinate and manage all geotechnical engineering aspects of the Projects. Mr. Straley received his MS in Geotechnical Engineering, and BS in Civil Engineering, from the University of Akron.



REPRESENTATIVE PROJECTS

Project Manager for an economic impact study on the effect of West Virginia's (WV's) 35 state parks, eight forests, four wildlife management areas, and two rail tracts for the WVDNR, Department of Parks and Recreation. Provided impact analysis of the state park system on local, regional, and state economics.

Tomlinson Run State Park and Kanawha State Forest Lake Dredging — WV: Project Manager for the preparation of construction documents for two lake dredging projects for the WVDNR, Parks and Recreation Design included providing a dredging scheme, disposal site design, a water handling plan to maintain stream flow, and providing a sediment control plan for both the dredging operations and the disposal site. Provided construction administration service and oversight of construction monitoring service.

Godby Branch Water Supply Extension Project — Logan County, WV: Managed geotechnical investigation and foundation design for water supply structures. Project included subsurface investigation; surveying; design of water tank, booster station, and approximately 2.5 miles of water line; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings.

Kingwood 52/6 Water Extension Project — Preston County, WV: GAI designed 13 miles of waterline, one water storage tank, and one booster pump station, subsurface investigations, and special considerations for high pressures. Tasks included preparation of drawings, technical specifications, engineer's cost estimate, and preparation of applicable permit applications.

Scotch Hill/Miller Hill Water Supply Extension Project — Preston County, WV: Work included subsurface investigation; design of one water storage tank, and approximately 7.5 miles of waterline including preparation of drawings, technical specifications, construction quantities, an engineer's cost estimate, and preparation of applicable permit applications.

Cow Creek - Sarah Ann Water Supply Extension Project — Logan County, WV: In charge of the geotechnical investigation and foundation design for water supply structures. Project included subsurface investigation; design of three water tanks, three booster stations, one master meter assembly, and approximately 19 miles of waterline; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings. Bid construction cost was approximately \$4,800,000. Design included an access road to WV Department of Transportation, Division of Highways (WVDOH) standards.



Alex Cook

Senior Project
Environmental Specialist



ENVIRONMENTAL
(GAI) CONSULTANTS

EDUCATION

BS / 2006 / Biology / West
Virginia State University

YEARS OF EXPERIENCE

Total: 13

Mr. Cook specializes in environmental and biological surveys and field assessments for private and public clients, including wetland delineations, jurisdictional stream determinations, vegetation surveys, benthic and water quality sampling, fish and herpetology studies, and threatened and endangered species surveys. He is familiar with current West Virginia (WV) and federal regulations, including the Section 401 and 404 permitting process [Clean Water Act (CWA)] and Section 7 consultation [Endangered Species Act (ESA)]. He has also been involved in drafting technical reports and National Environmental Policy Act (NEPA) documents for numerous large transportation and natural resource related projects.



REPRESENTATIVE PROJECTS

UNT #1 of Teter Creek, Phase I (Site Acquisition) and Phase II (Pre-Construction Design) In-Lieu-Fee Stream and Wetland Mitigation Program — Barbour County, WV: The project involved land acquisition, easement, preparation/recording, survey, environmental baseline assessments, mitigation plan and design, permitting, and bidder document preparation.

Performed and led field efforts concerning surface water determinations, delineations, and additional assessments for multiple projects involving the construction of natural gas well pads, pipelines, and other associated facilities in WV, Ohio (OH), and Pennsylvania (PA).

Conducted wetland delineations and vegetation surveys for several constructed compensatory wetland sites in WV to evaluate and report fulfillment of mitigation success criteria.

Conducted routine (monthly) monitoring of compensatory wetland sites in WV to satisfy mitigation monitoring conditions for specific projects. Routine assessments involved groundwater monitoring, benthic macroinvertebrate sampling, amphibian surveys, various vegetation surveys, and annual wetland determinations.

Implemented and performed bi-annual Narrative Water Quality assessments (NPDES compliance) for a proposed surface mine project that included habitat assessments, water quality sampling, fish surveys, benthic macroinvertebrate surveys, and geomorphic and sediment transport studies following WVDEP and federal protocols.

Conducted various stream and wetland assessments in conjunction with the Stream and Wetland Valuation Metric (SWVM) including hydrogeomorphic assessments (HGM), EPA RBP habitat assessment valuations (HAV), various water chemistry analyses, benthic macroinvertebrate sampling – for the purpose of generating a West Virginia Stream Condition Index (WVSCI), and surface water delineations to calculate mitigation requirements for individual permits on multiple projects and to establish credits for work related to mitigation banks in WV.

Performed site screening for Kentucky Department of Fish and Wildlife Resources to identify and establish stream restoration opportunities for the Kentucky (KY) In-Lieu Fee Mitigation Program in the Big Sandy Watershed.

Assisted in habitat identification surveys, mistnet surveys, agency coordination, and subsequent reporting for the endangered Indiana Bat (*Myotis sodalis*) on several transportation and natural resources related projects.

Developed habitat criteria evaluations to determine the need for further habitat or capture surveys for multiple species, identified as Regional Forester Sensitive Species (RFSS), as a condition of a Memorandum of Understanding (MOU) related to work in the Monongahela National Forest.

Contributed on several NEPA documents, including Environmental Assessments, Environmental Impact Statements, and technical reports pertaining to transportation related projects in WV.

Drafted and contributed on several Section 404 Permits (individual permits, individual permit modifications, and pre-construction notifications for nationwide permits) for multiple transportation, civil, and natural resource related projects.

PROJECT EXPERIENCE AND REFERENCES

WV Route 2 Water Main Replacement over Proctor Creek

Wetzel County, West Virginia

Design and preparation of construction documents for water line impacted by the replacement of an existing bridge structure.

The water line design effort included the relocation of approximately 1,325 feet of 2-inch through 8-inch water main due to environmental and construction concerns created by the crossing of Proctor Creek. Due to environmental and construction concerns, 287 feet of 2-inch main was installed utilizing a horizontal directional drill trenchless method. This method greatly reduced the impact to the surrounding stream and was a cost-effective approach versus a standard open cut installation.



Reference:

West Virginia Department of Transportation
Division of Highways, Engineering Division
1334 Smith Street
Charleston, West Virginia 25301
Ruby Tabassum, PE, CFM
304-558-9261 (phone)

Shiloh Park Water Mains

King George County, Virginia

Provided site planning, engineering design, surveying and environmental services for a new county park at the closed landfill site for Purkins Corner (33-acres). The AMT master plan includes ballfields, playgrounds, trails, picnic pavilions, concession building, parking lots and a recreational access road. The utility master plan includes water and sewer extensions, and an option for a reclaimed water connection to the Purkins Corner wastewater plant.

AMT provided the engineering design for two phases of construction work. The utility systems include 1,280LF of 8" water main; 500LF of 6" gravity sewer collector; a grinder pump with 770LF of 1.5" sanitary force main under the lake, an irrigation well, water and sewer connections, air release valves and blow-off assemblies.



Reference:

King George County, Virginia
Tim Smith
10459 Courthouse Drive
King George, Virginia 22485
540-907-9214 (phone)

Whitemarsh Park Force Main

Bowie, Maryland

AMT provided design services for site improvements throughout Whitemarsh Park which include a new sanitary sewer system extension, concession/restroom building, pedestrian plaza, athletic field, and multiple new parking lots. Phase 1 is currently under construction and includes the installation of a new on-site gravity sewer system that connects to a new public pressure sewer system extension that will serve the existing and proposed park buildings. The transition from gravity to pressure sewer required the design of a new sewer pump station with a grinder pump to address anticipated initial low flows that will increase as the park develops and future connections are made to the system. This design process included public meetings, construction documents, permitting, cost estimating, and construction phase services.



Reference:

City of Bowie, Maryland
Bowie, Maryland 20716
Mike Schramm
301-809-2341 (phone)

Rosalind Avenue Water Line Replacement

Roanoke, Virginia

Design services for the replacement of failing galvanized steel waterline in Rosalind Avenue between 23rd Street and 27th Street (approximately 1,800 LF of new 8-inch water main). The project included replacement of existing water services (40 residential), as well as analysis of the existing fire protection coverage and supplementation of the water system with additional hydrants.

The design utilized a combination of as-built review, GIS research and topographic survey to produce the contract documents. In addition, the survey included the use of drone technology which further supplemented the acquisition of existing information.



Reference:

Western Virginia Water Authority
601 S Jefferson Street #100
Roanoke, Virginia 24011
Earl Smith, PE
540-283-2938 (phone)

Additional responsibilities included identification of various pressure zones within the project area through usage of the Authorities records and available GIS information. A new connection, to include a closed zone boundary valve and a permanent end of-line blow-off, per the Authority's detail, was provided at the western terminus of the new water main. Field survey work/preliminary data capture required to produce bid-ready construction plans within the road ROW area of Rosalind Avenue was also performed and provided a centerline survey, strip topography, and existing water and sewer features. In addition, all existing mature trees, sidewalks, and adjacent utilities were also surveyed. Location and designation of the utilities was coordinated with Miss Utility and supplemented with available water/sewer as-builts from the Authority's GIS website, property corners and monuments defining rights-of-way, storm drainage features, etc. Work also includes complete erosion and sediment control measures, designed per the Virginia Department of Environmental Quality standards/regulations.

Kemp Mill 4-inch to 8-inch Water Main Replacement and Sewer Replacement

Montgomery County, Maryland

AMT designed and prepared contract documents (plans and specifications) for the construction of approximately 18,100 feet of 4-inch and 8-inch water distribution main, 11,715 feet of WHC replacements and rehabilitation of 34 sewer house connection laterals. The design effort included locations of service and utilities, sequences of construction, joint restraint calculations, hydrant and valve spacing and detailed maintenance of traffic control plans.

Specific services provided include:

- Topographic surveys and utility designation along alignments
- Soil investigation
- Pavement investigations
- Test holes (utility locations)
- Relocation and same trench water main replacement design
- Maintenance of traffic design
- Cost estimate preparation
- Contract completion time estimate
- Specifications



Reference:

Washington Suburban Sanitary Commission
Noelle Crawford (Retired)
301-206-4390 (phone)

Seabrook Road Water Main Replacement

Prince George's County, Maryland

AMT designed and prepared contract documents (plans and specifications) for the replacement of approximately 13,750 feet of 4, 8, and 12-inch water main and replacement of approximately 290 feet of 8-inch sanitary sewer. The design effort included utility designating locations of service and utilities, survey, replacement and relocation design, sequences of construction, thrust blocking and joint restraint calculations and sizing, hydrant and valve spacing, detailed County traffic control plans.

Specific services provided include:

- Topographic surveys and utility designation along alignments
- Soil investigation
- Pavement investigations
- Test holes (utility locations)
- Relocation and same trench water main replacement design
- Maintenance of traffic design
- Cost estimate preparation
- Contract completion time estimate
- Specifications



Reference:

Washington Suburban Sanitary Commission
Ahwi Quacoe
301-206-9772

Glenmont Forest 8-Inch to 12-inch SEU Water Main Replacement/Relocation

Montgomery County, Maryland

AMT designed and prepared contract documents (plans and specifications) for the construction of approximately 4,625 feet of 8-inch, 10-inch and 12-inch water distribution main and 2,900 feet of WHC replacements. The contract was constructed by WSSC's System Enhancement Unit (SEU) and utilized offset methods of construction for the majority of the length. The design operated under an accelerated design schedule to facilitate an agreement between WSSC and Montgomery County DPW&T regarding repaving of two (2) roadways. The design effort included locations of service and utilities, sequences of construction, joint restraint calculations, hydrant and valve spacing and detailed maintenance of traffic control plans.



Reference:

Washington Suburban Sanitary Commission
Dana Karzoun (No longer with WSSC)

Specific services provided include:

- Topographic surveys and utility designation along alignments
- Soil investigation
- Pavement investigations
- Test holes (utility locations)
- Relocation and same trench water main replacement design
- Maintenance of traffic design
- Cost estimate preparation
- Contract completion time estimate
- Specifications

Deep Creek Lake State Park Water System Connection

Garrett County, Maryland

AMT provided final design plans for the installation of approximately 5,530-LF of 10-inch water main to connect the McHenry Water System located northwest of Deep Creek Lake to the Thayerville Water System located south of Deep Creek Lake. Approximately 800-ft of this 10-inch water main will be installed across Deep Creek Lake using "submerge and sink" approach, which involves placement of the water main on using surface water craft and attaching anchors to submerge the water line utility to the bottom of the lake. In addition to connecting the separate water systems, the new 10-inch main will provide (metered) water service connection to 35 vacation homes and rental properties along the project corridor that are currently served by private wells. The project also includes approximately 40-ft of bore-and-jack operation under Garrett Highway (US 219) to extend a new 8-inch water service line to Rock Lodge Road to provide service or future connections. The proposed highway crossing involves the installation of 8-inch DIP main in a 24-inch steel casing pipe.



Reference:

Garrett County, Maryland
203 South Fourth Street, Room 208
Oakland, Maryland 21550
Brian Bowers
301-334-1985 (phone)

Gordy Road 24" Water Main Extension

Salisbury, Maryland

Designed and prepared contract documents (plans and specifications) for the construction of approximately 5,270 feet of a 24-inch water main extension. The 24-inch water main is to serve as a redundancy loop within the City's system and connects two previously dead-end sections of the system. The design effort included locations of utilities, survey, system extension design, sequence of construction, thrust blocking and joint restraint calculations and sizing, hydrant and valve spacing, detailed Wicomico County and SHA maintenance of traffic control and erosion and sediment control plans.

Specific services provided include topographic surveys and utility designation along alignments, new system extension water main design, 50' roadway cross-section analysis to be used in repaving coordination, evaluation and implementation/design of trenchless installation methods, including both Horizontal Directional Drilling (HDD) and Jack & Bore, and maintenance of traffic design. Permits included sediment and erosion control, Wicomico County and SHA construction within right-of-way, MDE water sewerage construction and a Joint Permit Application for work within a FEMA flood plain. Cost estimates were prepared as well as estimates of contract completion time.



Reference:

City of Salisbury Department of Public Works
Ife Akinkugbe
125 N. Division Street, Room 202
Salisbury, Maryland 21801
410-548-3170 (phone)

Dumbarton Oaks Utility Replacement

Washington, DC

AMT provided water system master planning, design, construction documents and construction administration for replacing 7,200 feet of 4" to 6" mains as part of the 100-year old water distribution system at Dumbarton Oaks Research Library and Collection. Dumbarton Oaks is a horticultural research and learning facility administered by Harvard University, is listed on the National Register for Historic Places and is a contributing resource of the Georgetown National Historic landmark.

AMT documented existing conditions, provided an assessment of the existing water system, identified needed system upgrades, provided the design of a new campus water system and developed cost estimates. We secured permits and assisted with contractor scoping and pricing.

To minimize disturbance to Dumbarton Oaks' significant landscape and historic resources, we used non-destructive state-of-the-art acoustic technology to assess water system leak locations and remaining service life of pipe infrastructure. We also developed strategies for access to the work site and phasing of the work to minimize disruption to existing operations and scheduled activities.

The project met the goals of replacing the failure-prone water system, minimizing water usage and improving the water system performance considering the significant landscape and historic resources of Dumbarton Oaks.



Reference:

Dumbarton Oaks Gardens, Research Library
and Collection
Alan Dincan, CFM
1703 32nd Street NW
Washington, DC 20007
202-339-6952 (phone)

Military Motor Pool at Huntington Tri-State Armed Forces Reserve Center

Kenova, WV

Design of a new military motor pool for the Huntington Tri-State Armed Forces Reserve Center in Kenova, West Virginia. Design services include the preparation of all preliminary and final working drawings, specifications, detailed cost estimates, bidding and construction schedules, assistance in surveying, and analyzing and evaluating bids for construction. The motor pool addition area consists of approximately 1.5 acres.

The primary goals of the project include reconstruction of the access road to the parking area to better accommodate heavy vehicles and improving the alignment at the intersection of the adjoining roadway; grading, draining, and stabilizing the site for the creation of a parking area to accommodate heavy military equipment; and lighting of the project area.

The project involves handling of the Center's NPDES construction stormwater permit.



Reference:

State of West Virginia, Purchasing Division
Crystal Rink
2019 Washington Street East
Charleston, West Virginia 25305
304-558-2402 (Phone)

Amherst Street Water and Sewer Improvements

Winchester, VA

Amherst Street is a main thoroughfare for the City and is the primary entrance corridor from the west. The project was challenging due to the high traffic volumes, age of the existing infrastructure, the diverse needs of the residents and businesses and the need to maintain open travel lanes and services in the area including numerous medical offices and commercial buildings. Adding to the complexity of the project was the number of utility and infrastructure issues.

Services provided included:

- Replacement of the existing 12-inch water main along a parallel alignment to minimize traffic impacts and associated costs
- CCTV inspection, condition assessments and analysis of sewer remediation needs
- Sewer betterments including and replacing deficient sewer manholes and laterals



Reference:

City of Winchester
Perry Eisenach, PE
15 North Cameron Street
Winchester, VA 22601
540-667-1815 (Phone)

AMT performed a topographic survey that extended 25 feet past the north and south right-of-way lines with utility markings by Miss Utility. Inverts of gravity storm drain systems and sanitary sewers were obtained from field measurements. Public records were researched to obtain deeds, subdivision plats and right-of-way plats for the properties to develop a property composite for the base mapping.

On-Call Statewide Construction Inspection

Statewide, WV

AMT was retained by the WVDOH to perform CEI services across the state of West Virginia.

District 4 Projects

Kingwood Streetscape Project, Preston County, WV: Inspection services for the Kingwood Street Scape project in Preston County WV. Inspection consisted of overseeing the contractor and subcontractors work on several different items. The work items were milling existing pavement, paving, sidewalk repairs, curb ramps, and pavement markings. Responsibilities included verifying the work was completed according the specifications and the project plans, ensured that the contractor performed all necessary testing and used the proper material. The inspector documented all daily activities into SiteManager.



Glade Run Drainage Structure, Preston County, WV: Inspection services for the Glad Run Drainage Structure under I-68 near Bruceton Mills, WV. The project consisted of removing the existing invert of an 120" structural plate pipe and then establishing a new invert. The inspector verified all work was done according to the specifications and the project plans, and ensured that all erosion control features were installed and working. The inspector documented all daily activities into SiteManager.



Laurel Run Drainage Structure, Preston County, WV: Inspection services for the Laurel Run Drainage Structure under I-68 near Cooper's Rock State Forest. The project consisted of removing the existing invert of a 78" X 66" steel structural plate pipe and then establishing a new invert. The inspector verified all work was done according to the specifications and the project plans, and ensured that all erosion control features were installed and working. The inspector documented all daily activities into SiteManager.

Reference:

West Virginia Department of
Transportation
Robert McLain
304-842-1521 (Phone)

District-Specific Construction Inspection

Augusta Church, Hampshire County WV: Construction inspection services for the Augusta Church project near Romney, WV. The project consists of installing a 1000 ft piling wall with concrete lagging and widening the existing road to install a turn lane. The inspector verified that all work was done according the specifications and the project plans. The inspector documented all daily activities into Site Manager.

Charleston Civic Center Master Plan/Design and Sanitary Sewer Relocation (GAI Consultants)

Charleston, WV

GAI Consultants, Inc. (GAI) assisted in leading the master plan and landscape architecture for a major renovation to the downtown Charleston Civic Center (CCC), as well as the associated adjacent streets and waterfront. Work was focused on the urban experience of arrival, parking, outdoor gathering, and adjacent urban development. GAI also provided civil and geotechnical engineering, and construction administration services to the City of Charleston for the expansion and renovation to the CCC along the banks of the Elk River, located in Charleston WV.



Reference:

City of Charleston
Chris Knox, PE
City Engineer
304-348-8106 (Phone)

GAI prepared plans and specifications for the relocation of a section of approximately 650 linear feet (LF) of existing 30" sanitary sewer pipe that ran underneath the proposed construction area. The design consisted of new 36" pipe, including a 450 LF section of dual-36" sewer pipe underneath entrance to West Hall. A significant portion of this section was installed utilizing the jack and bore construction method inside a steel casing pipe. The design included a by-pass pumping scheme with valves and controls that allowed construction of the relocated sewer line to take place without interrupting service to the existing sewer system.

A portion of the force main beneath the Civic Center was constructed with a redundant line, due to the inaccessibility of the improvements following construction. The valve pits that allowed flow to be switched between the pipes also allowed new pipes to be pulled through, should there be any problems in the future.

GAI worked closely with City personnel and the Sanitation Authority to develop a cost effective and mutually beneficial bypass design. GAI's services also included answering requests for information (RFIs), reviewing shop drawings, and construction observations during critical stages.

West Virginia University Evansdale Crossing Building (GAI Consultants)

Morgantown, WV

GAI Consultants, Inc. (GAI) provided survey, environmental assessment, geotechnical, and site design services for the Evansdale Crossing Building, an approximately 100,000-square-foot, five-story, multi-use structure on the Evansdale Campus of West Virginia University.

West Virginia University's (WVU's) new Evansdale Crossing Building is the new home of Student Services, including the Financial Aid Office, University Registrar, and Student Accounts. Additionally, Evansdale Crossing has restaurants, study spaces, classrooms, and a rooftop lounge.

A geotechnical investigation was conducted to obtain subsurface information for deep foundation design. Deep foundations were used due to the variable top of rock and the potential for expansive soils. GAI also conducted a Phase I ESA and provided consultation throughout construction. This student-centered space now houses retail, restaurant, student services, and instructional space.



Reference:

City of Charleston
Chris Knox, PE
City Engineer
304-348-8106 (Phone)

PROJECT UNDERSTANDING

The West Virginia Division of Natural Resources (WVDNR) seeks a qualified engineering firm to provide engineering services for water line replacements at Babcock, Chief Logan, North Bend, and Watoga State Parks.

DNR PROJECT GOALS AND OBJECTIVES

The DNR project goals and objectives for the water line replacements include:

Goals/Objective 1: Review existing plans and site conditions as well as the operation of the park and evaluate while communicating effectively with the Owner to execute a plan that can be implemented to absolutely minimize disruption to concurrent operation of the facility and meet all objectives.

Goals/Objective 2: As a portion of this process outlined in Objective 1, provide all necessary services to design the facilities described in this EOI in a manner that is consistent with The Division of Natural Resources needs, objectives, State and local codes; while following the plan to design and execute the project within the project budget.

Goal/Objective 3: Provide Construction Contract Administration Services with competent professionals that ensures the project is constructed and functions as designed.

The following approach and methodology to achieve the WVDNR's stated goals will be followed for each of the water line replacement sites.

Additionally, AMT understands that the WVDNR requires clear procedures for communication with the owner, completing the project within the project budget, and ensuring that construction can be completed within the time allotted with the WVDNR.

COMMUNICATION WITH PROJECT OWNER

AMT has the ability to provide project communication in a variety of formats. AMT believes the most effective communication methods is face to face meetings. In addition to emails and phone calls, AMT has the ability to conduct web-based meetings including screen sharing through programs such as Skype for Business and Go-To-Meeting. These tools allow for efficient and effective communication to review project designs in real time without the need for travel.

For each project/task, AMT can establish secure FTP sites, SharePoint Sites or utilize Projectwise for web-based collaboration and to share project information with the University and sub-consultants. AMT can also conform to any specific requests by the WVDNR including the use of e-Builder.

WORKING WITHIN PROJECT BUDGET

AMT manages approximately \$70 million of services annually and has provided design and construction phase services including management and inspection for several hundred million dollars of projects on an annual basis. These services are provided within strict cost control objectives as expected by our clients. Some of these measures include:

- Taking a proactive approach to minimize plan/field issues.
- Staffing the project with the appropriate manpower with the required skill-sets for only the duration needed.
- Partnering with our clients and contractors to minimize adversarial conditions and promote a win-win situation for all.
- Continuity of staff ensuring projects stay on schedule, reduce rework due to misunderstandings and promote confidence within the project team.

Partnering is another ingredient to AMT's project success approach. Establishing a proper chain of command, communication, and a mindset of problem solving at the lowest level is important to our formal and informal partnering commitment. AMT will operate seamlessly as an extension of WVDNR staff.

BUDGET TRACKING AND COMPLIANCE

Budget and value management is also a key component of our process. Throughout the duration of project, the budget is constantly analyzed to ensure compliance with the WVDNR's construction budget. AMT uses a variety of estimating tools to arrive and realistic engineer's estimate using a variety of sources to include current bid tabulations and Means Cost Estimating as well as our senior staff and construction engineering staff. AMT also validates budget estimates by considering the type, size and complexity of the project in relationship to other recently bid and representative projects.

Given the volatility of the construction market and available funding, AMT can include additive or deduct alternates into the design to allow the WVDNR to prioritize the construction options.

AMT utilizes Deltek Vision® for project management. This program provides real time information regarding time and related cost associated with a project or task. This is web based and is available remotely to staff at all times.

SCHEDULE COMPLIANCE

AMT routinely provides engineering support services for similar projects in West Virginia and beyond. Jerry Kavadias, PE, LEED AP, Project Manager, will also oversee this practice area with the following WV-licensed engineers: Tim Kirk, PE, PTOE; Chad McMurray, PE, PMP, CCM, DBIA; and Bart Schumacher, PE.

AMT performs monthly schedule reviews to verify that the schedule reflects actual conditions in the field. AMT will review project diaries, estimate summaries, and discuss the project with inspectors and managers to ensure that the reported progress matches the actual work performed and documented by the inspection staff. Each month following submission of the Contractor's Schedule Update, AMT's written report will outline the following:

- Observations through the date of the report.
- Revisions of schedule logic, if needed.
- Approved changes to project work/schedule.
- Problem areas or potential delaying factors (highlighted).
- Recommendations for corrective actions.

PROJECT KICKOFF AND NTP

Following the receipt of notice-to-proceed, AMT will schedule a kickoff meeting with the WVDNR management team. The meeting will be attended by the Project Manager, Jerry Kavadias, PE, LEED AP, as well as key design staff. Project goals, schedule, operations, agency concerns, and objectives will be discussed for each project site. A scope of work will be developed for each water line replacement project for review and approval from DNR.

APPROACH AND METHODOLOGY

Goals/Objective 1: Review existing plans and conditions as well as the operation of the park and evaluate while communicating effectively with the owner to determine a plan that can be implemented in a manner that will minimize disruption to concurrent operation of the facility and meet all objectives.

REVIEW OF EXISTING INFORMATION AND DATA

AMT will obtain and review previously prepared documents, such as the following:

- Review of record drawings and maintenance data
- Locating of service connections, curb boxes, meter boxes, and valve boxes
- Alignment approval
- External visual inspection of valves and fire hydrants (if present)
- Operating of valves and fire hydrants
- Fire flow testing
- Determination of material of pipeline and services
- Test shutdown
- Identification of defects and deficiencies
- AMT will also research the availability of the following documents which could help in developing the design
- GIS Quality Topographic Maps for the watersheds and Flood Inundation Zones;
- Other GIS Data available from the West Virginia GIS Technical Center/ GIS Services; and
- FEMA Data including FIRM maps and flood studies.

FIELD INVESTIGATION

As part of the development of the initial design concept, existing conditions are verified with a site walk-thru, review of as-built drawings, and locating existing utilities. Based upon the knowledge gathered, plans for any required surveying, test hole excavations, and geotechnical investigations are developed but not executed until alignment approval of the initial design package is granted by WVDNR.

Following approved utility designation, a site walk-thru is performed to verify existing conditions. The differences between existing and record conditions are noted on as-built plans, if available. During the site walk-thru, digital photographs are taken to document existing conditions along the proposed alignment and in areas that may be impacted by the utility installation. The information gained during this walk-thru is presented to the Project Manager with the schematics/concept design package submittal.

SCHEMATICS/CONCEPT DESIGN

Based upon the early identification of issues with WVDNR, AMT will work with WVDNR to define the goals of the project and develop a concept for the proposed water line alignment and improvements. This will also serve as information to be presented and discussed with the review agencies and for use in any public information meetings.

Goals/Objective 2: As a portion of this process outlined in Objective 1, provide all necessary services to design the facilities described in this EOI in a manner that is consistent with The Division of Natural Resources, needs, objectives, current law and current code; while following the plan to design and execute the project within the project budget.

SUBSURFACE UTILITY DESIGNATION

The existing water mains and services as well as adjacent gas and utilities are located and designated by AMT prior a site walk. This process is to verify that existing conditions such as adjacent utility clearances conform to current design criteria. If items are not in conformance, a change in design methods will be instituted to ensure compliance with the current design criteria for waterline installation.

SURVEY

A ground level survey will be performed by AMT for the entire length of the project as needed for detailed design and plotted for the submission of plans as part of the preliminary design process.

TEST HOLE EXCAVATIONS

If existing data is not available to determine vertical elevation and horizontal location of utilities for relocation design, test hole excavations are performed by AMT at underground utility tie-ins and crossings in order to avoid utility conflicts during construction. Upon completion and as requested, AMT will provide formal reports signed and sealed by a professional land surveyor.

EVALUATION OF REPLACEMENT METHOD

AMT will coordinate with WVDNR and applicable governing municipalities to determine the preferred method of replacement for the impacted water lines. Typical water line installation methods are as follows:

- Open cut same trench installation
- Open cut relocation/offset installation
- Trenchless installation

AMT is well versed with open cut installation, either for same trench or relocation, as this is typically the most common practice for water line applications.

AMT also has experience with trenchless installation methods. Given the potential of encountering environmentally sensitive areas and WVDNR's requirement to limit impacts to the project sites, trenchless installation may be a design consideration. Methods of installation include the following:

- Soft ground include auger boring with jacked pipe (Jack and Bore)
- Microtunneling with jacked pipe
- Horizontal directional drilling (HDD)

GEOTECHNICAL

GAI will provide geotechnical engineering services for this contract.

Subsurface geotechnical studies may be conducted at the locations of relocation if existing data is not satisfactory. These services can include soil borings.

A geotechnical investigation plan showing locations of proposed soil boring and pavement core locations is prepared and presented to the WVDNR Project Manager with the Initial Design Submittal. The geotechnical investigation report (including soil borings, laboratory test results and earthwork recommendations) is submitted to WVDNR upon completion. The permitting procedures for soil investigations vary depending upon County and State agencies involved.

The geotechnical investigation, if required, will evaluate the subsurface soil, rock, and groundwater conditions in more detail along the selected alignment and will develop geotechnical design parameters for the installation of the pipeline including groundwater and surface water control, vibration/blast monitoring, and earthwork.

ENVIRONMENTAL/PERMITTING/EA'S

Although not anticipated, AMT can prepare any required environmental assessments or studies necessary to identify natural resources potentially affected by the planned construction work. Some areas of considerations are described below.

Waters of the United States (WOUS): If needed, a field study of wetland and streams will be provided by AMT. US Army Corps of Engineers (USACOE) jurisdictional determination for Waters of the United States can then be made, working closely with the Corps, WVDEP, and WVDNR staff. The design will then minimize and mitigate these impacts, as required for the permit.

Recreational Uses: These parks offer public and private recreational uses and wildlife protection, and thus, rehabilitation projects will need to minimize construction impacts, reduce water shutdowns and minimize road closures.

Notice of Intent or Site Registration: A Notice of Intent (NOI) or Site Registration application will be filed with the West Virginia Department of Environmental Protection (WVDEP), Division of Water and Waste Management. Erosion and Sediment Control will be developed as part of the contract drawings to include access, E/S controls, stabilization, and sequencing.

COORDINATION WITH OTHER UTILITIES AND ROAD AUTHORITY

AMT coordinates with other utilities and roadway authorities as necessary to minimize disruption to the State Parks. During this time, paving restoration limits are established. Additionally, designs are prepared through coordination, to the greatest extent possible, with existing, proposed and future roadway and utility projects.

PLANS, SPECIFICATIONS, ESTIMATES

Based on the design and permitting services described above, bid level documents for these projects will be prepared including milestone submittals such as Schematic Design, Design Development, and Construction Documents. Bid documents will include plans and specifications, with an estimate of construction costs included with each submittal to manage and refine overall project costs anticipated, using a "design not to exceed" approach for WVDNR.

Plans: The milestone submittals of the construction drawings planned include:

- Plans for waterline replacement projects supplemented with profiles as required to clarify and/or provide as-built information. Plans and profiles for relocations.
- Recommendation for trenchless installations, as applicable.
- Connections to existing utilities and appurtenance details
- Special structural and thrust restraint designs not shown in standard details
- Tabulation of existing water house connection (WHC) information including sizes, lengths, and notes
- Suggested sequence of construction
- Required General Notes
- Special Details for construction
- Abandonment of existing mains if relocation design is being used

Project Specifications: West Virginia Department of Transportation Division of Highways 2017 Standard

Specifications will be used as a template. They will be supplemented as needed by AWWA specifications and/or local water agency specifications.

Construction Costs: The engineer's estimate of construction cost for the project will be based primarily on the bid items and unit costs taken from recent, similar projects by AMT or WVDNR. Bid tabulations will also account for the changing economic conditions and locations of these project sites.

Design Reports: Narrative reports and supporting calculations will be assembled into milestone submittals. They will include a design memorandum, preliminary design folder and final design folder for this project. Each report will address the design objectives, chosen replacement/installation method, supporting data, assumptions, procedures, and any additional supporting information necessary for design approval on these projects.

Goals/Objective 3: *Provide Construction Contract Administration Services with competent professionals that ensures the project is constructed and functions as designed.*

Upon receipt of all design and permit approvals, AMT's Engineer of Record will assist WVDNR Division of Wildlife Resources Section in the bidding and construction of this project to include the following:

- Assistance during the Bid Phase to include a pre-bid meeting agenda, pre-bid meeting notes, bid addenda, and other assistance leading to the bid opening.
- Assistance during the Procurement Phase including a bid analysis and recommendation of award and leading to a Construction Contract.
- Construction Project Management including leading a pre-construction meeting, reviewing/approving monthly pay requests, and reviewing/approving all submittals throughout the project including RFI's, change orders, test reports, and other project documentation in accordance with NRCS and County requirements with adherence to all permit conditions and requirements for the project.

- Substantial and Final Completion inspections, including punch lists for final acceptance of the completed work and a release of retainage.
- WVDEP-DS paperwork for the Certificate of Approval. A construction completion report (with as-builts) along with electronic copies of all construction documentation prior to project closeout will be provided.

Other construction phase services by our team will include the following:

- On site Quality Assurance inspections as necessary to include periodic or daily inspections in accordance with the approved Quality Assurance Plan in the design folder for the project.
- Provide review of material submissions by the contractor for conformance with design documents
- Preparation of as-built construction drawings by a West Virginia licensed surveyor (AMT survey manager) along with any quantity measurements for earthwork and other pay items.
- Environmental permitting and inspections by AMT to include adherence to all permit conditions for the project, and coordination with permitting agencies based upon the work, and for any issues encountered.

QUALITY CONTROL/QUALITY ASSURANCE

Quality Assurance Procedures: Delivery of a quality project is AMT's primary goal, and we maintain a rigorous QA/QC Program to assure accuracy and completeness of contract documents, compliance with standards, and adherence to budgets and schedules. Jerry Kavadias, PE, LEED AP, Project Manager, will be responsible for Quality Control, and Mike Wiercinski, PE, PLS is responsible for Quality Assurance. All review comments will be compiled at each submittal stage, and a response will be prepared and returned to the County and review agencies so that any areas of disagreement may be discussed. A checklist of changes and comments will assure that all comments are incorporated into the subsequent submittal stage.

Achievement of Quality Control: AMT has developed and utilizes quality control procedures that are

required through all phases of a project. The process starts with and is the responsibility of Mr. Kavadias, the Project Manager, who has 35 years of extensive water resource engineering experience. He is supported by a strong technical staff of engineers, planners, landscape architects, and surveyors, who perform independent checks of all assignments within their discipline.

In addition, AMT incorporates a quality control check at each milestone during each phase of design and construction.

AMT incorporates a quality control program check at each project deliverable. QC checks are utilized and revisions made prior to client submittals. For these QC checks, Mr. Kavadias will appoint experienced engineers as independent checkers or check things himself.

The checking of construction documents at the various milestones employs the use of the ASCE method (yellow/red/green approach) for verification of computations and plans. The use of these standard colors identifies exactly when the document has been checked and is acceptable.

Achievement of Quality Assurance: Jerry Kavadias, PE, LEED AP, will monitor the overall project progress to ensure that schedules are met and appropriate personnel are provided in support of the Project Manager at all times. Additionally, Mr. Kavadias will review QC documents on file, and ensure that all QC requirements of our corporate program are being met for each project.

Quality Results: In the past five (5) years, our quality assurance and control programs have allowed us to receive above average consultant evaluation scores from our clients in most cases, and AMT projects have an average change order value of <3% of the construction cost.

ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)

- 1. PLAN AND DRAWING DISTRIBUTION:** All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.
- 2. PROJECT ADDENDA REQUIREMENTS:** The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.
- 3. PRE-BID MEETING RESPONSIBILITIES:** The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.
- 4. AIA DOCUMENTS:** All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.
- 5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS:** In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

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.

Jerry Kavadias, PE, LEED AP

(Name, Title)

Jerry Kavadias, PE, LEED AP

(Printed Name and Title)

800 King Farm Boulevard, Fourth Floor, Rockville, MD 20850

(Address)

301-881-2545

(Phone Number) / (Fax Number)

jkavadias@amtengineering.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.

A. Morton Thomas and Associates, Inc.

(Company)



(Authorized Signature) (Representative Name, Title)

Jerry Kavadias, PE, LEED AP

(Printed Name and Title of Authorized Representative)

February 25, 2019

(Date)

301-881-2545 (Phone) / 301-881-0814 (Fax)

(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)

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

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

A. Morton Thomas and Associates, Inc.
Company


Authorized Signature

February 25, 2019
Date

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

West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: A. Morton Thomas and Associates, Inc. **Address:** 417 Grand Park Drive, Suite 104 Parkersburg, WV 26105

Name of Authorized Agent: Jerry Kavadias, PE, LEED AP **Address:** 800 King Farm Boulevard, Fourth Floor Rockville, MD 20850

Contract Number: DNR1900000005 **Contract Description:** A/E Services - Water Line Replacement at Various State Parks

Governmental agency awarding contract: West Virginia Division of Natural Resources

Check here if this is a Supplemental Disclosure

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

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

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

GAI Consultants, Inc.

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

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

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

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

Signature: Jerry Kavadias

Date Signed: February 25, 2019

Notary Verification

State of Maryland, County of Montgomery

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

Taken, sworn to and subscribed before me this 25 day of February, 2019

Jamie T. Gary
NOTARY PUBLIC
MONTGOMERY COUNTY, MD
01-12-2021
Notary Public's Signature 1/12/2021

To be completed by State Agency:
Date Received by State Agency: _____
Date submitted to Ethics Commission: _____
Governmental agency submitting Disclosure: _____

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

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

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: A. Morton Thomas and Associates, Inc.

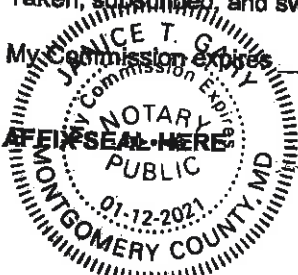
Authorized Signature: [Signature] Date: February 25, 2019

State of Maryland

County of Montgomery to-wit:

Taken, subscribed, and sworn to before me this 25 day of February, 2019

My Commission Expires 1/12, 2021.



NOTARY PUBLIC [Signature]
Purchasing Affidavit (Revised 01/19/2018)