Sullivan Tract EOI Design Team – Division of Engineering and Facilities Adjutant General

CEOI 0603-ADJ1700000005

03/22/17 14:39:10
WV Purchasing Division

Submitted to:

Bid Clerk
Department of the Administration
Purchasing Division
2019 Washington Street, SE
Charleston, WV 25305

On Behalf of:

Division Engineering & Facilities
Adjutant Generals Office
107 Coonskin Drive
Charleston, WV 25311

Submitted by:
March 23, 2017

L.A. GATES Company
www.lagates.com
BECKLEY & HURRICANE WEST VIRGINIA
ENGINEERS & CONSULTANTS

L. A. GATES COMPANY

ENGINEERS AND CONSULTANTS

L. A. GATES, P.E.
PRESIDENT

J.W. CANTLEY, JR., P.E., P.S.
EXECUTIVE VICE PRESIDENT

GARY J. KEATON, P.E.
VICE PRESIDENT -
NATURAL GAS ENGINEERING

DON CRUSAN
VICE PRESIDENT -
FACILITY ENGINEERING

NOEL S. RIFFE
VICE PRESIDENT -
FINANCE & ADMINISTRATION

March 23, 2017

Bid Clerk
Department of the Administration
Purchasing Division
2019 Washington Street, SE
Charleston, WV 25305

Re: **Sullivan Tract Master Plan Design Services Project**
CEOI ADJ1700000005

Dear Sir/Madam,

Please find enclosed our response to the Expression of Interest for the Sullivan Tract Master Plan Design Services Project. Our Project team has been able to visit the area.

Our team is comprised of professional engineers and technicians from the L. A. Gates Company, J. Dan Snead & Associates, and Triad Engineering. Our team is uniquely qualified to supply these services to the Adjutant General's Office. The following criteria make our team a good choice:

I. WV Firms with local offices in Beckley and Hurricane.
II. A vast range of experience with highway design, industrial parks, architecture and utilities.
III. We are currently working with the WVDOH on two roadway projects in the area.
IV. We are able to supply all the aspects of technical support that this project may require including: civil engineering, architectural design, electrical engineering, geotechnical engineering, site design and planning, survey and a strong project management program through diligent QC/QA.

Our proposal contains the following elements:

I. Cover Letter
II. Project Team Introduction/Project Approach
III. Resumes of Key Project Team Members
IV. Similar Projects
V. Project Schedule
VI. Certification
VII. Addendum Receipt Affidavit

It should be noted that our team also has experience working on military facilities such as Quantico, Yeager Airfield, Radford Army Arsenal and Camp Dawson. We understand the precision of the Armed Forces. Our large amount of experience within the WV Government and other governmental agencies aids our work by knowing what the expectations of our clients will be.

We look forward to demonstrating these key elements to you. Should you have any questions please call our office at 304-256-1640 Ext. 117.

Sincerely,

William B. Keaton, P. E.
Director – Municipal Services

Enclosure
WBK/wbk

I. Introduction of Project Team

The **L.A. Gates Company (Gates) and our teammates Triad Engineering and J. Dan Sneed Architects** are a multi-disciplined team of engineers, architects, designers, technicians, CADD operators, surveyors and construction managers that have continually met and exceeded the expectations of client. The key employees who will be assigned to work on this project have a very long history success with this type of project. This level of expertise means that the Adjutant General's Office will receive sound advice and a project that will be on budget and on time. Responsiveness and attention to the client are the primary goals for our staff. This level of service will be throughout the project.

The *list below* shows the services that can be offered by the project team. It is intended to show the diversity of the project team assigned to this project. As part of our kick-off meeting we will identify with the Adjutant Generals' Office and which services are required for this project. We will also provide a clear and agreed upon deliverable schedule.

II. Civil/Municipal/Architectural Services

i. Municipal Engineering Services

a. Preliminary Engineering and Facility Planning Reports
b. Preliminary and Final Designs / Drawings / Specifications / Construction Bidding Documents
c. Contractor Bidding and Negotiation Services
d. Environmental Assessments and Impact Statements
e. Operation and Maintenance Manuals
f. Value Engineering / Expert Witness Testimony
g. Project Cost Estimates/ Construction / Technical Services
h. Asset Management Plans / Feasibility Studies
i. Engineering and Topographical Surveys / Easement Preparation
j. Funding Applications / CWSRF / USDA / ARC
k. Infiltration and Inflow Studies
l. PSC Meetings / Hearings
m. Permit Application Preparation
n. Construction Stakeout Services
o. Geotechnical Engineering Assessments
p. Project Representation and Engineering During Construction

ii. Sanitary Sewer

a. Wastewater Treatment Plant Design
b. Sanitary Sewer Collection System Design
c. System Rehabilitation/Slip Lining
d. Infiltration and Inflow Separation
e. Project Funding Applications
f. Telemetry and SCADA Systems
g. Flow Monitoring

iii. Operation and Maintenance Support

a. Operation and Maintenance Plans

b. Facility Audit and Reviews
c. Root Cause Analysis
d. Problem Determination
e. Performance and Maintenance Analysis
f. Rate Review and Analysis

iv. **Structural Design**
a. Slip Repair
b. Concrete Foundations
c. Mechanical Supports
d. Platforms and Cranes
e. Load Ratings (floor, shelf)
f. Special Tool Certifications
g. Epoxy Grout Engineering
h. Concrete Slabs-on-Grade
i. Cable Tray Supports
j. Building Code Permits
k. Bridge Design

v. **Site Design and Survey**
a. Roadway and Grading Plans
b. Land Surveys / Property Plats
c. Flood Plain Studies

vi. **Construction Services**
a. Onsite Project Management / Project Lead / Resident Engineering
b. Construction Inspection / Project Representative
c. Engineering Support and Coordination of Sub-Contractors Activities During Construction
d. Start-up and Commissioning Planning / On-Site Commissioning Support
e. Decommissioning of Existing Facilities

vii. **Environmental / Permitting**
a. NPDES Permit Applications and Renewals /Municipal / Industrial
b. Source Water Protection Plans
c. Site Archeological Reviews
d. Air Permitting and Compliance Assistance
e. Spill Prevention Control and Countermeasure (SPCC) Plans
f. Groundwater Protection Plans and Spill Prevention Reports
g. Erosion and Sediment Control Plans

III. Professional Qualifications of the L.A. Gates Company

L. A. Gates Company (Gates) and Triad Engineering (Project Team) are a multi-disciplined team of engineers, designers, technicians, CADD operators, surveyors, and construction managers. For a more detailed look at the experience and qualifications of the engineers and the support staff, please refer to the attached Resumes. ***(See Appendix A for detailed Resumes and an Organization Chart)***

Jay Cantley, P.E., P.S. Jay is the Executive Vice President and Chief Operating Officer of Gates working out of the company's main office in Beckley, WV. Jay has overseen the project management of over 60 projects that had a total construction cost of over $270 million in the past 26 years and he currently oversees all Engineering Design performed at Gates.

Gary Keaton, P.E., will provide Quality Control/Quality Assurance for the project team. Gary has quality control/quality assurance expertise and will lend his over 20 years of experience to the QC/QA program.

William (Bill) B. Keaton, P.E. will be the project manager, client contact and senior utility project engineer on the project. Bill specializes in wastewater and water treatment and conveyance systems as well as site projects and implementation of project construction. Bill has also vast experience with the military having worked on projects at Yeager Airport, Quantico, Camp Dawson and the Eleanor Army Guard Center. Bill works out of the Beckley Office for L.A. Gates.

Dan Sneed, R.A. will serve as the lead architect on the design of the proposed building. He will oversee the building design components and work with the Adjutant General's Office on the buildings programmed use.

Bob L. Bragg, P.E. will be the assistant project manager and senior project engineer on the project. Bob, like Bill, specializes in water and wastewater treatment and conveyance systems as well as funding applications and implementation of project construction. Bob works out of the Hurricane Office for L.A. Gates.

Brian Bair, P.E. will be the lead structural engineer assigned to this project. He will provide clear concise designs and plans for improvements required for the wwtp structure and any other structures or foundations required. Brian has 18 years of experience with this type of project.

Brian Bair, P.E. will be the lead structural engineer assigned to this project. He will provide clear concise designs and plans for improvements required for the wwtp structure and any other structures or foundations required. Brian has 18 years of experience with this type of project.

Joseph Young, RLA will lead the planning tasks for the Sullivan Tract Park Project. Joe has 24 years of experience working with drainage, layout earthwork, construction and stormwater management. His experience will be essential on this project.

Larry L. McCoy, P.E. will provide site development engineering with concentration on industrial park layout with emphasis on earthwork and drainage. He also has a vast amount of experience with highway design.

IV. Specialized Experience and Technical Competence

L. A. Gates has provided municipal engineering services for the past 26 years and is prepared to being on your project immediately. ***(See Appendix B, Similar Clients and Relative Projects.)***

V. Product Quality Control

L.A. Gates has an experienced staff which will provide in-house QA/QC for all work. All work is peer reviewed at various stages throughout project development to ensure all quality requirements are fulfilled. The PEER review will consist of evaluating the technical aspects of the work. The QA/QC review ensures the documents adhere to the standards set forth in the kick-off meeting and the requirements of the reviewing agency. Review will be provided at the 50%, 90% and final stages of the design project. ***(See Appendix C, Quality Control Check List.)***

VI. Project Schedule

L. A. Gates uses MS Project© to schedule and track the progress of the project and budget throughout the duration of all phases. Our project manager will provide the Adjutant General's Office an updated schedule at every meeting during design and the construction progress meetings. This schedule will be discussed and agreed upon during the project kick-off meeting. ***(See Appendix D, Project Schedule)***

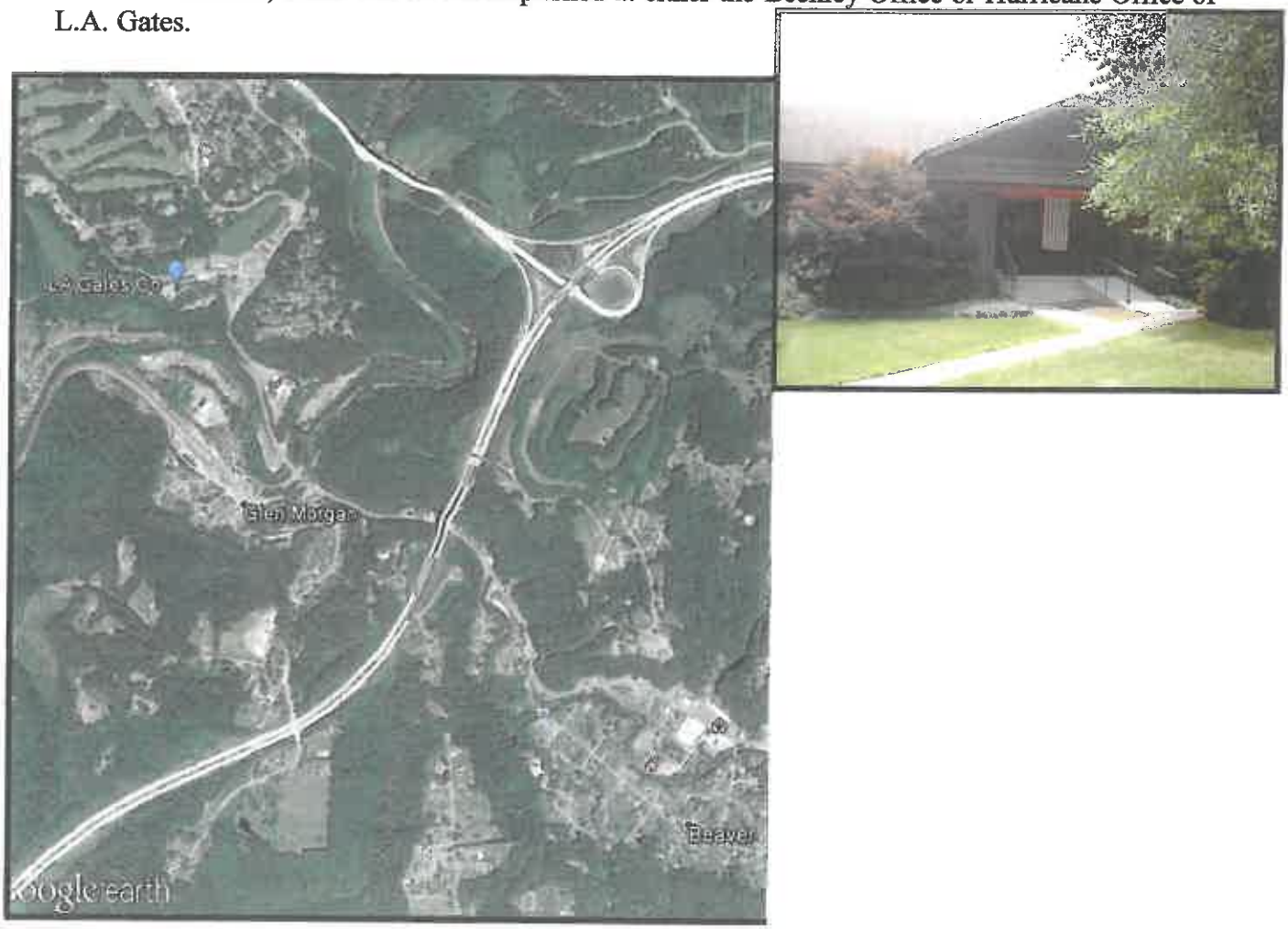
VII. Past Performance with Government Agencies and Private Industry

The Project Team prides itself on being a small West Virginia team that can compete with the larger national consulting firms. Throughout the years, we have continued to provide both private and government clients with quality work at a reasonable cost. These costs are controlled by closely monitoring the efficiency of the work being done by the senior staff and also by closely scrutinizing the budget constraints established early in the project and the billability of each department.

The quality of our work and its compliance with regulatory agency requirements and schedules is best measured by how well the team has met the expectations of its repeat clients.

VIII. Location of the Offices

If selected, work will be accomplished at either the Beckley Office or Hurricane Office of L.A. Gates.



The L.A. Gates Office in Beckley, WV Approximately 2 mile from Project Location

IX. Cost Accounting System

L. A. Gates Company utilizes the Ajera Financial Management Systems for its cost accounting software. The Ajera accounting software is specifically designed for use by professional consulting Architectural/Engineering firms. The software is capable of segregating and identifying the accumulated cost for each job performed under cost-plus type contracts by separating the projects by project number and by unique phase and task charge codes.

To accomplish an accurate accounting of each project, project managers have the primary responsibility of tracking each project by assigning a unique project number, with accompanying phase and task charge codes that correspond to those established in the engineering agreement negotiated with clients for each project. In addition, each week, the project managers are required to sign and approve all time sheets within their department and verify that all time charged to each project is correct and charged to the appropriate phase and task. With report printouts generated by the Ajera software, project managers can also obtain detailed reports of each phase and task to review the budget status of each specific work item being tracked. By obtaining budget reports, project managers can easily identify areas where the tasks are not being completed in a cost effective manner and take corrective measure to get the project back on budget. This system enables managers to be made aware of potential budget overruns before they occur

Project Approach

The following illustrates our proposed approach for this project;

1. **Project Goal 1.1 – Provide Full Preliminary Design Services**
   1. **Task 1.1.1 Provide Preliminary Design of Project**
      1.1.1. Provide preliminary design documents in the format stipulated by the Facilities Manager and the Adjutant General's Office.
      1.1.2. Designs may consist of civil, geotechnical, electrical, site and electrical drawings.
      1.1.3. Drawings generated will be formatted for public bid and award according to Federal and State Regulatory requirements.
   2. **Task 1.1.2 Specialized Services**
      1.2.1. Surveying services will be provided as part of the prescribed program.
      1.2.2. Survey documents will tie into existing survey datum where available. If none is available a certified bench mark will be established.
      1.2.3. Geotechnical design services results will be included in this submittal.
   3. **Task 1.1.3 Deliverable** - Project design drawings suitable for bidding and advertising will be provided. Five (5) hard copies and one digital copy will be provided.
2. **Project Goal 2.1 and 2.2– Preparation of Documents and Bidding/Award Services**
   1. **Task 2.1.1 Full Design Services** - Full design services will consist of preparation and submittal of preliminary and final working drawings, specifications, design reports, operation and maintenance analysis, detailed cost estimates bidding and proposed construction schedules, survey materials, any geotechnical investigations.
   2. **Task 2.2.1 Bid Phase Services** - Services will include response to questions during bidding, preparation of any addenda during bidding, analyzing and evaluation of construction bids, recommendation of award of bid after review of contractor credentials and submittals and preparation of certified bid tabulation.
   3. **Task 2.3.1 Deliverable** - Bid Phase Documents including RFIs, Addenda, Certified bid tabulation and recommendation for award of contract.
   4. **Task 2.3.2** - All documents will be provided in a format suitable for public bid and in the format as preferred by the Adjutant General's Office
3. **Project Goal 3.0 – Construction Phase Services**
   1. Evaluation/Approval of shop drawings/materials/samples
   2. Request for Information (RFI) and/or change order preparation generated for owners benefit
   3. Evaluation of any change order requests as requested by contractor
   4. Preparation of As-Constructed drawings (as-built drawings)
   5. Holding and Presiding over construction meetings
   6. Preparing Construction progress schedules and reports to Facility Manager/Army
   7. Providing meeting minutes to Facility Manager/Army during construction
   8. Preparation of punch list (final punch list) upon 90% completion of project.
   9. Certification of completion of project

10. **Task 3.1.0 Deliverable**
    3.1.1 Construction documentation
    3.1.2 As-Constructed Drawings
    3.1.3 Project Certification Documentation

Project Understanding

The following illustrates our proposed understanding for this project;

Project Goals (As defined by the EOI)

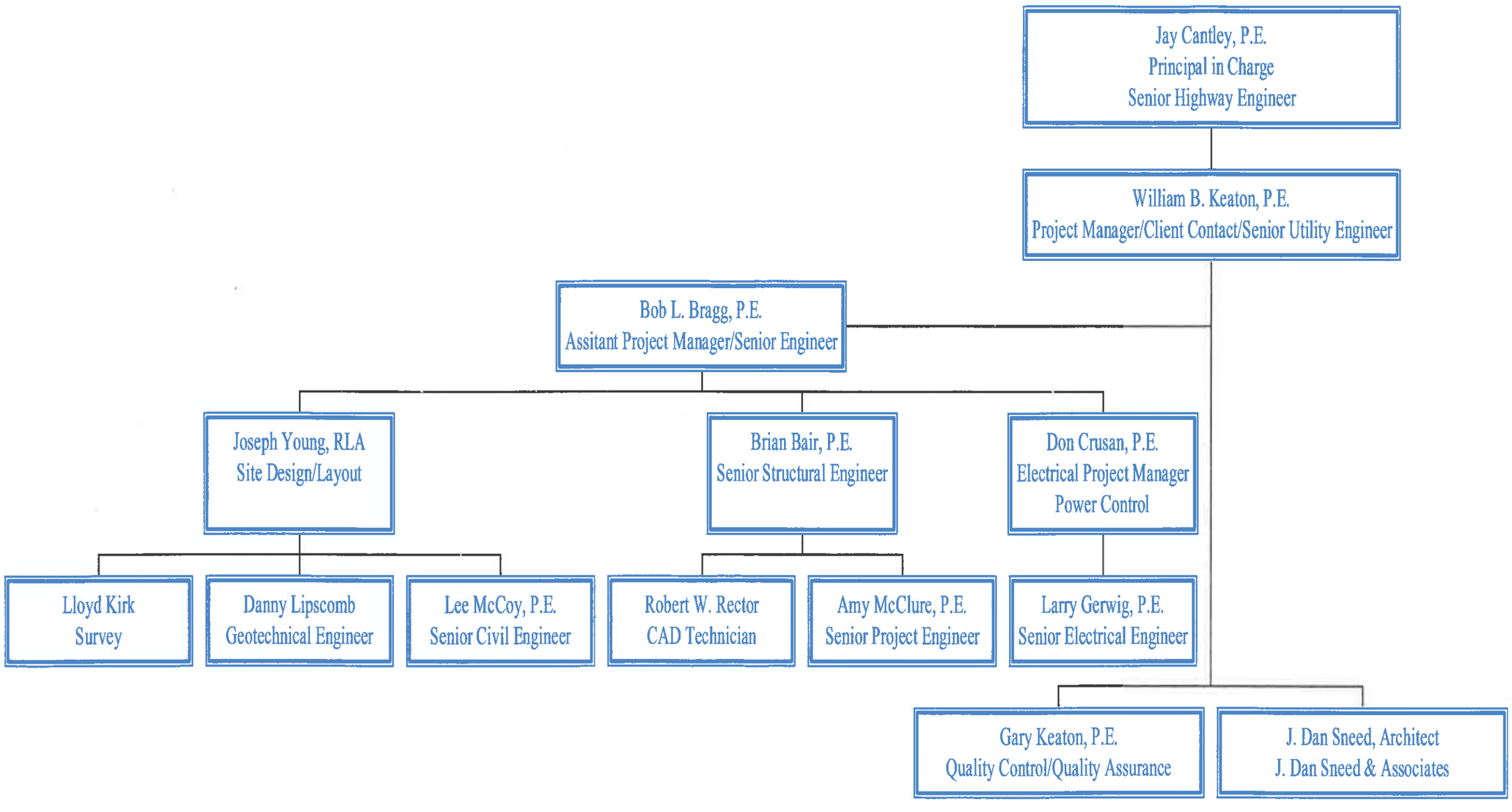
1. *Develop a master plan for the Sullivan property that is intended to be a business/industrial park which will include multiple options for entrance including existing state/county/local roads, proposed state/county/local roads and a possible interstate exchange, utility and road infrastructure for the property and building placement.* ***Our experience in the area relative to utilities, highways and regulative requirements will enable us to provide a successful project with minimal delays. We are currently working with the WVDOT on two highway projects in the project area and work well with the WVDOH Project Manager. Additionally we meet regularly with Beckley Water, the Beckley Sanitary Board and he Shady Spring Public Service District, this will be very beneficial in determining utilities to serve the industrial park.***
2. *Develop drawings and specifications for the construction if the chosen route(s) for the purpose of advertising and awarding contract(s).* ***Our team can easily develop the plans and specifications in the format desired by the Adjutant General's Office. It should be noted that the WVDOH will be using MicroStation™ and the Utilities will be using ACAD™. Our team uses both platforms to develop plans.***
3. *Provide drawings and specifications for the construction of any necessary utility road infrastructure as needed as directed by the owner and/or state agency, utility company or other utility approval authority for the Sullivan Tract property located near Beaver, West Virginia, in addition provide drawings and specifications for the construction of a 25,000 to 100,000 SF building with a parking lot as needed and as directed by the owner for the purpose of advertising and awarding construction contract(s).* ***As stated we can easily provide these services and specifically the architect on this Team, Dan Sneed will provide alternatives for different building in the size range required by the Adjutant General's Office.***
4. *Preparation of the definitive design including preparation of all preliminary and final working drawings, specifications, detailed cost estimates, bidding and construction schedules, and assistance in surveying, analyzing and evaluating bids or proposals for construction.* ***See note above.***
5. *Perform review and approval of samples and/or shop drawings, preparation of change orders and detailed cost estimates, evaluation of suppliers change order proposals and recommendations for negotiation, and preparation of record drawings (reproducible) showing construction work as actually accomplished (as-built drawings). These services also include presiding over the required construction progress and forecast reports.* ***Our project team also provides resident project representation and construction administration for these types of projects. Our inspectors are seasoned professionals with over 25 years of experience each.***
6. *Construction Administrative Services may also be part of this contract depending on the availability of funds.* ***See note above.***

RESUMES

APPENDIX A

March 9, 2017

Sullivan Tract EOI Design Team – Division of Engineering and Facilities Adjutant General
CEOI 0603-ADJ1700000005



L.A. GATES Company
www.lagates.com
BECKLEY & HURRICANE WEST VIRGINIA
ENGINEERS & CONSULTANTS
CIVIL STRUCTURAL NATURAL GAS MUNICIPAL

TRIAD ENGINEERING, INC.

Jerry (Jay) W. Cantley, Jr., P.E., P.S.

Executive Vice President
28 Years Experience

EDUCATION:

West Virginia Institute of Technology, B.S. Civil Engineering, 1987

REGISTRATION:

Professional Engineer
West Virginia [redacted]
Virginia [redacted]
Professional Surveyor
West Virginia [redacted]

MEMBERSHIPS:

Tau Beta Pi - Alpha Chi Chapter
President Elect – ACEC WV
West Virginians for Better Transportation

SPECIALTIES:

- Project Management
- Roadway Design and Plan Production
- Stormwater System Design
- R/W Plan Development
- Sediment & Erosion Control Design
- Project Quality Control
- Construction Coordination
- Surveying
- Water and Wastewater Design
- Contract Administration

Jay has over 28 years of experience on a wide variety of civil engineering projects. His projects include work on transportation, water and sewer, site development and environmental projects. He has worked for L.A. Gates Company for the past 24 years starting as a design Engineer in 1991. Since 2005, Jay has been promoted to Executive Vice President and Chief Operating Officer and is the principal in charge of all Engineering Design. Jay oversees and manages all work done at L.A. Gates Company. In Jay's 28 years of experience he has managed over 60 roadway and bridge projects, 20 water and sewer projects and 50 civil/site projects. Jay's strongest skill set include; Project Management, Highway Design, and Stormwater Systems Design. Jay currently directs a staff of 38 engineers, technicians, inspectors and surveyors, who design and prepare plans for projects involving bridges, highways, and natural gas.

In recent years Jay has oversaw the design of some of Gates most notable Highway projects including 4 miles of the East Beckley Bypass and 5 miles of the Coalfields Expressway.

REPRESENTATIVE PROJECTS:

Highway

- *Allen Creek – Big Ridge (Coalfields Expressway), Raleigh County, WV*
- *East Beckley Bypass, Raleigh County, WV*
- *Slab Fork – Surveyor Creek (Coalfields Expressway), Raleigh County, WV*
- *Stollings-Logan Road, Logan County, WV*
- *White Sulphur Springs Interchange, Greenbrier County, WV*
- *Hurricane Creek Road + 1, Putnam County, WV*
- *Kanawha Street Improvements, Raleigh County, WV*

Bridges

- *State Fair Pedestrian Underpass, Greenbrier County, WV*
- *Henlawson Thru Truss Bridge, Logan County*
- *South Mineral Wells Interchange, Wood County, WV*
- *Bradshaw Bridge, McDowell County, WV*
- *Clear Fork Arch No. 1 Bridge, Wyoming County*
- *Pettry Bottom Bridge, Raleigh County, WV*
- *Huff Creek Bridge, Wyoming County, WV*
- *Pettry Bottom Bridge, Raleigh County, WV*
- *Bruno Bridge, Logan County, WV*
- *Grafton HS Arch Bridge, Taylor County, WV*
- *Main Street Bridget, Wetzel County, WV*
- *Greenbrier Avenue Bridge, Greenbrier County, WV*
- *Shepherd Bridge, Marshall County, WV*
- *Cranberry Creek Bridge, Raleigh County, WV*
- *Russellville Bridge Replacement, Greenbrier County, WV*
- *Airport Bridge Replacement, Greenbrier County, WV*
- *Muddy Creek Bridge Replacement, Greenbrier County, WV*

Jerry (Jay) W. Cantley, Jr., P.E., P.S.

Executive Vice President

28 Years Experience

- Continued –

- *Stollings-Logan Road Bridges, Logan County, WV*
- *Clearfork Coatings Bridge, Wyoming County, WV*
- *Camden on Gauley Truss Bridge Replacement, Webster County, WV*
- *Switzer Monty Brothers Bridge Replacement, Logan County, WV*
- *Roach Truss Bridge Replacement, Cabell County, WV*
- *Stringtown Bridge, Hampshire County, WV*
- *Mill Road Bridge, Hardy County, WV*
- *Steinbeck Bridge Replacement, Roane County, WV*
- *Diana Bridge Replacement, Webster County, WV*
- *Little Hurricane Creek Bridge #1813, Putnam County, WV*
- *James Branch Bridge # 4003, Boone County, WV*
- *Cazy Bridge, #4404, Boone County, WV*
- *Rock Lick Bridge, Boone County, WV*

Water and Sewer Design

- *SSPSD Cool Ridge/Flat Top WWTP Improvements*
- *Water System Improvements for Pocahontas County High School, Pocahontas County, WV*
- *SSPSD Ward Park Sewer Line Improvements*
- *SSPSD Mont Phillips Road Extension*
- *SSPSD Lamplighter Road Extension*
- *SSPSD Sky Line Drive Extension*
- *Georgia Pacific OSB Plant Water and Sewer Line Extensions*
- *Treatment Plant for Twin Falls State Park, Wyoming County, WV*
- *Treatment Plant for Pipestem State Park, Mercer County, WV*
- *Treatment Plant and Collection System for Babcock State Park, Fayette County, WV*
- *Treatment Plant and Collection System for Watoga State Park, Pocahontas County, WV*
- *Treatment Plant and Collection System for Bluestone State Park, Summers County, WV*

Site Development

- *Somar Telecommunications, Raleigh County, WV*
- *CWV Residence Halls, Raleigh County, WV*
- *Springwood Subdivision Roanoke County, Virginia*
- *Limestone Woods Subdivision Greenbrier County, WV*
- *Anthony Woods Subdivision Greenbrier County, WV*
- *Tealwood Subdivision York County, South Carolina*

Gary Keaton, P.E.

Vice President – Natural Gas
22 Years Experience

EDUCATION:

West Virginia Institute of Technology, B.S. Civil Engineering, 1993

REGISTRATION:

Professional Engineer
- West Virginia
- Virginia
- Pennsylvania
- Kentucky
- Ohio
- Mississippi
- North Carolina
- New York
- Louisiana
- Tennessee

MEMBERSHIPS:

American Society of Civil Engineers
Association for the Advancement of Cost Engineering
American Concrete Institute
West Virginian Oil & Natural Gas Association

SPECIALTIES:

- Project Management
- SPCC Plans
- Pipeline Integrity Management
- Pipeline Design
- Cost Estimating
- Construction Inspection
- Construction Coordination
- Environmental Permitting

As Vice President – Natural Gas, Gary is responsible for the overall management of natural gas projects for L.A. Gates Company. Gary has over 22 years of experience in the oil and gas, construction, highway, and environmental engineering industry.

Gary has extensive experience in the design, permitting, management, and monitoring of natural gas and highway construction projects. Gary is also an industry expert in the field of cost estimating and risk analysis, with over $8 billion worth of capital cost estimating experience covering hundreds of projects from the Gulf of Mexico to the New England states, with an emphasis on natural gas. Gary has also engineered and designed numerous natural gas pipeline facilities.

Past experience includes the following positions: Field Engineer, Environmental Assurance Specialist, Construction Implementation Specialist, Chief Inspector, Cost Engineer, Civil Engineer, and Senior Mechanical Design Engineer.

PAST PROJECTS:

- Scope review, shop fabrication, and construction drawing review for (14) launcher/receiver integrity management projects for natural gas pipeline client.
- Spill Containment, Control, and Countermeasure (SPCC) plan development and Professional Engineer certification for natural gas transmission facilities.
- Detailed engineering design of (12) launcher/receiver integrity management projects for natural gas pipeline company. Included cost estimate, design, material procurement, and drawing reviews. Project costs ranged from $900,000 to $3,500,000.
- Detailed engineering design of (8) natural gas pipeline replacements ranging from 250ft to 16,000ft in length. Included cost estimate, design, material procurement, drawing reviews, and construction support. Project costs ranged from $300,000 to $7,500,000.
- Cost estimate for relocation of gas distribution pipeline in downtown Beckley, WV.

- Detailed engineering design of (9) launcher/receiver integrity management projects for natural gas pipeline company. Included cost estimate, design, material procurement, and drawing reviews. Project costs ranged from $750,000 to $4,500,000.
- Detailed engineering design of (5) natural gas pipeline replacement projects ranging from 800ft to 6,000ft in length. Included cost estimate, design, material procurement, drawing reviews, and construction support. Project costs ranged from $200,000 to $4,000,000.
- Managed scope and cost estimating for 5-year Integrity Management Program for major natural gas pipeline.
- Developed (20) cost estimates for natural gas transmission pipelines and compression facilities ranging in size from $200,000 to $1,500,000,000.
- Detailed engineering design of (3) natural gas liquids tanks between 4000 and 8000 gallons in size. Included cost estimate, design, material procurement, and drawing reviews.
- Developed standard launcher/receiver designs for major natural gas transmission company. Included stakeholder meetings, detailed engineering, and drawing approvals.
- Developed cost estimate for over 1,800 natural gas pipelines, compressor stations, measurement, and other related facilities. Value of estimates totaled over $7,000,000,000.
- Developed cost estimating standards for natural gas pipeline company.
- Developed design standards in launcher/receiver design.
- Developed design standards for cable tray and supports.
- Chief Inspector on (3) natural gas pipeline projects.
- Permitting coordinator on (6) natural gas pipeline and facility project.

William B. Keaton, P.E.

Director – Municipal Services
25 Years of Experience

EDUCATION:

West Virginia Institute of Technology, B.A. 1986
West Virginia Institute of Technology, B.S. Civil Engineering, 1993
Webster University, M.A., Management, 1992

REGISTRATION:

Professional Engineer
- West Virginia
- Virginia
- North Carolina
- New York
- Tennessee

MEMBERSHIPS:

American Society of Civil Engineers
WEF/AWWA
NSPE
American Society of Military Engineers

SPECIALTIES:

- Project Management
- Water Conveyance Systems/Pump Stations
- Wastewater Collection/Lift Stations
- Pipeline Rehabilitation
- Plan Review
- Site Utility Design
- Water Treatment
- Wastewater Treatment
- Funding Applications
- Water System Capacity Evaluations
- Sewer System Capacity Analysis
- SSES/CSO Evaluations
- Risk Assessment for Water Systems
- Risk Assessment for Wastewater Systems
- Stormwater Management/MS4
- Cost Estimating
- Construction Inspection
- Construction Coordination
- Environmental Permitting

As Director – Municipal Services, Bill is responsible for the overall management of municipal services projects for L.A. Gates Company. Bill has over 25 years of experience in the site development, parks, federal facility utilities/site design, water and wastewater treatment design, and capacity analysis of water and wastewater systems, permitting, and environmental engineering.

Bill has extensive experience in the design, permitting, management, and monitoring of site projects consisting of Stormwater management, waste water system conveyance and treatment and waste water conveyance and treatment. Bill has been responsible for such large projects as the potable, fire and process water system analysis of the Radford Army Ammunition Arsenal in Radford, VA. He was the project manager and lead engineer on several BRAC projects including the new Faith Center at Quantico, VA.

Past experience includes the following positions: Senior Engineer, Lead Construction Engineer, Section Leader, Director and Vice President.

PAST PROJECTS:

- Project manager, lead engineer for Radford Army Arsenal potable, fire and process water system inventory and analysis. The project involved the inventory and of over 100 miles of varying size water lines, eleven water storage tanks, booster stations. The project determined the useful live and replacement cost estimates for the entire facility.
- Project Manager/Lead Engineer for the firing range improvements at Camp Dawson, Kingwood, WV.
- Project Manager/Lead Engineer for the new Faith Facility on Quantico, VA.
- Project Engineer for the site development for the Tamarac Arts Facility in Beckley, WV.
- Lead Engineer for the site designs and utilities for fourteen (14) cabins and the lodge at the Stonewall Jackson State Park, Lewis County, WV
- Project Manager/Lead Engineer for twelve wastewater treatment systems in Summit County, OH.

William B. Keaton, P.E.
Director – Municipal Services
25 Years of Experience
- Continued –

- Lead Engineer on the Cabell County, WV Project 2000 water report that inventoried all water systems in Putnam County, WV and made recommendations on how to provide potable water to all of Putnam County, WV
- Project Manager/Lead Engineer on the Town of Buffalo, WV Regional Wastewater Treatment Plant that serves the Toyota Motors Manufacturing Company
- Project Manager for the Kanawha County, WV Water systems projects totaling $12,000,000 in construction over a three year period.
- Project Manager for the Putnam County, WV Water systems projects totaling $9,800,000 in construction over a two year period. Project included a 300,000 gallon elevated water tank and two booster stations.
- Project Manager for the Cabell County, WV Water systems projects totaling $8,250,000 in construction over a three year period.
- Project Manager for a $12.4 million upgrade to the East Greenbush, NY wastewater treatment plant.
- Project Manager for the Decommissioning of the Goshen Correctional Facility water and wastewater treatment plants and the design of connective systems to Orange County, NY.
- Assistant Project Manager for the $20 million wastewater treatment plant upgrade to the City of Charleston's Wastewater Treatment Plant.
- Project Manager for the City of Salem, WV raw water impoundment improvements project that included a new spillway and intake structure.
- Project Manager for East Pointe Business Park, Clarksburg, WV site development included building pads, entrance roads and utilities.
- Design of the replacement for the Dunlow Truss Bridge in Randolph County, WV. Work included hydraulics, structural design, approach roadways, and permitting for a 180' structure.
- US460/I77 bridge replacement consisting of a new four lane bridge over I-77 in Mercer County, WV. Work effort also included relocation of water and sanitary sewer, water, and storm water lines. Project included a 1.2 mile access road.

Bob L. Bragg, P.E.

Project Manager – Municipal Services
24 Years of Experience

EDUCATION:

BS, Civil Engineering,
WV Institute of Technology, 1992
B.S. Electronic Engineering Technology, 1983
A.S. Electrical Engineering Technology, 1980

REGISTRATION:

Professional Engineer
West Virginia
Pennsylvania
Ohio
Virginia

MEMBERSHIPS:

Project Manager Institute (PMI)
WEF/AWWA
American Society of Cost Engineers

SPECIALTIES:

- Project Management
- Water Conveyance Systems/Pump Stations
- Wastewater Collection/Lift Stations
- Pipeline Rehabilitation
- Plan Review
- Site Utility Design
- Water Treatment
- Wastewater Treatment
- SSES/CSO Evaluations
- Risk Assessment for Water Systems
- Risk Assessment for Wastewater Systems
- Stormwater Management/MS4
- Cost Estimating
- Construction Inspection
- Construction Coordination

As Project Manager – Municipal Services, Bob is responsible for the o management of municipal services projects for L.A. Gates Company. Bob has over 24 years of experience in the water and sewer planning, water and sanitary sewer conveyance systems, water and wastewater treatment design, and capacity analysis of water and wastewater systems, permitting, and construction management.

Bob has extensive experience in the design, permitting, management, and monitoring of wastewater system conveyance and treatment and waste water conveyance and treatment. Bob has master planning experience for Raleigh County, WW, Grant County, WV and Cabell County, WV. He has been the project manager or lead engineer on varied projects throughout his twenty year career.

Past experience includes the following positions: Senior Engineer, Senior Project Manager and Lead Construction Engineer.

PAST PROJECTS:

- Project Manager/Engineer responsible for the preparation of the master plan report for Raleigh County, WV which was used to document areas currently served by municipal water and sewer service and to identify areas of potential expansion. Also responsible for the collection of all field data, interviews, map preparation and presentation of the final product to the client and funding agencies.
- Project Manager/Engineer responsible for the preparation of the master plan report for Grant County, WV which was used to document areas currently served by municipal water and sewer service and to identify areas of potential expansion. Also managed and directed the collection of all field data, interviews, map preparation and presentation of final product to the client and funding agencies.
- Project Manager/Engineer responsible for all initial funding applications and engineering reports for the West Virginia Infrastructure and Jobs Development Council, the DEP Abandoned Mine Lands Division, and the USDA Rural Utility Service for Craigsville Public Service District. Prepared design plans and specifications,

Bob L. Bragg, P.E.
Project Manager – Municipal Services
24 Years of Experience
- Continued –

contract documents, permitting, and managed contractor bid solicitation. Also responsible for the coordination with contractors, project administrators, and the Craigsville County Public Service District. This project was funded with an AML grant and loan from the USDA Rural Utility Service and consisted of approximately nine miles of various diameter pipelines, a booster station and a 77,000 gallon water storage tank to serve approximately 90 customers in Nicholas County.

- Project Manager/Engineer for the Leadsville Public Service District for 4.5 miles of water line, a booster station, and a bladder tank system in Randolph County. Responsibilities included initial waterline layout and design, preparation of specifications, contract documents, and design report. Attended client board meetings, Public Service Commission hearings. Delegated permit approvals and existing utility info to subordinates.
- Project Manager/Engineer responsible for the West Virginia Infrastructure and Jobs Council application, coordinating HUD environmental review, assisted in the preparation of engineering reports, design plans, specifications, and contract documents, all permits and funding agency approvals for the 750 gallon per minute water treatment plant located in Wyoming County. The project also included a one mile dedicated 10-inch water and 300,000 gallon water storage tank to allow the Town to maintain their existing pressure gradient. Assisted in contractor bid solicitation and construction management as well as all post construction services.

Brian M. Bair, P.E.

Lead Structural Engineer
18 Years Experience

EDUCATION:

West Virginia Institute of Technology, B.S. Civil Engineering, December 1997

REGISTRATION:

Professional Engineer
West Virginia [redacted]
Virginia [redacted]

MEMBERSHIPS:

Tau Beta Pi

SPECIALTIES:

- Span arrangements and TS&L submittals for WVDOH projects
- Final bridge design (steel and concrete)
- Bridge hydraulics & hydraulics for flood analysis, HEC-RAS modeling
- Permitting necessary for bridges (causeway, cofferdam, and temporary bridge hydraulic analysis)
- Retaining walls and miscellaneous structures associated with highway construction
- Structural Software: MDX, Conspan, L Pile, BSDI
- Autocad

Brian is the lead Structural Engineer at L.A. Gates Company having worked on 25 Highway Department bridge projects. Brian is experienced in bridge hydraulics, foundation and abutment design, pile and caisson design, retaining walls, concrete and steel beam design, and steel curved girder design. He is proficient with AutoCAD, LEAP Conspan, HEC-RAS hydraulic software, MDX Steel Bridge Rating software, COM624P and L Pile Piling and Caisson design software, Microsoft Word and Microsoft Excel.

REPRESENTATIVE PROJECTS:

Bridges

- *Big Rock Bridge, Mingo County*
- *Kirk Bridge, Mingo County*
- *Teter Creek Slab Bridge, Barbour County*
- *State Fair Pedestrian Underpass, Greenbrier County*
- *Pleasant Dale Bridge, Hampshire County*
- *Virginia Line Bridge, Monroe County*
- *Henlawson Thru Truss Bridge, Logan County*
- *South Mineral Wells Interchange, Wood County, WV*
- *Bradshaw Bridge, McDowell County, WV*
- *Clear Fork Arch No. 1 Bridge, Wyoming County*
- *Pettry Bottom Bridge, Raleigh County, WV*
- *Huff Creek Bridge, Wyoming County, WV*
- *Bruno Bridge Replacement, Logan County, WV*
- *Main Street Bridge Replacement, Wetzel County, WV*
- *Shepherd Bridge Replacement, Marshall County, WV*
- *Grafton High School Arch Bridge, Taylor County, WV*
- *US 220 Ramp Connector Bridge, Hardy County, WV*
- *Greenbrier Avenue Bridge, Greenbrier County, WV*
- *Russellville Bridge Replacement, Greenbrier County, WV*
- *Kenna Bridge Rehabilitation, Jackson County, WV*
- *Switzer Monty Brothers Bridge, Logan County, WV*
- *WV Route 17 Connector Bridge No. 2, Logan County, WV*
- *WV Route 17 Connector Bridge No. 4, Logan County, WV*
- *Muddy Creek Bridge, Greenbrier County, WV*
- *Camden on Gauley Bridge Replacement, Webster County, WV*
- *Steinbeck Bridge Replacement, Roane County, WV*
- *Roach Truss Bridge Replacement, Cabell County, WV*

Amelia McClure, P.E.

Structural Engineer
17 Years Experience

EDUCATION:

West Virginia Institute of Technology, B.S. Civil Engineering, 1998

Marshall University Graduate College, M.S. Engineering, 2002

REGISTRATION:

Professional Engineer
West Virginia [redacted]
Virginia [redacted]

MEMBERSHIPS:

West Virginians for Better Transportation
Greater Greenbrier Chamber of Commerce
Tau Beta Pi

SPECIALTIES:

- Final bridge design
- Bridge hydraulics & hydraulics for flood analysis
- Permitting necessary for bridges (causeway, cofferdam, and temporary bridge hydraulic analysis)
- Temporary Shoring and Bracing Plans
- Bridge Demolition and Erection plans
- Microstation & HEC-RAS

Amelia is an experienced Structural Engineer having worked on various bridge projects in the private sector as well as at the West Virginia Department of Transportation where she worked as Bridge Design Engineer for District Nine in Lewisburg, WV. Amelia is experienced in plan review, bridge hydraulics, abutment design, foundation design, pile design, retaining wall design and steel beam design. Amelia is experienced in various aspects of bridge construction engineering such as temporary shoring, bracing, decking, demolition and erection plans. She is proficient with Microstation CAD software, HEC-RAS hydraulic analysis software, GawacWin gabion retaining walls design software, GRLWEAP pile driving analysis software, Microsoft Word and Microsoft Excel.

REPRESENTATIVE PROJECTS:

Bridges

- *Big Rock Bridge, Mingo County*
- *Kirk Bridge, Mingo County*
- *Teter Creek Slab Bridge, Barbour County*
- *Camp 29 Bridge, Nicholas County, WV-Erection Plan and Decking Plan*
- *Carters Creek Bridge, Nicholas County, WV-Demolition Plan and Temporary Bridge Plan*
- *Chesapeake Bridge, Kanawha County, WV-Decking Plan*
- *Dunloup Bridge #7, Fayette County, WV-Abutment Redesign, Demolition Plan and Erection Plan*
- *East Kingston Arch, Fayette County, WV-Demolition Plan and Erection Plan*
- *Ethel Slab Bridge, Logan County, WV-Decking Plan, Erection Plan, and Temporary Bracing Plan*
- *Fields Creek Bridge, Kanawha County, WV-Temporary Bridge Plan, and Demolition Plan*
- *First Slab Bridge, Randolph County, WV-Demolition Plan, Erection Plan, and Temporary Bracing Plan*
- *Five Mile Road Bridge, Kanawha County, WV- Demolition Plan, and Temporary Bridge Plan*
- *Granny Creek Bridge, Roane County, WV-Demolition Plan, and Erection Plan*
- *Grassy Creek Bridge, Webster County, WV-Temporary Bridge Plan, and Demolition Plan*
- *Gum Bridge, Randolph County, WV-Temporary Bridge Plan*
- *Hampton Truss, Upshur County, WV-Cofferdam Design, Demolition Plan, Erection Plan, and Temporary Bracing Plan*
- *Hemlock Bridge, Jackson County, WV- Demolition Plan and Erection Plan*
- *Huff Creek Bridge, Wyoming County, WV-Demolition Plan, and Temporary Bridge Plan*
- *Lochgelly Road Interchange Bridge, Fayette County, WV-Erection Plan*
- *Little Grassy Creek Bridge, Webster County, WV-Temporary*

Amelia McClure, P.E.
Structural Engineer
17 Years Experience

-Continued-

Bridge Plan, and Demolition Plan

- *Little Sandy Arch, Preston County, WV -Temporary Shoring Plan*
- *Peachtree Girder Bridge, Raleigh County, WV-Temporary Bridge Plan, Demolition Plan, and Erection Plan*
- *Pettry Bottom Bridge, Raleigh County, WV-Demolition Plan*
- *Reader Creek Bridge, Wetzel County, WV-Decking Plan, Wave Equation Analysis, Erection Plan, and Demolition Plan*
- *Rolfe Arch, Marion County, WV-Demolition Plan*
- *Rosebud Bridge, Harrison County, WV-Temporary Bridge Plan, Demolition Plan*
- *Scott Slab Bridge, Harrison County, WV-Temporary Bracing Plan, Decking Plan, and Erection Plan*
- *Ward Bridge, Kanawha County, WV-Temporary Bridge Plan*
- *Winifrede Railroad Overpass, Kanawha County, WV-Demolition Plan, Erection Plan, Temporary Bracing Plan, and Temporary Shoring Plan*
- *Walnut Hill Bridge Replacement, Greenbrier County, WV-Permits, Design and Plans for Construction*
- *Canterbury Road Bridge Replacement, Fayette County, WV-Permits, Design and Plans for Construction*
- *Rock Camp Run Bridge Replacement, Nicolas County, WV-Permits, Design and Plans for Construction*
- *Sawbones Bridge Replacement, Monroe County, WV-Permits, Design and Plans for Construction*
- *Canvas Bridge Deck Repair, Nicolas County, WV- Design and Plans for Construction*
- *Harts Run Bridge Deck Repair, Greenbrier County, WV-Design and Plans for Construction*

Civil/Site

- *Greenbrier Summit Village Subdivision Plan Review, Greenbrier County, WV*
- *Stoney Glen Subdivision Plan Review, Greenbrier County, WV*
- *Dawson Lake Subdivision Plan Review, Greenbrier County, WV*
- *River Cliffs Subdivision Plan Review, Greenbrier County, WV*

Robert W. Rector

Cad Technician
27 Years Experience

EDUCATION:

Woodrow Wilson High School - Graduated 1986; completed a two-year course in drafting at Raleigh County Vocational School in Beckley, WV.

West Virginia Institute of Technology - Graduated 1988; completed a two-year AS degree in Drafting & Design Engineering Technology.

SPECIALTIES:

- Proficient Cad Technician
- Develop construction documents for the various disciplines including: Roadway, Bridge, Sewer, & Water,
- Architectural/Structural and Site Development
- Quantities and calculations for Structural projects

Robert's background consists of a wide range of experience in the development of construction documents, both board and CADD practices. With 24 years with Gates, Robert's responsibilities consist of drafting and coordinating with the various disciplines such as civil, architectural and structural projects. His duties also include the production of plans for bridge and roadway projects including calculations and quantity estimates.

REPRESENTATIVE PROJECTS:

Highway

- *Coalfields Expressway, Raleigh County, WV*
- *East Beckley Bypass, Raleigh County, WV*
- *Stollings - Logan Road, Logan County, WV*
- *WV Route 10, Man to Logan, Logan County, WV*
- *Sutton-Webster Springs Road, Braxton and Webster Counties, WV*

Bridges

- *Big Rock Bridge, Mingo County*
- *Kirk Bridge, Mingo County*
- *Teter Creek Slab Bridge, Barbour County*
- *State Fair Pedestrian Underpass, Greenbrier County, WV*
- *Pleasant Dale Bridge, Hampshire County, WV*
- *Henlawson Bridge, Logan County, WV*
- *Pettry Bottom Bridge, Raleigh County, WV*
- *Huff Creek Bridge, Wyoming County, WV*
- *South Mineral Wells Interchange, Wood County, WV*
- *Bradshaw Bridge, McDowell County, WV*
- *Bruno Bridge, Logan County, WV*
- *Main Street Bridge, Wetzel County, WV*
- *Shepherd Bridge, Marshall County, WV*
- *Grafton High School Arch Bridge, Taylor County, WV*
- *US 220 Ramp Connector Bridge, Hardy County, WV*
- *Greenbrier Avenue Bridge, Greenbrier County, WV*
- *Russellville Bridge, Greenbrier County, WV*
- *Cranberry Creek Bridge, Raleigh County, WV*
- *Switzer Monty Brothers Bridge, Logan County, WV*
- *Guyandotte River Bridge, Logan County, WV*
- *WV Route 17 Connector Bridge No. 4, Logan County, WV*
- *Muddy Creek Bridge, Greenbrier County, WV*
- *Camden on Gauley Bridge Replacement, Webster County, WV*
- *Steinbeck Bridge Replacement, Roane County, WV*
- *Roach Truss Bridge Replacement, Cabell County, WV*
- *Kenna I/C Bridge #2179, Jackson County, WV*
- *Grass Lick Creek, Bridge #2199, Jackson County, WV*
- *Grass Lick Road, Bridge #2198, Jackson County, WV*
- *Rock Lick Bridge, Boone County, WV*
- *James Branch Bridge, Boone County, WV*
- *Cazy Bridge, Boone County, WV*
- *B&O Railroad Underpass Bridge, Barbour County, WV*

Robert W. Rector
Cad Technician
27 Years Experience
- Continued –

- *Boulder Truss Bridge, Barbour County, WV*

Architectural

- *Beckley State Police and DMV Building, Beckley, WV*
- *Raleigh County Junior High School, Beckley, WV*
- *New River Birthing Center, Scarbro, WV*
- *Clarksburg Center of Fairmont State College, Clarksburg, WV*
- *College of West Virginia Library, Beckley, WV*
- *College of West Virginia building additions, Beckley, WV*
- *Pinecrest Multi-purpose Building, Beckley, WV*
- *Clarksburg Federal Building, Clarksburg, WV*
- *Hospice House of Southern WV, Beckley, WV*

Water and Sewer

- *Wastewater Treatment Plants for Watoga, Bluestone, Babcock, Twin Falls, and Pipestem State Parks.*
- *Cool Ridge/Flat Top Wastewater Collection & Disposal Project*
- *Airport Road/The Oaks Sanitary Sewer Extension Project*
- *Pluto Road Sanitary Sewer Extension Project*
- *Jolo/Paynesville Water System Extension*
- *Little Beaver Interceptor Sewer Pump Station & Force Main Project*

Site Development

- *Petersburg Main Post Office - Site and utility design*
- *Clarksburg GSA Federal Building - Site design*
- *Raleigh County Public Library - Site development for new parking area*
- *Princeton Main Post Office - Site and utility design*
- *Beckley State Police and DMV Building - Site and utility design*

L.A. Gates Company
Engineers & Consultants

TRIAD ENGINEERING, INC.

Joseph Young, RLA
Senior Landscape Architect

Education
BSLA, Landscape Architecture, West Virginia University

Professional Experience
24 Years

Registrations & Licenses
- Registered Professional Landscape Architect, WV, KY & OH

Skills
- Site Inventory and Analysis
- Program Production
- Conceptual Design
- Master Planning

Highlights of Experience

Mr. Young currently serves as Senior Landscape Architect for the Southwestern Region of Triad Engineering, Inc. In this capacity, he provides clients with a variety of landscape architectural services including site inventory and analysis, program production, conceptual design, design development, high quality graphic presentations, project management, construction document preparation and construction administration. In this capacity, Mr. Young brings years of experience on a diverse range of projects covering all aspects of landscape architectural design and planning in both the public and private sector. Mr. Young's experience includes park and streetscape design, resort and campus master planning, subdivision layout, landscape and hardscape design, landscape design, grading and earthwork calculations, construction detailing, specifications, and estimating. Mr. Young also performs Project Management on related projects, and has been involved in planning projects for national and international military bases, pocket parks, 5,000 acre reserves, large downtown streetscapes, subdivision layout and design, and campus master plans for many college and universities.

Relevant Project Experience

Washington Nile Local School District, West Portsmouth, OH
Mr. Young oversaw the site civil landscape work for the development of a middle school on an existing high school and elementary site. The new addition occupies the area now that was being used as a football practice field and open play area. The site needed to be raised 13 feet so that it would no longer be in the Ohio Rivers flood plain. Site features included the development of a new circulation and parking system, the placing of the building for appropriate sun orientation, pedestrian circulation around the site, utility design and an extensive storm water management system. The project is a LEED registered project that achieved a Silver Certification. Triad worked with a project team headed by the architect and owner, to develop a complete comprehensive set of construction documents.

Clay Local School District, Portsmouth OH
The project consists of the development of an existing high school site into a K-12 school site with the addition of the middle and elementary schools . The new addition occupies the area now being used as student and faculty parking area. Site features included the development of a new circulation and parking system, the development of age appropriate play areas, outdoor learning areas, outdoor courtyard area, pedestrian circulation around the site, utility design and a storm water management system. This project is a LEED registered sustainable project.

Portsmouth high School Athletic Complex, Portsmouth, Ohio
Mr. Young over saw the Site Civil and Landscape Architecture work for this 35 acre development in downtown Portsmouth Ohio. The project involved the planning, and design and preparation of construction documents for a football stadium, baseball field, softball field, tennis courts, outdoor basketball courts, dedicated running track, open green space, parking areas and an extensive underground storm water detention system to meet the stringent standards of the City of Portsmouth.

King's Daughters Medical Center, Ashland, KY
This project consisted of site civil engineering services as well as landscape architectural services for multiple Medical Office Buildings in Southern Ohio and Eastern Kentucky. Mr. Young worked with a project team headed by the Architect and the owner, to develop a complete comprehensive set of construction drawings. This projects involved optimizing the available properties to

accommodate the medical office buildings and parking areas that improved circulation on the site to allow for a patient drop-off area at the front of the buildings. Services provided by included preparation of construction documents and details including site grading and drainage features, landscaping to compliment the architecture of the buildings and local and state permits.

St. Mary's Medical Center, Boiler Plant, Huntington, WV
Mr. Young over saw the Site Civil and Landscape Architecture work the development of the new Boiler Plant on the Main Campus. The project involved the planning, and design and preparation of construction documents for the, parking area, outdoor storage area, utilities, storm water design and landscape screening
to meet the requirements of the City of Huntington as well as the adjacent neighbors.

St. Mary's Medical Center, Huntington, WV
Teaming with a local architect to provide a comprehensive plan for the future development of St Mary's Medical Center campus, Mr. Young oversaw the planning for this project which included the realignment of roads and parking areas to improve vehicular and pedestrian circulation. The plan also included the development of a green space system that allows patients, visitors and employees to walk from building to building with minimal vehicular conflicts. One of the key elements of the project was reducing the amount of paved area on campus. The reduction of paved area will reduce the amount of storm water entering the city's combined system. A portion for the parking lot will incorporate a pervious pavement system that will further reduce the storm water impact on the local system.

Sacred Heart Pavilion, Diocese of Wheeling-Charleston, Charleston, WV
This project consisted of site civil engineering services as well as landscape architectural services for Daycare and Gymnasium building in downtown Charleston, WV. This projects involved optimizing the available properties to accommodate the building, parking area, and a synthetic turf play area for the daycare. The design also needed to allow for a drop-off area at the front of the building. Services provided by included preparation of construction documents and details including site grading and drainage features, landscaping to compliment the architecture of the buildings and local and state permits.

Oak Hill high School Baseball and Softball Complex, Oak Hill, Ohio
Mr. Young over saw the Site Civil and Landscape Architecture work for this 10 acre development on the campus of Oak Hill High School in Oak Hill, Ohio. The project involved the planning, and design and preparation of construction documents for a baseball field, softball field, tennis open green space, parking areas and an extensive underground storm water detention system, synthetic turf baseball infield, and irrigation for both facilities.

Huntington Pediatric Dentistry and Orthodontics, Huntington, WV
Triad Engineering, Inc. teamed with the Huntington Pediatric Dentistry's Architects / Contractor to provide a comprehensive set of construction plans for the development of the new Huntington facility in Kinetic Park. Mr. Young served as project Landscape Architect and helped guide the team with the development of the parking, vehicular and pedestrian circulation, utilities, storm water design and landscaping to meet the requirements of the Kinetic Park and the City of Huntington.
development consists of apartments, townhouses and condominiums, state-of-the-art 6500 sq. ft. clubhouse as well as swimming pools, Jacuzzis, sport courts, tot lots, and dog exercise areas. This project includes grading, drainage, permitting, parking lot design, as well as many other aspects.

Amazon Call Center – Huntington, WV
As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a 70,000 square foot call center with 9 acres of parking in Huntington, WV. This facility houses over 800 customer service employees. This project includes grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, water quality design as well as many other aspects.

DirecTV Call Center – Huntington, WV
As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a call center just outside Huntington, WV. This facility houses DirecTV's customer service employees. This project includes grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, as well as many other aspects.

Devonshire Development, Scott Depot, WV
As Project Manager and Lead Engineer, Mr. McCoy, is responsible for the project design and construction administrative services for a large resort style mix use residential development located in Scott Depot, WV. This development consists of apartments, townhouses and condominiums, state-of-the-art 6500 sq. ft. clubhouse as well as swimming pools, Jacuzzis, sport courts, tot lots, and dog exercise areas. This project includes grading, drainage, permitting, parking lot design, as well as many other aspects.

Logan Embankment Failure Repair – Logan, WV
As Project manager and Lead Civil Designer, Mr. McCoy prepared construction documents for the repair of 4 landslides within the City of Logan. Project coordination was with the city and FEMA as the slides were attributed to local storm runoff. These landslides posed both access issues as well as safety issues to residents. The slides were encroaching on a structure in one case, access to the McCoy-Hatfield recreational trail, and were encroaching on city streets rendering them dangerously narrow with nearly vertical drop offs. Repairs varied from drilled pile walls to soil nailing. The repairs were designed to stabilize the slides and restore city streets to pre-slide conditions.

Bayer CropScience – Institute, WV
As Project manager and Lead Civil Designer, Mr. McCoy prepared construction documents for the expansion for Bayer CropScience's Hazardous Waste Landfill in Institute, WV. The project included grading, drainage and the design of landfill liner and closure features including both earthen and synthetic liners and drainage features.

William Sharpe Hospital Expansion– Weston, WV
As Project Manager and Lead Civil Designer, Mr. McCoy prepared construction documents for site infrastructure for a 50 bed expansion to the existing William Sharpe Hospital Expansion. This project includes grading, drainage, detention, roadway expansion, parking lot design, utilities as well as many other aspects.

King's Daughters Medical Center – Various Locations in KY and OH
As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of numerous medical office buildings throughout Ohio and Kentucky. These projects include grading, drainage, detention, roadway expansion, parking lot design, utilities as well as many other aspects. Following is a list of more specific project locations:

Sheetz Store, Eisenhower Drive, Beckley, WV
As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a gas station/convenience store in Beckley, WV. This project includes grading, drainage, detention, roadway expansion, parking lot design, water quality design as well as many other aspects.

TRIAD ENGINEERING, INC.

Larry L. McCoy, Jr., PE

Civil Engineering Services Manager, Senior Engineer

Education

BS, Civil Engineering, West Virginia Institute of Technology

Professional Experience

19 Years

Registrations & Licenses

- Professional Engineer, WV, KY & OH

Skills

- Civil Engineering
- Transportation Engineering
- Site Development
- Planning and Surveying

Highlights of Experience

Mr. McCoy is currently the Department Manager for our Civil/Transportation Design Section and a Project Manager for the St. Albans office of Triad. In this capacity, he is responsible for the oversight of our civil engineering staff as well as the technical and management aspects of civil design and transportation projects within the office. Mr. McCoy has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included streets/highways, bridges, retail/commercial site preparation, airports, parking lots, buildings, retaining walls/foundations, sanitary structures, as well as recreational facilities. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation.

Relevant Project Experience

Devonshire Development, Scott Depot, WV

As Project Manager and Lead Engineer, Mr. McCoy, is responsible for the project design and construction administrative services for a large resort style mix use residential development located in Scott Depot, WV. This development consists of apartments, townhouses and condominiums, state-of-the-art 6500 sq. ft. clubhouse as well as swimming pools, Jacuzzis, sport courts, tot lots, and dog exercise areas. This project includes grading, drainage, permitting, parking lot design, as well as many other aspects. Mr. McCoy is also responsible for all sanitary sewer collection and water system distribution design for the development.

Child Development Center Sewer Line Extension, Hanging Rock, Ohio

As lead engineer on this project, Mr. McCoy is responsible for the initial study to determine the most feasible and cost effective method for upgrading the existing sanitary sewer collection system. Based on the results of the study, the option of extending the line to the City of Ironton, Ohio's Waste Water Treatment Plant was chosen. The project includes several thousand feet of 3 inch diameter force main line, booster stations, and road and creek crossings.

Federal Express Ground Distribution Center – Cross Lanes, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the development and construction of a 10 acre site to accommodate a distribution center and associated parking and access drives. This project included grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, water quality design as well as many other aspects.

Commerce Park – Huntington, WV

As Project Manager and Lead Engineer, Mr. McCoy, is responsible for the project design and construction administrative services for a large use development located in Huntington, WV. This development consists of affordable housing apartments, flex space warehousing and office space. This project includes grading, drainage, stormwater management, permitting, parking lot design, as well as many other aspects.

parameters for alternate deep foundation types. He also provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Hurricane Creek Bridges Wayne County, West Virginia
As a Project Manager and Geotechnical Engineer on this design/build project, Mr. Lipscomb participated on all geotechnical aspects of this multiple bridge project including developing a boring layout based on the project cross-sections provided by the client. His work included supervision of work of field inspectors during the subsurface investigation. Mr. Lipscomb participated in providing recommendations and design parameters for alternate deep foundation types. He also provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Subsurface and Foundation Investigations (WV, VA, MD, KY, and OH)
Mr. Lipscomb has performed subsurface and foundation investigations for various private business and industrial firms. The projects consisted of performing subsurface investigations and analysis and recommending appropriate foundation types based on the results of the subsurface investigation. The projects also involved estimating potential settlement, delineating potential subsurface problems, and providing related recommendations regarding the geotechnical aspects of the projects. A geotechnical report was prepared and provided to the client for each project. Mr. Lipscomb has also designed foundation systems for buildings and other structures.

Dominion Transmission, Inc. (Chelyan, West Virginia)
As project engineer, Mr. Lipscomb processed information gathered during drilling activities and developed a report of subsurface exploration to aid in the design of a horizontal directional drilling project under the Kanawha River in Kanawha County, West Virginia. This included providing rock core unconfined compression test results, and performing a review of rock core samples to observe their Mohs Scale of Mineral Hardness values. Regional geologic information was also given to aid in the project's design.

United Coal Company (Crab Orchard, West Virginia)
As project engineer, Mr. Lipscomb performed geotechnical analysis of the site subsurface conditions and provided foundation recommendations for new coal preparation plant components planned to improve an existing facility. New coal preparation plant components included in the project consisted of a main coal preparation plant building, a raw coal reclaim tunnel, raw and clean coal stock piles (including stacker tubes), a loadout unit, and a refuse bin. Mr. Lipscomb recommended the use of cast-in-place concrete caissons for the majority of the proposed components due to underlying fill of unknown origin and variable content. Cast-in-place concrete caisson design parameters were provided for each of the proposed components, and spread foundation design parameters were provided for the refuse bin as an alternative to cast-in-place concrete caissons.

Putnam County Schools (Putnam County, West Virginia)
Mr. Lipscomb served as the project engineer for the subsurface exploration at multiple Putnam County School projects. His responsibilities on the projects included scheduling and coordination of drilling activities, oversight of assignment for laboratory analysis of soil samples collected during drilling activities, developing boring logs, performing estimated settlement calculations, developing foundation recommendations, and composing a report of subsurface exploration for the individual projects.

Water Distribution System Upgrades (Boone, Wayne, Berkley, Lincoln, and Logan Counties, West Virginia)
Mr. Lipscomb has served as the project engineer for the detailed design of over 30 miles of water line extensions and associated appurtenances, including the preparation of construction drawings, water storage tank sizing and design, booster station design, hydraulic calculations, technical specifications, cost estimates, contractor's bid documents, review and recommendation of contractor's bids, and review of shop drawings.

Civil/Site Design Projects (West Virginia, and Virginia)
Mr. Lipscomb has civil/site design experience related to the development of grading plans, cut/fill analysis, utility design/layout, hydrological analysis, hydraulic evaluations of open channel flow systems, storm sewer design, stormwater retention/detention design, sediment control structure design, preparation of permit applications, and consulting with clients, architects, regulatory agencies, and municipalities.

TRIAD ENGINEERING, INC.

Danny Lipscomb, PE

Geotechnical Project Manager

Education

Fairmont State College, WV, BS, Civil Engineering

Professional Experience

11 Years

Registrations & Licenses

- Registered Professional Engineer, WV

Skills

- Geotechnical Evaluations
- Energy Sector
- Environmental Assessments
- Permitting
- Construction Materials Testing and Inspections

Highlights of Experience

Mr. Lipscomb is currently a Project Engineer at the St. Albans branch of TRIAD. In this capacity, he has been involved in development and management of subsurface exploration projects and development of geotechnical engineering reports providing recommendations based on field observations and laboratory results for bearing capacity, earthwork operations, earthen dam embankments, slope stability, flexible and rigid pavement design, lateral earth pressures, sinkhole remediation, geophysics (electrical resistivity and ground penetrating radar), and rock excavation. These projects have included freshwater dams, shopping centers, roadway/bridges, buildings, retaining walls, residential communities, water storage tanks, waste water treatment facilities, and structures for coal mining facilities. Duties included assignment of laboratory testing, visual inspection of soil/rock specimens, geophysics, and earthen embankment evaluation. Mr. Lipscomb has additional experience in areas relating to civil site design, hydrologic and hydraulic design, grading plans, water line plans, sewer line plans, hydraulic calculations, storage tank sizing, booster station design, roadway layout and design, storm water management plans, technical specifications, environmental and regulatory permitting, blast monitoring, and construction quality control.

Relevant Project Experience

East Beckley Bypass-Rural Acres Drive to Stanaford Road, Raleigh County, West Virginia
As a Geotechnical Engineer on this project, Mr. Lipscomb participated on all geotechnical aspects of the project including developing a boring layout based on the project cross-sections provided by the client. His work included supervision of work of field inspectors during the subsurface investigation. Mr. Lipscomb participated in the design of cut and fills slopes, performed settlement calculations for embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment. He also provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

East Beckley Bypass-Stanaford Road to Industrial Drive, Raleigh County, West Virginia
As a Geotechnical Engineer on this project, Mr. Lipscomb participated on all geotechnical aspects of the project including developing a boring layout based on the project cross-sections provided by the client. His work included supervision of work of field inspectors during the subsurface investigation. Mr. Lipscomb participated in the design of cut and fills slopes, performed settlement calculations for embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment. He also provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Yon Peraldo Memorial Bridge Mercer County, West Virginia
As a Project Manager and Geotechnical Engineer on this project, Mr. Lipscomb participated on all geotechnical aspects of the project including developing a boring layout based on the project cross-sections provided by the client. His work included supervision of work of field inspectors during the subsurface investigation. Mr. Lipscomb participated in providing recommendations and design parameters for alternate deep foundation types. He also provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Hen Lawson Bridge West Virginia
As a Geotechnical Engineer on this project, Mr. Lipscomb participated on all geotechnical aspects of the thru truss bridge project including developing a boring layout based on the project cross-sections provided by the client. His work included supervision of work of field inspectors during the subsurface investigation. Mr. Lipscomb participated in providing recommendations and design

TRIAD ENGINEERING, INC.

Lloyd Kirk, PS
Surveyor Supervisor

Professional Experience
26 years

Registrations
- Licensed Professional Surveyor-WV & NC
- FEMA Certified Flood Plain Surveyor

Skills Highlights
- Construction Layout
- Right of Way Plans
- Photogrammetric and Topographic Surveying
- Mine Surveying
- Civil Engineering
- Environmental Assessments

- **Professional Affiliations**
- WV Society of Professional Surveyors
- National Society of Professional Surveyors

Highlights of Experience

Mr. Kirk is currently the Survey Supervisor for the St. Albans office of TRIAD. In this capacity, he is responsible for the supervision of the survey crews, overseeing the field work through drafting to the finished product delivered to the client, meeting with clients, and performing field work on large and complex projects. Mr. Kirk is experienced in, construction layout, boundary and road work surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of work including surface mine surveying for coal mine facilities, site surveys and construction layout for landfill facilities, site surveys and right of way plans for WVDOH and NCDOT highway projects, and site surveys and construction layout for site development projects. Mr. Kirk has been involved in survey projects in several states including West Virginia, South Carolina and North Carolina.

In his supervisory capacity, he is responsible for schedules, project budgets, and the overall coordination of all survey projects. He works with all levels of engineering staff, the overall project team, and the project owner to produce a quality work product which satisfies all project requirements.

Relevant Project Experience

City of Raleigh-
Buffalo Road Sanitary Sewer Collector Easement Acquisition Survey
As Surveyor-of-Record, provided direct supervision of various field crews and conducted field surveys for right-of-way acquisition, topographic location, and wetlands delineation surveys for an approximately 6000 LF sanitary sewer line. Project consisted of field work necessary to compile and prepare recordable plats of survey for easement acquisition by the City of Raleigh. Topographic mapping for design purposes, and the preparation of Wetlands Delineation Maps to secure 404(c) permits through the US Army Corps of Engineers (Wilmington District).

North Carolina Department of Transportation-
State Route 1608 – Will Cheek Road
State Route 1620 – Sherriff Davis Road
As Surveyor-of-Record / Data Analyst contracted to NCDOT, provided direct supervision of various field crews and conducted field surveys for right-of-way acquisition and topographic location surveys for roadway improvements. Project consisted of field surveys conducted per Federal Highway Administration High Risk Rural Roads specifications for approximately 3.5 miles of local rural roads in Warren County NC including deliverable plan sets prepared per NCDOT/NC MAPS specifications. Final field work consisted of setting Right-of-Way monumentation and staking of best-fit centerline of road alignment.

North Carolina Army National Guard-
Professional Services 2005 / Construction Completed
Surveyor of Record / Field Supervisor providing construction staking and layout of Crash, Fire and Rescue (CFR) Facilities Building supporting the 1st of 130th Aviation Battalion (AH-64 Apache Helicopter unit) based at Raleigh Durham International Airport. Operations were conducted in close coordination with Federal Aviation Administration and NC National Guard personnel to provide layout services for the construction of an approximately $1.3 million facility.

Triangle Transit Authority (TTA)-Raleigh, Durham, Chapel Hill Triangle Area of North Carolina
Regional Transit Plan – Phase I Regional Rail – Durham to North Raleigh
As Surveyor-of-Record / Data Analyst, provided direct supervision of various field crews and CAD technicians for Subsurface Utilities Engineering location surveys and gravity utilities mapping for a 40 mile railway corridor in support of design efforts for a regional rail service route. Field work and deliverables preparation were conducted in accordance with Federal Railway Administration, CSX Railroad, NC Railroad, and North Carolina Department of Transportation Rail Division specifications and guidelines. Being a controversial project, construction is still pending with a capital cost estimate of $754 million.

Raleigh-Durham Airport Authority (RDUAA)-Morrisville, North Carolina
Professional Services 2000-2003 / Construction completed & ongoing
Surveyor-of-record for long-term on-call contract to provide professional services to the Raleigh Durham Airport Authority providing, boundary surveys, topographic location, as-built surveys, subsurface utilities location, construction verification and construction layout for various on-site improvement and expansion projects. Provided coordinative support/project management for various design and engineering firms for the development of the RDU Airport Authority's Master Plan for future development and improvement of RDU International Airport. As one of the few non-employees to ever be granted limited movement privileges at RDU, coordinated airside survey operations (night-time and day-time conditions) with Ground Traffic Controller and FAA personnel on-site.

J. DAN SNEAD, AIA

EDUCATIONAL BACKGROUND

West Virginia Institute of Technology, 1965

REGISTRATIONS & MEMBERSHIPS

National Council of Architectural Registration Boards
The Board of Architects, State of West Virginia, 1608
American Institute of Architects
West Virginia Society of Architects

PROFESSIONAL EXPERIENCE

J. Dan Snead & Associates, Inc., Beckley, West Virginia
1998 - Present

Computects, Inc. - Beckley, West Virginia
1988 - 1998

Donald H. Stark Architects, Inc.
1973 - 1988

SUMMARY

Mr. Snead is a licensed architect in West Virginia and a member of the American Institute of Architects; the West Virginia Society of Architects; and is certified by the National Council of Architectural Registration Boards.

With over forty-two years of experience in Architectural design and construction administration, Dan has developed a well known, excellent reputation within West Virginia for providing functional, aesthetically pleasing designs within budget limitations. His innovative designs and understanding of design objectives have rewarded him with a long list of satisfied, repeat clients.

His experience is extensive and varied and includes primary, secondary and higher education facilities; municipal and government facilities; administrative offices; industrial and commercial projects; as well as numerous renovation, rehabilitation and adaptive reuse projects. Many of the designs Dan has developed require significant sensitivity to historic issues, local codes, life safety and current ADA thinking.

Dan is dedicated to maintaining the highest levels of both professional and ethical standards and to the coordination of teamwork both with the Owner and construction professionals to bring to each project a positive and successful conclusion.

RAYMOND E. FINK, JR.

EDUCATIONAL BACKGROUND

Bluefield State College - A.S. Civil Engineering Technology, 1972 - 1974

Mercer County Vocational Technical School - Civil Engineering Technology, 1971 - 1972

REGISTRATIONS

Licensed Land Surveyor, West Virginia, 1989
Certified Surface Mine Foreman, West Virginia, 1977

PROFESSIONAL EXPERIENCE

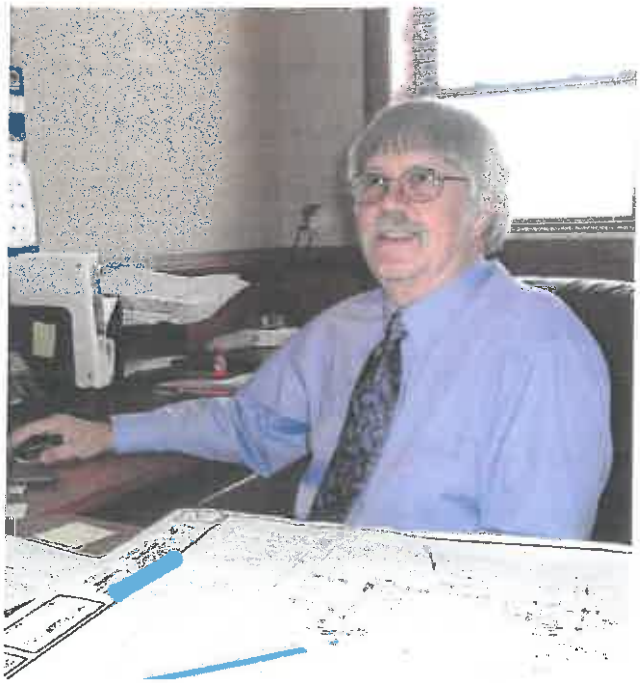
J. Dan Snead & Associates, Inc., Beckley, West Virginia
1998 - Present

Almes & Associates, Inc., Beaver, West Virginia
1997 - 1998

Computects, Inc., Beckley, West Virginia
1984 - 1997

Oscar Vecellio, Inc., Beckley, West Virginia
1976 - 1983

SUMMARY



For nearly thirty years, Raymond has been responsible for the preparation of Architectural drawings for educational, commercial and residential facilities as well as working in construction administration of various projects including site inspection and review of submittals.

With over 41 years experience in the field of Civil Engineering, Raymond has worked as both party Chief and Chief of Surveys, directing boundary and topographic field surveys as well as construction layout.

Raymond's experience also includes serving as foreman and cost estimator for various site construction projects spanning a period of seven years.

In addition to his architectural, surveying and engineering background, Raymond commands a wealth of computer knowledge and serves as the System Administrator for computer operations.

DONALD H. NORMAN, II

EDUCATIONAL BACKGROUND

Bluefield State College - B.S. Mining Engineering Technology, 1986

PROFESSIONAL EXPERIENCE

J. Dan Snead & Associates, Inc., Beckley, West Virginia
2001 - Present

Pentree, Inc., Princeton, West Virginia
1994 - 2001

Computects, Inc., Beckley, West Virginia
1987 - 1993

SUMMARY

Don has more than twenty-eight years of experience in the fields of Architecture and Civil Engineering.

During the last 14 years, Don has been responsible for the preparation of Architectural drawings for educational, commercial and residential facilities as well as providing construction administration for the projects.

Spanning a period of seven years, Don served as an engineering technician responsible for the preparation of engineering drawings for water and sanitary sewer projects, as well as West Virginia Department of Transportation projects.

SIMILAR CLIENTS and RELEVANT PROJECT EXPERIENCE

APPENDIX B

March 9, 2017

L.A. Gates Proejct Team

Sullivan Tract EOI Design Team – Division of Engineering and Facilities Adjutant General

CEOI 0603-ADJ1700000005

Date: March 9, 2017

Listing of West Virginia Highway and Roadway Projects

	Year	Bridge Projects	County	Length	Spans	Type	Cost
65							
64							
63							
62	2016	Falling Rock Bridge	Kanawha	90	1		500000
61	2016	Sewage Plant Bridge	Fayette	99			$952,000
60	2016	Breeden Through Girder Bridge	Mingo	104			$1,458,000
59	2016	Meadowville Arch Bridge +1 (Teter Ck Slab E	Barbour	43	1		$758,000
58	2016	Big Rock Bridge	Mingo	88			$1,626,000
57	2016	Kirk Thru Truss Bridge	Mingo	109			
56	2016	Davy Arch Bridge	McDowell	165	3	Steel Rolled Beams	$971,000
55	2015	State Fair Pedestrian Underpass	Greenbrier	40	1	Precast Box Culvert	$1,630,000
54	2014	Pleasant Dale Bridge	Hampshire	165	3	Steel Rolled Beams	$2,000,000
53	2014	Virginia Line Bridge	Monroe	84	1	Steel Rolled Beams	$1,448,300
52	2013	Henlawson Bridge	Logan	333	3	Steel Plate Girder	$2,956,858
51	2015	*Bramwell Twin Pony Truss Bridge*	Mercer	133	1	Prefab Steel truss	$1,400,000
	2011	*South Mineral Wells Interchange*	Wood	430	30	Steel Plate Girder	$8,137,771
	2011	*Cranberry Creek Bridge*	Raleigh	1200	5	Steel Plate Girder	$19,817,515
50	2011	*Bradshaw Bridge*	McDowell	69	1	Steel Rolled Beam	$980,000
49	2010	*Mill Creek Bridge*	Fayette	328	3	Steel plate Girder	$2,201,486
48	2010	*Clear Fork Arch No 1*	Wyoming	121	1	Steel Plate Girder	$849,700
47	2009	*Shepherd Bridge*	Marshall	280	3	Steel Plate Girder	$1,300,000
46	2009	*Huff Creek Bridge*	Wyoming	48	*1*	*Pre-cast Conc Box Beam*	*$408,500*
45	2009	*Pettry Bottom Bridge*	Raleigh	118	1	Steel Plate Girder	$936,491
44	2008	*Bruno Bridge*	Logan	264	3	AASHTO Conc I Beam	$2,446,732
43	2007	*Main Street Bridge Replacement*	Wetzel	84	1	Steel Rolled Beam	$1,300,000
42	2005	*Grafton HS Arch Bridge*	Taylor	73	1	*Pre-cast Conc Box Beam*	$1,100,000
41	2004	*Greenbrier Avenue Bridge*	Greenbrier	152	1	Prefab Steel truss	$1,100,000
40	2004	*US 220 Ramp Connector Bridge*	Hardy	615	4	Steel Plate Girder	$4,300,000
39	2002	*Russellville Bridge Replacement*	Greenbrier	320	4	Steel Rolled Beam	$1,400,000
38	2000	*Airport Bridge Replacement*	Greenbrier	230	3	Steel Rolled Beam	$1,700,000
37	2000	*Muddy Creek Bridge Replacement*	Greenbrier	133	2	AASHTO Conc I Beam	$450,000
		Stollings-Logan Road Bridges	Logan				
		Bridge 1		1095	7	Twin Str - Steel Plate Girder	$13,974,000
		Bridge 2					$12,024,000
		Bridge 3					$4,076,000
		Bridge 4			1		$662,000
36		*Clearfork Coatings Bridge*	Wyoming	230	2	Steel Plate Girder	$800,000
35		*Camden on Gauley Truss Bridge Replacement*	Webster	258	3	Steel Plate Girder	$1,400,000
34		*Switzer Monty Brothers Bridge Replacement*	Logan	148	3	Steel Rolled Beam	$2,400,000
33		*Roach Truss Bridge Replacement*	Cabell	428	4	AASHTO Conc I Beam	$2,100,000
32		*Stringtown Bridge*	Hampshire		1		$353,000
31		*Mill Road Bridge*	Hardy		1		$255,000
30		*Gragston Creek Road Bridge*	Wayne			Rehab	
29		*Mt. Gay Overpass Renovation*	Logan			Rehab	
28		*William S. Ritchie Bridge Renovation*	Jackson			Rehab	
27		*Steinbeck Bridge Replacement*	Roane	73	1	Steel Rolled Beam	$1,000,000
26		*Diana Bridge Replacement*	Webster	150	3	Steel Rolled Beam	$1,300,000
25		*Little Hurricane Creek Bridge*	Putman				$1,169,000
24		*James Branch Bridge*	Boone	36	1	Steel Rolled Beam	$715,000
23		*Cazy Bridge*	Boone		1		$600,000
22		*Rock Lick Bridge*	Boone		1	Double 9x12 CIP Box Culv	$476,000
21		*Kenna I/C Bridge*	Jackson			Deck Rehab	$1,600,000
20		*CR 21/28 Overpass Bridge*	Jackson			Deck Rehab	$2,700,000
19		*Grasslick Run Bridge*	Jackson			Deck Rehab	$832,000
18		*B & O Railroad Underpass Bridge*	Barbour	345	4	Steel Plate Girder	$2,500,000
17		*Boulder Truss Bridge*	Barbour	245	3	Steel Plate Girder	$1,000,000

		Roadway Projects		miles			
16	2018?	Shady Spring - Beckley	Raleigh	4.36		3 lane highway	
15	2016	Mileground - Airport Road	Monongalia	0.87		5 lane highway	$8,000,000
14	2011	*Switchback – Maybeury Road*	McDowell	0.08		Moment Slab-Slide Repair	$684,600
13	2011	*Allen Creek – Big Ridge (CFX)*	Raleigh				$32,800,000
12	2015	*East Beckley Bypass*	Raleigh	4.05			$55,500,000
11	2015	*Stollings-Logan Road*	Logan				$63,600,000
10	2004	*Slab Fork – Surveyor Creek (CFX)*	Raleigh				$26,700,000
9	2001	*White Sulphur Springs Interchange*	Greenbrier			Interstate Interchange	$14,900,000
8		*Hurricane Creek Road + 1*	Putman	0.8		3 lane and 5 lane	$5,800,000
7		*Kanawha Street Improvements*	Raleigh			Intersection Improvement	$100,943
6		*Locust Drive*	Mercer	0.25		two lane road	$353,819
5		*Stafford Drive*	Mercer			Intersection Improvement	$195,116
4		*Marlinton-Snowshoe Road*	Pocahontas	1		Climbing Lane	$645,000
		Design Studies					
3		*Clarksburg-Grafton Road*	Harrison, Taylor				
2		*Sutton-Webster Springs Road*	Braxton, Webster				
1		*WV 10, Man to Logan*	Logan				

$274,790,316

BRIDGE PROJECTS

State Fair Pedestrian Underpass

State Project No. S313-219-0.731 00
Greenbrier County, WV

Study, design and preparation of construction documents and R/W plans for a Pedestrian Underpass Box Culvert Underpass carrying US Route 219 overtop of the State Fair attendees pedestrian access to the fairgrounds in Greenbrier County in Fairlea. The Box Culvert is a 40 feet long 14 x 8 precast box culvert.

LAG Project No.: 14.025
Estimated Construction Cost: $1,430,000

Henlawson Thru Truss Bridge Replacement

State Project No. S323-12/4-0.05 00
Logan County, WV

Study, design and preparation of construction documents and R/W plans for a new bridge carrying County Route 12/4 over the Guyandotte River to the community of Henlawson in Logan County. The bridge is a three span 333 feet long steel plate girder structure.

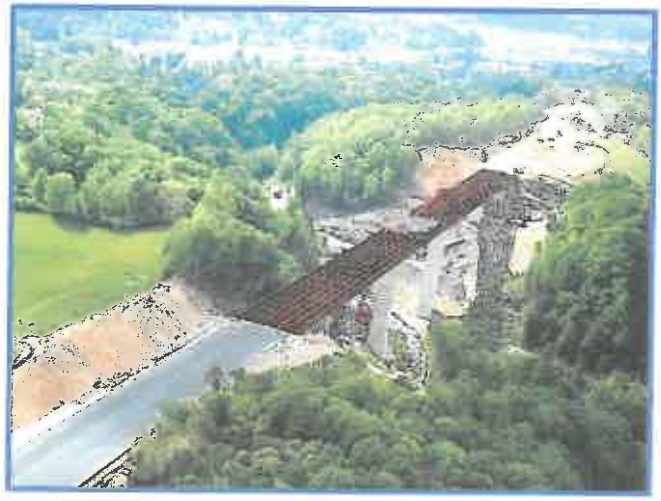
LAG Project No.: 12.013
Estimated Construction Cost: $2,950,000

Cranberry Creek Bridge

State Project No. U341-19-14.47 03
Raleigh County, WV

Study, design and preparation of construction documents and R/W plans for the new bridge carrying US Route 19 over Cranberry Creek Creek in Raleigh County near Beckley. The Bridge is 1200 ft long five span steel plate girder structure that is 217 ft high.

LAG Project No.: 10108.047



Estimated Construction Cost: $19,820,000

South Mineral Wells Interchange

State Project No. U354-14-7.47
Wood County, WV

Study, design and preparation of construction documents and R/W plans for the new bridge carrying WV Route 14 over Tygart Creek in Wood County. The Bridge is 430 ft long three span steel plate girder structure near Mineral Wells.

LAG Project No.: 10106.004
Estimated Construction Cost: $8,140,000

Bradshaw Bridge

State Project No. S324-80-0.02
McDowell County, WV

Study, design and preparation of construction documents and R/W plans for the replacement of Bradshaw Bridge with a 69 ft simple span steel rolled beam structure carrying WV Route 80 over Bradshaw Creek in McDowell County.

LAG Project No.: 10108.033
Estimated Construction Cost: $980,000

Mill Creek Bridge

State Project No. S310-16-1.57
Fayette County, WV

Study, design and preparation of construction documents and R/W plans for the replacement of Mill Creek Bridge with a 328 ft long three span curved steel plate girder structure. The structure carries WV Route 16 over Mill Creek in Fayette County near Mount Hope.

LAG Project No.: 10107.031
Estimated Construction Cost: $2,200,000

Clear Fork Arch Bridge No. 1

State Project No. S355-6-5.95
Wyoming County, WV

Study, design and preparation of construction documents and R/W plans for the replacement of the Clear Fork Arch Bridge with a 118 ft long simple span steel plate girder structure carrying County Route 6 over Clear Fork in Wyoming County near Simon.

LAG Project No.: 10108.015
Estimated Construction Cost: $850,000

Pettry Bottom Bridge

State Project No. S341-103/2-0.01
Raleigh County, WV

Study, design and preparation of construction documents and R/W plans for the replacement of Pettry Bottom Bridge with a 118 ft long simple span steel plate girder structure carrying County Route 103/2 over Marsh Fork in Raleigh County near Naoma.

LAG Project No.: 10107.040
Estimated Construction Cost: $937,000

Bruno Bridge

State Project No. S323-11/2-0.01
Logan County, WV

Study, design and preparation of construction documents and R/W plans for the replacement of Bruno Bridge with a 262 ft long three span utilitzing an AASHTO Type III Concrete I-Beam. The structure carries County Route 11/2 over the Guyandotte River in Logan County near Bruno.

LAG Project No.: 10104.013
Estimated Construction Cost: $2,450,000

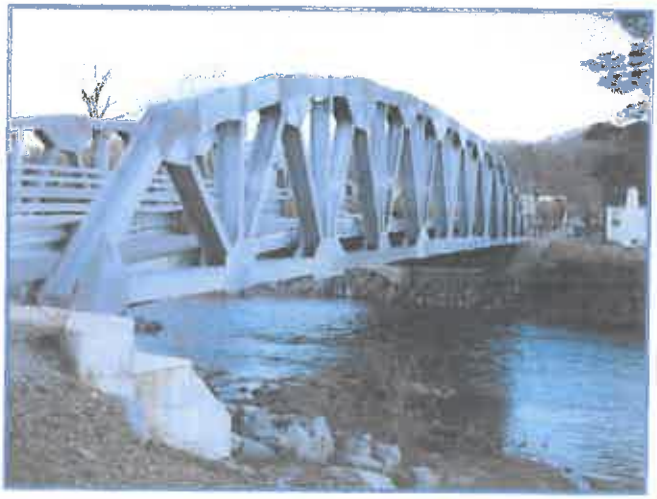
Greenbrier Avenue Bridge

State Project No. S313-60/87-0.02
Greenbrier County, WV

Study, design, and preparation of a bridge replacement study, contract, plans, R/W plans and environmental documents for the replacement of the existing truss bridge on Greenbrier Avenue (CR 60/87) over Howard's Creek. The existing bridge was replaced by a 152 ft prefabricated steel truss bridge.

LAG Project No.: 10113.093

Estimated Construction Cost: $1.1 Million



ROADWAY PROJECTS

East Beckley Bypass

State Project No. U341-19-14.47 00
Raleigh County, WV

Study, design, and preparation of construction contract plans and related documents for a 3.7 mile segment of the East Beckley bypass, a five lane commercial road spanning from the I-64 East Beckley Interchange to CR8 Ragland Road. The project includes a major bridge over 1200 feet long spanning Cranberry Creek.

LAG Project No.: 10111.829
Estimated Construction Cost: $ 79.5 Million

Switchback – Maybeury Road

State Project No. X341-121-560 00
Raleigh County, WV

Study, design and prepare R/W and Construction Contact Plans for 400 feet of slide repair along US Route 52 in McDowell County. The project include the design of an innovative moment slab.

LAG Project No.: 10111.930
Estimated Construction Cost: $684,600

Allen Creek – Big Ridge (Coalfields Expressway)

State Project No. X341-121-2.50
Raleigh County, WV

Study, design and preparation of Construction Contact Plans and related documents for a 3-mile portion of the Coalfields Expressway, a four-lane facility with a 46' median and a design speed of 65 miles per hour.

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LAG Project No.: 10104.055

Estimated Construction Cost: $32.8 Million

Stollings - Logan Road

State Project S323-10-19.39 00
Logan County, WV

Study, design, and preparation of construction contract plans and related documents for a segment of WV 10 beginning on the west side of the Guyandotte River approximately 1.0 mile south of Logan Boulevard and extending northward to Logan Boulevard, and for a connector from WV 10 to WV 17 and existing WV 10 across the river at Stollings. The project includes a bridge on the connector spanning the Guyandotte River, existing WV 10 and the railroad, a bridge on the relocation of existing WV 10 over the railroad and Dingess Run, a sideroad bridge on Dingess Run, and a mainline bridge over the river near the end of the project. The mainline will be a four-lane facility with a 46' median and a design speed of 65 miles per hour.

LAG Project No.: 10111.778
Estimated Construction Cost: $63,600,000

White Sulphur Springs Interchange

State Project No. X341-121-560 00
Raleigh County, WV

Study, design and prepare R/W and Construction Contact Plans for a new interchange on the east end of White Sulphur Springs.

LAG Project No.: 10111.930
Estimated Construction Cost: $14.9 Million

Slab Fork – Surveyor Creek Road (Coalfields Expressway)

State Project No. X341-121-560 00
Raleigh County, WV

Study, design and preparation of R/W documents and Construction Contact Plans for a 2-mile portion of the Coalfields Expressway, a four-lane facility with a 46'

median and a design speed of 65 miles per hour.

LAG Project No.: 10111.930
Estimated Construction Cost: $26.7 Million

DESIGN STUDIES

Clarksburg – Grafton Road Design Study

State Project No. U217-50-18.03
Harrison/Taylor County, WV

Prepared location design report and environmental studies for approximately 13 miles of a four-lane partially controlled access facility from the Clarksburg Bypass (US 279) near Bridgeport to Grafton generally following the US Route 50 alignment east.

LAG Project No.: 10111.910
Estimated Construction Cost: $65 Million

WV 10, Man to Logan Design Study

State Project No. U223-10-7.68
Logan County, WV

Prepared location design report for WV 10 from Man to Logan. The facility will be a four-lane, partially-controlled access facility from Man to Logan. The study looked at alternative routes, environmental impacts, and cost analysis of the various routes. The length of the project is approximately 12 miles.

LAG Project No.: 10185.309
Estimated Construction Cost: $250 Million

Sutton-Webster Springs Road Design Study

State Project No. U204-15-0.00
Braxton-Webster Counties, WV

Prepared location design report for approximately 32 miles of high quality, two lane highway from U.S. 19 near its intersection with Braxton County Route 28, eastward to West Virginia Route 20 at Webster Springs, passing through Centralia.

LAG Project No.: 10185.378
Estimated Construction Cost: $250 Million

Federal Express Ground Distribution Center
Cross Lanes, WV

Project Description:

The project consisted of a distribution facility for Federal Express. The site was constructed on a vacant 10 acre lot located at the SW corner of the intersection of Donald Karnes Blvd. and J.W. Drive in Cross Lanes, WV. The site is located outside the Nitro City Limits and was under the jurisdiction of Kanawha County Planning Commission.

In order to facilitate the increased truck traffic to the facility, the project also consisted of upgrading the existing public roads to the site.

Triad worked for multiple clients on this project. Services provided by Triad for this project consisted of full site civil design services for the site and access road, geotechnical investigation, construction layout and quality control testing and inspection services during construction.

Clients

Cooper Construction – Birmingham, Alabama
Jackson Taylor Contractors – Mentor Ohio
SOLCO – Charleston, WV

Commerce Park Mixed Use Development
Huntington, WV

Project Description:

The project consisted of the development of an existing industrial site into a multi-use site consisting of multi-family housing, flex space warehousing, and future retail. The existing site consisted of an approximately 12 acre industrial site which has had many uses since it's initial development in 1926, ranging from glass product manufacturing to various other uses including heavy equipment manufacturing, metal fabrication, machine and welding shop, and various industrial truck repair and maintenance operations.
TRIAD initially conducted an extensive Site Characterization under the West Virginia Voluntary Program (WVVRP). The site was parceled to allow for the use of differing redevelopment land-use scenarios. Certificates of Completion (COCs) have been issued by the WVDEP, OER for all three parcels at the site.

TRIAD provided full civil engineering services including site development design during development for this project. The project consisted of the construction and site development for mixed residential and commercial use. The residential development consisted of a 6 acre site including 7 buildings with a total of 52 housing units. The commercial development consisted of an additional 6 acres for a flex space warehouse and future retail out parcels. TRIAD worked with a project team consisting of the architect and developer, to develop a complete comprehensive set of construction drawings. Site features included concrete and asphalt paving, sidewalks, curb and gutter, site utility routing and drainage structures.

Services provided by Triad consisted of a phase I environmental site assessment to determine past site usage regarding any environmental concerns, field surveying to generate a map of existing site and topographic features, a geotechnical investigation to determine subsurface conditions to facilitate design of the building foundations and associated site work, design of all site grading and drainage features, and preparation of West Virginia Division of Highways (WVDOH) encroachment permit and West Virginia DEP construction storm water permits.

Client

Structures Resources, Inc.
Huntington, WV

RELATED PRIOR EXPERIENCE

King's Daughter Medical Center
Medical Office Building
Ashland, Kentucky

Project Description:

Triad provided site civil engineering services as well as landscape architectural services for this project. Triad worked with a project team headed by the Architect and the owner, to develop a complete comprehensive set of construction drawings. This project involved optimizing the available property to accommodate the medical office building and a 50 car parking area that improved circulation on the site to allow for a patient drop-off area at the front of the building. Services provided by Triad included preparation of construction documents and details including site grading and drainage features, landscaping to compliment the architecture of the building and local and state permits.

Services provided by Triad included preparation of construction documents and details including site grading and drainage features, landscaping to compliment the architecture of the building and local and state permits.

Client

King's Daughter Medical Center

RELATED PRIOR EXPERIENCE

King's Daughter Medical Center
Ashland, Kentucky

Project Description:

Triad provided site civil engineering services as well as landscape architectural services for the King's Daughters Medical Center Campus in Ashland, Kentucky. Triad worked with a project team headed by the Architect and the owner, to develop a complete comprehensive set of construction drawings for 4 new buildings sites. The projects involved optimizing the available property to accommodate the new buildings and parking areas and the improvement of pedestrian and vehicular circulation. The projects included the development of pedestrian spaces, for the patients and visitors which features plant massings, water features, sculptures and other site amenities.

Services provided by Triad included preparation of construction documents and details including site grading and drainage features, landscaping to compliment the architecture of the building.

Owner

Kings Daughter Medical Center
Howard Harrison, Director of Facilities

RELATED PRIOR EXPERIENCE

Devonshire Development
Scott Depot, WV

Project Description:

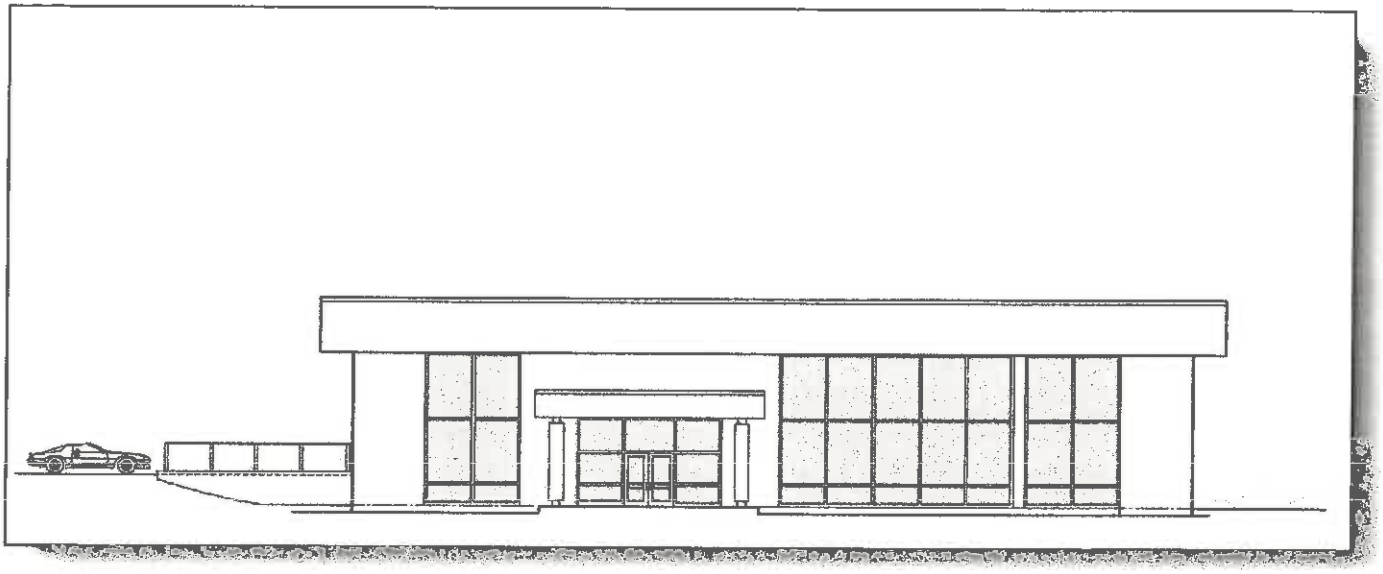
TRIAD provided full civil engineering services including site development design for this project. The project consisted of the construction and site development for a large luxury mixed used residential development located in Scott Depot, West Virginia. The development which encompasses approximately 110 acres will ultimately have 532 luxury apartments, 174 townhouses, 72 condominiums and 59 single family patio homes. The development also includes a 6,500 square feet clubhouse, resort style pool, play grounds and sport courts. TRIAD worked with a project team consisting of the architect and developer, to create a complete, comprehensive set of construction drawings. Site features included concrete and asphalt paving, sidewalks, curb and gutter, site utility routing, drainage structures, and storm water management features.

Services provided by Triad consisted of, field surveying to generate a map of existing site and topographic features, geotechnical investigations to determine subsurface conditions to facilitate design of the building foundations and associated site work, design of all site grading and drainage features and storm water management features, and preparation of West Virginia Division of Highways (WVDOH) encroachment permit and West Virginia DEP construction storm water permits. The permitting phase of the project also included close coordination with the Putnam County, West Virginia Planning Commission to obtain building permits and certificates of occupancy. Triad also performed construction administration services on this project including full time inspection, construction documentation, pay estimate review, and Owner / Contractor coordination.

Client

Cathcart Properties, Inc.

A New Classic Auto Display Showroom for Jack Fairchild



The building, which is located at the Raleigh County Airport Industrial Park, is a metal building structure clad with insulated metal panels and a large expanse of aluminum and glass curtain wall. The interior includes a two level vehicle display floor, a large mezzanine with offices and a conference / lounge space. Also included are, a sales office, storage spaces and a small apartment. The building which is currently under construction contains approximately 11,000 square feet. The new structure is connected to a larger existing building which will be used for auto repair, refurbish and storage.

Beaver, WV

Raleigh County

J. Dan Snead & Associates, Inc.

Beckley Dream Center

The Beckley Dream Center is located behind the Family Worship Center on Pinewood Drive in Beckley and is intended to serve the community's needy. The metal building type structure contains 22,200 square feet and includes a large food warehouse, a baby pantry, a clothes room, a computer room, a kitchen and a dining area to serve hot meals.

Beckley, WV
Raleigh County

Total Project Budget: $1,000,000.00

J. Dan Snead & Associates, Inc.

Raleigh County Solid Waste Authority
Recycling Center

The Raleigh County Solid Waste Authority constructed the recycling facility to process recyclable materials from the local and surrounding areas. The building contains over 32,900 square feet and includes an open room with a very large sorting machine, dump hopper, storage bins, conveyers, compactor and binder. Additionally, the facility includes administrative offices, a conference room and a second floor elevated lecture room with a window wall to view recycling activities

Beckley, WV
Raleigh County

Total Project Budget: $1,200,000.00

J. Dan Snead & Associates, Inc.

RALEIGH/BOONE TECHNOLOGY CENTER

The Raleigh/Boone Technology Center was a joint effort between Raleigh and Boone counties and was funded by the School Building Authority of West Virginia.

The design concept required two metal buildings, each containing mechanical, electrical and fire safety systems which represent the best of current thinking.

The facility is jointly used by students in Raleigh and Boone counties and provides a rural area with state-of-the-art vocational educational opportunities.

One of the two buildings is used for residential construction technology. The other houses equipment to repair mining machinery.

Pettus, WV

New Construction

Total Project Cost: $326,000

J. Dan Snead & Associates, Inc.

Hometown KIA

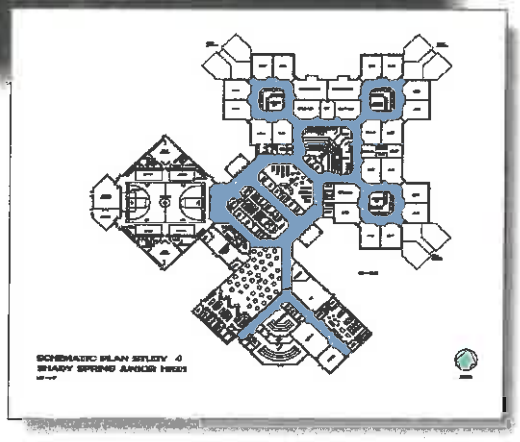
A new KIA dealership near Beckley, WV of approximately 8,800 square feet. The metal frame structure is clad with insulated aluminum panels at the front façade and anodized aluminum curtain wall. Concrete block is used at the work bays at the back of the building. The design is consistent with KIA brand prototypical protocol.

Prosperity, WV
Raleigh County

Total Project Budget: $1,600,000.00

J. Dan Snead & Associates, Inc.

SHADY SPRING MIDDLE SCHOOL



The recently completed Shady Spring Middle School project is part of a $20,000,000 construction program undertaken by Raleigh County.

The new Shady Spring Middle School had a budget of over nine million dollars and was partially funded by a School Building Authority grant.

The new facility houses 600 students in three academic pods. It contains 78,000 square feet and features a unique design facilitating the middle school concept. Incorporated into the design is a centrally located administrative suite, media center, and commons area.

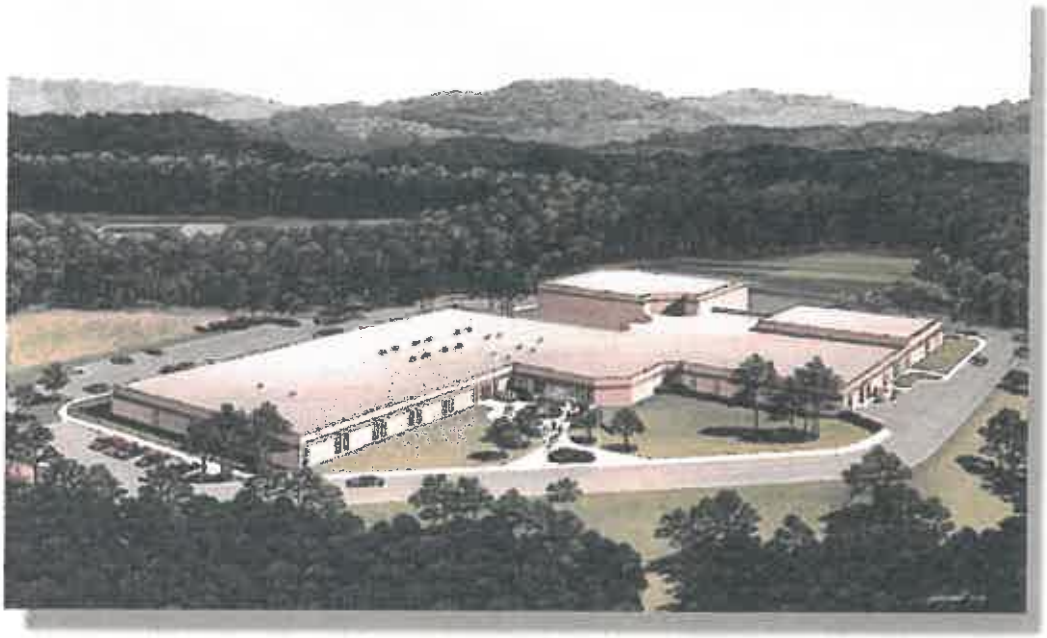
Additional features include three computer labs and an isolated, but easily accessible gymnasium.

Shady Spring, WV
Raleigh County

Total Project Budget: $9,500,000

J. Dan Snead & Associates, Inc.

INDEPENDENCE JUNIOR HIGH



Sophia, WV

New Construction

Total Project Cost: $6 Million

Independence Junior High School was designed to provide the Owners a functional and attractive facility on a predetermined budget and area. The school was designed for the inclusion of the Creative Learning Systems, Inc., "Lab 2000". With this system, students can integrate today's technology with the classroom. Computers provide the students the opportunity to study manufacturing, communication, transportation, and construction technologies in their own environment. Innovative gymnasium design provided an additional 3,000 square feet at little, if any, cost to the Owner and produced a gymnasium that complemented the layout of the school. The combination of all the special ingredients in Independence Junior High School has provided Raleigh County with a unique educational facility to be utilized by students and faculty for many generations.

J. Dan Snead & Associates, Inc.

QUALITY CONTROL

APPENDIX C

March 9, 2017

QA/QC Document Review Form

Document submitted for QA/QC review to: _____ _____

Project Name:		Project Number:	
Site Address:		Project Manager:	
Municipality		Technical Lead:	
County		Project Designers:	

Description of Document attached: Site Plans

Required QA/QC Submittals for this document: 30% ☐ 60% ☐ 90% ☐

QA/QC Reviewer - please sign and return to Project Manager upon completion of each review.

QA/QC Submittal Date: _____ QA/QC Review needed by: _____ Hours Budgeted for QA/QC Review: _____
Peer Reviewed by: _____ Date: _____ Proj. Submittal Deadline: _____
Review for Submittal to: _____ Type of approval sought: _____

30 percent review

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

PM and/or Technical Lead: _____ _____ **QA/QC** Addressed ☐ Not Addressed ☐ **Regulatory** Addressed ☐ Not Addressed ☐
Date:

Sheets Reviewed: SK-1

QA/QC Submittal Date: _____ QA/QC Review needed by: _____ Hours Budgeted for QA/QC Review: _____
Peer Reviewed by: _____ Date: _____ Proj. Submittal Deadline: _____
Review for Submittal to: _____ Type of approval sought: _____

60 percent review

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

PM and/or Technical Lead: _____ _____ **QA/QC** Addressed ☐ Not Addressed ☐ **Regulatory** Addressed ☐ Not Addressed ☐
Date:

Sheets Reviewed:

QA/QC Submittal Date: _____ QA/QC Review needed by: _____ Hours Budgeted for QA/QC Review: _____
Peer Reviewed by: _____ Date: _____ Proj. Submittal Deadline: _____
Review for Submittal to: _____ Type of approval sought: _____

90 percent review

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

_____ _____ Approved ☐ Make Corrections noted ☐ Revise and Resubmit ☐
Date:

PM and/or Technical Lead: _____ _____ **QA/QC** Addressed ☐ Not Addressed ☐ **Regulatory** Addressed ☐ Not Addressed ☐
Date:

Sheets Reviewed:

Checklists attached:

Client Sustainability Preference Worksheet:	Completed ☐	N/A ☐
Project Description/Marketing Material update:	Completed ☐	N/A ☐
Initial Wetland Review Checklist:	Completed ☐	N/A ☐
Boundary & Topographic Survey Review Checklist:	Completed ☐	N/A ☐
Civil Drawing Review Checklist (Peer Review):	Completed ☐	N/A ☐

Comments:

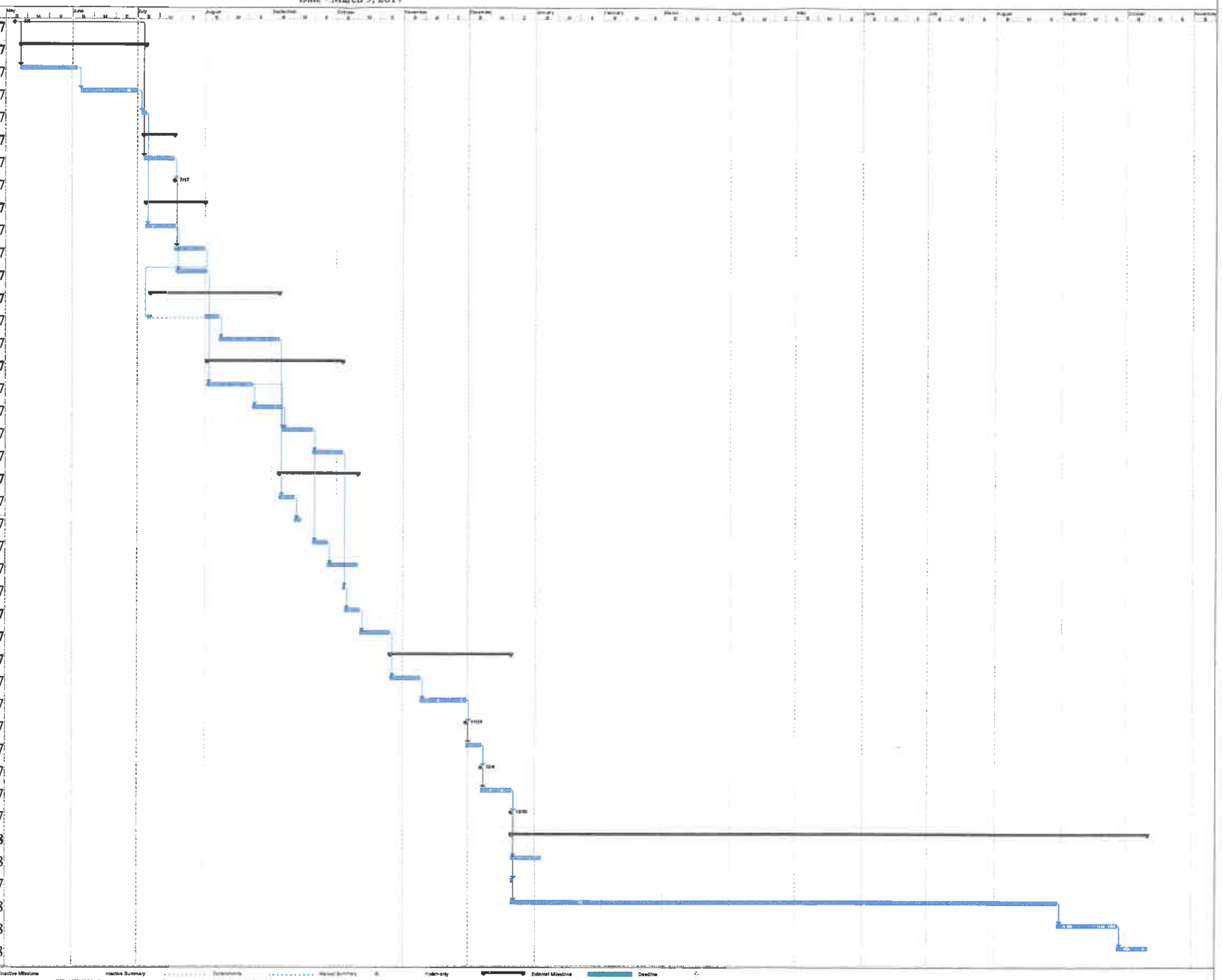
PROJECT SCHEDULE

APPENDIX D

March 9, 2017

Sullivan Tract EOI Proposed Schedule - Division of Engineering and Facilities Adjutant General - CEOI 0603 - ADJ1700000005
Date - March 9, 2017

ID	Task Name	Start	Finish
1	**Project Kickoff Meeting**	**Fri 5/5/17**	**Fri 5/5/17**
2	**1.0 Preliminary Engineering**	**Mon 5/8/17**	**Tue 7/4/17**
3	PrepareAlternatives	Mon 5/8/17	Fri 6/2/17
4	Prepare Alternates cost analysis	Mon 6/5/17	Fri 6/30/17
5	Review with ARNG	Mon 7/3/17	Tue 7/4/17
6	**2.0 Survey Services**	**Tue 7/4/17**	**Mon 7/17/17**
7	Topographic Survey	Tue 7/4/17	Mon 7/17/17
8	Survey Complete	Mon 7/17/17	Mon 7/17/17
9	**3.0 Geotechnical Services**	**Wed 7/5/17**	**Mon 7/31/17**
10	Potential Site Borings	Wed 7/5/17	Tue 7/18/17
11	Prepare Geotechnical Report	Tue 7/18/17	Mon 7/31/17
12	**4.0 Preliminary Review with WVARNG**	**Wed 7/19/17**	**Tue 8/1/17**
13	**5.0 Permitting**	**Fri 7/7/17**	**Mon 9/4/17**
14	Preparation and Submission of Permit Documents	Fri 7/7/17	Mon 8/7/17
15	Issuance of Permits	Mon 8/7/17	Mon 9/4/17
16	**6.0 Technical Documents**	**Wed 8/2/17**	**Tue 10/3/17**
17	Completion of Drawings	Wed 8/2/17	Tue 8/22/17
18	Completions of Specifications	Wed 8/23/17	Tue 9/5/17
19	ARNG Review of Documents	Wed 9/6/17	Tue 9/19/17
20	ARNG Approves Documents	Wed 9/20/17	Tue 10/3/17
21	**7.0 Opinions of Construction Cost**	**Mon 9/4/17**	**Tue 10/10/17**
22	50% Design Completion Cost Estimate	Mon 9/4/17	Mon 9/11/17
23	ARNG Review of 50% Cost Estimate	Mon 9/11/17	Thu 9/14/17
24	90% Design Completion Cost Estimate	Wed 9/20/17	Tue 9/26/17
25	ARNG Review of 90% Cost Estimate	Wed 9/27/17	Tue 10/10/17
26	Final Approval By ARNG	Wed 10/4/17	Wed 10/4/17
27	**8.0 SUBMIT ALL DOCUMENTS To ARNG**	**Thu 10/5/17**	**Wed 10/11/17**
28	**9.0 RECEIVE APPROVAL to BID FROM ARNG**	**Thu 10/12/17**	**Wed 10/25/17**
29	**10.0 Bidding Phase**	**Thu 10/26/17**	**Wed 12/20/17**
30	Submit Bid Advertisement for Publication	Thu 10/26/17	Wed 11/8/17
31	Bid Construction Project	Thu 11/9/17	Wed 11/29/17
32	Receive Bids	Wed 11/29/17	Wed 11/29/17
33	Evaluate Bids Received	Thu 11/30/17	Wed 12/6/17
34	Construction Contract Award	Wed 12/6/17	Wed 12/6/17
35	Construction Contract in Place	Thu 12/7/17	Wed 12/20/17
36	Start Construction	Wed 12/20/17	Wed 12/20/17
37	**11.0 Construction**	**Thu 12/21/17**	**Wed 10/10/18**
38	Submittal Review/Response to RFIs	Thu 12/21/17	Wed 1/3/18
39	Preconstruction Meeting	Thu 12/21/17	Thu 12/21/17
40	Project Construction	Thu 12/21/17	Wed 8/29/18
41	Completion of Construction (Punchlist)	Thu 8/30/18	Wed 9/26/18
42	Construction Contract Closeout	Thu 9/27/18	Wed 10/10/18



WVARNG JFHQ Coonskin Parking and Storage Area Project

Task · Split · Milestone · Summary · Project Summary · External Tasks · External Milestone · Inactive Task · Inactive Milestone · Inactive Summary · Manual Task · Duration-only · Manual Summary Rollup · Manual Summary · External Tasks · External Milestone · Progress · Deadline

L.A. Gates Company
Engineers & Consultants

TRIAD

PURCHASING AFFIDAVIT

APPENDIX E

March 9, 2017

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: William B. Keaton, P.E., Director - Municipal Services L.A. Gates Company

Authorized Signature: William B. Keaton Date: March 7, 2017

State of West Virginia

County of Raleigh, to-wit:

Taken, subscribed, and sworn to before me this 7 day of March, 2017.

My Commission expires February 1, 2023.

AFFIX SEAL HERE

NOTARY PUBLIC Angela S. Riffe

NOTARY PUBLIC OFFICIAL SEAL
ANGELA S RIFFE
State of West Virginia
My Comm. Expires Feb. 1, 2023
140 Bobcat Lane
Beaver, WV 25813

ADDENDUM ACKNOWLEDGEMENT

APPENDIX F

March 9, 2017

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)

[x]	Addendum No. 1	[ ]	Addendum No. 6
[x]	Addendum No. 2	[ ]	Addendum No. 7
[x]	Addendum No. 3	[ ]	Addendum No. 8
[X]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	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.

L. A. Gates Company
Company

William B. Keaton
Authorized Signature

3/22/17
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012