Expression of Interest to provide

Architectural / Engineering Design Services

Bluefield Area Transit – PTR120004
Administrative and Maintenance Facility

Near Bluefield, West Virginia

submitted to:

Mr. Frank Whittaker, Buyer 44
Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, West Virginia 25305-0130

submitted by:

Michael Baker Jr., Inc.
5088 Washington Street West
Charleston, West Virginia 25313

Baker
Creating Value ... Delivering Solutions.

October 27, 2011

Michael Baker Jr., Inc.
5088 West Washington Street
2nd Floor
Charleston, WV 25313

304-769-0821
FAX 304-769-0822

October 27, 2011

Mr. Frank Whittaker, Buyer 44
Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, West Virginia 25305-0130

Re: Statement of Qualifications to Provide Architectural / Engineering Design Services – Bluefield Area Transit System – PTR12004 - Near Bluefield, WV

Dear Mr. Whittaker:

Michael Baker Jr., Inc. (Baker) is pleased to present our qualifications and experience as it relates to the Planning and Design of the proposed Administrative and Maintenance Facility for the Bluefield Area Transit Section 5311 Rural Transit Provider for Mercer and McDowell Counties.

Baker is a global engineering firm with some 4,700 members in 50 office locations. We propose to undertake this assignment from our Charleston office with a staff of over 40 individuals including architects, engineers, landscape architects, planners, surveyors, environmental specialists, construction managers, public safety specialists, inspectors, and technicians.

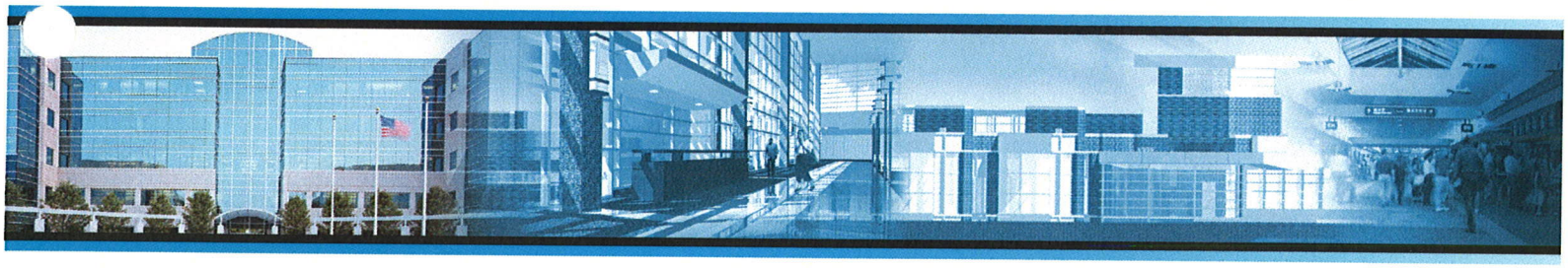
We feel that our combination of global expertise and West Virginia based experience is unique to Baker and will provide efficient, timely, personal, cost effective, and quality solutions for the Bluefield Area Transit Section 5311 Rural Transit Provider.

We are extremely interested in providing the required services on this important project for the Bluefield Area Transit Section 5311 Rural Transit Provider. We look forward to meeting with the selection committee to personally present our approach to this project.

Very truly yours,

MICHAEL BAKER JR., INC.

Russell Hall, P.E., P.S.
Charleston Office Manager



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Part 1 – Introduction

The Bluefield Area Transit Section 5311 Rural Transit Provider is seeking a highly qualified firm experienced in the planning, design, and construction administration to develop a new office and renovated bus maintenance facility to be located in Bluefield, West Virginia. Michael Baker Jr., Inc. (Baker) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in continuing our professional relationship with the WV Division of Public Transit.

"...we are extremely interested in continuing our professional relationship with the WV Division of Public Transit."

Corporate Capabilities

Baker is a wholly owned subsidiary of the Michael Baker Corporation (a publicly owned company traded on the American Stock Exchange), employs over 5,000 people in 50 offices world-wide, and ranks in the top 10% of the nation's top 500 engineering firms. Baker provides consulting, engineering, architecture, operations, and technical services worldwide. The firm has a national practice with 34 offices throughout the U.S. from which to serve clients nationally. Since our founding in 1940, Baker has compiled an outstanding record of transportation engineering design achievements including more than 1,000 bridges of every description and over 100,000 miles of roadway. We are committed to using computer technology and provide services in the areas of Water Resources, Environmental Design and Permitting, Geographic Information Systems, GPS and Field Data Collection, Infrastructure Management, Database Development, Computer/Web Programming, and CADD.

Baker has extensive resources and the required qualifications to provide planning and design services for the Bluefield Area Transit Section 5311 Rural Transit Provider for this important project. We have nationally recognized experts with the technical experience necessary for this assignment. In addition, Baker's team of experienced professionals has an established record of delivering quality work products to our clients, on schedule and within budget.

In summary, Baker's staff can provide documentation of our extensive experience in the following areas for this project:

- Nationally recognized expertise in Program Management Assignments;
- Facilities (Buildings, Access, Parking, Site Development) Plan Preparation;
- Full range of Public Transportation Services;
- Graphic Design Skills (CADD); and
- Coordination with State and Federal Agencies, as required.

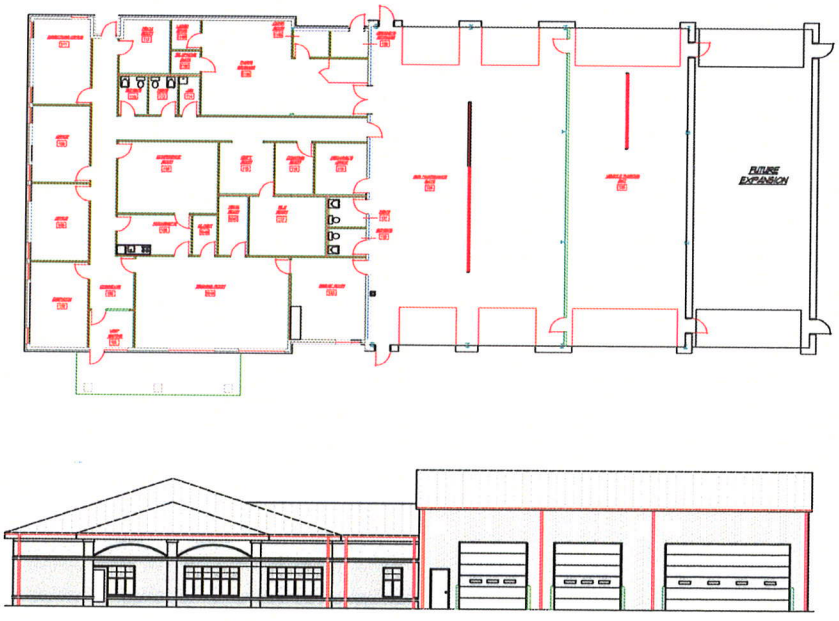
Baker's Charleston office is a "single-stop resource" capable of providing comprehensive professional services, from environmental and public safety planning, final design, and construction management through operational support. From major new bridges and roadway designs to surface mine permitting and water resource projects, Baker has evolved into one of the leading engineering services firms by consistently providing targeted solutions for its client's most complex challenges.

"Baker has evolved into one of the leading engineering and energy services firms by consistently providing targeted solutions for its clients' most complex challenges."

Baker's clients for facilities design and program management projects include, but are not limited to, the Counties, Cities, Towns, and local municipalities, numerous State Department's of Transportation, Military facilities, airport complexes, and private sector clients. Baker's geographic location and extensive experience enables us to quickly respond to wide-ranging scopes of service in order to meet client needs.

Cost Accounting System

Baker's cost accounting system segregates and accumulates costs by project and by task within each project. Through our work on past Transportation Enhancement projects, the WVDOH is familiar with this system. A current Cost Accounting Information Statement is on file with the WVDOH and is available upon request.



Little Kanawha Bus Facility Mt. Zion, WV

Part 2 – Qualifications

Baker routinely provides architectural/engineering services and project management for the design of municipal facilities, and the associated construction oversight when required. Project assignments have included maintenance facilities, garage facilities, emergency services facilities, and office buildings.

Baker is proposing to use two consultants for this project, CAS Structural Engineering, Inc. and NGE Environmental & Geotechnical Engineering Solutions. Both firms are DBE certified firms and will be assisting in design of the facility.

CAS Structural Engineering, Inc. – CAS Structural Engineering, Inc. is a West Virginia Certified Disadvantaged Business Enterprise structural engineering firm located in the Charleston, West Virginia area.

Providing structural engineering design and/or analysis on a variety of projects throughout the state of West Virginia, CAS Structural Engineering has experience in excess of 20 years on the following types of building and parking structures:

- Governmental Facilities (including Institutional and Educational Facilities)
- Industrial Facilities
- Commercial Facilities

Projects range from new design and construction, additions, renovation, adaptive reuse and historic preservation (including use of The Secretary of the Interior's Standards for Rehabilitation) to evaluation studies/reports and analysis.

CAS Structural Engineering utilizes AutoCAD for drawing production and Enercalc and RISA 2D and 3D engineering software programs for design and analysis. Structural systems designed and analyzed have included reinforced concrete, masonry, precast concrete, structural steel, light gauge steel and timber.

Carol A. Stevens, PE is the firm President and will be the individual responsible for, as well as reviewing, the structural engineering design work on this project. While CAS Structural Engineering, Inc. has only been in business for ten years, Carol has over 20 years of experience in the building structures field, working both here in West Virginia and in the York, Pennsylvania vicinity. Carol is also certified by the Structural Engineering Certification Board for experience in the field of structural engineering.

CAS Structural Engineering, Inc. maintains a professional liability insurance policy.

NGE, LLC. –is a West Virginia Certified Disadvantaged Business Enterprise environmental and geotechnical engineering consulting firm located in the St. Albans, West Virginia.

NGE is an environmental and geotechnical engineering consulting firm providing superior services at a manageable price. Our core capabilities include Environmental Consulting, Geotechnical Engineering and Environmental Construction / Remediation. NGE is a certified Disadvantaged Business Enterprise (DBE) in many states, an 8(a) certified Small Disadvantaged Business (SDB), and is a service provider under the U.S. General Services Administration (GSA).

NGE's staff includes experienced engineers, geologists, construction managers and foremen with experience in a broad range of disciplines.

Baker and NGE have teamed together on a number of projects as listed below:

- Dumpling Run CSL Testing, Hardy County, WV
- Pleasant Valley Road Bridge CSL Testing, Fairmont, WV
- WVDEP/AML Drilling Project, Kanawha County, WV
- Pennsylvania Ave. Tunnel Project, Kanawha County, WV
- Twelvepole Creek Bridges, Wayne County, WV
- Crooked Creek AML Project, Harrison County, WV
- Pile Driveability Analysis – Kanawha River Bridge, South Charleston, WV
- Upper Cane Creek Road Design, Menifee County, WV
- Little Kanawha Bus Facility, Mount Zion, WV
- Maybeurry AML Project, McDowell County, WV

Baker will provide architectural and engineering services for the renovation of an existing facility with the possibility of demolishing the current administration portion of the building in order to expand this part of the facility. Baker understands it is the desire of the Owner to keep the maintenance area of the facility enact with upgrades to meet code. The proposed property contains an 11,346 square feet building consisting of a single story rigid steel frame warehouse with office space and supporting site improvements. The building was utilized as a truck repair truck wash facility (DBA Eagle Lines, Inc.).

The interior of the existing building is partitioned into 2,289 square feet of office area with the remaining 9,057 square feet serving as open warehouse and/or storage area. The existing building was constructed in 1989 and is considered to be in average to good condition. The existing building currently sits on a 3.52 acre gravel lot. This project will be located near the city limits of Bluefield on John Nash Boulevard near the intersection of the Industrial Park and Interstate 77.

Baker's expertise includes but is not limited to:

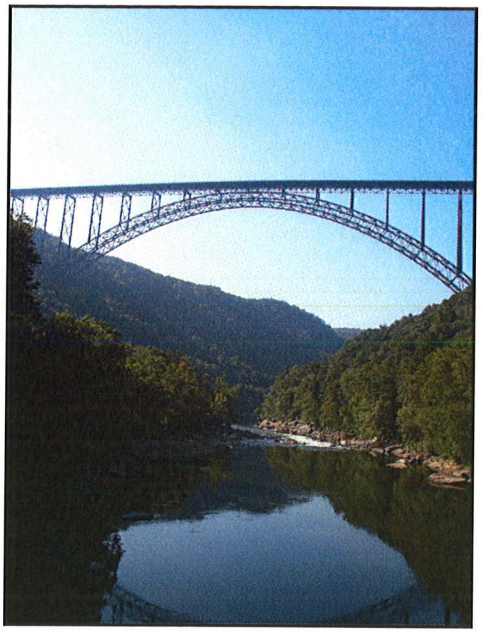
- Program Management

- Conceptual Planning
- Design Charrettes
- Coordination and Public Involvement
- Sub-surface Investigation
- Land Development Planning
- Building Facility Siting
- Architecture and MEP
- Screening and Noise Abatement
- Landscape Architecture
- Permitting
- Construction Cost Estimating
- Right of Way and Easements
- Pre-Bid Meeting
- Bidding and Contracting
- Construction Inspection Services

Baker's Design Services for these types of assignments have included planning, surveying, mapping, right of way services, geotechnical design, architecture, civil, mechanical, electrical, plumbing and structural engineering, and public safety programming, permitting and cost estimating. Specific project elements have included, architecture, landscaping, retaining wall structures, access road design, utility adjustment/relocation, storm drainage, water and sewer connections, site design, parking, fire protection design, pump stations, electrical duct banks, gas mains, fiber optic communication systems, corrosion control systems, HVAC design, oil/water separators, and security systems.

Part 3 – Technical Expertise

Baker can offer the Bluefield Area Transit Section 5311 Rural Transit Provider proven experience in the following Professional Services which are typical for projects such as the type identified in your Request for Qualifications:



New River Gorge Steel Arch Bridge

Preliminary Plans and Costs

Baker proposes to prepare preliminary site plans, elevations and schematic details with supporting design documentation. This document will describe the individual elements required for the architectural, engineering, public safety, environmental and traffic issues associated with the proposed facility.

Preliminary Cost Estimates for Construction will be prepared and included in the Preliminary Engineering Report submittal.

Plan and Specification Preparation

Baker has vast experience in the development of construction plans and technical specifications for all types of architectural engineering projects. Initial survey data, topography, and physical features are collected electronically and downloaded into our CADD system for use by the designers in either AutoCAD or Microstation format. Plan and/or Profile sheets are then developed. Detail Sheets are created from our Standard Detail Library then modified to suit specific project applications. Specifications in Microsoft Word format are created from our Master Spec Library and tailored to meet individual project requirements.

During the project design phase, Baker routinely prepares permit applications for public and private clients. We have recently been involved in this process for local Municipalities. Permits which may be required for this project include:

- WV Department of Environmental Protection, NPDES Permit
- WVDOT/Division of Highways, MM-109 Permit
- WV Department of Health & Human Resources, Water & Sewer Permit

"Baker has established relationships with each of these agencies which will streamline the permit acquisition process."

- WV State Fire Marshal's Office

Baker has established relationships with each of these agencies which will streamline the permit acquisition process.

Bidding and Contracting Document Preparation

Baker generally makes use of E.J.C.D.C. and/or A.I.A. bidding and contracting documents, as normally dictated by the funding agencies. Blank copies of these forms are included in the Project Manual and made available to all plan holders during the bidding process to minimize the risk of confusion or controversy and "level the playing field" for all prospective bidders. In our bid documents, Baker makes use of additive/deductive alternates and the unit costs approach to bidding. This allows the owner flexibility in spending, to insure the project meets budgetary requirements and that no "surprises" are realized.

Project Bid Evaluation

Bids will be scrutinized by the Baker Project Manager. Likewise, detailed bid tabulations will be developed to allow WV Division of Public Transit and the funding agencies to work with the Project Manager toward the development of a Construction Contract award.

Construction Administration and Inspection

Baker is well equipped to provide the administration and inspection of construction projects. Pre-Construction and regular job-site meetings, as well as shop drawing review, requests for information, pay requests and all other construction-related correspondence will be the responsibility of the Project Manager. Resident inspection services will be conducted by Baker technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation (i.e. concrete placement, compaction, asphalt, trenching, etc.). Constant communication between field and office is essential and will be achieved via cellular telephone, internet access, and facsimile.

Part 4 – Management and Staffing Capabilities

The management approach for this assignment will follow ***The Baker Way*** which is the clearly defined and scalable internal process by which all projects are managed throughout Baker. This process requires administrative training for all Project Managers. This training module is known as ***Baker BEST*** (Business Enterprise Systems Training) and includes project setup, delivery, and billing modules.

Through better organization, tools and methods to monitor budgets, an emphasis on communication, and a structured approach to delivering quality; ***The Baker Way*** clearly provides considerable value to our clients.

Baker's Charleston office possesses a large and diverse engineering, architectural, and environmental planning staff. Baker's proposed team of experienced professionals has demonstrated the ability to deliver quality work products to our clients, on-time and within budget. While Baker can provide the entire depth of services necessary to complete the project, we are willing to subcontract certain services (i.e., surveying, geotechnical engineering, inspection and testing, etc.) in an effort to control cost or to meet any small and/or disadvantaged business participation goals established by the principal funding agency or the Bluefield Area Transit Section 5311 Rural Transit Provider.

Each individual on this project team has extensive experience in their field of expertise and have demonstrated success on projects of similar size and scope. The following provides a brief discussion of each team member's experience base relevant to this project.

As Principal-In-Charge, **Russell Hall, P.E., P.S.,** will ensure that all required resources including staff and equipment are available to the project manager to execute the project successfully. Mr. Hall has over 22 years of experience in transportation engineering working in both the government and private sectors. Mr. Hall has been responsible for the design and management of multiple transportation projects of varying size and complexity. His experience, understanding of project delivery and dedication to client satisfaction will guide this project.

Patrick Fogarty, P.E., P.S., will function as Project Manager. Mr. Fogarty has over 23 years of experience with civil engineering projects of various size and levels of complexity. Mr. Fogarty will ensure that quality deliverables are submitted according to project schedule and within budget. Some of his notable projects that are directly related to the current proposed project are as follows:

Town of Lost Creek – Historic Train Depot Improvements (completed)

Lakewood Elementary School Boundary Survey (completed)

Bonham Elementary School Flood Protection Study (completed)

Charleston Housing Authority – Numerous Projects (completed)

With his unequalled expertise in structural design, we feel Mr. Fogarty would be a tremendous asset to the WV Division of Public Transit for this project.

Ron Bolen, AIA, with over 36 years of diverse experience, will serve as the Project Architect for this project. Mr. Bolen's project design experience includes master planning, educational, parks, recreation, institutional, commercial, housing, health care, long-term care, and religious facilities. He is experienced with the submittal process for various State Agencies, including WV SBA, State Board of Education and State Fire Marshal's office.

Little Kanawha Bus Maintenance/Administrative Offices, Grantsville, WV (design complete – awaiting authorization to bid.)

Raleigh County Schools Bus Maintenance New Facility, Raleigh County (completed)

Ghent Vehicle Maintenance New Facility, Raleigh County (completed)

Standard Vehicle Maintenance New Facility, Fayette County (completed)

WV Army National Guard – Charleston Armory Improvements (in construction)

West Virginia State Capitol Campus Master Plan (complete)

West Virginia State Capitol Restroom Renovation & Restoration (design at 95%)

David Hilliard has over 20 years of mechanical/electrical engineering experience and will provide HVAC and MEP services for this project. Mr. Hilliard brings extensive MEP design experience from numerous educational facilities, housing projects, medical facilities, and commercial and industrial office space projects.

Laura Cox, PLA, ASLA, has over 26 years of experience in fields of architecture, landscape architecture, and land planning. She has extensive knowledge of all phases of design from site analysis and conceptual planning through construction, documentation, permitting and administration.

Joseph Crowder, P.S. Mr. Crowder has over 17 years of surveying/civil engineering experience and will provide civil related services for this project. Mr. Crowder brings extensive civil design, surveying, construction inspection and field testing experience from numerous facilities projects. Mr. Crowder will be responsible for the data collection associated with surveying, easements, and right of way coordination for the project.

Part 5 – Project Outline

We have carefully reviewed your Request for Statements of Qualifications to improve our familiarity and to identify any key issues. Based upon this information, Baker has developed the following project outline:

Existing Conditions / Issues

- The West Virginia Division of Public Transit, located at 1900 Kanawha Blvd., East, Building 5 at the Capitol Complex administers the Bluefield Area Transit Section 5311 Rural Transit Provider for Mercer County.
- Proposed site is near Bluefield, West Virginia.

Project Understanding

Architectural/Engineering services for the building, landscaping and site design, preparation of construction specifications, contract plans, and related documents, assistance in the preparation of bidding documents, costs estimates, construction oversight, coordination with local officials, utilities, site assessments and construction administration and supervision of renovation and possible new construction of the administrative space in an 11,346 sq. ft. building. This proposed project is to be located near the city limits of Bluefield on John Nash Boulevard near the intersection of the Industrial Park and Interstate 77.

Baker will insure that all state, federal and local regulations and codes shall be met.

Baker will provide if desired the project plans will be completed and ready for bid within six months of contract award.

Project Description

- Architectural / Engineering Services for Building, Landscaping and Site Design.
- Preparation of:
    - Construction Specifications.
    - Contract Plans.
    - Related Documents.
- Assistance in Preparation of Bidding Documents.
- Cost Estimates.
- Construction Oversight.
- Coordination with Local Officials, Utilities.
- Site Assessments.
- Construction Administration and Supervision of Construction.

Based upon our knowledge to this point, we consider this an architectural assignment. Architectural elements may include provisions for office space, vehicular maintenance area, meeting room and restrooms within, development of interior finishes and amenities. Landscape architecture elements may include design geometrics, ADA compliance, road access, parking, utilities and earthwork.

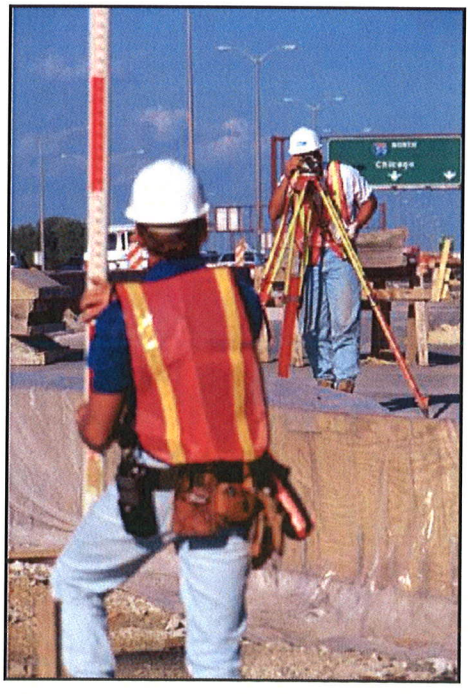
Conceptual Planning Phase

During this phase, Baker will collect all available data including historic information, utility maps, soils surveys, etc. We will use our existing E-911 mapping with 10' contour intervals and edit with conventional field surveys. Once all graphic data has been acquired, we will prepare a mosaic of the information and review for concepts and conflicts. We will then develop conceptual layouts for the structural elements, foundation design, and any other desired project elements.

Design Development Phase

Once conceptual plans have been approved by WV Division of Public Transit, Baker will prepare the Preliminary Engineering Report and Cost Opinion for submission to the funding agencies. A 50% Design Submittal will also be prepared for review and approval.

Baker Construction Monitoring



Baker Surveying

Construction Documents Phase

Upon receipt of comments for the Design Development submittal, Baker will prepare construction plans, technical specifications, bid documents, final construction estimates, and all necessary permit applications. Likewise, we will assist Bluefield Area Transit Section 5311 Rural Transit Provider in the preparation of additional funding applications if necessary.

Bidding Phase

During this phase, Baker will participate in the Pre-Bid Conference; prepare any necessary technical responses/clarifications to be included in Addenda.

Construction Phase

Initially, Baker will perform Construction administration services that will consist of shop drawing review, processing requests for information, monitoring construction progress, conducting construction meetings, processing payment applications, Davis-Bacon compliance review, and providing periodic construction inspection.

Part 6 – Related Prior Experience

The following Project Descriptions illustrate Baker's related prior experience. We have included examples of building facilities used for administrative office space, maintenance, training, parking and support functions for both military and civilian clients at various locations across the nation. We believe these projects show the depth of our expertise in all aspects of engineering and architecture. While we propose to conduct activities from our West Virginia operation, these diverse project locations are meant to emphasis our ***One Baker*** philosophy, which simply means that the WV Division of Public Transit will have access to the human resources, expertise, and technology of all Baker locations as particular needs arise.

In addition to this project experience, members of Baker's Charleston office have established relationships with many potential funding agencies including:

- Federal Highway Administration (FHWA);
- WV Department of Transportation / Division of Highways;
- WV Development Office;
- USDA Rural Utility Service;
- US Department of Commerce E.D.A.;
- US Environmental Protection Agency; and
- WV Department of Environmental Protection.

ConnDOT – Hartford Bus Maintenance Facility

Little Kanawha Bus Administrative and Maintenance Facility

Grantsville, WV

Baker is currently providing general Architectural and Engineering services to the West Virginia Division of Public Transit for the Little Kanawha Administrative/Maintenance Facility. The facility will be located in Grantsville, West Virginia.

The WV Division of Public Transit selected Baker to provide complete design and construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Parking for the buses (in the rear of the building) and employee vehicles will surround the building. The proposed new site of the Little Kanawha Transit Authority facility is located in Calhoun County near Grantsville, West Virginia. The site is approximately 4.55 acres. A facility sign including an electronic message board and landscaping will be added to the site. The operations facility will have approximately 10,000 square feet of which 4,500 square feet will house four - five offices, a conference room, and money counting room, office storage space, copier and supply room, and a driver training room which will accommodate approximately 25 individuals. The remaining 5,500 square feet is dedicated to the maintenance functions. The garage will require a ceiling of a minimum of 16 feet to accommodate bus hoisting. With the structural roof members, the overall roof height will be about 18 feet. This area will also include space for indoor bus storage for approximately seven (7) vehicles. The building should be designed so that the vehicles can pull through the facility. The building should be designed to employ green building practices and LEED (Leadership in Energy & Environmental Design) Certified.

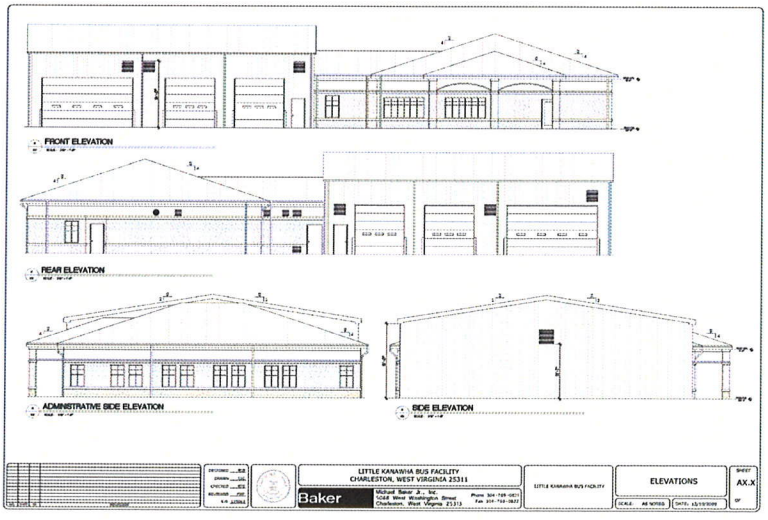
Client
State of West Virginia
Department of Transportation
Division of Public transit
Building 5, Room 906
1900 Kanawha Blvd., East
Charleston, WV 25305-0432

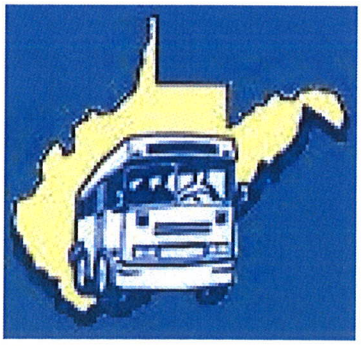
Ms .Susan O'Connell, Director
304-558-9018

Completion Date
Estimated: 2011

Baker's Role

- Architecture
- Civil Engineering
- Mechanical Engineering
- Landscape architecture
- Structural Engineering
- Bid Phase Services
- Construction Inspection
- Constructability Analysis
- Estimating





Bus Maintenance Facility

Baltimore/Washington International Airport (BWI), Baltimore, MD

To support the new consolidated rental car facility at Baltimore/Washington International (BWI) Airport a new fleet of buses, and a new facility to maintain them was required. The initial fleet size required was 25 buses, growing to an ultimate size of 40. Baker designed a 22,450 square foot building on a 12-acre site in close proximity to the rental car facility. The building provides for administrative space, four maintenance bays, shop space, break rooms, lockers, shower and toilet facilities, parts and equipment storage, maintenance equipment, building support areas, and vehicle wash and detail facilities. Features of the site include a controlled access entry, employee parking, and bus staging and cue areas employing a counter-clockwise site circulation pattern. Environmental requirements were met with the use of a storm filter system for water quality, and a storm sewer system with a detention pond for water quantity. Accommodations were made for a Compressed Natural Gas (CNG) facility on-site, which is planned for future construction.

The Bus Maintenance Facility was a successful project due in large part to an organized planning and design process, involving close client and end user coordination. The facility's design plan responded to the programming, planning and conceptual efforts developed in conjunction with various user groups with respect to organization, planning and user amenities layout. Baker has been involved with this project from inception through construction, performing the following project tasks:

Site Planning. After the kick-off meeting, the initial task for the feasibility study, planning and conceptual design was to review any site constraints and limitations. Consideration included a review of the additional bus traffic regarding its impact on existing intersections. The design team studied environmental concerns specific to the selected site including previous reforestation areas, wetlands, endangered plants and species and archaeological sites including existing cemeteries. Important functional site relationships were reviewed relative to the adjacent properties, the airport runway, the Consolidated Rental Car Facility and Customer Service Building, and the new BWI Tenant Parking Facility.

The design team investigated any applicable zoning and code impacts, utility location and access, fuel storage, bus washing facilities, storage, parking and

Client
Maryland Aviation Administration
PO Box 8766
Third Floor, Terminal Building
BWI Airport, MD 21240-0766

Benjamin Chin, P.E.
Manager, Design
410-859-7093

Completion Date
2004

Baker's Role

- Site Planning
- Programming
- Program Comparison
- Fueling Options
- Design Charrette
- Preliminary Design Report
- Design Phase Services
- Bidding Assistance
- Construction Phase Services
- Operator Selection

loading dock requirements for spare parts and tires.

Baker initiated coordination with Anne Arundel County Planning Department. Issues arose from the proposed facility's proximity to the existing Church and western site development (by Rock Realty). This included County road requirements, adjacent Smith Farm Road easements, water system requirements, sanitary sewer system requirements, and others. Baker reviewed potential wastewater pretreatment requirements that the County may require for discharge into the sanitary sewers.

Programming. Baker pursued a proactive regimen and initiated formal questions (via email) to develop programmatic requirements. This effort included future staff projection and growth for the bus maintenance facility. This effort was supplemented by a 2-hour teleconference meeting with Maryland Aviation Administration (MAA) to discuss three initially developed schemes. The program requirements included:

- Data collection from individual user groups including MAA, MAA's Program Manager, and the Rental Car Agencies (RACs)
- Current and future staff projections;
- Growth for the Bus Maintenance Facility;
- Typical work standards (spactial relationships for maintenance and administrative staff) development.
- Preliminary program diagrams development.
- Teleconference interviews with MAA user groups to review preliminary program and determine adjacency requirements.
- Blocking and stacking.

From the teleconference conversation, the diagrammatic development process was undertaken. This included:

- Revised blocking and stacking diagrams.
- Final program document development.
- Initial space and interior room layout.
- Narrowed the conceptual design to two schemes

Program Comparison. Baker provided a program comparison between the proposed concepts for BWI and similar built facilities. Four closely sized maintenance facilities were selected and reviewed to verify the proposed building square footage, namely:

- Consolidated Rental Car Bus Maintenance Facility at George Bush Intercontinental Airport, Houston, Texas
- El Metro Facility in Laredo, Texas
- Beaver County Transit Authority's (BCTA) Expressway Travel Center and Maintenance Facility in Center, Pennsylvania
- Cuyahoga County Board of Mental Retardation (CCBMR) East Transportation Facility in Cleveland, Ohio.

Fueling Options. Baker studied the pros and cons of building a diesel versus a CNG-fueled maintenance facility. The study demonstrated that additional safety measures were required for a CNG facility (i.e. explosion-proof fixtures, radiant floor heating, etc.), and a gas line had to be installed to service the site. Despite the higher costs, MAA chose to go with a CNG facility, and use the cleaner running CNG buses. Baker contacted four third party vendors for designing, building, operating, and maintaining the proposed CNG fueling facility for a minimum duration of 8 to 10 years. MAA ultimately decided to use the existing CNG fueling facility at BWI Airport for the immediate future.

Design Charette. Baker hosted a day-long design charrette with key personnel from MAA and their Program Manager. Two conceptual plans were prepared for discussion at the charrette. The conceptual plans included existing and proposed contours; property lines, preliminary storm water management requirements and plans, utility service plan, parking, preliminary horizontal mapping, and the building floor plan layout. This offered the opportunity to discuss in great detail the programming needs and requirements for the Bus Maintenance Facility.

Preliminary Design Report. The final conceptual design was documented in a final feasibility and planning/programming report. All preliminary design documentation was included and summarized to including a discussion of all areas of investigation; description of alternatives; recommendations; preliminary construction phasing; and preliminary costs including design, construction, and construction management/inspection costs.

A project schedule was also prepared as part of the Preliminary Design Report. The schedule included milestones for the design and construction phases of the project. Milestones for the design phase included a Conceptual, 40%, 60%, 90% and Final Bid Document submittals of the plans and specifications; submittal of Engineer's Report and Safety/Phasing Plans; and submittal of documents to the Maryland Department of the Environment for Erosion and Sediment Control and Stormwater Management approval. Milestones for the construction phase were based on the Preliminary Construction Phasing Plan.

A "pre-final" conceptual design was presented at the "Draft" Preliminary Design Report Meeting. The purpose of this meeting was to present the "draft" report to the attendees. Specific emphasis of this meeting was to inform the Rental Car Agency Representatives of the concepts developed and discussions held to date on the Bus Maintenance Facility Project. The comments from this meeting were included in the final report, which formalized the design criteria for the Final Design Phase of the project.

Design Phase Services. Baker prepared a series of submissions consisting of technical specifications from the 40%, 60%, 90%, and Final levels of design. Comments were received on each submission, and incorporated into the subsequent submission. Baker formulated an Internal Technical Review Team to conduct peer reviews of all project elements, including that of subconsultants.

Bidding Assistance. Plans and Specifications were reproduced and distributed as required to obtain competitive levels for the construction of each package. Contract bid documents were distributed to MAA Divisions; all prospective bidders; plan rooms and minority business clearing houses; and agencies as requested.

A Prebid Conference was conducted at MAA's offices to familiarize bidders with the scope of the project, the project site, and the conditions and stipulations upon which the bid was to be offered. Baker prepared the agenda for this meeting and led the appropriate parts. A tour of the project site was given following the meeting.

A meeting record was prepared, as with a list of bidder's questions and clarifications to those questions. These were issued as part of Addendum No.1 to further clarify bid requirements and technical issues.

When bids were received, Baker tabulated, checked for accuracy, compared to the Engineer's Estimate, and analyzed for responsiveness. Baker prepared a Recommendation of Award for the construction contract, with all supporting analyses and justification needed for presentation by MAA to the Board of Public Works.

Construction Phase Services. Baker attended the Pre-Construction Conference to answer questions and discuss issues regarding the plans and specifications. Other construction phase tasks included reviewing shop drawings and submittals, providing responses to Requests for Information (RFI), performing periodic site inspections, consulting as required, and preparing As-Built drawings.

Operator Selection. Baker provided assistance to MAA and the RAC's for the proposal for the selection of the operator of the Bus Maintenance Facility, including preparing exhibits, and assisting with the compilation of operating and maintenance items from the equipment specifications.

GIS Data Development Services - Bus Route Geocoding

Newark, New Jersey

Client
New Jersey Transit Corporation
One Penn Plaza East, 4th Floor
Newark, NJ 07105-2246

Louis Millan
Director of GIS
973-491-7760

Completion Date
Estimated: 2007
Actual: 2007

New Jersey Transit requested the assistance for various GIS related tasks via an open-ended general GIS planning contract. Baker was selected to provide the two main tasks to New Jersey Transit. The first, geocoding of bus route patterns, required detailed knowledge of the NJ Transit GIS data model, Intergraph Modular GIS Environment software, and linear referencing concepts. Baker staff worked on-site at NJ Transit to geocode and apply linear referencing (route and milepost identification) to all variations of the 20+ bus routes originating out of NJ Transit's Fairview, New Jersey garage. Staff used available reference material such as timetables and driver directions to determine the actual routing of each variation (pattern) of each bus route, and then identify the street segments from the NAVTEQ base map used by NJ Transit that made up the route pattern. Challenges in the assignment included properly linear referencing bus routes that reverse back onto themselves and perform loops, two features not usually found when applying linear referencing to physical road layers. This project was unique because it involved combining spatial data sets from the 4 different states (New Jersey, New York, Delaware, and Pennsylvania) that make up the NJ Transit service area. As part of this task, Baker staff also assisted NJ Transit in matching real-time data from an autonomous GPS-based passenger counting system with the GIS route features. The passenger counting system recorded GPS coordinates whenever passengers entered or excited the bus as well as at regular intervals along the bus route. The challenge of this task was to match up the actual bus locations with expected bus location for that specific time of day, day of week, and month of year.

The second task that Baker provided assistance to NJ Transit was geocoding of bus stop locations to the NAVTEQ street base network. NJ Transit has more than 25,000 bus stop locations that were not linked directly to the bus route patterns in the GIS. Baker examined the bus stop data and through a series of iterative steps, used automated and manual geocoding techniques to determine the geographical location of the closest intersecting street names for each stop. Challenges in this task were matching street names in the bus stop database to corresponding street names in the NAVTEQ base map. Many locations names had to be modified after careful research to determine the correct locations.

Project Features:

- Geocoding bus route patterns
- Linear referencing bus route patterns
- Analysis of GPS collected passenger data with expected bus routes
- Bus stop geocoding to base road layer

Brooklyn Bus Maintenance Facility

Southeast Brooklyn, New York

Baker performed construction inspection services for electrical, mechanical, and structural steel fabrication and erection as subconsultant to Deleuw Cather.

Special features of this new 8.6-acre NYC Arts Commission approved bus complex were: an outdoor parking lot for 145 buses and 185 employee/visitor automobiles, a 50,000 square foot first floor bus maintenance and parts storage area with 16 repair bays, a 10,000 square foot 2nd story for administration offices, a super-fastfill Compressed Natural Gas (CNG) fueling station capable of fueling a 60-120 CNG bus fleet on a daily basis, modern waste management, material storage, service cycle, bus washing and painting, and recycling services, bi-folding maintenance bay doors instead of conventional roll-up doors for improved facility maintenance, chassis dynamometer and paint spray booth bays, extensive perimeter landscaping/buffering of facility, and reconstruction of surrounding City streets.

Client

City of New York Department of Transportation
59 Maiden Lane
36th Floor
New York, NY 10038

Danial Horn, P.E.
212-788-1788

Completion Date

Estimated: 1997
Actual: 1998

Project Costs

$27,000,000 (Construction)

Baker's Role

- Construction Inspection
- Structural Steel Fabrication
- Electrical and Mechanical

New Britain-Hartford Bus Rapid Transit (BRT)

New Britain and Hartford, Connecticut

The New Britain-Hartford Busway was the recommended alternative from a Major Investment Study of the Hartford West Corridor. The busway will be a Bus Rapid Transit (BRT) facility connecting New Britain, Newington, West Hartford, and Hartford, Connecticut. The 9.4 mile-long busway will run along inactive and active railroad corridors. It will consist of a two-lane bus-only roadway and 10 stations that will include sheltered platforms and other amenities.

The New Britain-Hartford Busway was selected as one of 10 Federal Transit Administrations BRT demonstration projects. The BRT initiative aims to implement projects which improve the speed, reliability and convenience of bus service, along with improving mobility and promoting a healthy environment.

The project is currently in the final design stage, which is expected to last until May 2011. It is anticipated that the project will proceed as a design/bid/build project, with construction scheduled for completion in December 2013. Current planning is to issue multiple design/bid/build contracts for the busway.

Project challenges include: shared right-of-way with Amtrak, utility relocations, ITS applications, station area development, and working with four different municipalities and ConnDOT.

Client
Connecticut Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Mark D. Rolfe, P.E.
Construction Division Chief
860-594-2660

Completion Date
Estimated: 2010

Project Costs
$550,000,000 (Construction)

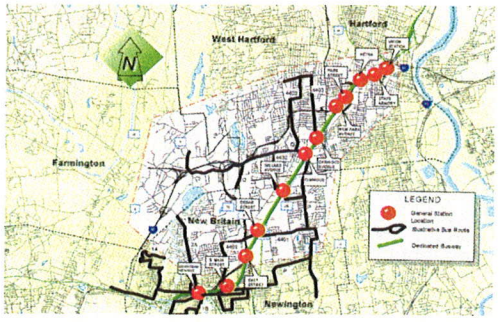
Baker's Role

- Program Management
- Preliminary Design
- Reviews of Final Design
- Construction Management

Baker is providing program management, surveying, preliminary design, environmental support, right-of-way services, review of final design, and construction management services to ConnDOT.

Project Features

- Busway Design
- Station Design
- Intense Community Involvement
- Transit Oriented Development
- Intelligent Transportation Systems
- Railroad Relocation
- New/Rehabilitated Bridges
- Design/Bid/Build
- Multi-use Trail



New DASH Bus Maintenance Facility

Alexandria, Virginia

Baker is providing planning, architectural, interior design, and structural engineering services for a new, $35 million, design-build bus maintenance facility for Alexandria's multimodal transit system, Driving Alexandria's Safely Home (DASH).

The new 156,500-square-foot building provides administrative, operations, maintenance, and bus storage space for up to 96 buses, with expansion capability to 130 buses. The maintenance garage includes 10 bus maintenance bays, with two bus fueling and washing lanes. All bus storage is covered and heated to minimize the impact of cold weather on operations. Driver spaces feature locker rooms, quiet room, and an exercise facility. The facility also includes a 99,800-square-foot rooftop parking deck.

Baker designed the building to achieve the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) Silver rating standards. The design incorporates many environmentally friendly features, such as natural lighting in the shops and offices, bus wash-water reclamation, and in-ground bus lifts, which capture oil and other chemicals and prevent them from leaking onto the ground. The facility design also meets Americans with Disabilities Act requirements.

The new bus maintenance facility is the first design-build transit project of its kind to be approved by the Commonwealth of Virginia Transportation Board and the Virginia Department of Transportation. Funded by a combination of state, local, and federal appropriations, the project had to meet the requirements of all the funding agencies and is now the test case for such projects in Virginia.

Client
City of Alexandria, Virginia
Dept. of Transportation & Environmental Services
301 King Street
Alexandria, VA 22314

Jeremy McPike
Division Chief, Capital Projects
703-838-4770

Michael Barker
703-370-4590

Adrian King
City of Alexandria, Project Manager
703-838-4376 x227

Completion Date
Estimated: 2010

Project Costs
$35,000,000 (Construction)

Baker's Role

- Planning
- Architecture
- Interior Design
- Structural Engineering

Route 1 Corridor, Bus Rapid Transit Feasibility Study

Mercer County, New Jersey

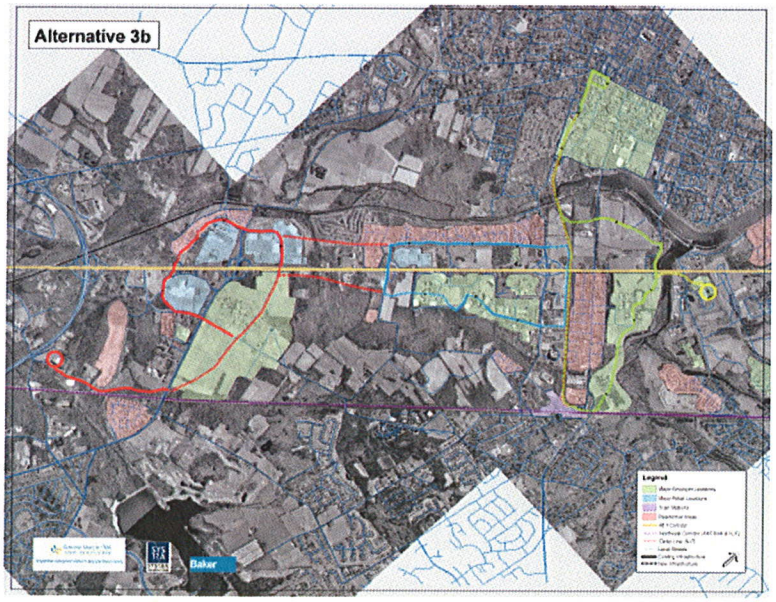
The Route 1 Corridor, one of the country's first "high tech" corridors, is among the most traveled roadways in the State of New Jersey.

Responding to a grass roots concern for managing traffic congestion and maintaining the economic vitality of the region, the Baker/SYSTRA team worked with the Greater Mercer Transportation Management Association to develop a vision for Bus Rapid Transit (BRT) in the Mercer County area.

This is one of the first applications of BRT to a strictly suburban corridor.

Project Features

- Visioning
- Partnering with Local Business Owners, Municipalities, Princeton University, Counties, New Jersey Transit and Delaware Valley Regional Planning Commission
- Alternative Selection
- Land Planning
- Transit-Oriented Design System Planning
- Environmental Review
- Ridership
- Cost-Estimating
- Queue Jumping and Other Priority Treatments for BRT



Client

Greater Mercer Transportation Management Association (GMTMA)
15 Roszel Road
Princeton, NJ 08540

Sandra Brillhart
Executive Director
609-452-1491

Completion Date

Estimated: 2005
Actual: 2002

Baker's Role

- Needs Assessments
- Stakeholder Consensus
- Alignment Studies
- Rider Information System Requirements
- Financial Packaging
- Traffic Evaluation
- Coordination with Central Jersey Transit Forum
- Coordination with Princeton University
- Coordination with Developers
- Development of Educational Tools for Municipal Government
- Land Use Planning
- Transit Integration

West Ox Bus Maintenance Facility Design

Fairfax, Virginia

The West Ox Bus Operations Facility can accommodate operations and maintenance for a combined fleet of up to 300 Washington Metropolitan Area Transit Authority (WMATA) and Fairfax Connector buses. The project was phased such that the first phase provided fully functional facilities for 150 buses while serving the unique needs of each operator. It provides shared spaces which were operationally feasible to reduce redundant program area. After in-depth user and owner interviews and meetings a program was developed, which incorporated the needs of both users. The preliminary functional site and building designs were developed during a weeklong Design Charrette, which included intensive meetings involving users, County agencies and the design team. This process included presentations, analysis and redesign as necessary to satisfy the needs of all stakeholders. The conceptual floor plans for all three buildings were developed, modified and further discussed until consensus was reached on the final layouts. The site and building were developed and program adjusted to accommodate opportunities realized during the interactive design process. The schematic design provided for both, Phase I, 150 bus and Phase II, 300 bus facilities.

Client
County of Fairfax
DIT Administration
12000 Government Center Parkway
Fifth Floor, Suite 527
Fairfax, VA 22035

Hossein Malayeri, P.E.
703-324-2992

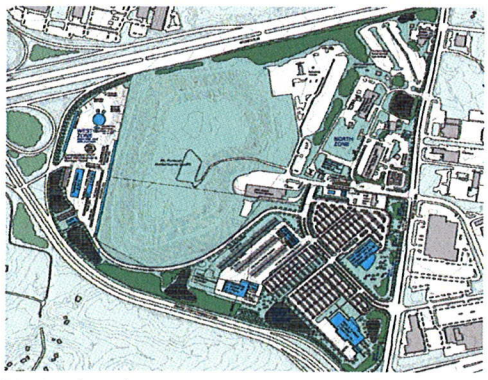
Completion Date
2007

Project Costs
$31,000,000 (Construction)
$1,351,707 (Fee)

Baker's Role

- Planning
- Architecture
- Mechanical Engineering
- Electrical Engineering
- Structural Engineering
- Transportation Engineering

Ultimately it was decided that three separate buildings allowed the most efficient use of the site and provided the highest level of safety. The maintenance facilities occupy the main facility along the southern edge of the site, which also acts as a buffer to a nearby residential neighborhood across the Parkway. It will provide space for 13 maintenance bays in Phase I and an additional 13 in phase two. A paint and body shop were moved into the Phase I development. The administration and operations components are separated from the maintenance facilities and located in a separate building adjacent to the employee parking area, which will help to reduce the need for bus drivers to cross bus circulation as often as a single building layout would. The fuel and wash facilities are located near the north face of the maintenance building. This location provides some space saving opportunities due to proximity and eliminated most non-service related bus circulation from the maintenance bay entrance area. The current program requires approximately 96,000 SF of building area in Phase I and another 38,000 SF in Phase II.



U.S. Army Reserve Center OMS/AMSA/STRG

North Canton, Ohio

The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88Reserve Support Command in North Canton, Ohio. The complex was to be of design-award-winning caliber as well as functional, durable, and easy to maintain while being sensitive to first costs, operating costs, and aesthetics. The 88th RSC includes the following units:

- 416th FETDA
- 192nd Company Petro Supply
- 762nd Transportation Company
- 758th Maintenance
- 256th CSH Hub Detachment 2
- 79th QM Company Detachment 2
- 447th MP Company
- AMSA 3-Canal Fulton

Approximately 400 reservists will work and train in the new facility. The Army Reserves units are currently housed in three government-owned facilities, two leased facilities, and one facility on leased land. The new complex will reduce operational costs to the government while significantly improving unit readiness and mobilization, and will increase the proficiency of service members.

This 61,344-gross-square-foot Training Center and OMS/AMSA comprise a one-story L-shaped building with a two-story element at the connection of two wings. Clerestory translucent panels were used in the maintenance bays and unit storage areas to allow the opportunity for daylighting and design expression.

The Training Center portion of the building houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, physical readiness, engagement skills trainer, COMSEC training room, arms vault and armory's room, assembly hall, kitchen, toilets, lockers, showers, and building support functions.

The OMS/AMSA portion of the building houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane.

The project also included paving design for on-site parking and storage for 238 military vehicles, including Hum-V's and trailers, along with 150 spaces for

Client
U.S. Army Corps of Engineers,
Louisville District
Room 821
600 Dr. Martin Luther King, Jr. Place
Louisville, KY 40201-0059

Joseph Gates
Project Manager
502-315-6849

Mary Ann Just
Project Engineer
502-315-6365

Completion Date
2006

Project Costs
$11,051,699 (Construction)

Baker's Role
- Design/Build Delivery
- Architecture
- Architectural Renderings
- Mechanical Engineering
- Fire Protection and Plumbing Engineering
- Electrical Engineering
- Structural Engineering
- Site/Civil Engineering

privately-owned vehicles. Additional on-site storage is provided by an unheated storage building, a long narrow pre-engineered metal building with two small enclosed spaces for the storage of fittings. The remainder of the building is open on one side and used for the storage of fuel bladders.

Design Charrette

An on-site design charrette kicked off the project and included all project stakeholders: the U.S. Army Reserves, the U.S. Army Corps of Engineers, and the design/build team members. The project's conceptual design was jointly developed, carrying forward and further developing the design intent established in an earlier phase.

The new energy-efficient facility was designed to achieve a Silver SPiRiT Rating for sustainability. Design considerations include water-efficient landscaping, use of recycled and sound-absorbing building materials, collection and storage area to accommodate a recycling program, and an overall design that will accommodate other potential building uses into the future.

The Design/Build Team

Baker teamed with New Era Builders, Inc. and Mascaro Construction Company for this design/build project, providing the architectural and engineering design services from 35% documents through construction.

Project Features

- Project improves mission readiness for the 88th RRC unit of the U.S. Army Reserve.
- Project provides modern and convenient training and maintenance facilities for the 88th RRC unit of the U.S. Army Reserve.
- Designed for the Silver SPiRiT sustainable rating.

Comprehensive Design Services - Contract VI, MAA-AE-03-005

Baltimore/Washington International Thurgood, Marshall (BWI) & Martin State (MTN) Airports, Baltimore, Maryland

Baker provided general architectural and engineering services to the Maryland Aviation Administration (MAA), Division of Facilities Design, working under contract for the sixth Comprehensive Design Services contract on the following task orders:

Task 2350.1: Hertz MIS Room. Task included review of a building permit for modifications to the Hertz MIS room.

Task 2351: New Community Hangar at Martin State Airport. Baker provided design and construction administration services for the development of a 20,000 SF corporate hangar to be used by Black and Decker. The hangar included space for corporate aircraft and office space for the tenant. Work also included the apron, apron taxilane, connecting taxiway to Taxiway F, and the parking lot required for the facility.

Task 2352: Airfield Pavement Rehabilitation. Project developed construction documents for the rehabilitation of various areas on the BWI Airfield including Taxiways B, P, A, D, and Runway 4-22 as well as taxiway centerline lighting for Taxiways B, P, A, U, and C. Task required extensive coordination for airfield phasing with the FAA ADO, FAA ATCT, and MAA Operations.

Task 2353: Fire Training Facility Improvements. Task included a planning study and development of construction documents for upgrading the existing fire training facility at BWI Airport. Improvements included resizing of the pit, providing water to the site, providing electrical power and site lighting, providing new fueling storage and control system, and addressing environmental concerns.

Task 2354: Pavement Management Design Assistance. Baker provided design and construction administration services for landside and airside pavement repairs at BWI Airport.

Task 2355.1: Security CCTV Upgrades - Short Term. Task provided Phase I, II, and III services for the upgrades to the CCTV Security System at BWI Airport. Phase I documented existing facilities and determined what needs to be upgraded and added to the system in order to accomplish the immediate goals of MAA Security. Phase II and III provided detailed design and construction administration services for the addition of 25 new cameras, 4 new digital video recorders, 3 workstations, and associated work.

Client
Maryland Aviation Administration
P.O. Box 8766
Third Floor, Terminal Building
BWI Airport, MD 21240-0766

Benjamin Chin, P.E.
Director of Facilities Design
410-859-7093

Completion Date
Estimated: 2009

Project Costs
$4,441,064 (Fee)

Baker's Role

- Planning
- Feasibility Study
- Conceptual Design
- Preliminary Design Report
- Geotechnical Design
- Survey and Mapping
- Drainage and Stormwater Management Design
- Erosion and Sediment Control Design
- Landside Design
- Airside Design
- Pavement Design
- Architectural Design
- Structural Design
- MEP Design
- Permitting
- Security Evaluation/Design
- Construction Management

Task 2355.2: Security CCTV Upgrades - Long Term. This study developed a needs analysis to determine the long term needs for Airport Security Improvements and recommended a proposed program with costs and required phasing.

Task 2356: Fire Station Vehicle Exhaust. Task includes adding a vehicle exhaust system to the existing ARFF station. It includes preparation of a performance specification for design/build as well as a three year maintenance contract.

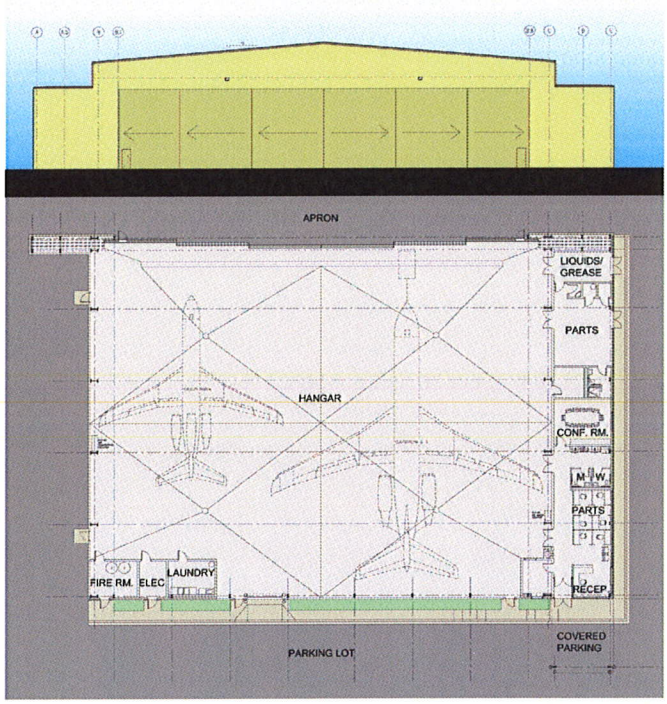
Task 2358: Airfield Underground Fire Hydrants. Task included development of construction documents to install five (5) underground fire hydrants adjacent to runway ends at BWI Airport. Locations of hydrants were determined through coordination with the Fire Marshall's office.

Task 2359: Gateway Treatment. Task included development of concepts and final design for implementation of a "Gateway" at BWI Airport.

Task 2359.1: Short-term Thurgood Marshall Signs. Task to include development of concepts and final design for short-term signage to address the name change from BWI Airport to Baltimore/Washington International Thurgood Marshall Airport.

Task 2360: MTN ATCT. Task will provide design and construction phase services for the development of a new Air Traffic Control Tower at Martin State Airport. Conceptual renderings were developed so that a concept could be selected. Design to include all aspects of the ATCT, including architectural, MEP, FAA coordination, sitework and utilities to the tower, etc. Design has been halted at the 30% design level due to construction funding concerns.

Task 2360.1: Taxiway F Extension. Task provides design and construction administration services for the Taxiway F Extension at Martin State Airport. The Taxiway F Extension must be designed and constructed prior to the commissioning of the new MTN ATCT.



Task 2360.2: Taxiway F Extension. Provided a study evaluating options for Stormwater Management in association with the Taxiway F Extension project.

Task 2361.1: Revenue Parking Control Study. Task provided a study to analyze the existing BWI Revenue Parking Control System and provide recommendations on replacement or upgrades the system. Task will provide construction cost estimates and phasing. Baker is performing the design documents as part of the 2006 contract.

Task 2362: Perimeter Security Fence & Gates Improvement, Phase I. Task investigates the existing security fence perimeter and recommends modifications to the existing airport security fence to improve safety and address wildlife issues. Necessary modifications will be ranked by priority.

Task 2363: Rental Car Customer Service Facility Improvements. Task provides design and construction phase services for various improvements to the Consolidated Rental Car Facility. Design issues include storm water drainage, signage/branding, and traffic flow at the Car Rental Customer Service Building and the Parking Garage.

Task 2364: Artificial Turf Installation. Provided Phase II & Phase III services for the installation of airfield turf in a test location in the vicinity of 10-28/15R-33L intersection.

Task 2365: Runway 15R Emergency Repairs and Pavement Evaluations. This was a two-phase project. Phase 1 was designed in three weeks. The work included a three-inch mill and overlay starting 23 feet either side of the runway centerline. Phase 1 was 2,850-feet long. The Phase 2 design was completed in June 2007. Phase 2 rehabilitates the remainder of Runway 15R-33L in a similar fashion as Phase 1. Phase 2 design required significant coordination with the Tower and Airport Operations due to phasing and airfield access.

Task 2366: Design Standards. Consolidated MAA Design Standards into one cohesive document. Baker acts as an extension of staff on this project for all current and forthcoming design standards at BWI.

Design/Build RFQ/RFP Development for Statewide Construction Program

PAARNG Stryker Brigade Combat Team, Statewide, PA

Under a National Guard Bureau IDIQ, Baker was selected by the United States Property and Fiscal Office for Pennsylvania (USPFO) and the Pennsylvania Army National Guard (PAARNG) to provide a series of defined and optional services for the development of Design/Build Requests for Proposals (RFPs) to support the PAARNG's 56th Brigade's conversion to a Stryker Brigade Combat Team (SBCT) for two sites, Erie and Philadelphia. Subsequently, Baker was selected for a "Stryker specific" indefinite delivery indefinite quantity (IDIQ) contract to support PAARNG's statewide Stryker transformation. In addition, Baker worked with the Pennsylvania Department of General Services (DGS) to create the program's Application for Qualification for potential design/build teams that wish to be considered for contracts under the program.

The Stryker, first put into service in 2001, is the new lightweight tank with rubber tires that is designed for urban warfare maneuverability and portability to any place on Earth within 96 hours or less.

Baker's current work under the $167,000,000 statewide construction program includes the development of program and project-level design/build RFP documents for sites throughout the Commonwealth of Pennsylvania. Key program components include two building types: Readiness Centers for the training of SBCT Soldiers and Field Maintenance Shops for the maintenance and storage of a variety of military vehicles, including the Stryker military vehicle. The Readiness Centers consist of administrative offices, training centers, and conference facilities, with support spaces such as kitchens and dining areas. The Field Maintenance Shops consist of vehicle maintenance bays, storage facilities, and support spaces. The sustainable design goal is for each finished facility to qualify for a SPiRiT Gold sustainable design rating for FY 2006 and FY 2007, and meet an equivalent LEED® Silver Rating for FY 2008.

Baker's task orders include Design/Build RFP document development for structures at the following sites: Erie - a new Readiness Center and a new Field Maintenance Shop; Philadelphia

Client
US Property and Fiscal Office for Pennsylvania
PA Dept. of Military/Veteran Affairs
Bldg. S 0-47, Fort Indiantown Gap
Annville, PA 17003-5003

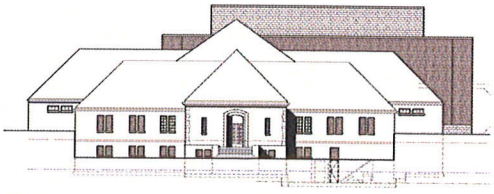
Michael G. Koontz
Contracting Officer
717-861-8643

Completion Date
Estimated: 2007

Project Costs
$97,300,000 (Construction)
$3,933,188 (Fee)

Baker's Role

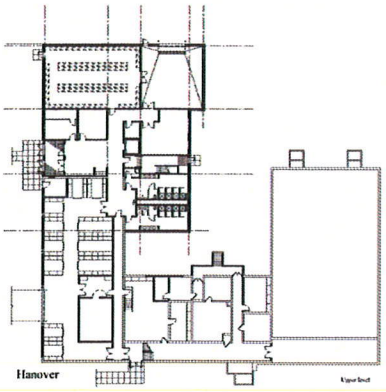
- Sustainable Design (SPiRiT/ LEED®)
- Architecture
- Civil Engineering
- Structural Engineering
- Mechanical, Plumbing, and Fire Protection Engineering
- Electrical Engineering
- Outline Drawings and Specifications
- Cost Estimating
- Scheduling
- RFQ Development
- Construction Management Support Services
- Land Development
- Permitting



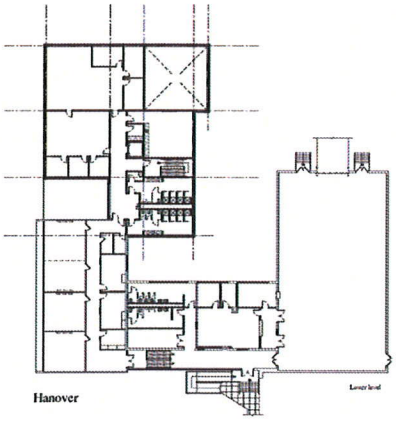
LEWISTOWN

- a new Readiness Center and Field Maintenance Shop; Elizabethtown - a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon - new Readiness Centers.

Additionally, Baker is developing Design/Build RFP documents for the additions and alternations to Readiness Centers in Lewistown, Punxsutawney, Butler, Hanover, and Lebanon.



Baker's services include the following: site investigation, an on-site programming and design charrette for each site, significant architectural and structural engineering services, sustainable design focusing on the military's SPiRiT rating and LEED®, the development of outline specifications for multidiscipline engineering services in support of the design/build teams that will be selected later by the Pennsylvania DGS, "nearly complete" civil engineering and foundation design services, surveying and geotechnical engineering, land development, permitting, scheduling, cost estimating, and other related construction management support services.

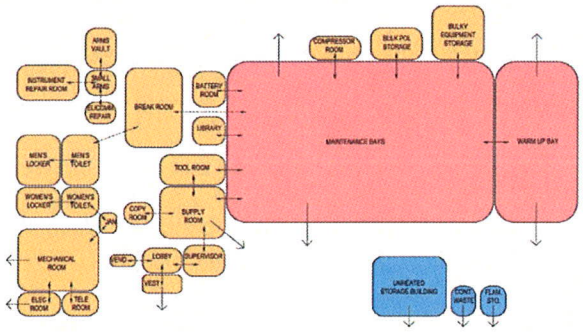


In 2005, Baker's architectural space layouts, engineering requirements, and certain equipment and material selection modules that were prepared for the statewide program were incorporated into the Army National Guard's Design Guides.

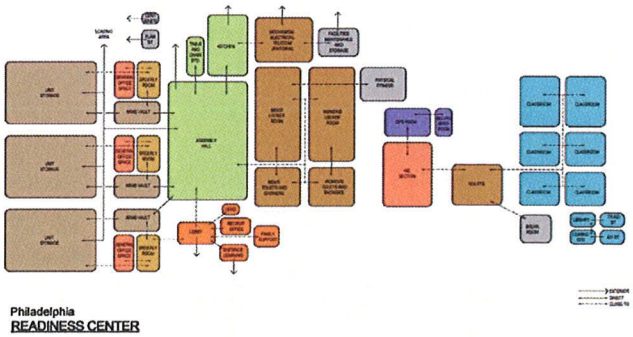
Baker will also support the USPFO, the PAARNG, and their state partner, the Pennsylvania DGS, during their selection of the design/build teams that will carry forward Baker's Project Definition Documents to completed buildings. As construction at the various Pennsylvania sites takes place, Baker also anticipates being contracted to provide construction management services to DGS.

Project Features

Special Requirements: Design new and renovation of existing facilities to current building codes standards with particular attention paid to Anti-terrorism & Force Protection, security and intrusion detection, sustainable design (SPiRiT and LEED®) all while working within limited budgets.



Philadelphia
ORGANIZATIONAL MAINTENANCE SHOP



Philadelphia
READINESS CENTER

WVARNG Charleston Armory HVAC & Architectural Renovations

Charleston, West Virginia

The existing building/facility started as the Coonskin Armory constructed in 1961. The Headquarters Building was constructed simultaneously with the Coonskin Armory and occupied the second floor. Also in 1961, as a separate structure, the Adjutant General's Wing (TAG Wing) was constructed nearby. Later, in 1984 the Coonskin Armory/Headquarters Building was physically connected to the TAG Wing with an area of administrative offices. This final major construction project connected all the buildings into one major facility of over 50,000 square feet, referred to as the Charleston Armory.

Client
West Virginia Army National Guard
Division of Engineering and Facilities
1703 Coonskin Drive
Charleston, WV 25311-1085

Major Michael J. Beckner
Armory Facilities Manager
304-561-6333

Completion Date
Estimated: Spring 2010

Project Costs
$2,990,000 (Estimated Construction)
$72,100 (Fee)

Baker's Role

- Planning
- Architecture
- Mechanical Engineering
- Civil Engineering
- CADD Drafting
- Bidding
- Construction Administration

The West Virginia Army National Guard (WVARNG) Construction and Facilities Management Office (C&FMO) requested a study be conducted of the consolidated facility known as the Charleston Armory, to consider such items as the condition of existing HVAC/MEP systems, and proposed improvements or upgrades to those systems; examine the existing building envelope and recommend possible improvements to the envelope; and finally, investigate the requirements of LEED-certification as it relates to existing buildings.

Baker offered six potential solutions for the facility's HVAC issues in the Planning Study Report. During the review of the six solutions, Baker to understand the Owner's needs and expectations and the level of disruption they would allow. These factors were considered in the final system selection. Preliminary discussions quickly reduced the six considered solutions to two systems: a four pipe hot water/chilled water system and a loop pipe water source heat pump system. Finally, with fewer pipes and a lower installation cost, the loop pipe water source heat pump system was selected as the best system for this situation.

The water source heat pump system is modular and duct work is much smaller than other systems. Heat can be moved around the building such that the equipment would not energize during certain outside air conditions. By treating the building as one, as opposed to three, there is a greater opportunity to share energy produced by the office equipment and occupants located within the building during off peak hours.

West Virginia State Capitol Campus Master Plan

Charleston, WV

The West Virginia Capitol Campus was created following the vision of Cass Gilbert, one of America's most significant architect of the first half or the 20th century. The Campus Plan and the Capitol Building represent his most mature work, as they were conceived and executed towards the end of his career and life.

Following his death in 1934, his son, Cass Gilbert Jr., continued his father's vision. Later additions and changes to the campus have shaped the site in different directions since the initial plan. A series of campus wide plans and recent additions and changes of the campus have attempted to address current needs on a piecemeal basis. Today, the State of West Virginia is facing a series of pressing needs and a new reality in a post 9-11 world, and is seeking to:

- Address the needs of the government and its important campus in a comprehensive and holistic manner
- Capture the essence of Cass Gilbert's original vision and design
- Create a framework for addressing future needs, and
- Recommend specific project that can begin to implement the recommendations of the plan.

Client
State of West Virginia
Department of Administration
General Services
Building 1, Room MB60
1900 Kanawha Blvd., East
Charleston, WV 25305-1023

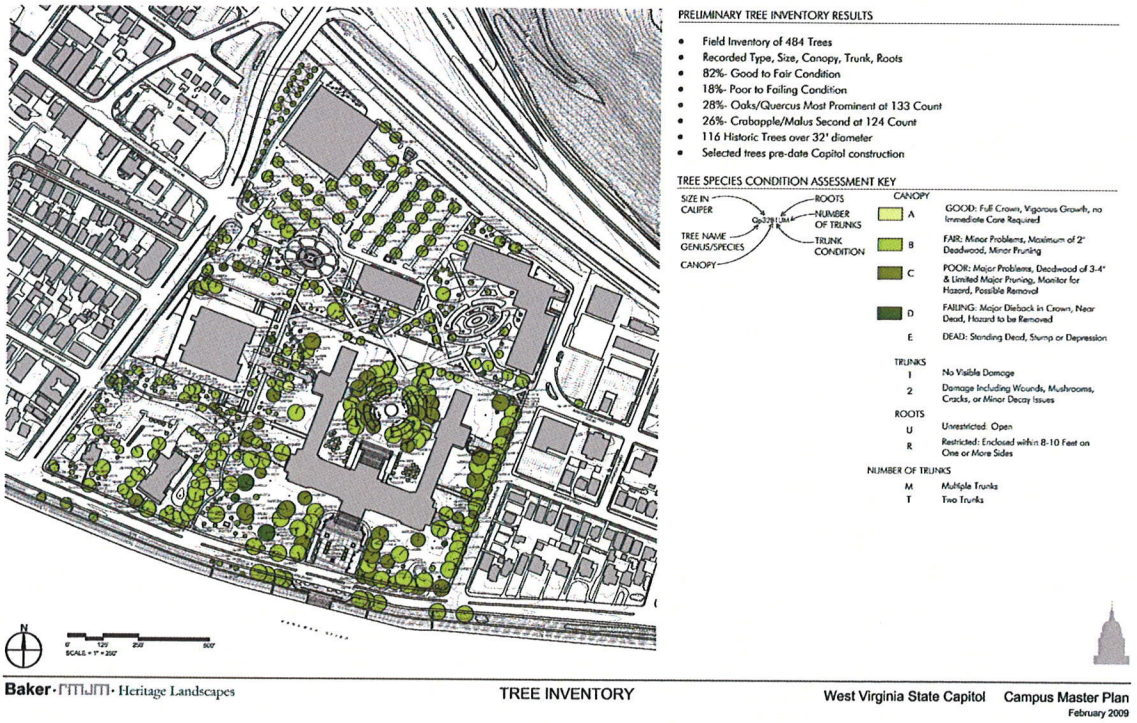
Mr. Robert Krause, AIA, PE
304-558-9018

Completion Date
Estimated: 2009

Project Costs
$887,880 (Fee)

Baker's Role

- Campus Master Planning Services
- Architectural/Engineering Services



The Master Plan is to be prepared in a collaborative manner, engaging a wide range of government leaders, stakeholders, users and other entities. The engagement of all of those groups of interested parties will include several levels of communication. Items to be addressed in the Master Plan include:

- General Campus Planning
- Programming Planning
- Historic Research
- Pedestrian Flow & Accessibility
- Parking
- Security
- Utilities and Infrastructure
- Hazardous Materials
- Future Growth

Town of Lost Creek
Historic Train Depot Rehabilitation, Phase I
Lost Creek, West Virginia

The Town of Lost Creek retained Baker for the planning and design of the rehabilitation of a historic train depot adjacent to the Harrison County Rail Trail. Phase I involved foundation work associated with the structure.

Client
Town of Lost Creek
Post Office Box 216
Lost Creek, WV 26385

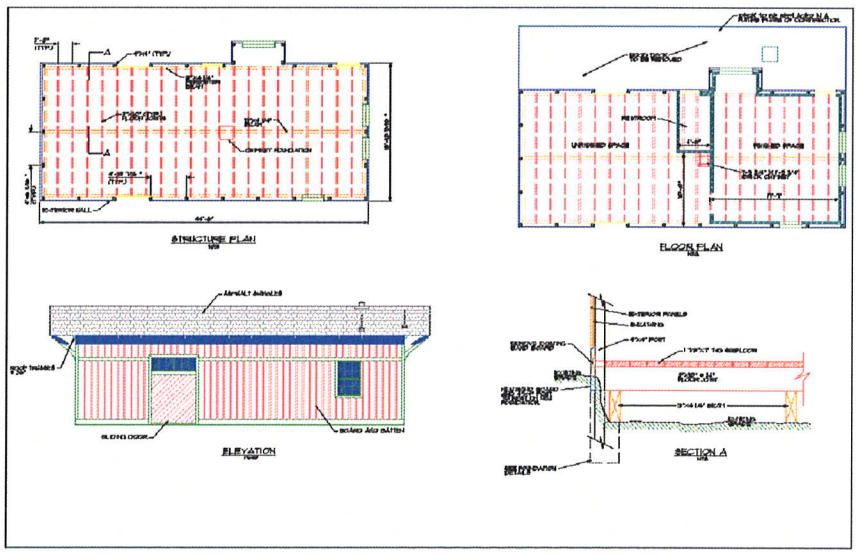
Honorable Randall Lake, Mayor
(304) 745-3466

Completion Date
2009

Baker's Role
- Civil Engineering
- Structural Engineering
- Stormwater Management
- Preparation of final Construction Plans and Specifications
- Cost Estimating
- Bidding
- Construction Administration
- Construction Inspection

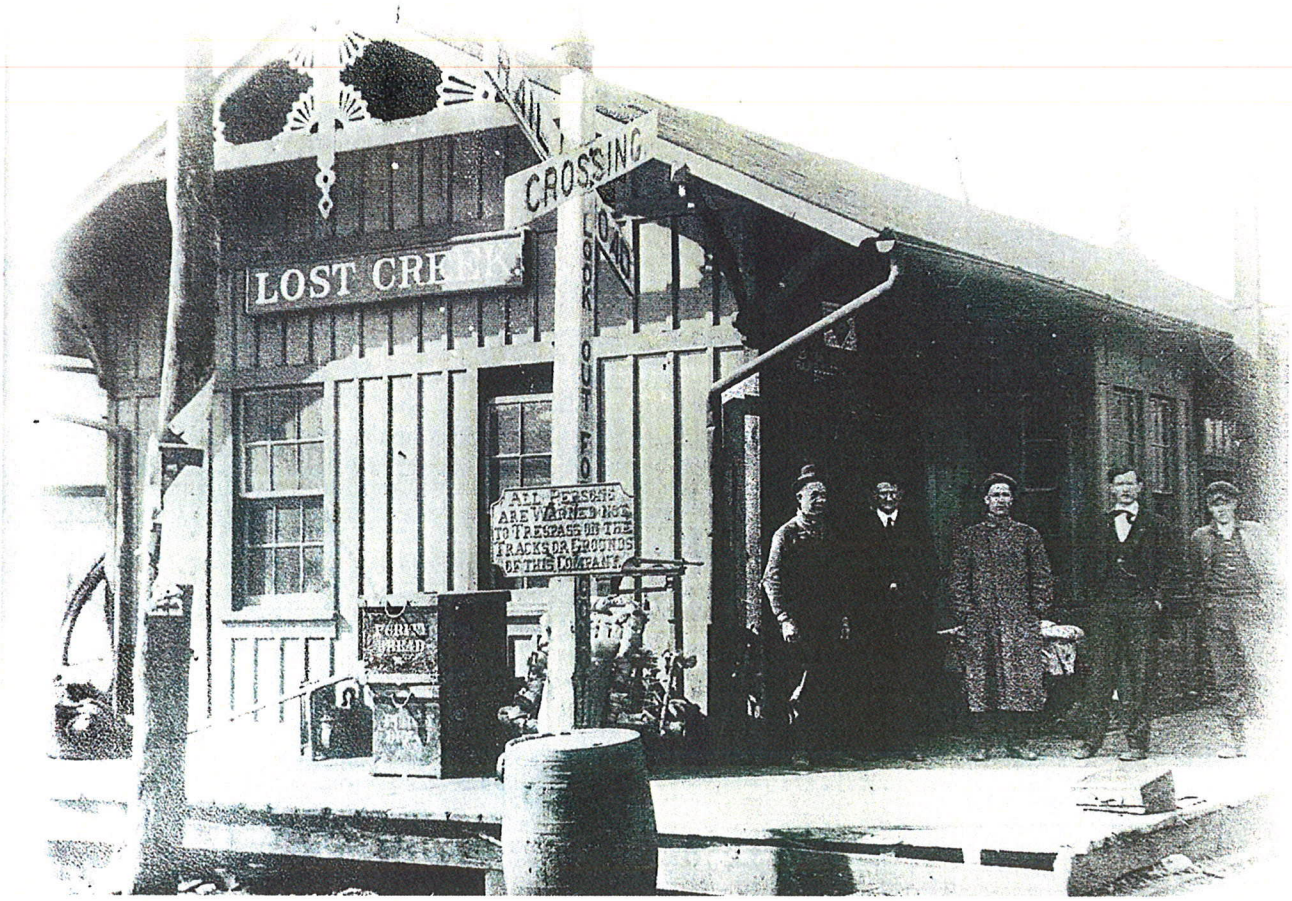
The existing building was constructed of non-dimensional timber framing and board with batten siding. The perimeter posts were originally buried below grade and the primary floor beams rested on the ground. Over the years, surface drainage had migrated under the building and deteriorated many of the posts and portions of the beams.

Baker prepared a plan to raise the structure, make repairs to the deteriorated timber, excavate and place the concrete foundation system, then lower the structure to rest on the new foundation. The foundation system included a new perimeter concrete wall foundation to support the posts and exterior floor beams. The interior beam was supported by concrete piers on spread footings. The perimeter concrete wall raised the finish floor elevation by 12" and provided a barrier against storm water intrusion.



Unit costs and additive/deductive alternates were used in the bidding of the project, allowing the Town flexibility in meeting the limitations of the available Transportation Enhancement Grant funding. Baker provided construction administration and inspection services as well as periodic site review during construction.

Baker is currently assisting the Owner in acquisition of funding thru various state and federal grants. Baker has provided the Owner cost breakdowns, as well as a Phase II scope of work for use in the various grant applications. Phase II may include new glazing and door replacement, roof replacement, board and batten siding replacement, architectural trim and molding reconstruction, exterior deck and landscaping improvements and various other architectural and infrastructure improvements to take the facility back to its original period setting.



Student Recreation Center

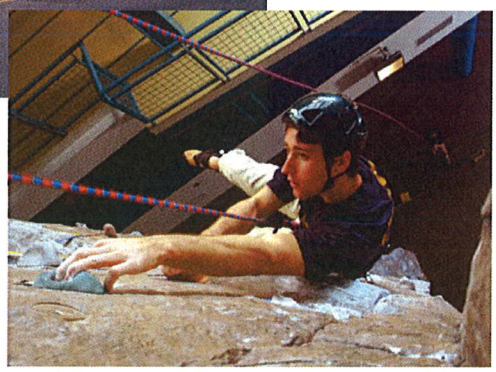
West Virginia University, Morgantown, WV

Through an open-end architectural and engineering services agreement, Baker provided program management services to West Virginia University to oversee the implementation of the construction program that supported their campus master plan.

Specifically, the University required a firm experienced in providing program management, construction management, cost estimating, scheduling, inspection services, programming, planning, design, construction documents, site evaluations, feasibility studies, and construction contract administration services.

Responsibilities included providing full-time on-site owner representation to monitor the work of the designers, contractors, and construction management teams for WVU's new 170,000-square-foot Student Recreation Center.

The facility provides a focal point for campus life and includes seven basketball courts, three racquetball courts, a squash court, 17,000 square foot weights/fitness area, three multi-purpose sports rooms, a three-story tall indoor rock climbing wall, large lap swimming pool, leisure pool, spa, elevated in-door jogging track, food court area, and administrative offices. The building was designed to serve the entire student population, along with University staff.



Client
West Virginia University
3040 University Avenue
Morgantown, WV 26506

Randy Hudack
Director of Physical Plant
304-293-2330

Completion Date
Estimated: 2003
Actual: 2001

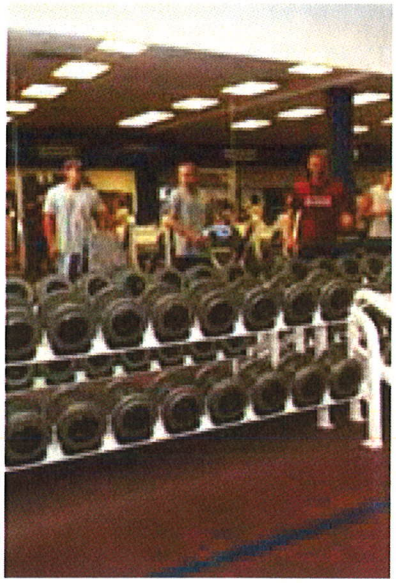
Project Costs
$35,000,000 (Construction)
$405,745 (Fee)

Baker's Role

Program Management/Construction Management-related Services:

- Cost Estimating
- Schedule Management
- Inspection QA/QC
- Acted as extension of staff for the university
- Budget Monitoring
- Project Coordination
- Procurement Support
- Pay Application Approvals
- Move-in Coordination
- Closeout Support
- Change Order Review and Recommendations












Research and Development Facility

Institute for Scientific Research, Fairmont, West Virginia

Using a design/build delivery method, a new Research and Development Facility of approximately 260,000 GSF for The Institute for Scientific Research (ISR) was constructed in Fairmont, West Virginia. The facility is the anchor project for West Virginia's High Tech Corridor on I-79, with a goal of attracting the best and brightest scientists and software engineers from around the world.

Client
Institute for Scientific Research, Inc.
1000 Technology Drive
Fairmont, WV 26554

Completion Date
2006

Baker's Role

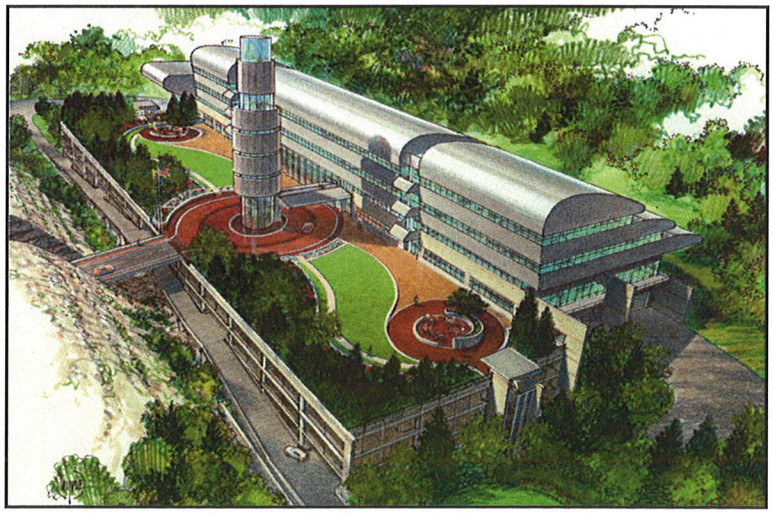
- Design/Build Delivery
- Geotechnical Engineering
- Architecture
- Structural Engineering
- Electrical Engineering
- Lighting Design
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Construction Administration

The east end of the building structure rests on bedrock, while the west end, including the slab-on-grade, was supported on caissons that extend through abandoned mines. Baker performed a subsurface investigation for the building site and of the underlying abandoned coal mine. Recommendations for a unique rock cut access road, building and retaining wall foundations, site grading, and a coal mine stabilization program were prepared. Construction consultation on the site grading and pre-split blasting program for the rock cuts was provided.

The electrical subsystem distribution and fixtures used are "plug and play" devices, providing deferred fit-out costs in unoccupied spaces while permitting maintenance staff to easily reconfigure work spaces.

The facility was outfitted with advanced technology features and amenities that included:

- World-class distance learning centers (210-person auditorium and classrooms outfitted with user-friendly audio-video systems, large screen displays, and voice/data outlets at each seat);
- World-class voice/data systems, including copper "home runs" to each workstation and fiber optics to each zone;
- Large two-story exhibit hall for the display of R&D projects;
- "Heavy" research floor, with high bay area, prototype workshop and 10-ton crane, in which flight simulator, clean room, and similar R&D project activities will be carried out;
- Fitness center and full-service kitchen/restaurant.



The building was designed to achieve LEED® certification for environmentally sensitive and energy-efficient design. In addition to the environmentally sensitive design features, a number of unique energy-efficient strategies were used to accomplish LEED® certification, including:

- A linear building floor plate with long elevations facing north and south to minimize peak A/C loads and admit abundant natural light. Sunscreens provide efficient shading of the south-facing glazed area of the two-story Exhibition Hall, and careful glazing selections throughout provide high insulation values and low solar heat gain coefficients;

- Indirect lighting system supplemented with task lighting to achieve superior light quality at minimal energy consumption;

- Integration of lighting control zones and HVAC zones to reduce "off-hour" energy use, providing the ability to set back comfort control and eliminate ventilation air to unoccupied zones (while providing full lighting, comfort control, and ventilation to zones actively occupied after normal office hours);

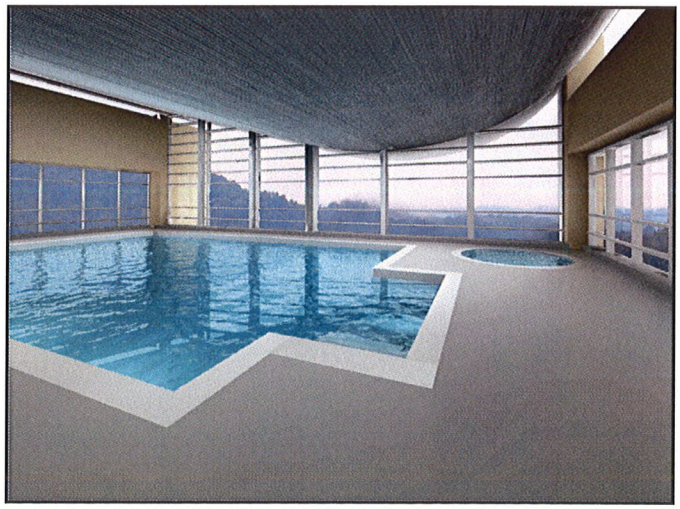
- Conference and assembly rooms were equipped with carbon monoxide sensors and override controls to assure indoor air quality while minimizing unnecessary energy usage. A heat recovery air handler with variable volume control was designed for 100% outside air delivery to the Educational Wing, and a custom pool air handler was used for temperature and humidity control of the indoor pool facility;

- 100% raised access floor on three floors of "soft" research areas and educational spaces, providing absolute flexibility in changing out furniture, voice/data cabling, and in-floor air-conditioning systems. Variable volume floor diffusers include manual override capability so individuals can adjust personal comfort within supply air control zones. The in-floor air conditioning system utilizes a true plenum pressurization design, eliminating significant under-floor ductwork (reducing construction costs and increasing flexibility) compared to other raised access floor systems;

- Intelligent kitchen exhaust hoods were selected to reduce makeup air requirements during partial or unoccupied periods;

- World-class voice/data systems, including both copper and fiber optic "home runs" to workstations and a voice-over-IP telephone system;

- A stand-by power generation system capable of maintaining power to all research areas in the event of a power disruption from the electrical grid, avoiding costly downtime - be it a few hours or days. The system will use a flywheel, rather than conventional UPS battery system, and the potential to use this large stand-by power generation system for peak electrical demand reduction was investigated.



Lodge Complex Development

Stonewall Jackson Lake State Park Resort, Roanoke, West Virginia

Baker provided scheduling and quality control under a construction management service agreement for the construction of a new Lodge Complex at Stonewall Jackson Lake State Park in Roanoke, West Virginia. The 158,000-square-foot Lodge and Conference Center consists of four three-story wings and 196 guest rooms. The facility is constructed on over 10 acres of scenic park property overlooking a 2,650-acre lake, nature trails, and adjoining premiere 18-hole golf course.

The Lodge and Conference Center is constructed of natural stone, cast-in-place concrete, structural precast concrete, concrete masonry, structural steel, metal decking, synthetic plaster, fiber-cement siding, standing seam roofing, insulated single-ply roofing, skylights, coiling shutter doors, wood doors, and aluminum store-front windows and curtain wall. Sitework included all new infrastructure, including electrical service from a newly constructed substation, and an HVAC system using electric heat pump and exchangers.

Baker also performed design reviews on the electrical and mechanical systems.

Client
McCabe Henley Durbin
KB&T Center, Suite 300
107 Capitol Street
Charleston, WV 25301

Completion Date
2003

Project Costs
$18,000,000 (Construction)
$17,929 (Fee)

Baker's Role

- Construction Management
- Scheduling
- Quality Control
- Electrical/Mechanical Systems Design Review

U.S. Army Reserve Center OMS/AMSA/STRG

North Canton, Ohio

The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88Reserve Support Command in North Canton, Ohio. The complex was to be of design-award-winning caliber as well as functional, durable, and easy to maintain while being sensitive to first costs, operating costs, and aesthetics. The 88th RSC includes the following units:

- 416th FETDA
- 192nd Company Petro Supply
- 762nd Transportation Company
- 758th Maintenance
- 256th CSH Hub Detachment 2
- 79th QM Company Detachment 2
- 447th MP Company
- AMSA 3-Canal Fulton

Approximately 400 reservists will work and train in the new facility. The Army Reserves units are currently housed in three government-owned facilities, two leased facilities, and one facility on leased land. The new complex will reduce operational costs to the government while significantly improving unit readiness and mobilization, and will increase the proficiency of service members.

This 61,344-gross-square-foot Training Center and OMS/AMSA comprise a one-story L-shaped building with a two-story element at the connection of two wings. Clerestory translucent panels were used in the maintenance bays and unit storage areas to allow the opportunity for daylighting and design expression.

The Training Center portion of the building houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, physical readiness, engagement skills trainer, COMSEC training room, arms vault and armory's room, assembly hall, kitchen, toilets, lockers, showers, and building support functions.

The OMS/AMSA portion of the building houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane.

The project also included paving design for on-site parking and storage for 238 military vehicles, including Hum-V's and trailers, along with 150 spaces for

Client
U.S. Army Corps of Engineers,
Louisville District
Room 821
600 Dr. Martin Luther King, Jr. Place
Louisville, KY 40201-0059

Joseph Gates
Project Manager
502-315-6849

Mary Ann Just
Project Engineer
502-315-6365

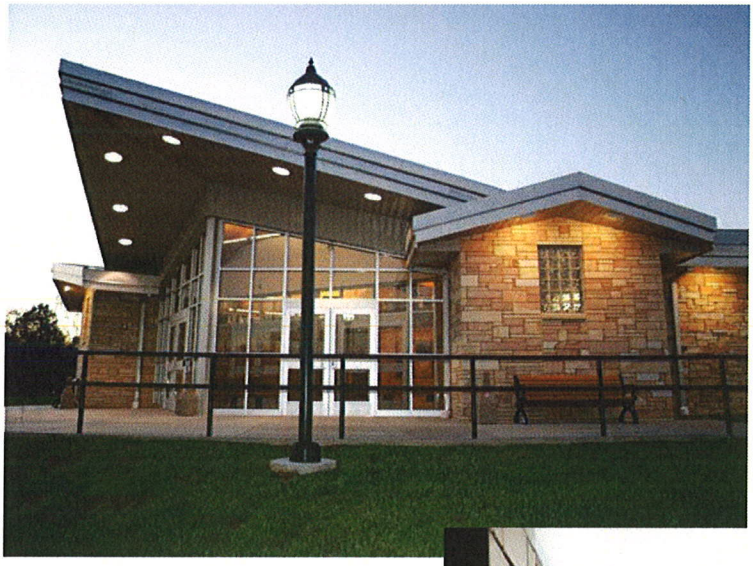
Completion Date
2006

Project Costs
$11,051,699 (Construction)

Baker's Role
- Design/Build Delivery
- Architecture
- Architectural Renderings
- Mechanical Engineering
- Fire Protection and Plumbing Engineering
- Electrical Engineering
- Structural Engineering
- Site/Civil Engineering

BURNSVILLE I-79 REST AREAS

Burnsville, West Virginia



The rest areas consist of three buildings, the rest area building, the vending building and the maintenance building. Each of the buildings was constructed with a local West Virginia stone façade.

The existing rest area buildings were demolished and replaced with these new state-of-the-art facilities.

The main lobby framing consists of a tube steel beam, glulam beams and timber decking.

CAS Structural Engineering, Inc.

CAS
Structural Engineering, Inc.

COVENANT HOUSE

Charleston, West Virginia

This 3-story structure utilized a structural steel frame and light-gauge steel roof trusses for the structural system. The 13,700 SF building was designed to appear as a residential structure, with vinyl siding, asphalt shingles, dormers and gingerbread accents.

The Covenant House occupies the first and second floors, and the third floor has lease office space.

Project Architect: NVisions Architects
Project Structural Engineer: CAS Structural Engineering, Inc.

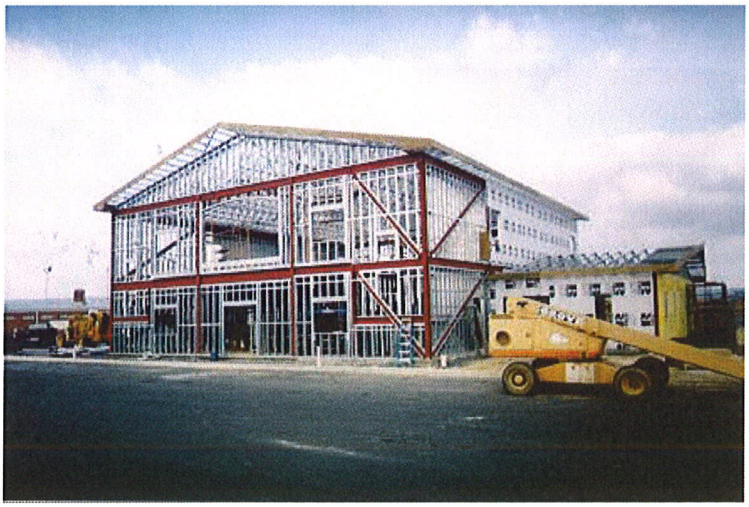
South Charleston, West Virginia
Alum Creek, West Virginia

EASTERN WEST VIRGINIA REGIONAL AIRPORT
TERMINAL BUILDING

Martinsburg, West Virginia

This facility replaced an existing, undersized terminal building at the airport. The building houses normal airport terminal building functions such as rental car space, restaurant ticket counters, baggage areas and offices.

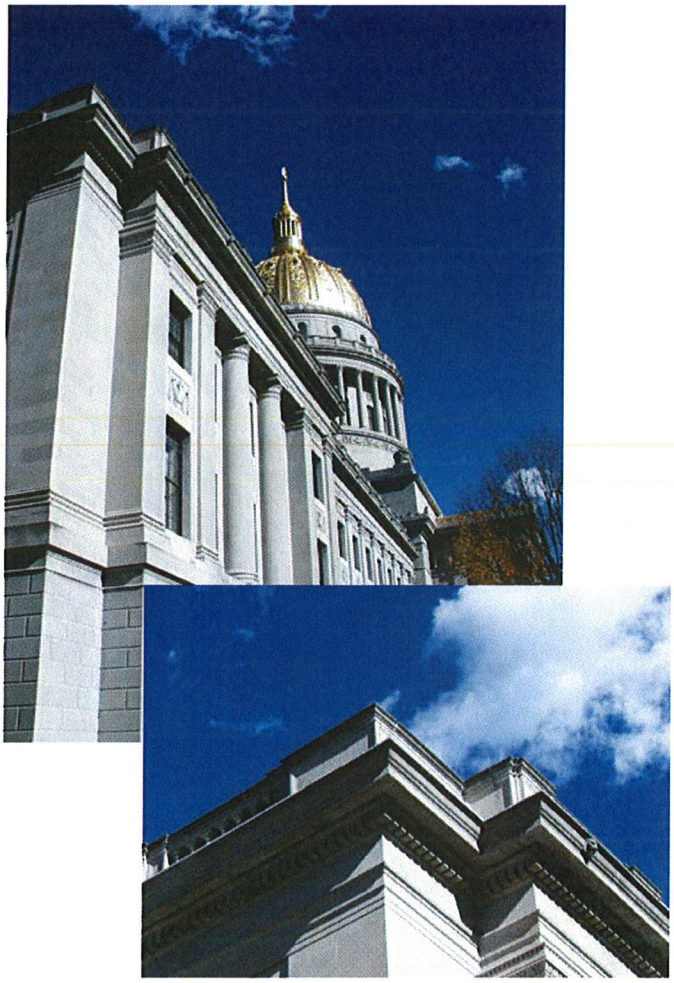
Both the air side and the public side have attractive brick and limestone exteriors, with a standing seam metal roof system.



The building structure consists of structural steel frame with metal stud infill.

CAS Structural Engineering, Inc.

Project Experience



CAPITOL PARAPET WALL REPAIRS
Charleston, West Virginia

This project included an exploratory investigation and preparation of construction documents for repairs to the limestone and brick parapet wall and balustrade at the top of the Capitol Building.

CAPITOL DOME RESTORATION
Charleston, West Virginia

This project included an exploratory investigation and preparation of construction documents for repairs to the structural steel in Capitol Dome.

CAS Structural Engineering, Inc.

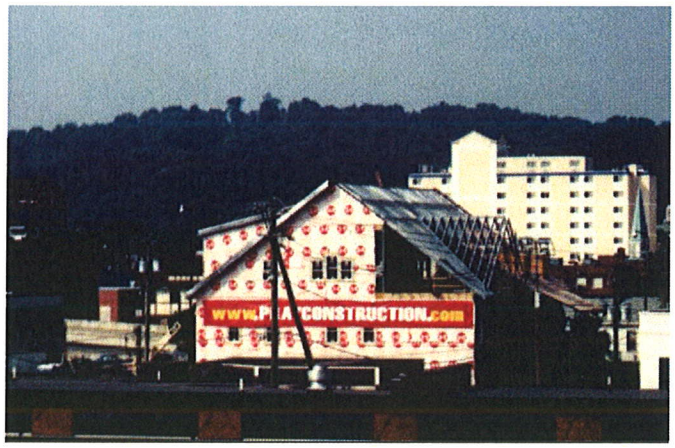
Project Experience

BUILDING 3 CANOPY REPAIRS
Charleston, West Virginia

Structural design of repairs to existing limestone canopy and supporting structural elements. Discovered that as-built conditions differed from original design documentation

GEORGE WASHINGTON HIGH SCHOOL
Charleston, West Virginia

Structural design of additions to include new 3-story classroom addition, new entrance/commons addition, and new gymnasium addition for Kanawha County Schools.



COVENANT HOUSE
Charleston, West Virginia

This 3-story structure utilized a structural steel frame and light-gauge steel roof trusses for the structural system. The 13,700 SF building was designed to appear as a residential structure, with vinyl siding, asphalt shingles, dormers and gingerbread accents.

CAS Structural Engineering, Inc.

Project Experience

JOHNSON AVENUE PROFESSIONAL BUILDING
Bridgeport, West Virginia

Structural design of new 9,400 SF steel framed office building.

YORK COUNTY GOVERNMENT CENTER
York, Pennsylvania

Structural analysis and design of 1898 former department store converted to county government offices. Interior renovations included adding floor framing at mezzanine level, analyzing and redesigning deficient floor framing, and adding new elevators. Exterior renovations included complete façade rework to recreate original appearance.

METROPOLITAN EDISON
Reading, Pennsylvania

The two-story, 5000 SF lobby replaced an outdated 1200 SF lobby and business office. The lobby addition, which serves as a focal piece for the Headquarters Complex, contains several conference rooms and a second floor bridge spanning the width of the lobby. The lobby addition consisted of structural steel framing. An 80,000 SF office addition was constructed during the second phase of this project. A semi-circular cafeteria addition was located at the rear of the complex.

CAS Structural Engineering, Inc.

CAS
Structural Engineering, Inc.

JOHNSON AVE PROFESSIONAL BUILDING

Bridgeport, West Virginia

This building was designed as professional office space for several tenants. The 9,400 SF building has a complex system of wood roof trusses supported by a structural steel frame.

Project Architect: The Omni Associates—Architects
Fairmont, West Virginia

Project Structural Engineer: CAS Structural Engineering, Inc.
Alum Creek, West Virginia

TWIN FALLS STATE PARK LODGE ADDITION

Mullens, West Virginia

Performed structural design for new 28,000 SF addition to existing lodge facility. Addition includes new lobby and conference areas, sleeping rooms, indoor pool facility and all support spaces.

Construction materials consisted of timber, concrete, masonry, precast plank and structural steel.

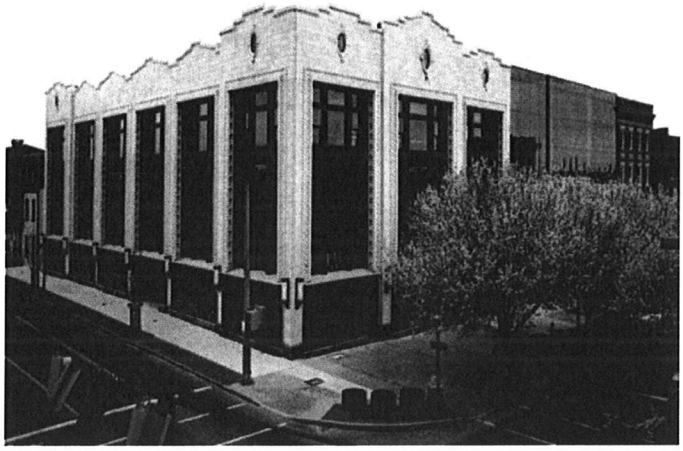
Project Owner: West Virginia Division of Natural Resources
Contact Person: Brad Leslie, PE
Contact Phone: (304) 558-2764
Professional Services End Date: December 2009
Construction Completion Date: Winter 2010
Construction Cost: $7.3M

CAS Structural Engineering, Inc.

YORK COUNTY GOVERNMENT CENTER

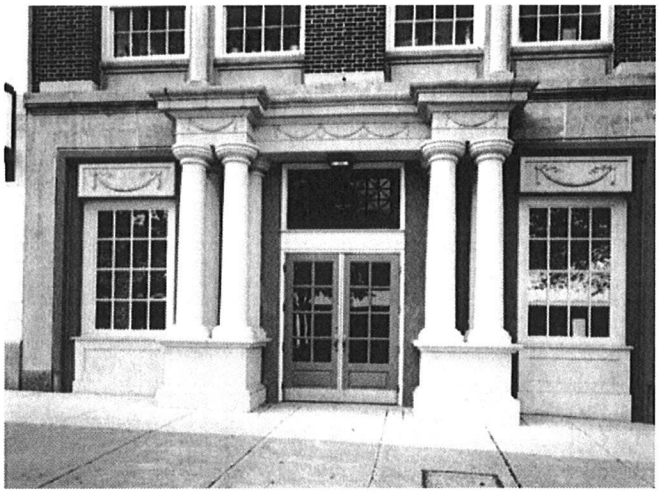
York, Pennsylvania

This 1898 former department store in downtown York was converted to the York County Government offices in the early 1990's.



New exterior features included the monumental parapets and oval windows to recreate the original appearance.

Materials on this project ranged from cast iron to structural steel to masonry to wood framing. Loose-laid stone foundations walls were also encountered.



The former JC Penney Building renovation included a Beaux-Arts style façade. This building and an adjacent townhouse were incorporated into the design of the county offices and interior access between each of the structures was provided

This project was completed while working for a previous employer.

CAS Structural Engineering, Inc.

The second floor originally consisted of a mezzanine around three sides of the structure. The renovated floor plan required adding floor structure on this level to access a new elevator. The new structural steel framing connections were designed to frame into the existing hollow cast iron columns.

Part 7 – Resumes

Russell E. Hall, P.E., P.S.

Charleston Office Manager

General Qualifications

Mr. Hall is an experienced transportation engineer who has been involved in numerous bridge and highway design projects in West Virginia for over 22 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He has over seven years of experience in office management as well. His office management responsibilities include financial oversight and accountability for a staff of over 45 engineers, scientists, and administrative personnel for Baker's Charleston office. His major strengths include organizing and managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

Years with Baker: 4

Years with Other Firms: 18

Education
B.S., 1985, Civil Engineering, West Virginia Institute of Technology

Professional Registrations
Professional Engineer, West Virginia, 1990, 10947

Professional Surveyor, West Virginia, 1996, 1878

Mr. Hall is very proud of the fact that he has been able to spend his entire career in West Virginia working to address West Virginia's transportation needs.

Experience

2004 to Present, Michael Baker Jr., Inc. – *Office Manager* for the Charleston, West Virginia office.

1998 to 2004, Neff, Longest, and Beam, L.L.C. – *Office Manager* for the Charleston, West Virginia office. Responsibilities included the duties of both project manager and office manager. The following is a list of representative projects:

- **WV 9, Charles Town Bypass to Virginia State Line, Jefferson County** – The project provided for the preparation of construction and right of way plans for an approximately five mile section of 4-lane highway. This project included the design of two interchanges, four bridges, and multiple intersections and access roads. This project was divided into seven construction contracts.
- **Fetterman Truss Bridge, Taylor County** – The project provided for the preparation of construction and right of way plans for the replacement of the existing Fetterman Bridge in Grafton, West Virginia. This project included the design of a multiple span curved bridge over the Tygart River and a 200,000 gallon CSO tank.
- **Corridor H, Hardy County** – The project provided for the preparation of construction and right of way plans for a two mile section of 4-lane divided highway. This project included the design of one interchange, two bridges, and multiple intersections and access roads. This project was divided into three construction contracts.
- **Wellington Bridge, Roane County** – The project provided for the preparation of construction and right-of-way plans for the replacement of the existing Wellington Bridge over Spring Creek.
- **I-64 Widening, Putnam County** – This project provided for the preparation of a design report and contract plans for the upgrade of I-64 to six-lane for the proposed US 35 interchange to the existing six-lane section at the 25th Street Overpass Bridge. Neff is a subconsultant to Site-Blauvelt and is

responsible for surveys, right-of-way plans, all bridges except the Kanawha River bridge crossing, and the St. Albans interchange. The project is in the final stage of the design report phase. The design report phase assesses the engineering and environmental impacts of multiple alignments and interchange configurations.

- **US 35/I-64 Interchange, Putnam** – Neff was a subconsultant to Baker responsible for all right-of-way plan development.
- **New River Parkway, Summers and Raleigh counties** – Neff is a subconsultant to Kimley-Horn responsible for all right-of-way plan development.
- **US 52, King Coal Highway, US 119 Mingo County to US 460 Mercer County** – Neff was program manager for the entire corridor. The responsibilities include all engineering design review and approval; develop and maintain schedules; and coordinate with all resource agencies, the WVDOH, and the public.
- **Statewide Services Contract** – Neff provided construction and right-of-way development and review on an as needed basis.

1996 to 1998, West Virginia Department of Transportation – *In-House Design Section Head* for the WVDOH. Responsibilities included the management of four design squads containing approximately 15 engineers and 10 engineering technicians. The In-House Design staff was responsible for the design and preparation of construction and right of way plans for multiple projects throughout the state.

1994 to 1996, West Virginia Department of Transportation – *Consultant Review Section Head* for the WVDOH. Responsibilities included the management of five project managers. Each project manager was responsible for the oversight, review, and approval of consulting engineers' design work. Each manager was responsible for several consultants, most with multiple projects.

1991 to 1994, West Virginia Department of Transportation – *Consultant Review Section Project Manager* for the WVDOH. Responsibilities included oversight, review, and approval of consulting engineers' design work. Each manager was responsible for several consultants, most with multiple projects.

1988 to 1991, West Virginia Department of Transportation – *In-House Design Section Squad Leader* for the WVDOH. Responsibilities included the management of one design squads containing approximately 3 engineers and 2 engineering technicians. The design squad was responsible for the design and preparation of construction and right of way plans for multiple projects throughout the state.

1988 to 1991, West Virginia Department of Transportation – *In-House Design Section Project Engineer* for the WVDOH. Responsibilities included the design and preparation of construction and right of way plans for multiple projects throughout the state.

Patrick W. Fogarty, P.E., P.S.

Civil Services Group Manager

Years with Baker: 3

Years with Other Firms: 19

Education

B.S. 1985, Civil Engineering, West Virginia University Institute of Technology

Diploma 1993, Surveying and Mapping, International Correspondence Schools

Registrations

Professional Engineer, West Virginia

Professional Engineer, Kentucky

Professional Engineer, Virginia

Professional Engineer, Pennsylvania

Professional Engineer, Maryland

Professional Engineer, Ohio

Professional Engineer, North Carolina

Professional Surveyor, West Virginia, Kentucky and Ohio

Certifications

Laboratory Procedures, FAA 1992

Construction Document Technologist, CSI 1996

Roadway Worker for Rail Line Sites, CSX 2001

40 Hour HAZWOPER, OSHA 29 CFR 1910.120, OSHA 2001

Technician, PCC, Asphalt, Aggregate, Compaction, WVDOT 1991

General Qualifications

Mr. Fogarty is an asset to the Michael Baker Jr., Inc. team with over 23 years of project management experience. He is responsible for technical and management aspects of planning, civil design and surveying projects within the office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included retail/commercial site preparation, airports, streets/highways, bridges, parking lots, buildings, retaining walls/foundations, sanitary systems and structures, as well as boundary and topographic and photogrammetric surveys. 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. Management duties include financial planning, management and staff utilization for two departments, human resource planning, marketing, and strategic planning.

Experience

Bicycle and Pedestrian Plan, Kanawha and Putnam Counties, West Virginia. *Regional Intergovernmental Council.* Project Manager. Responsible for the development of a 2-phase bike and pedestrian study for a 2-county area. The plan included data collection, facilities inventory, identification of activity centers, public involvement, community information analysis, identification of specific improvement locations and their corresponding physical deficiencies and improvement recommendations.

Capitol Campus Master Plan, *State of West Virginia General Services Division.* Project Manager. Responsible for the development of a campus-wide (55 acres) master plan for the West Virginia State Capitol Complex. Elements of the plan included: Vehicular and pedestrian access, security, utilities, parking, landscaping, and space planning.

Corridor Management Plan, Country Roads Scenic Byway, Various Counties, West Virginia. *Country Roads Byway, Inc.* Project Manager. Responsible for the development of a Corridor Management Plan for a designated State Scenic Byway over a multi-county area. The plan included an inventory of Intrinsic Qualities, an assessment and analysis of existing conditions, an opportunity analysis and proposed development alternatives. The focus of the plan was to provide for inclusion in the National Scenic Byway Program.

Pennsylvania Avenue Tunnel, Kanawha County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Project Manager. Responsible for complete services toward the development of Right of Way and Construction Plans for the rehabilitation of a 1 lane, tunnel structure on County Route 6/6 near the City of St. Albans. Services included field surveying, right of way, utilities verification and relocation, storm drainage, traffic control, structural design and approach road design. Baker provided project management, environmental coordination, geotechnical engineering, preliminary and final design as well as construction phase services.

On-Call Engineering/Architectural Services, Yeager Airport (CRW), Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Project Manager. Responsible for management planning and lead design for miscellaneous assignments. Additionally, provided engineering consultation on a current construction project as needed. Baker provided multi-discipline, on-call services to the Central West Virginia Regional Airport Authority (CWVRAA), which owns and operates Yeager Airport (CRW). Baker provided a full range of services to CWVRAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, surveying, and construction management.

Flood Protection Options Report-Bonham Elementary School, Kanawha County, West Virginia. *West Virginia Division of Homeland Security and Emergency Management.* Project Manager. Responsible for the development of a report listing potential flood protection options for the facility. Baker was retained by the West Virginia Division of Homeland Security and Emergency Management to prepare a report to address flood protection options for Bonham Elementary School in Kanawha County, West Virginia.

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* QA/QC. Responsible for quality assurance review of final computations. Upon completion of construction of the Blennerhassett Island Bridge over the Ohio River by 2007, the 878' – 6" long network tied arch that ranks as the longest of its type in the United States and one of the longest in the entire world. Baker provided project management, environmental and location studies, permitting, preliminary and final design as well as construction phase services.

Municipal Planning and Design, Engineer-of-Record, Various Locations, *State of West Virginia*
Performed numerous assignments as Lead Designer and Project Manager for various municipalities including: Planning, and Bituminous and Concrete Pavement Design and Rehabilitation, Sidewalk Design, Storm Drainage Design and Stormwater Permitting, Wetlands Delineation and Mitigation, Equipment Specifications, Sanitary Sewage Collection and Potable Water Distribution Systems, Parking Lot Design, Security Lighting, Environmental Site Assessments, Pre-Bid Meetings, Bid Evaluation and Tabulation, Grant Applications, Construction Management, Pre-Construction Meetings, Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Notable clients include: City of Parsons; Town of Moorefield; Town of Hambleton; Town of Mason; Town of Lost Creek; and the Town of West Milford.

PRIOR BAKER EXPERIENCE

Planning, Various Airports, *State of West Virginia*
Performed numerous assignments as Lead Planner and Project Manager for various airports over the past 23 years, including: Site Selection Studies, Master Planning, and ALP Preparation and Update, Wetlands Delineation and Mitigation, Aircraft Wash and De-Ice Facilities, VASI and PAPI Systems, NAVAIDS, Security and Access Control Systems, Security Lighting, and Security Fencing, Capital Improvement Plans, DBE Plans, Maintenance Plans, Spill Control, Containment and Countermeasures Plans, Environmental Site Assessments, FAA Forms A and C, Pre-Bid Meetings / Construction Management Plans / Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Services provided

for notable airport clients include the following: Mercer County Airport Authority, Bluefield; Upshur County Regional Airport, Buckhannon; Wood County Airport Authority, Parkersburg; Raleigh County Airport Authority, Beckley; Grant County Airport Authority, Petersburg; Eastern West Virginia Regional Airport Authority, Martinsburg; Mason County Commission; Point Pleasant; Elkins-Randolph County Airport Authority, Elkins; Roane County Airport Authority, Spencer; Central West Virginia Regional Airport Authority, Charleston; Mingo County Airport Authority, Williamson; Philippi-Barbour County Airport Authority, Philippi; Nicholas County Airport Authority, Summersville; Marshall County Airport Authority, Moundsville.

Putnam County Parks and Recreation Commission, Various Projects, Hurricane, West Virginia. *Valley Park.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services on the waterslide and splashdown pool and the Museum in the Community, including structural and civil engineering.

Kanawha County Parks and Recreation Commission, Various Projects, Charleston, West Virginia. *Coonskin Park.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services for soccer fields, recreational trails, shelters and wedding garden.

Municipal Planning and Design, Various Locations, *State of West Virginia*
Performed numerous assignments as Lead Designer and Project Manager for various municipalities over the past 20 years, including: Planning, Bituminous and Concrete Pavement Design and Rehabilitation, Sidewalk Design, Storm Drainage Design and Stormwater Permitting, Wetlands Delineation and Mitigation, Equipment Specifications, Sanitary Sewage Collection and Potable Water Distribution Systems, Parking Lot Design, Security Lighting, Environmental Site Assessments, Pre-Bid Meetings, Bid Evaluation and Tabulation, Grant Applications, Construction Management, Pre-Construction Meetings, Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Notable clients include: Town of Poca; Town of Moorefield; City of Buckhannon; City of St. Albans; Town of Hambleton; City of Williamson; Town of Mason; Town of West Milford; City of Bridgeport

Professional Affiliations

American Society of Civil Engineers

International Right of Way Association

Construction Specifications Institute

American Planning Association

West Virginia Airport Managers Association

Previous Work History

Triad Engineering, Inc., Vice President/Senior Engineer/Civil and Survey Manager, 1996-2005

Chapman Technical Group, Vice President Transportation Engineering, 1991-1996

Chapman Technical Group, Project Engineer, 1986-1991

Steel Service Company, Senior Steel Detailer, 1985-1986

Ron L. Bolen, AIA, LEED GA

Senior Architect

General Qualifications

Mr. Bolen brings over 36 years of design and project coordination experience to the project. Mr. Bolen insists on listening to the client's needs and bringing those desires to reality in a distinctive, functional and state of the art facility – on time and within budget. Project types include a multitude of small and large-scale designs, including office, hotel, and multi-purpose facilities, augmented by varied experience in a wide range of opportunities in renovation and new facility design. Truly innovative designs are based on a well-articulated program developed in a close and continuing interaction between the client and the design team.

While at Baker, Mr. Bolen has focused most of his time on design and coordination with clients while maintaining a close relationship with the design team. Increasingly, Mr. Bolen's facilities have become the result of collaborative problem solving with other design professionals and our clients. The results are design solutions that balance interests, intentions and objectives with concepts that reflect quality, integrity and aesthetic appeal.

Years with Baker: 1
Years with Other Firms: 36+

Education

- B.S. Architectural Design, Parkersburg Community College / WVU Ext., 1980

Registrations

- Registered Architect, No. 3135, West Virginia, 1999
- LEED Green Associate, 10610975, 2010

Professional Affiliations

American Institute of Architects (AIA)
West Virginia Board of Architects (WVBOA)
Comprehensive Education Facilities Planners, International (CEFPI)

Experience

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division of Public Transit.* Project Manager. Responsibilities include providing a complete design and detailed construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve a high degree of energy efficiency. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

A/E Services for the Charleston Armory Improvements, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State of West Virginia, Division of Engineering and Facilities.* Project Architect. Responsible for design and document quality oversight. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for architectural and engineering services. The State Army National Guard Headquarters in Charleston, West Virginia was

originally constructed in the early 1960's. Over the years, there have been numerous upgrades to the facility. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and further provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. The Owner desired the modernization of approximately 55,000 square feet of existing outdated heating, ventilation, and air conditioning equipment. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes, asbestos removal, and a new 4-pipe environmental control system. Baker worked closely with the client during the planning phase to define a project scope to upgrade the existing facility consistent with previous renovations and within a limited budget.

A/E Services for the Capitol Campus Master Plan, State of West Virginia, Charleston, West Virginia. *State of West Virginia, General Services Division.* Architectural Project Manager. Mr. Bolen is currently providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Working in conjunction with the owner and a team of specialized sub-consultants, Ron is currently providing elements including:

- Master Planning
- Programming
- Architectural / Review
- Document Management
- GIS
- Project Scheduling
- Cost Estimating
- Facilities Planning
- Sub-consultant Management
- Client Coordination

A/E Services for the Harrison County Extension Service and the Parks and Recreation – Clarksburg, West Virginia. *Harrison County Commission*. Project Manager. Responsible for Design, Document Preparation, and Construction Administration for the renovation of an existing facility for use as Administrative Offices and as Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services for architectural improvements. The existing facility located near Clarksburg, West Virginia was originally constructed in the early 1960's and was used recently as a business for a local exterminating firm. Over the years, there have been additions and upgrades to the facility. Baker was selected by the Harrison Co. Commission to upgrade of front area of the facility for the Harrison County Extension Service's offices and back area of the facility for use as storage by the Harrison County Parks and Recreation. With funding through ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of existing with appropriate "Green Building" materials. Upgrades of the exterior doors and windows, interior partitions and

finishes replacing the outdated heating, ventilation, and air conditioning equipment, and replacing the existing electrical service with energy efficient product. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior window and door replacements, new interior doors and hardware, new wall finishes, updated water saving toilet facilities and a new energy efficient HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

Non-Baker Project Experience

Main Harts Creek Vol. Fire Station *Main Harts Creek Vol. Fire Department.*
As Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, and client relations. The design was for renovation to an existing emergency medical service facility by modifying it to meet the surrounding area's needs. The facility houses six emergency vehicles, dayroom area, kitchenette, two bunkrooms, toilets and showers.

Raleigh Co. Board of Education Bus Maintenance Facility *Raleigh County Board of Education.*
Mr. Bolen preformed duties as Project Manager Services through From Schematic Design through Contract Document. Design for a new facility to replace an existing building for the Bus Maintenance program with new facility within the required state guidelines.

Ghent Maintenance Facility *WV Parkways Authority.* As Project Manager, Ron provided services through pre-design and all phases of document preparation, consultant coordination, client relations, and construction administration. This new facility design replaced an existing building for the Snow Removal Vehicle Maintenance Program. The WV Parkways Authority funded this project.

Standard Maintenance Facility *WV Parkways Authority.* As Project Manager, Ron provided services through pre-design and all phases of document preparation, consultant coordination, client relations, and construction administration. The new facility design replaced the existing building for the Snow Removal Vehicle Maintenance Program. The WV Parkways Authority funded this project.

Ronceverte Vol. Fire Station & Community Center *Ronceverte Vol. Fire Department.*
As Principal / Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. The design replaced an existing fire station. The facility was designed with five truck bays, office spaces, and conference hall, large meeting hall, toilets, and kitchen facilities and equipped with facilities for community flood relief.

Glenville State College, *Glennville, West Virginia*
Mr. Bolen provided Project Manager Services for the development of two projects at Glenville State College as follows:

- Science Hall – Mr. Bolen provided Project Manager Services through Pre-design and all phases of Document Preparation, Consultant Coordination, Client Relations, and Construction Administration. Design for an addition of four-story office complex with elevator, making an existing building ADA accessible.
- Louis Bennett Hall – Mr. Bolen provided Project Manager Services through Pre-design and all phases of Document Preparation, Consultant Coordination, Client Relations, and Construction Administration. Design for a addition of three story office complex with elevator and walking bridge between two buildings, (Louis Bennett Hall and Administration Building) making each existing building ADA accessible.

West Virginia University, *Morgantown, West Virginia*
Mr. Bolen provided Project Manager Services for the development of two projects at West Virginia University as follows:

- Ruby Memorial Hospital – Mr. Bolen provided Project Job Captain & CADD tech services through Design Development and Contract Document. Design for an addition renovation to an existing facility for the ICU department with the University Hospital.
- WVU – Indoor Practice Facility – Mr. Bolen provided Project Job Captain & CADD tech services through the Programming and Pre Design phase for an addition Design Build project to an provide a new indoor sports practice facility for the Athletic Department with the University.
- WVU – Natatorium Facility – Mr. Bolen provided Project Job Captain & CADD tech services through the Programming and Pre Design phase for an addition Design Build project to provide an addition to the existing natatorium facility for the Athletic Department with the University.

Comprehensive Education Facilities Plans (CEFP) 2000-2010
Mr. Bolen assisted in the development of the various Counties' Facilities Plan for the ten-year period of 2000 - 2010. The plans included evaluation of all existing facilities, plans for bringing existing facilities up to current codes and guidelines, cost estimates to bring facilities up to current standards, and final planning scenarios. The following are counties that Mr. Bolen assisting in the development of their CEFP:

- Nicholas County Board of Education
- Cabell Co. Board of Education
- Wetzel County Board of Education
- Raleigh County Board of Education (required update)

Comprehensive Education Facilities Plans (CEFP) 2000-2010
Mr. Bolen provided Project Manager Services for the development of the various Counties' Facilities Plan for the ten-year period of 2000 - 2010. The plans included evaluation of all existing facilities, plans for bringing existing facilities up to current codes and guidelines, cost estimates to bring facilities up to current standards, and final planning scenarios. The following are counties that Mr. Bolen developed the CEFP plan in conjunction with educational component of DeJong and Associates in the development of their CEFP:

- Pocahontas County Board of Education
- Marshall County Board of Education
- Monroe County Board of Education

A/E Services for Berlin McKinney Elementary School. *Wyoming County Board of Education.*
Ron provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation design repaired classrooms, toilets and auxiliary spaces for an existing school which was flooded and provided the project within the required state guidelines.

A/E Services for Beckley Elementary School. *Raleigh County Board of Education.*
Mr. Bolen provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This new facility design replaced two existing schools within the required state guidelines and funded by the School Building Authority.

A/E Services for Elkins Middle School. *Randolph County Board of Education.*
As Job Captain, he provided services from design development through all phases of document preparation, and consultant coordination. This addition / renovation design to the existing facility provided needed classroom, and toilet facilities within the required state guidelines.

A/E Services for Daniels Elementary School. *Raleigh County Board of Education.*
Ron provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation / addition design replaced two existing schools within the required state guidelines, and the project was funded by the School Building Authority.

A/E Services for Cheat Lake Elementary and Middle School. *Monongahela County Board of Education.*
Mr. Bolen was Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a major addition / renovation to the existing facility to replace four existing schools with new facility within the required state guidelines. The two schools shared the dining / kitchen facilities.

A/E Services for Lincoln County High School. *Lincoln County Board of Education.*
As Project Architect, Ron provided services through Contract Document Preparation. Design for a new facility to replace two existing schools with new facility within the required state guidelines. This project included new administration, kitchen / dining, gymnasium, classrooms and labs. The project was a silver LEED designed project.

A/E Services for Roane County High School. *Roane County Board of Education.*
Ron preformed duties as Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a new facility to replace two existing schools with new facility within the required state guidelines. The project included new administration, kitchen / dining, gymnasium, classrooms and labs. This project won the state AIA Design Award.

North Central Regional Juvenile Detention Center. *WV Division of Juvenile Services, Parkersburg, WV.*
Mr. Bolen provided construction administration services during the renovation and expansion of the North Central Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

Sam Perdue Juvenile Detention Center. *WV Division of Juvenile Services, Princeton, WV.*
Mr. Bolen provided bidding and construction administration services during the renovation and expansion of the South Regional Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

Gymnasium Facility. *Federal Bureau of Prisons Beckley, West Virginia.*
As Project Job Captain, he provided services through all phases of document preparation, consultant coordination, and client relations. This new facility design provided an indoor gymnasium facility for the medium security prison.

Americans with Disabilities Act (ADA) Compliance Studies. *Federal Bureau of Prisons, Beckley, WV.*
As Project Job Captain, Mr. Bolen provided services through all phases of document preparation, consultant coordination, and client relations to update existing facility with ADA standards for medium security prison.

Alderson Women's Dormitory, Alderson, WV.
Mr. Bolen provided Project Architect services during contract document preparation and client relations. This new facility design replaced an existing dormitory facility at the women's correctional facility.

Classroom and Outdoor Training Facility Upgrades, Camp Atterbury, Columbus, Indiana. *Directorate of Public Works, Post Engineer.* Project Architect. Project responsibilities included site surveying and base map preparation, site civil and architectural plan preparation, detailing, bidding, and construction administration for renovations required by the Post Engineer, Camp Atterbury, Indiana. Elements of the project included expansions and renovations to existing classrooms, expansion of existing

office space, renovations to electrical, communications, and fire detection and suppression systems, and development of outdoor MWR facilities and training facilities such as a community park, and obstacle course. Periodic construction administration services were included during construction.

Glen Jean Armory, Glen Jean, Fayette County, West Virginia. *State of WV, Division of Engineering and Facilities.* Project Architect. Responsible for design development and construction document preparation for a new Armed Forces Readiness Center in Glen Jean, Fayette County, WV. The project consisted of military offices constructed of structural steel frame, brick veneer exterior, and EDPM membrane roofing system. The new Armory was constructed as a Readiness Center to consolidate the Oak Hill and Beckley Organizational Maintenance Shops and houses the 77th Bridge Troop Command from Charleston, the 18-63rd Transportation Company from Oak Hill's armory and the 150th Armored Division from Raleigh County's armory in Beckley.

Harrison County Emergency Squad Facility in Shinnston WV *Harrison County Commission.*
As Principal / Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. The design replaced an existing fire station. The facility was designed with four truck bays, office spaces, and conference / training room, meeting hall, toilet and kitchen facilities.

David Hilliard, EI, LEED GA

Senior Mechanical Designer

General Qualifications

General Qualifications

Mr. Hilliard has a wide range of "hands on" design and construction experience. From his simple beginnings as a carpenter he has expanded his professional abilities. His recent design experience has included the complex mechanical design of such projects as a large Charleston, WV hospital. His resume covers over 20 years of real world work in design, layout, fabrication, construction and finishes in both the mechanical and general trades.

Over the years, while practicing his profession, Mr. Hilliard continued his education. He attended night school and began working on a civil engineering degree, which later changed to mathematics then finally to mechanical engineering. While in school, he used his HVAC work experience to evaluate mechanical problems and make design recommendations on two campus buildings. He has continued his education and professional development through his involvement with ASHRAE and other pertinent organizations.

Years with Baker: 1

Years with Other Firms: 19

Education

B.S., 2002, Mathematics, West Virginia State College

B.S., 2005 Mechanical Engineering, West Virginia University Institute of Technology

Professional Affiliations

ASME

ASHRAE

SMACNA

Experience

Little Kanawha Bus Facility, Calhoun County, West Virginia. WV Division of Public Transit. Project Manager. Responsibilities include providing the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility and is designed to achieve a high degree of energy efficiency.

A/E Services for the Harrison County Extension Service and the Parks and Recreation – Clarksburg, West Virginia. *Harrison County Commission, Clarksburg, West Virginia.* Mechanical engineer. Mr.Hilliard is Responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for the renovation of an existing facility for use as county Extension Administrative Offices and as a Parks and Recreation Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services to upgrade the building and increase energy efficiency. With funding through an ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of the existing building with appropriate "Green Building" materials. Replacements of outdated heating, ventilation and air conditioning equipment, as well as the existing electrical service with energy efficient products are at the core of the design. Some of the elements to be included in the design are energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, updated water saving toilet

facilities and a high efficiency HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

WV Capitol Building Restrooms Restoration/Renovations, State of WV, Charleston, WV. *State of WV, General Services Division.* Mechanical Engineer.
Mr. Hilliard is currently providing the State of West Virginia General Services Division a comprehensive plumbing plan for the renovation and renovation of the 33 restrooms of the WV State Capitol Building.

Charleston Armory Improvements, WV Army National Guard, Division of Engineering and Facilities, Charleston, WV. *State of WV, Division of Engineering and Facilities.* Project Engineer. David is responsible for all mechanical design oversight and construction management. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for architectural and engineering services. The State Army National Guard Headquarters in Charleston, West Virginia was originally constructed in the early 1960's. Over the years, there have been numerous upgrades to the facility. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and further provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. The Owner desired the modernization of approximately 55,000 square feet of existing outdated heating, ventilation, and air conditioning equipment. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes, asbestos removal, and a new 4-pipe environmental control system. Baker worked closely with the client during the planning phase to define a project scope to upgrade the existing facility consistent with previous renovations and within a limited budget.

Capitol Campus Master Plan, State of WV, Charleston, WV. *State of WV, General Services Division.* Mechanical Engineer. Mr. Hilliard is currently providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Working in conjunction with a team of specialized consultants, Dave is currently providing programming, cost estimating and facilities planning support. Services included HVAC Loads as well as utility evaluation and planning for future growth.

Recent Non-Baker Project Experience

CAMC Memorial, Kanawha City, West Virginia.

Performed design calculations, layout of Plumbing, HVAC ductwork, piping and components for three floors of the Clinical Teaching Center; Lobby, Cath Labs and patient rooms. This work was all done in affiliation with BSA Life Structures.

West Virginia Army National Guard support Maintenance Shop; Eleanor WV

Mr. Hilliard worked on Design Evaluation and Coordination of construction of the HVAC system; including infared heat, gas unit heaters, auto fume exhaust and make-up air

Air National Guard Maintenance Facility; Ashland KY

Mr. Hilliard worked on coordination drawings and managed construction of the HVAC system; including infared heat, gas unit heaters, auto fume exhaust and make-up air.

City of Charleston Fire Department -2; Virginia Street West, Charleston WV

Mr. Hilliard worked on shop and construction drawings for the HVAC system; including gas unit heaters, Carmon retractable auto fume exhaust and make-up air

Raleigh General Hospital Surgery Suite; Beckley West Virginia,

Worked on value engineered and shop drawing for a 20,000 square foot surgery addition, as well as managed and coordinated construction of this complex mechanical design.

Donald R. Kuhn Juvenile Detention Center; Julian WV Project Coordinator / Mechanical Engineer
Mr. Hilliard developed HVAC shop drawings, Masonry Opening drawings and worked as a construction coordinator.

Lakin Correctional Center; West Columbia WV Project Coordinator / Mechanical Engineer
Mr. Hilliard developed HVAC shop drawings, Masonry Opening drawings and worked as a construction coordinator.

Camden-Clark Memorial Hospital -, Parkersburg, WV. Mechanical Engineer.
Mr. Hilliard developed Plumbing, HVAC ductwork, piping coordination drawings for the five story addition. Included in that building were eleven operating and patient rooms. Construction Administration was also part of his duties.

Riverside High School; Charleston, WV
Mr. Hilliard worked on Design Evaluation and Coordination of the VAV Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

PREVIOUS WORK HISTORY

Air Systems Sheet Metal Company; Contractors & Engineers, 1990 - 2009, ***Drafter / Designer / Construction Manager / Estimator.*** Air Systems is currently the largest sheet metal contractor in West Virginia. They engineer, fabricate and install both commercial HVAC and industrial ventilation systems in the tri-state area.

During his tenure at Air Systems, he managed and directed the drafting and design department preparing shop, design and value engineered drawings. He also worked as a project coordinator for HVAC ductwork, piping, plumbing and sprinkler. Estimating jobs (Quick Pen software), construction management, submittal review, procurement of supplies and air balancing were also part of his working experience.

CS Lewis Contracting Co., 1985 - 1990, Partner, ***Designer/Builder.*** As a business partner he designed and built homes and light commercial building from the ground up; including plumbing, electrical, HVAC. He also supervised the installation of underground utilities and concrete roads for various subdivisions; running a six to twelve men crew.

Laura L. Cox, P.L.A.,A.S.L.A., LEED GA

Landscape Architect

Years with Baker: 2

Years with Other Firms: 28

Education

B.S. Landscape Architecture, West Virginia University, 1978

Computer Aided Drafting, Putnam County Technical Center, 1995

Registrations

CLA, Virginia, 1987

PLA, West Virginia, 2008

NICET Level 3 (Highway Design), 1983

Professional Affiliations

American Society of Landscape Architects

WV Chapter – American Society of Landscape Architects

WV Chapter – American Institute of Architects

General Qualifications

Ms. Cox is a Registered Landscape Architect with over 26 years of experience in the fields of landscape architecture and land planning. She has knowledge of all phases of design from site analysis and conceptual planning through construction documentation, permitting and administration. Her design experience includes large scale site preparation and grading, drainage analysis, storm water conveyance and detention, and utility and infrastructure design.

Ms. Cox has an extensive background in site and land use planning for counties and municipalities including, feasibility studies, review and evaluation of preliminary and final subdivision plans, special exceptions, rezoning applications, yield studies, special use permits and client representation at public hearings and meetings with civic groups.

Experience

Little Kanawha Bus Facility, Calhoun County, West Virginia. WV Division of Public Transit. Lanscape Architect / Civil Designer. Responsibilities include providing a complete landscaping design, site and civil design aspects of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The facility is designed to be completely ADA-compliant.

A/E Services for the Harrison County Extension Service and the Parks and Recreation – Clarksburg, West Virginia. *Harrison County Commission, Clarksburg, West Virginia.* Project Site Civil Designer. Ms. Cox will be responsible for all site and civil design aspects for the renovation of an existing facility for use as Administrative Offices and as Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services for architectural improvements. The existing facility located near Clarksburg, West Virginia was originally constructed in the early 1960's and was used recently as a business for a local exterminating firm. Over the years, there have been additions and upgrades to the facility. Baker was selected by the Harrison Co. Commission to upgrade of front area of the facility for the Harrison County Extension Service's offices and back area of the facility for use as storage by the Harrison County Parks and Recreation. With funding through a ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of existing with appropriate "Green Building" materials. Upgrades of the exterior doors and windows, interior partitions and finishes replacing the outdated heating, ventilation, and air conditioning equipment, and replacing the existing electrical service with energy efficient product. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior window and door replacements, new interior doors and hardware, new wall finishes, updated water saving toilet facilities and a new energy

efficient HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

Dunbar Zoning Ordinance Update, Dunbar, West Virginia. *Town of Dunbar.* Project Manager, Ms. Cox is assisting the Town of Dunbar in updating its Zoning Ordinance and Mapping System. The original ordinance adopted in 1961 and its associated mapping have undergone very little updating. This project, when complete will bring the current Ordinance into the Twenty first Century along with its GIS based electronic mapping which will be available to the public. Ms. Cox is assisting the Dunbar Planning Commission in the necessary public involvement process, as well as ordinance writing, research, mapping and coordination efforts for this project

West Virginia Capitol Complex Master Plan, Charleston, West Virginia. *WV Department of Administration.* Project Planner, Ms. Cox is assisting in providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Ms. Cox is part of the Baker Team which is working in conjunction with the owner and a team of specialized consultants providing planning elements including master planning, public involvement, document management, facilities planning, and document preparation.

Winfield On-Call Planning Services, Winfield, West Virginia. *Town of Winfield.* Project Planner, Laura serves as the Planning Director of the Town, where she staffs subdivision, special exception, and rezoning applications. She meets with the public and serves as Town Staffing to the Planning Commission and Board of Zoning Appeals. Upcoming projects for the Town include assisting in the preparation of a Comprehensive Land Use Plan and updating the Zoning ordinance.

Historic Wellsburg and Bethany Scenic Byway Corridor Management Plan, Wellsburg, West Virginia. *Byway Committee.* Project Landscape Architect, Ms Cox was responsible for field inventory and analysis, community input facilitation, and document preparation. She helped prepare a Corridor Management Plan for the Historic Wellsburg and Bethany Scenic Byway in Brooke County West Virginia in preparation for Federal recognition in the National Scenic Byway Program. The plan showcased the story of settlement and the development of industry along the Ohio River in the Northern Panhandle of West Virginia, as well as developing recreational opportunities and improving safety along the circular 22-mile scenic corridor loop.

Parsons City-wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia. *Parsons Parks Board.* Project Planner. Ms. Cox was responsible for assisting in the master planning design. She assisted in preparing a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the city limits of Parsons, Tucker County, West Virginia. Through a series of public meetings and stakeholder meetings, a final plan was realized with recommendations for ball fields, hiking and biking trails, a recreation center, miniature golf course, additional play structures, picnic facilities, ADA-compliant fishing access, interpretive signage, and landscaping improvements for the existing and new park areas.

Ararat River Greenway Parks Projects, Mount Airy, North Carolina. *City of Mount Airy, North Carolina.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She assisted in the preparation of construction documents and provided construction administration and construction inspection for three (3) parks along the Ararat River in North Carolina. The designs were prepared on a previously developed master plan of the Ararat River Greenway. The first park, Riverside Park, includes basketball courts, playground structures, parking areas, a premier soccer field, picnic shelters, nature trails, canoe launch facility, restrooms, fencing, signage and landscaping. Rowe Environmental Park showcases environmental issues in the park design and construction, including an outdoor amphitheater and classroom, picnic facilities, nature trails, parking area, pedestrian bridge to nearby middle school, fishing access and canoe launch facility. The final park

design is for Tharrington Park, which l includes a premier soccer field, additional soccer fields to create a soccer complex, access road and parking, fitness trail, restroom facility, concessions, and a maintenance building.

Kanawha & Putnam County Bicycle – Pedestrian Master Plan, South Charleston, West Virginia. *Regional Intergovernmental Council (RIC).* Project Planner. Ms. Cox provided assistance in field inventory and analysis, plan preparation and graphic support. She helped perform a two-phase bicycle and pedestrian circulation study for Kanawha and Putnam Counties. Based on these efforts, a list of recommended improvements to the 2-county area was proposed to improve bicycle and pedestrian safety and user-friendliness throughout the project area.

Country Roads Scenic Byway Corridor Management Plan, Boone, Logan and Mingo Counties, West Virginia. *Coalfield Convention and Visitors Bureau.* Project Landscape Architect. Ms. Cox was responsible for field inventory and analysis, community input facilitation, and document preparation. She helped prepare a Corridor Management Plan for the Country Roads Byway in southern West Virginia in preparation for Federal recognition in the National Scenic Byway Program. The plan showcased the story of organized labor and its relation to the industrial revolution in West Virginia, as well as developing recreational opportunities and improving safety along the nearly 180-mile scenic corridor loop.

Valley Park Sidewalk Improvements Project, Hurricane, West Virginia. *Putnam County Parks and Recreation Commission.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She assisted in complete planning, design, and construction management services for new sidewalks and streets improvements for access into Valley Park, Putnam County. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, and storm water improvements. The park sidewalks have a unique colored stamping of natural elements found in West Virginia, such as leaves and ferns, animal tracks, and flowers. Ms. Cox helped provide Construction Administration and inspection services as well as periodic site review during construction.

Habitat for Humanity Restore Parking Lot and Rain Garden Project, Charleston, West Virginia. *Habitat for Humanity Corporation.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She performed complete planning and design services for a new parking lot that included a rain garden. This was a pilot project of the City of Charleston and is the City's first rain garden. This Low Impact Design element is an innovative solution to urban storm water detention problems.

Non-Baker Project Experience

FPC Alderson, Federal Prison Camp; Alderson WV Landscape Architect. / Civil Designer
Ms. Cox worked on concept campus plans as well as well as complete site and landscape plans for the renovation and expansion of two dormitories along with extensive renovations to existing site recreational features.

Gene Spadero Juvenile Detention Center; Mt. Hope WV Landscape Architect / Civil Designer
Ms. Cox designed all site amenities including entrance configuration, parking; roads; grading; utilities; fencing and landscaping.

Lakin Correctional Center; West Columbia WV Landscape Architect / Civil Designer
Ms. Cox designed parking; roads; grading; utilities; fencing and landscaping for a new dormitory and a Correctional Industries Building.

Erma Byrd Center, Beaver, Raleigh County, West Virginia. *Southern West Virginia Community and Technical College.* Project Landscape Architect. Ms. Cox was responsible for master planning of the campus, detailed design, and site construction document preparation. She developed site design and

construction documents for the development of a new multi-purpose education facility. Future plans for the campus include additional buildings arrayed around a central water feature.

Miniature Golf Course at Chief Logan State Park, Logan County, West Virginia. *Environmental Design Group.* Consultant. Laura was responsible for storm sewer design for a new recreational feature for the Park. Services included site drainage analysis and design of storm conveyance system.

Byrd Park Redevelopment Master Plan, Richmond, Virginia. *Richmond Parks and Recreation Board.* Project Manager. Ms. Cox performed site inventory and analysis, public outreach and preparation of a revitalization master plan for one of the oldest parks in the City.

Glen Jean Armory, Glen Jean, Fayette County West Virginia. Staff Landscape Architect. Laura prepared Complete Landscaping and Entrance Area Ramps/Stairs Plans addressing ADA and force protection issues.

Logan Readiness Center, Logan, West Virginia. Staff Landscape Architect. Ms. Cox designed parking lot and sidewalk system and prepared Landscaping Plan

Jackson County National Guard Facility, Cottageville, West Virginia. Staff Landscape Architect. Ms. Cox provided preliminary site analysis and conceptual plans for public comment phase of the project.

Morgantown National Guard Facility, Morgantown, West Virginia. Staff Landscape Architect. Ms. Cox provided conceptual site plan for submission to client.

St Albans High School, St Albans West Virginia, St. *Albans School Board.* Staff Landscape Architect/ Civil Designer – Ms. Cox prepared Complete Phased Civil and Site Construction Drawings for entire campus plan.

Lincoln County High School, Hamlin, West Virginia, *Lincoln County Board of Education.* Staff Landscape Architect/ Civil Designer. Laura prepared Complete Phased Civil and Site Construction Drawings for entire campus plan, including design of DOH roadway and extensive site grading.

Southside Elementary/Southwest Middle School, Huntington, West Virginia, *Cabell County Board of Education.* Staff Landscape Architect/ Civil Designer – Ms. Cox prepared Complete Phased Civil/Site/Landscape Construction Drawings for urban campus plan, which included a sustainable underground storm collection system.

Milton Middle School, Milton, West Virginia, *Cabell County Board of Education*. Staff Landscape Architect/ Civil Designer – Laura prepared Complete Phased Civil/Site Construction Drawings for rural campus plan, which included extensive site grading along with a sustainable underground storm collection system.

PREVIOUS WORK HISTORY

ZMM, Inc., Architects & Engineers, MAY 2000 – NOVEMBER 2007, *Landscape Architect*, Ms. Cox performed planning and site design functions, permit processing, software implementation and training. She was responsible for all in-house site design and civil engineering projects for West Virginia's largest multidisciplinary AEC firm, specializing in educational, correctional, and commercial projects. While employed at ZMM Laura was involved in all phases of design from site analysis and conceptual planning through construction documentation and administration. She prepared large scale site preparation and grading plans, provided drainage analysis, prepared storm water conveyance and detention plans, and produced utility and infrastructure design and worked with government agencies to obtain approvals and permits. In addition to design responsibilities, she was in charge of recurrent training of the technical staff to support upgrades, advances, and improvements in design software.

Self Employed as a Design Consultant, *April 1995 - May 2000*, Ms. Cox provided civil, architectural, and environmental design and drafting services, She also provided Instruction of both on and offsite

AutoCAD classes. Laura also provided comprehensive design and drafting services for clients in the Charleston/Huntington area; Services included Land Use Planning, Civil Design and Drafting, Architectural Drafting, Environmental Design, and Landscape Architecture. Additionally she served as trainer for Mountain CAD, Charleston's Autodesk software reseller.

Fauquier County Department of Community Development, ***August 1990 - December 1993,*** **Chief of Planning Division,** Ms. Cox was responsible for the processing of land use applications. She also supervised a design review team; Her responsibilities included organization and implementation of office procedures; enforcement of subdivision and zoning ordinances; review and evaluation of preliminary and final subdivision plans, special exceptions and rezoning. She answered public inquiries; represented the county at public meetings. In addition Ms. Cox provided reports and recommendations directly to the Fauquier County Planning Commission and Board of Supervisors.

Land Design Concepts, Incorporated, JUNE 1989 - AUGUST 1990, ***Senior Planner/Office Manager,*** **Ms. Cox was responsible for o**versight of office procedures and performed and supervised a broad spectrum of planning tasks. She managed the staffing, organizing, marketing and supervising the equipping of an office for a new planning firm; Ms. Cox was in charge of management of both office and planning staff; She developed all client contacts; prepared and negotiated contracts and supervised billing; Ms. Cox was responsible for preparing and processing rezoning applications, preliminary plans, feasibility studies, site and land use analysis, yield studies and conceptual design in Stafford and Spotsylvania Counties.

Kidde Consultants, AUGUST 1986 - MAY 1989, ***Chief, Planning & Landscape Architecture Section,*** Ms. Cox was in charge of a team that was involved in all phases of planning and landscape architecture. Her responsibilities included: coordinating with and assisting clients' attorneys in obtaining rezoning, special exceptions and special use permits; contract preparation, negotiation and billings; She represented clients at public hearings and meetings with civic groups in Arlington, Fairfax, Prince William and Stafford Counties.

Huntley, Nyce and Associates, P. C., OCTOBER 1984 - AUGUST 1986, ***Staff Landscape Architect,*** Ms. Cox was responsible for small and large scale landscape design, civil design and graphics presentations. She was in charge of a squad of design and drafting personnel. She prepared site, subdivision and landscape plans in Fairfax and Loudon Counties.

Paciulli, Simmons and Associates, APRIL 1984 - OCTOBER 1984, ***Designer,*** Ms. Cox was responsible for the design of commercial and residential site plans and all phases of site design including utility and drainage computations, layout grading plans and roadway design.

WVDOT Division of Highways, DECEMBER 1980 - APRIL 1984, ***Highway Design Technician,*** Ms. Cox was responsible for highway design including repair and improvement; horizontal and vertical layout of roads, quantity calculations, report graphics and drafting.

Joseph Crowder

Surveyor

General Qualifications

Mr. Crowder is currently employed as a surveyor at the Charleston, West Virginia office of Baker's South Region. Mr. Crowder has over 11 years of diverse experience that includes assignments in civil design, surveying, construction inspection and field testing.

Years with Baker: 2

Years with Other Firms: 16

Education
A.S., 1989, Computer Aided Drafting, West Virginia State University

Licenses/Certifications
Real Estate License, West Virginia

Registered Land Surveyor, West Virginia

Experience

CAMC-Flood Protection Project-Phase 1. *CAMC.* Surveyor. Assisted with field work during survey process. Also served as instrument person.

Coal River Energy-Aldrich Branch Permit. *Coal River Energy, LLC.* Surveyor. Assisted in GPS survey control for project. Also served as Instrument Person and Survey Party Chief during field surveys.

Commonwealth of Kentucky-Upper Cane Creek of Red River. *Commonwealth of Kentucky.* Surveyor. Participated as Instrument Person and Survey Party Chief to physically locate streams during survey. Also participated with GPS Surveying of control for Lidar Mapping of project.

Town of West Milford-Sidewalk Improvements, West Milford, West Virginia. *Town of West Milford.* Surveyor. Participated in construction stakeout and monitoring. Baker performed complete planning, design and construction management services for new sidewalks along U.S. Route 270 (Main Street) for the Town of West Milford. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, "ladder-style" crosswalks and storm drainage design. Baker provided Construction Administration and resident inspection services as well as periodic site review during construction.

Miscellaneous Surveying and Mapping Projects, Various Locations. *Columbia Gas Transmission Corporation.* Surveyor. Participated in duration of complete survey. Responsible for courthouse research, helped with actual field locations and mapping and plotting of deeds. Also, assisted in writing of legal description. Over the past nine years, Baker has performed well over 120 miles of extensive gas line surveys and mapping projects throughout the Columbia Gas System.

Non-Baker Project Experience

DuPont, near Washington Works Plant, Wood County, WV. Sampling of water wells. Assisted in gathering data from residents, locating potential sample points, such as old drilled water wells, cisterns, and springs. Assisted in actual water sampling using various methods - bailers, air pumps, etc.

Winfield ACF Site, ACF/Corps of Engineers, Winfield, WV. Work included Boundary, Topographic, Construction Layout, and Sample Point Layout of 15 acres along the Kanawha River. This project had over 12,000 sample points laid out on a 3' grid.

Poor Charlie, Riverside Site, Glasgow, WV; Poor Charlie, Sattes Site, Nitro, WV; Poor Charlie, Cramer Metals Site, Parkersburg, WV. Work included Boundary, Topographic, Location and Boring Stakeout of various VERA sites and adjoining properties.

Elkem Metals Disposal Facility, Elkem Metals, Alloy, WV. Work included Control Network, Boundary, Topographic Surveys, and yearly volume reports.

Solutia, Nitro, WV. Work included Boundary, Topographic and Location Surveys for various projects, disposal facility caps, charcoal filtering systems, and monitoring well control network throughout the site and adjoining properties.

Nicholas County Landfill, Summersville, WV. Work included Control Network, Boundary and Topographic Surveys for expansion of cells and yearly volume reports.

Pocahontas County Landfill, Pocahontas County, WV. Work included Control Network, Boundary and Topographic Surveys for expansion cells and yearly volume reports.

Fleming Landfill, WVDEP, Sissonville, WV. Work included Boundary and Topographic Surveys, along with control network and baseline stakeout for landfill closure.

Cunard Landfill, WVDEP, Fayetteville, WV. Work included Topographic and Construction Layout for landfill closure.

Mingo County Landfill, J & B Contracting, Mingo County, WV. Work included Topographic and Construction Layout for landfill closure.

Mercer County Landfill, Jimmy Dunn, Mercer County, WV. Work included Topographic and Construction Layout for landfill closure.

Merritts Creek Connector Road, WVDOT, Barboursville, West Virginia. Preliminary route survey of 2.2 miles of four-lane roadway. Work included courthouse research, property owner questionnaires, stake proposed centerline, tie to properties, set and reference construction control points. Crew Chief/Project Manager.

Bentons Ferry Bridge Replacement, WVDOH, Fairmont, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

North Bridgeport Connector Road, WVDOH, North Bridgeport, West Virginia. Work included GPS control survey of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points, courthouse research, property owner questionnaires. Crew Chief/Project Manager.

Corridor H, WVDOH, Section 15, Elkins, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Corridor D, WVDOH, Martown Section, Parkersburg, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Martha Truss Bridge Replacement, WVDOH, Milton, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Martha Girder Bridge Replacement, WVDOH, Milton, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Smith Bridge, WVDOH, Wetzel County, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Project Manager.

Opaquen Bridge, WVDOH, Wetzel County, West Virginia. Work included topographic survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Project Manager.

King Coal Highway, WVDOH, Mingo County, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

Sharon Heights Connector Road, WVDOH, Mingo County, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

Kanawha Turnpike, WVDOH, Charleston, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

East Huntington Bridge, WVDOH, Huntington, West Virginia. Work included annual bridge inspection survey of cable stay bridge over the Ohio River. Crew Chief/Surveying Supervisor.

Cogentrix Energy, Cogentrix, Marshall County, West Virginia. Work included GPS control survey of project area, boundary survey of 292 acres, topographic survey of 177 acres for site construction, courthouse research. Surveying Supervisor.

Big Sandy Peaker Plant, Constellation Power, Cabell County, West Virginia. Work included GPS control survey of project area, boundary and topographic of 42 acres, boundary and route survey for 1 mile of transmission lines, construction stakeout. Crew Chief/Surveying Supervisor.

Paintsville Power Plant, Energy Services, Paintsville, Kentucky. Work included control and topographic survey of a 180-acre site for proposed power plant, construction stakeout. Survey Supervisor.

Greenbrier Pipeline, Dominion, West Virginia, Virginia, and North Carolina. Work included control and preliminary route survey of a 264-mile pipeline running from Corton, West Virginia to Raleigh, North Carolina. Survey Supervisor.

Upshur County Power Plant, Dominion, Upshur County, West Virginia. Work included control survey and construction survey of a 170-acre power plant. Survey Supervisor.

Cellular telephone tower sites, Nextel, West Virginia, Kentucky, and Ohio. Work included courthouse research, boundary and topographic survey for 86 tower locations. Crew Chief/Survey Supervisor.

West Virginia-American Water Company. Work included boundary survey for 180 water tank sites throughout West Virginia. Crew Chief/Survey Supervisor.

National Lumber Plant Site, Roane County, West Virginia. Work included boundary and topographic survey, construction stakeout for plant site. Crew Chief/Survey Supervisor.

Buckskin Council Boy Scout Camp, Boy Scouts of America, Pocahontas County, West Virginia. Work included topographic survey and construction stakeout for new water and sewer system. Survey Supervisor.

Hampton-Clarke, Philips Lighting Company, Fairmont, West Virginia. Work included boundary and topographic survey, construction stakeout for cullet pile of hazardous waste site. Crew Chief/Survey Supervisor.

BIDCO, Kanawha County, West Virginia. Work included boundary and topographic survey of several parcels in the development, also stakeout of spec building and parking lots.

University of Charleston, Charleston, West Virginia. Work included boundary survey of several parcels of land for student housing and parking lot. Crew Chief/Survey Supervisor.

Marshall University, Charleston, West Virginia. Work included boundary and location survey of research complex. Survey Supervisor.

Marshall University, Huntington, West Virginia. Work included courthouse research, boundary and topographic survey of several city blocks for student housing and parking buildings. Crew Chief/Survey Supervisor.

Chief/Survey Supervisor.

Previous Work History

Triad Engineering, Inc., Survey Party Chief, July 2006-September 2007

HNTB Corporation, Survey Party Chief, July 2006-July 2005

Potesta & Associates, Survey Manager, Inc., 1999-2005

Design Tech, L.L.C., Survey Party Chief, 1997-1999

Site Blauvelt Engineers, Survey Party Chief, 1996-1997

Dunn Engineers, Survey Party Chief, 1993-1996

Professional Affiliations

West Virginia Society of Professional Surveyors (WVSPS)

CAS Structural Engineering, Inc.

Carol A. Stevens, P.E.
Structural Engineer

EDUCATION

West Virginia University, BSCE, 1984
Chi Epsilon National Civil Engineering Honorary
The Pennsylvania State University, ME Eng Sci, 1989

PROFESSIONAL REGISTRATION

P.E.	1990	Pennsylvania
P.E.	1991	West Virginia
P.E.	1994	Maryland
P.E.	2008	Ohio
P.E.	2010	Kentucky

BACKGROUND SUMMARY

2001 – Present	President, Structural Engineer CAS Structural Engineering, Inc.
1999 – 2001	Structural Engineer Clingenpeel/McBrayer & Assoc, Inc.
1996 – 1999	Transportation Department Manager Structural Engineer Chapman Technical Group, Inc.
1995 – 1996	Structural Engineer Alpha Associates, Inc.
1988 – 1995	Structural Department Manager Structural Engineer NuTec Design Associates, Inc.
1982 – 1988	Engineer AAI Corporation, Inc.

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers, WV Section
Past President
National Society of Professional Engineers
American Concrete Institute
American Institute of Steel Construction
West Virginia University Department of Civil and Environmental Engineering Visiting Committee
West Virginia University Institute of Technology
Department of Civil Engineering Advisory Comm

CIVIC INVOLVEMENT

ASCE Christmas in April Project

EXPERIENCE

West Virginia, Central West Virginia Transit Authority (CENTRA): Repairs to existing facility roof and parapet wall to repair leaks.

West Virginia, Bluefield Transit Building: Design of new office, maintenance and bus storage facility for the Bluefield Transit Authority.

West Virginia, State Capitol Complex, Dome Structure: Exploratory investigation and preparation of construction documents for repairs to structural steel in Capitol Dome.

West Virginia, State Capitol Complex, Building 3: Structural design and construction administration of repairs and renovations to limestone canopy.

West Virginia, State Capitol Complex, Main Capitol Building Parapet: Exploratory investigation of limestone/brick parapet/balustrade of Main Capitol Building to determine cause of movement/cracking/leaks. Construction contract for repairs has been awarded and work is progressing. Building is on State Historic Register.

West Virginia, Huntington Parking Garage: Designed structural repairs to existing parking facility. New deck expansion joints were installed at the upper level and a new deck coating system was applied to parking level above retail space.

West Virginia, State Capitol Complex, Governor's Mansion: Structural analysis and design in addition to evaluation report for modifications and renovations to several areas of mansion. Building is on State Historic Register.

West Virginia, State Capitol Complex, Holly Grove Mansion: Structural evaluation report for preliminary condition assessment of building structure. Building is on State Historic Register.

West Virginia, State of West Virginia Building 2, California Ave Parking Garage, Charleston, WV: Performed condition survey of existing 1950's reinforced concrete parking facility and recommended repairs to Owner. Owner opted to raze structure.

West Virginia, St. Mary's Parking Structure: Performed condition survey of existing post-tensioned

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Certified in the Practice of Structural Engineering

parking structure designed in 1978. Recommended repairs to the Owner.

Pennsylvania, Sewickley Manor Parking Garage: Performed condition survey of existing parking structure constructed in the 1960's. Structure consists of precast concrete beams and joists supported by concrete columns. Recommended repairs to Owner.

Pennsylvania, Holiday Inn Parkway East: Performed condition survey of existing structure designed in 1974. Determined that there were structural deficiencies and recommended repair solutions to Owner.

Pennsylvania, Fifth & Neville Apartments Parking Garage: Performed condition survey of existing parking structure constructed in the 1960's. Recommended repair solutions to Owner.

West Virginia, Upshur County Courthouse: Developed construction documents for structural repairs to main entrance and dome of 1899 structure. Work is currently under contract.

PREVIOUS EXPERIENCE

West Virginia, Huntington TTA Bus Garage: Designed repairs to existing building foundation and floor slab in office area for project including renovations of offices, driver's and mechanic's area and locker room recreations room/break room.

West Virginia, State Capitol Building: Designed structural system to replace deteriorated reinforced concrete slab at landing on north side of Capitol steps.

West Virginia, Farrell Law Building: Performed analysis of existing deteriorated structural sidewalk over parking area. Recommended repair solutions for reinforced concrete and aged terra cotta façade of 1920's building.

West Virginia, Upshur County Courthouse Annex: Performed structural evaluation and design for repairs to existing multi-story Annex addition.

West Virginia, Sissonville Library: Structural design of new 7,000 SF branch library. Structure consisted of wood framing.

West Virginia, Cabell Huntington Hospital Boiler Mezzanine: Structural analysis and testing of existing reinforced concrete mezzanine with significant degradation from brine tank leakage. Developed new structural system to replace existing concrete mezzanine utilizing steel framing and steel grating.

West Virginia, Beckley Wastewater Treatment Plant: Designed reinforced concrete tanks and masonry support structures for new wastewater treatment plant.

West Virginia, Morgantown High School Additions: Designed steel framing and foundations for science classroom, cafeteria and gymnasium additions to existing education complex.

West Virginia, Grafton High School Addition: Designed steel framing and foundations for new science classroom addition to existing high school.

Pennsylvania, Metropolitan Edison Company, Headquarters: New 80,000 SF two-story office addition to existing complex.

Pennsylvania, Defense Distribution Region East: Structural engineering and design for a 33,000 SF Hazardous Materials Storage Warehouse.

Pennsylvania, Glatfelter Insurance: Design of steel framing and foundations for new 30,200 SF building.

Maryland, U.S. Army Corps of Engineers, Baltimore District, Administration Building: Seismic design of new 10,000 SF masonry building.

Pennsylvania, Carlisle Syntec: Design of foundation supports for 800,000 lb rubber vulcanizing machine; enlargement of foreman's office including new framing to support mechanical equipment on roof; new monorail installation; extension of existing gantry rail.

Pennsylvania, Engel Worldwide: Steel framing and foundations for new 12,000 SF two-story office building; design of crane beams and columns for adjacent 60,000 SF crane building.

Pennsylvania, AMP IMF: Structural design for the renovation and conversion of a stamping facility into an integrated manufacturing facility (IMF) housing operations for stamping as well as blow molding processes.

Texas, York International: Structural survey of existing building structure for modifications to incorporate large testing and manufacturing areas for mechanical equipment.

Maryland, Columbia 100: Design of structural steel framing for new two-story 43,000 SF office building.

Pennsylvania, York Federal Savings and Loan Association/New Service Corporation: Design of steel framing, reinforced concrete retaining wall and foundations for new 14,400 SF two-story office building.

Pennsylvania, Yorktowne Parking Garage: Study of reinforced concrete/steel framed parking garage.

Larry C. Nottingham, PhD, PE

Mr. Nottingham served as a Principal Engineer at Triad Engineering, Inc. for over 25 years before joining the professional staff at NGE. During that time he has accumulated a broad range of experience in the numerous disciplines of geotechnical engineering. Mr. Nottingham also served as a professor and department chair of the Civil Engineering Department at the West Virginia University Institute of Technology in Montgomery, West Virginia. Mr. Nottingham was involved with consultation and review of many subsidence related projects performed for BRIM as well as the WVDEP.

Fields of Competence

- Foundation Investigations
- Landslide Analysis & Remedial Design
- Mine Subsidence Investigations
- Highway & Airport Geotechnical Design
- Pavement Analysis & Design
- Retaining Wall Design
- Forensic & Insurance Investigations
- Expert Witness Consultation
- Ground Water and Seepage Analysis & Design
- Dam Analysis & Design
- Personnel Management
- Project Management
- Project Estimating

Education

- B.S.C.E., Civil Engineering, West Virginia Institute of Technology, 1965
- M.S.C.E., Civil Engineering, University of Pittsburgh, 1966
- Ph.D., Civil Engineering, University of Florida, 1975

Registration/Certifications

Registered Professional Engineer in West Virginia, Kentucky, and Ohio

Employment History

- May 2005 – Present
  Senior Engineer, NGE, LLC
- 1979 – May, 2005
  Principal Engineer, Triad Engineering, Inc.
- 1989 - 1994
  Professor and Department of Civil Engineering Chair, West Virginia Institute of Technology
- 1975 - 1979
  Senior Engineer, Fugro Gulf, Inc., Houston, Texas
- 1970 - 1974
  Project Engineer, Florida Department of Transportation
- 1967 – 1970
  Project Engineer – Ackenheil & Associates, Inc.

John E. Nottingham, P.E., P.S.

Mr. Nottingham has served as Principal Engineer for the West Virginia office of NGE since late 2002 after having managed Geotechnical Services at Triad Engineering. In this capacity, he has served as lead Geotechnical Engineer on a variety of government and commercial design and construction projects. His responsibilities on these projects include direction and coordination of all geotechnical engineering activities. Duties on these projects have included foundation investigation report production, foundation and retaining wall design, fill embankment and cut slope design, dam design and analysis, slope stability analysis, pavement design, design of drainage systems, supervision of subsurface drilling programs, field activity coordination, laboratory data computation and processing, performance of field work, client relations, and supervision of staff and project level geotechnical engineers.

Fields of Competence

- Highway & Airport Geotechnical Design
- Foundation Investigations
- Pavement Analysis and Design
- Landslide Analysis & Remedial Design
- Ground Water and Seepage Analysis & Design
- Retaining Wall Design
- Mine Subsidence Investigations
- Forensic & Insurance Investigations
- Construction Monitoring
- Personnel Management
- Project Management (schedule and budget)
- Project Estimating

Education

- B.S., Civil Engineering, West Virginia University - 1987
- M.S., Civil Engineering, West Virginia University - 1995

Registration/Certifications

- Registered Professional Engineer in West Virginia. Registration No. 12357 (since 1994)
- Registered Professional Surveyor in West Virginia. Registration No. 1495 (since 1995)

Employment History

- November 2002 – Present
  Branch Manager, Vice President, Principal Engineer, NGE, LLC
- 1997 – November 2002
  Geotechnical Services Manager, Triad Engineering, Inc.
- 1996 – November 2002
  Senior Engineer, Triad Engineering, Inc.
- 1993 – 1996
  Project Engineer, Triad Engineering, Inc.
- 1988 – 1993
  Staff Engineer, Triad Engineering, Inc.

Michael D. Frame

Mr. Frame has worked on numerous projects for clients in private industry as well as for state and federal agencies. He has performed a variety of roles in various projects from office management activities to coordination of field activities. Duties on these projects have included foundation investigation report production, slope stability analysis, AutoCAD drafting, supervision of subsurface drilling programs, field portion of environmental site assessments, structural inspections, GPS and conventional surveys, laboratory data computation and processing, performance of fieldwork, and client relations.

Fields of Competence

- Foundation Investigations
- Construction Monitoring
- Personnel Management
- Project Management (schedule and budget)
- Project Estimating

Education

- BS, Civil Engineering Technology, West Virginia University Institute of Technology, 2010

Registration/Certifications

- OSHA 1910.120 40-hour HAZWOPER Training, 2010

Employment History

- December 2010 – Present
  Staff Engineer, NGE, LLC
- March 2010 – December 2010
  Engineering Intern, NGE, LLC
- 2004 – Present
  Structural Journeyman, Civil Engineering Squadron
  West Virginia Air National Guard
- 2009
  Resurfacing Inspector Intern, WVDOH

Chuck Montgomery, P.G.

NGE
Environmental & Geotechnical
Engineering Solutions

Mr. Montgomery has served as Project Geologist on numerous projects for clients in private industry as well as for state and federal agencies. He has performed a variety of roles in various projects from office management activities to coordination of field activities. Duties on these projects have included foundation investigation report production, mine subsidence evaluation and assessment, supervision of subsurface drilling programs, field activity coordination, laboratory data computation and processing, performance of fieldwork, client relations, and supervision of staff. Mr. Montgomery also coordinates and performs Crosshole Sonic Logging (CSL) testing, a non-destructive method of analyzing the integrity of concrete shafts.

Fields of Competence

- Foundation Investigations
- Landslide Analysis
- Mine Subsidence Investigations
- Seismic Site Class evaluation, per International Building Code (IBC) 2000 edition.
- Forensic & Insurance Investigations
- Crosshole Sonic Logging (CSL)
- Personnel Management
- Project Management (schedule and budget)
- Project Estimating

Education

- B.S., Geology, Marshall University – 1991
- OSHA 1910.120 40-hour HAZWOPER Training

Registration/Certifications

- Registered Professional Geologist in Kentucky. Registration No. KY-2258 (since 1999)
- Certified Monitoring Well Driller in West Virginia
- OSHA 1910.120 40-hour HAZWOPER Training

Employment History

- February 2004 – Present
  Project Manager, NGE, LLC

- 1996 – February 2004
  Project Geologist, Triad Engineering, Inc.

- 1992 –1996
  Staff Geologist, Triad Engineering, Inc.

Gene Brown, P.E.

Mr. Brown has served as Project Engineer on numerous projects for clients in private industry as well as for state and federal agencies. He has performed a variety of roles in various projects from office management activities to coordination of field activities. Duties on these projects have included foundation investigation report production, slope stability analysis, dam analysis, AutoCAD drafting, supervision of subsurface drilling programs, field activity coordination, environmental site assessments, operation and maintenance of groundwater extraction and remediation systems, structural inspections, GPS and conventional surveys, laboratory data computation and processing, performance of fieldwork, client relations, and supervision of staff.

Fields of Competence

- Foundation Investigations
- Landslide Analysis & Remedial Design
- Seismic Site Class evaluation, per International Building Code (IBC) 2000 edition.
- Construction Monitoring
- Personnel Management
- Project Management (schedule and budget)
- Project Estimating

Education

- BS, Civil Engineering Technology, Bluefield State College, 2000
- BS, Architectural Engineering Technology, Bluefield State College, 2000

Registration/Certifications

- Registered Professional Engineer, West Virginia
- Licensed Remediation Specialist (LRS), West Virginia
- OSHA 1910.120 40-hour HAZWOPER Training, 2005
- Certified WVDOT-DOH Compaction Inspector
- Certified WVDOT-DOH Portland Cement Concrete Inspector

Employment History

- October 2008 – Present
  Project Engineer, NGE, LLC
- October 2006 – October 2008
  Staff Engineer, NGE, LLC
- 2001 – 2006
  Staff Engineer, Terradon Corporation
- 2000 – 2001
  Survey Technician, John E. Chance & Associates, Inc
- 1999
  Engineer Intern, Burgess & Niple, Ltd.

Jeffrey T. Huffman, P.E.

Mr. Huffman has served as Senior Engineer for the West Virginia office of NGE since 2011 and is concurrently Assistant Professor of Engineering at Marshall University. Prior to NGE and Marshall University he was Branch Manager for the South Charleston, WV and Durham, NC offices of CTL Engineering. In this capacity, he supervised all office operations on a variety of government, commercial and residential design & construction projects. His responsibilities on these projects include direction and coordination of all geotechnical engineering, site civil engineering, laboratory and QA/QC activities. Duties on these projects have included foundation investigation report production, foundation and retaining wall design, fill embankment and cut slope design, dam design and analysis, slope stability analysis, pavement design, design of drainage systems, supervision of subsurface drilling programs, field activity coordination, laboratory data computation and processing, performance of field work, client relations, and supervision of staff.

Fields of Competence

- Highway Geotechnical Design
- Subsurface Investigations
- Pavement Analysis and Design
- Landslide Analysis & Remedial Design
- Groundwater and Seepage Analysis & Design
- Retaining Wall Design
- Mine Subsidence Investigations
- Expert Witness & Arbitration
- Forensic & Insurance Investigations
- Construction Monitoring
- Project Management (schedule and budget)
- Project Estimating
- Office & Personnel Management

Education

- Docrorate work, Civil Engineering, Virginia Polytechnic Institute and State University - 1991
- M.S., Civil Engineering, – Virginia Polytechnic Institute and State University, 1990
- B.S., Civil Engineering, – Virginia Polytechnic Institute and State University, 1988

Registration/Certifications

- Registered Professional Engineer in Pennsylvania. Registration No. PE04567E (1994)
- Registered Professional Engineer in West Virginia. Registration No. 016403 (2005)
- Registered NCEES. Registration No. 30346 (2007)
- Registered Professional Engineer in Kentucky. Registration No. 25185 (2007)
- Registered Professional Engineer in Ohio. Registration No. 72131 (2007)
- Registered Professional Engineer in North Carolian. Registration No. 034520 (2008)

Employment History

- June 2011 – Present
  Senior Engineer, NGE, LLC

- January 2011 - Present
  Assistant Professor of Engineering, Marshall University

- 2008 – 2010
  Branch Manager, CTL Engineering

- 2009 – 1991
  Senior Geotechnial Engineer, Geotechnical Engineer, Project Geotechncial Engineer, Techncial Director and Vice President of various firms in PA, OH and WV.

Part 8 – References

Each of the Project Profiles found in Part 7 lists Baker's client and contact information for your use as a reference. Additionally, we offer the following diverse list of past or current clients and contact information:

- City of Parsons
  341 Second Street
  Parsons, WV 26287
  Mr. Jason Myers, City Administrator
  (304) 478-2311
- West Virginia Department of Transportation – Division of Highways
  1900 Kanawha Boulevard East,
  Building 5, Room A-109
  Charleston, WV 25305
  Mr. Darrell Allen, P.E., Deputy State Highway Engineer
  (304) 558-3304
- City of Charleston
  915 Quarrier Street, Suite 5
  Charleston, WV 25301-2607
  Mr. Tony Fish, P.E., Assistant City Engineer
  (304) 348-8106
- WV Division of Homeland Security & Emergency Mgmnt., E-911 Mapping
  1900 Kanawha Boulevard, East
  Building 1, Room EB-80
  Charleston, WV 25305
  Mr. Jimmy Joe Gianato, Director of Homeland Security
  (304) 530-6142
- Harrison County Planning Commission
  301 West Main Street
  Clarksburg, WV 26301
  Ms. Terry Schulte, Director
  (304) 624-8690
- Habitat for Humanity of Kanawha & Putnam County ReStore
  815 Young Street
  Charleston, WV 25301
  Ms. Amy McLaughlin, Director
  (304) 720-0141
- West Virginia Army National Guard – Division of Engineering and Facilities
  1707 Coonskin Drive
  Charleston, WV 25311-1099
  Major Michael J. Beckner, Facilities Management Officer
  (304) 561-6333

Part 9 – Attachments

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM # 1: Letter of Intent

Name of Bidder/Offeror's Firm: Michael Baker Jr., Inc.

Address: 5088 West Washington Street

City: Charleston State: WV Zip Code: 25313

Name of DBE firm: CAS Structural Engineering, Inc.

Address: P. O. Box 469

City: Alum Creek State: WV Zip Code: 25003

Telephone: 304-756-2564

Description of work to be performed by the DBE firm:

Structural Engineering

By: Carol A Stevens (Signature) President (Title)

If the Bidder/Offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

(Submit this page for each DBE subcontractor.)

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM # 1: Letter of Intent

Name of Bidder/Offeror's Firm: Michael Baker, Jr., Inc,

Address: 5088 West Washington Street

City: Charleston State: WV Zip Code: 25313

Name of DBE firm: NGE

Address: 806 B Street

City: St. Albans State: WV Zip Code: 25177

Telephone: 304-201-5180

Description of work to be performed by the DBE firm:

Soils Investigation

By: _____ Vice President
(Signature) (Title)

If the Bidder/Offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

(Submit this page for each DBE subcontractor.)

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM #2: DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION

The undersigned Bidder/Offeror has satisfied the requirements of the bid specification in the following manner (please check the appropriate space):

__X__ The Bidder/Offeror is committed to a minimum of 5.1% DBE utilization on this contract.

_____ The Bidder/Offeror (if unable to meet the DBE goal of 5.1%) is committed to a minimum of 5.1% DBE utilization of this contract and submits documentation demonstrating good faith efforts.

Name of Bidder/Offeror's firm: Michael Baker, Jr., Inc.

By: Russell Hall (Signature) Asst. Vice President (Title)

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM #3

Michael Baker, Jr., Inc. hereby certifies that it IS or IS NOT (specify one) included on the U.S. Comptroller General's Consolidated List of Persons or Firms Currently Debarred for violations of Various Public Contracts Incorporating Labor Standards Provisions.

10/27/11
Date

Russell Hall
Authorized Signature

Russell Hall
Title Assistant Vice President

Michael Baker Jr., Inc.
Company Name

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM #4

CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential contractor for a major third party contract),

Michael Baker Jr., Inc. (COMPANY NAME) certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and

4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT),

Russell Hall, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

Russell Hall / Asst. Vice President
Signature and Title of Authorized Official

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM #5

CERTIFICATION OF RESTRICTIONS ON LOBBYING

The undersigned (Vendor, Contractor) certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. [as amended by "Government Wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure. [Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure.]

The Vendor, Michael Baker Jr., Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Vendor understands and agrees that the provisions of 31 U.S.C. § 3801, et seq., apply to this certification and disclosure, if any.

10/27/11 — Date

Russell Hall — Authorized Signature

Russell Hall

Title Assistant Vice President

Spending Unit: Division of Public Transit
Department of Transportation

BID FORM #6

RFQ No. PTR12004

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: 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 the debt owed is an amount greater than one thousand dollars in the aggregate.

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.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (***West Virginia Code*** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Michael Baker Jr., Inc.

Authorized Signature: _____ Date: 10/27/11

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 27th day of October, 2011

My Commission expires April 14, 2013

AFFIX SEAL HERE

NOTARY PUBLIC _____

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
STEPHANIE A. HENSLEY
c/o MICHAEL BAKER JR., INC.
5088 WEST WASHINGTON ST.
CHARLESTON, WV 25313
My commission expires April 14, 2013

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
PTR12004	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
FRANK WHITTAKER
304-558-2316

VENDOR
*709015418 02 304-769-0821
MICHAEL BAKER JR INC
5088 W WASHINGTON ST 2ND FLR

CHARLESTON WV 25313

SHIP TO
DIVISION OF PUBLIC TRANSIT
BLUEFIELD TRANSIT SYSTEM

1642 BLUEFIELD AVENUE
BLUEFIELD, WV
24701 304-327-8418

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
10/21/2011				

BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-00-00-001		
	ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL					
	****** THIS IS THE END OF RFQ PTR12004 ******				TOTAL:	

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE [signature] TELEPHONE 304-769-0821 DATE 10/27/11

TITLE Assistant V.P. FEIN 251228638 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
PTR12004	1

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10/21/2011				

BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

********** ADDENDUM NO. 1 **********

THIS ADDENDUM IS ISSUED TO:

1) CLARIFY THE INFORMATION THAT SHOULD BE CONTAINED ON THE OUTSIDE OF THE VENDOR'S EOI

THE OUTSIDE OF THE ENVELOPE OR PACKAGE(S) SHOULD BE CLEARLY MARKED:

BUYER: 44
REQ#: PTR12004
BID OPENING DATE: 10/27/2011
BID OPENING TIME: 1:30 PM

2) PROVIDE THE SCHEDULE OF EVENTS THAT WAS OMITTED FROM SECTION 1.16 OF THE EOI IN ERROR. SECTION 1.16 IS CHANGED AS FOLLOWS:

1.16 SCHEDULE OF EVENTS:

RELEASEOF THE EOI	09/30/201
FIRMS WRITTEN QUESTION SUBMISSION DEADLINE	10/13/2011
ADDENDUM ISSUED	TBD
EXPRESSION OF INTEREST OPENING DATE	10/27/2011
ESTIMATED DATE FOR INTERVIEWS	TBD

********** END ADDENDUM NO. 1 **********

RECEIVED
OCT 24 2011
MICHAEL BAKER CORPORATION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE Cyndell Hall TELEPHONE 304-769-0821 DATE 10/27/11

TITLE Assistant V.P. FEIN 251228638 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
PTR12004	3

ADDRESS CORRESPONDENCE TO ATTENTION OF:
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304-558-2316

VENDOR
*709015418 02 304-769-0821
MICHAEL BAKER JR INC
5088 W WASHINGTON ST 2ND FLR

CHARLESTON WV 25313

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BLUEFIELD TRANSIT SYSTEM

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24701 304-327-8418

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/30/2011				

BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	****** THIS IS THE END OF RFQ PTR12004 ****** TOTAL:					

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE Russell Hall TELEPHONE 304-769-0821 DATE 10/27/11

TITLE Assistant V.P. FEIN 251228638 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
PTR12004	2

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304-558-2316

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*709015418 02 304-769-0821
MICHAEL BAKER JR INC
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BLUEFIELD TRANSIT SYSTEM

1642 BLUEFIELD AVENUE
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24701 304-327-8418

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/30/2011				

BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:

SEALED BID

BUYER: 44

RFQ. NO.: PTR12004

BID OPENING DATE: 10/27/2011

BID OPENING TIME: 1:30 PM

PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:

304-769-0822

CONTACT PERSON (PLEASE PRINT CLEARLY):

Russell Hall

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
Russell Hall	304-769-0821	10/27/11

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Assistant V.P.	251228638	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
PTR12004	1

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304-558-2316

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*709015418 02 304-769-0821
MICHAEL BAKER JR INC
5088 W WASHINGTON ST 2ND FLR

CHARLESTON WV 25313

SHIP TO
DIVISION OF PUBLIC TRANSIT
BLUEFIELD TRANSIT SYSTEM

1642 BLUEFIELD AVENUE
BLUEFIELD, WV
24701 304-327-8418

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BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-00-00-001		

ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL

THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF PUBLIC TRANSIT IS SOLICITING EXPRESSIONS OF INTEREST FROM QUALIFIED FIRMS TO PROVIDE ARCHICTURAL AND ENGINEERING SERVICES FOR RENOVATION/CONSTRUCTION OF THE BLUEFIELD TRANSIT FACILITY PER THE ATTACHED.

ALL TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO FRANK WHITTAKER IN THE WV PURCHASING DIVISION VIA EMAIL AT FRANK.M.WHITTAKER@WV.GOV OR VIA FAX AT 304-558-4115. DEADLINE FOR ALL TECHNICAL QUESTIONS IS 10/13/2011. ALL TECHNICAL QUESTIONS WILL BE ADDRESSED BY ADDENDUM AFTER THE DEADLINE.

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.

NOTICE

A SIGNED BID MUST BE SUBMITTED TO:

DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
BUILDING 15
2019 WASHINGTON STREET, EAST
CHARLESTON, WV 25305-0130

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
Russell Hall	304-769-0821	10/27/11

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Assistant V. P.	251228638	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'