

#### **Expression of Interest for:**

## **Architectural/Engineering Design Services**

## St. Marys Correction Facility - COR61430

#### submitted to:

#### Mr. John Abbott

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

August 27, 2009

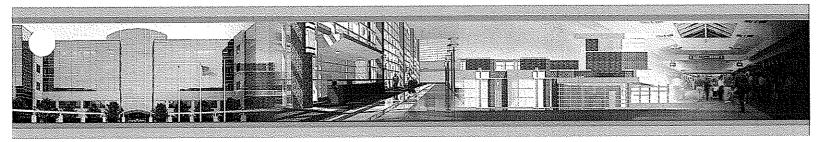
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#### PART 1 - LETTER OF INTEREST

39/19/

August 27, 2009

Michael Baker Jr., Inc.

A Unit of Michael Baker Corporation

5088 West Washington Street Second Floor Charleston, WV 25313

304.769.0821 Phone 304.769.0822 Fax

Mr. John Abbott, Senior Buyer Purchasing Division P.O. Box 50130 Charleston, WV 25305-2544

**Expression of Interest to Provide Architectural/Engineering Services** RE: St. Marys Correction Center - COR61430

Dear Mr. Abbott:

We appreciate the opportunity to respond to the Request for Expression of Interest for the design of the St. Marys Correction Center Project. As you will see from the enclosed project profiles and personnel resumes, Baker has extensive experience in the preparation of similar facility plans. Baker's vast experience in municipal architectural design will allow us to provide the St. Marys Correction Center unmatched services and the ultimate successful completion of this important project.

Baker is a global engineering and energy firm with some 5,000 members in 50 office locations. We propose to undertake this and any subsequent assignments from our Charleston, West Virginia office. Our Charleston office employs over 40 individuals including architects, engineers, landscape architects, planners, surveyors, environmental specialists, and technicians.

We feel this combination of global expertise and West Virginia based experience is unique to Baker and are confident we can provide efficient, timely, personal, cost effective, and quality solutions for the St. Marys Correction Center.

We continue to strive to be the best at what we do. No other firm can match our commitment. Please call us for an interview so that we can further present our qualifications and ideas regarding your project. Baker is eager to forge a long-term relationship with the St. Marys Correction Center, and would welcome the opportunity to become your project delivery team.

We appreciate your consideration and would be pleased to respond to any questions. For the purposes of future contact and further questions, please feel free to contact me at (304) 769-0821 or by e-mail at <a href="mailto:pfogarty@mbakercorp.com">pfogarty@mbakercorp.com</a>.

Sincerely,

Patrick W. Fogarty, PE, PS

chael Baker In, Inc.

Civil Services Group Manager

## PART 2 – STATEMENT QUALIFICATIONS AND EXPERIENCE OF STAFF PERSONNEL

The St. Marys Correction Center is seeking a highly qualified firm experienced in program management, planning, design, and construction administration of new buildings and renovations to the existing facilities, that will bring the facility to full capacity. Michael Baker Jr., Inc. (Baker) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in establishing a professional relationship with the Division of Corrections and St. Marys Correction Center.

#### A. Project Understanding

#### Location:

St. Marys Correction Center located in St. Marys, West Virginia

#### Background:

The main facility was constructed as a hospital and transferred to the Division of Corrections in 1998. The existing facility has required many renovations with different phases. The task is to make renovations and new buildings necessary to bring the facility up to full capacity.

#### The General Requirements:

• Firms are to be licensed Architectural / Engineering Firms and be familiar with and have a successful track record of design of similar projects. The anticipated contract will be for a "full service" A/E design.

#### The Project Description:

- The project consists of (1) one 80 bed segregation unit, one (1) Correctional Industries/ Vo-Tech Building, renovations to an existing building used as an Administrative Building, renovations to an existing Multi-Use Building and four (4) 56 bed dormitories. All these building are within the existing secured perimeter.
- The Demolition of the old Administration Building and construction of a new Administration Building and replacement of an existing storm drain. This work is outside the secured perimeter.

- To provide Architectural / Engineering design and Construction services for the project, with assistance from appropriate personnel from the West Virginia Division of Corrections.
- Preparation of Schematic Design Documents.
- Preparation of Design Development Documents.
- Preparation of Construction Documents.
- Assistance to the Owner during the Bidding Phase, including assisting with evaluation of bids and the qualifications of bidders.
- Construction Administration.
- Provide three (3) complete sets of Record Drawings for the project.

#### B. 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 4,700 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, landscape architecture, operations, and technical services worldwide. The firm has a national practice with 34 offices throughout the U.S. from which to serve our domestic clients. Our multi-national architectural/engineering services result in over \$400M gross revenue per year. We are committed to using the latest computer technology and provide best quality services in the areas of Architectural Facility Design and Planning, Landscape Architecture, Environmental Design, and CADD.

Work for this project will be performed at our local Charleston, West Virginia Office, which we feel will give the very best advantages to the St. Marys Correction Center.

Baker has extensive resources and the required qualifications to provide planning and design services for the St. Marys Correction Center for this very important project. The Baker team of experienced professionals have an established record of delivering quality work products to our clients.

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 Safety Services
- · Graphic Design Skills
- Coordination with State and Federal Agencies, as required

Baker is devoted to providing comprehensive professional services, from environmental to facility designs, and construction management. From major new facility designs to renovation projects, Baker has evolved into one of the leading Architecture and Engineering firms dedicated to creating well-fitting Architectural Drawings and interior designs. Our goal is only achieved when our client is perfectly satisfied with any work we have done. Our staff will accommodatingly guide our clients to creating their vision driven ideal facility.

Baker's clients for facilities design and program management include, but are not limited to, the Counties, Cities, Towns, and local municipalities, numerous State Agencies, 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.

#### C. 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. Services for these assignments have included programming, planning, architecture design, civil, mechanical, plumbing, and geotechnical, electrical, surveying, engineering, permitting, cost estimating and construction administration.

In addition, and of particular importance to this project, Baker is committed to sustainable design and the reuse of recycled materials on all projects with client approval. We have numerous LEED® accredited professionals on staff that are completely familiar with the five elements of the Leadership in Energy and Environmental Design, Green Building Rating System.

#### D. Technical Expertise

Baker can offer the St. Marys Correction Center proven experience in the following Professional Services which may be required for this project:

#### 1. Preliminary Plans and Costs.

Baker proposes to prepare preliminary cost estimates, site plans, elevations and schematic details with supporting design documentation. These documents 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 Schematic Submittal.

#### 2. Plans and Specifications 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. 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 are created from our Master Spec Library and tailored to meet individual project requirements.

During the project design phase, Baker routinely assists in the preparation of permit applications for public and private clients. Permits and approvals required for this project may include:

- WV Department of Environmental Protection, NPDES Permit
- U.S. Department of Homeland Security
- West Virginia State Historic Preservation Office
- WV State Fire Marshal, Plan Review.

We have established relationships with each of these agencies which will streamline the permit acquisition process.

#### 3. 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.

#### 4. Project Bid Evaluation.

Bids will be scrutinized by the Baker Project Manager. Likewise, detailed bid tabulations will be developed to allow the Project Manager to work with the Division of Correction, St. Marys Correction Center and Purchasing Division toward the development of Construction Contract award.

Bidders will assist the Owner in evaluating by the bidders for technical and financially capability to accomplish the project on time, within budget, and as specified.

#### 5. 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

the correspondence will be construction-related Resident responsibility of the Project Manager will conducted Baker services be bν inspection technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation (i.e. concrete placement, compaction, Constant communication asphalt, trenching, etc.). between field and office is essential and will be achieved.



### E. Management and Staffing Capabilities

Baker's Charleston office possesses a large and diverse engineering and environmental planning staff. Baker's team of experienced professionals has demonstrated the ability to deliver quality work products to our clients, on-time and within budget. Each individual on this 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, PE, PS,** 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 civil engineering working in both the government and private sectors. Mr. Hall has been responsible for the design and management of multiple multi-disciplinary projects of varying size and complexity. His experience, understanding of project delivery and dedication to client satisfaction will guide this project.

**Patrick W. Fogarty, PE, PS,** is the Civil Services Group Manager. Mr. Fogarty has over 22 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.

**Ron L. Bolen, AIA,** with over 36 years of diverse experience, will serve as the Project Manager for the **Baker** effort of the architectural element of 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 State Agencies, including WV Division of Purchasing and State Fire Marshal's office. Some of Mr. Bolen's directly related notable projects are as follows:

- Project Architect for State of West Virginia Capitol Master Plan
- Job Captain for the Federal Bureau of Prisons Facility for the Gymnasium Addition on the medium security facility at Beckley, West Virginia
- Job Captain for the Federal Bureau of Prisons Facility for the ADA Renovations on the medium security facility at Beckley, West Virginia
- Project Architect during Construction Administration Phase for the North Central Regional Juvenile Detention Center – Parkersburg, WV
- Project Architect during Bidding and Construction Administration Phases for the Sam Perdue Juvenile Detention Center – Princeton, WV

**David Pecharka, AIA, LEED AP,** Mr. Pecharka's project design experience includes transportation, military, master planning, educational, institutional, commercial, housing, recreational, health care, long-term care, and religious facilities. He has a long-standing interest in environmentally sustainable building design, and has conducted and administered LEED® applications for several buildings.

**David Hilliard,** Mr. 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 institutional, medical, and educational facilities, and commercial and industrial office space projects.

**Craig West, PE, LEED AP,** Mr. West is the Mechanical Technical Manager for mechanical engineering department. His background includes project management and providing design and specifications for HVAC, plumbing, fire protection, piping, and process exhaust systems for educational, military, commercial, institutional, healthcare, and industrial facilities.

**Owen Milligan, PE,** Mr. Milligan is an electrical engineer who is experienced working with consulting engineering firms in the study and design of electric distribution and control systems, emergency power for process plants and facilities, water/wastewater treatment plants, government and commercial projects, ASHRAE energy-efficient building design, coordination with vendor and contractors, and approval of vendor drawings.

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.

R. Todd Schoolcraft, PLA, ASLA, will provide site civil and landscape architectural support for this project. Mr. Schoolcraft has over 18 years of

experience in site planning and landscape architecture, with over 26 years of tenure in the construction industry. His major areas of specialty include commercial development, military installation design, site planning, streetscape and urban design.

Jason T. Smithson, PS. Mr. Smithson is a graduate geologist, professional surveyor, and engineering technician with over 9 years of diverse experience in civil, environmental, and geotechnical engineering assignments. Mr. Smithson will be responsible for the surveying and data collection, as well as the disposition of utility easements and right of way coordination for the project.

**John W. Dawson, PE, PS,** will serve as Construction Services Manager. Mr. Dawson has over 38 years of construction management experience. In his tenure at WVDOH, he has worked as a Construction Engineer, Maintenance Engineer, and District Engineer. Mr. Dawson manages all of Baker's Construction Management and Inspection contracts in West Virginia.

## F. Key Personnel 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 21 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 Years with Baker: 3

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

managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

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 25<sup>th</sup> Street Overpass Bridge. Neff is a sub consultant 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 sub consultant to Baker responsible for all right-of-way plan development.
- New River Parkway, Summers and Raleigh counties Neff is a sub consultant 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

#### General Qualifications

Mr. Fogarty is an asset to the Michael Baker Jr., Inc. team with over 21 years of project management experience. He is responsible for technical and management aspects of 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, 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 for the 250 member firm as a member of the board of directors.

#### Experience

On-Call Engineering/Architectural Services, Airport (CRW), Charleston, West Virginia. Central West Virginia Regional Airport Authority. Project Manager. Responsible for management planning and lead design for assignments. Additionally, provided miscellaneous 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.

Years with Baker: 2

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 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

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.

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, and identification of activity centers, public involvement, and community information analysis, identification of specific improvement locations and their corresponding physical deficiencies and improvement recommendations.

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.

#### PRIOR BAKER EXPERIENCE

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.

#### Structures Resources, Inc., Huntington, West Virginia

As a Project Manager and Engineer of Record, provided design, administration and quality assurance services for numerous Site Development projects for various locations in Cabell, Putnam, Kanawha and Wayne Counties in West Virginia. Services included site layout, grading and drainage, utility design, road and parking layout, pavement design, site lighting, permitting and construction administration.

#### Notable sites have included the following:

- Commerce Park (40 Acres, Industrial, Commercial, Residential), Cabell and Wayne Counties;
- The Hamlets (10 Acres, Residential), Cabell County;
- Lakeview Manor (12 Acres Residential), Wayne County;
- Carriage Hill (10 Acres, Residential), Kanawha County;
- Teays Commons (8 Acres, Residential), Putnam County.

#### 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, and Bituminous and Concrete Pavement Design and Rehabilitation, Sidewalk Design, Storm Drainage Design and Storm water 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 included the following:

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

Society of American Military Engineers

International Right of Way Association

Construction Specifications Institute

American Planning Association

American Water Works Association

West Virginia Society of Professional Surveyors

Kentucky Association of Professional Surveyors

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, A.I.A.

#### Senior Architect

#### General Qualifications

Mr. Bolen brings over 35 years of design and project coordination experience to the project. He believes in 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 the client 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: 3

#### Education

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

#### Registrations

 Registered Architect, No. 3135, West Virginia, 1999

#### **Professional Affiliations**

American Institute of Architects (AIA)

West Virginia Board of Architects (WVBOA)

Comprehensive Education Facilities Planners, International (CEFPI)

#### Experience

A/E Services for the Capitol Campus Master Plan, State of West Virginia, Charleston, West Virginia. State of West Virginia, General Services Division. As 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 consultants, Ron is currently providing elements including:

- · Master Planning
- · Public Involvement
- Programming
- Architectural / Review
- Document Management
- GIS
- Project Scheduling
- Cost Estimating
- · Facilities Planning
- · Consultant Management
- Client Coordination

Charleston Armory Improvements, WV Army National Guard, Div of Engineering and Facilities, Charleston, West Virginia. State of WV, Division of Engineering and Facilities. As Project Architect, Mr. Bolen is 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.

#### Non-Baker Project Experience

North Central Regional Juvenile Detention Center - WV Div. of Juv. 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 Div. 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.

#### ADA - Federal Bureau of Prisons Beckley, West Virginia

As Project Job Captain, Mr. Bolen provided services through all phases of document preparation, consultant coordination, and client relations to update an existing facility with ADA standards for the 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

St. Marys Correction Center Expression of Interest 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.

#### 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.

#### 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.

#### 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 is for renovation to an existing emergency medical service facility by modifying the facility to meet the current Shinnston and surrounding area needs. The facility will house 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.

#### 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)

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
- ♦ Monroe County Board of Education

♦ Marshall 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. The project was funded by the School Building Authority as a Needs Project.

#### 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. The Project was funded by the School Building Authority as a Needs Project.

#### 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 Co 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.

## David Pecharka, A.I.A., LEED AP

#### Senior Architect

#### **General Qualifications**

Pecharka's project design experience includes transportation, military, master planning, educational, institutional, commercial, housing, recreational, health care, long-term care, and religious facilities. He has a longstanding interest in environmentally sustainable building design, and has conducted and administered LEED® applications for several buildings. He is a founding member of the AIA Pittsburgh Committee on the Environment (COTE), and the AIA Pennsylvania COTE. Mr. Pecharka has acted as the Baker lead contact to the U.S. Green Building Council, and has provided LEED® consultation on numerous projects company-wide. He has consulted with the U.S. Army Corps of Engineers on sustainable issues and the use of SPiRiT and LEED® Guidelines.

Mr. Pecharka's work at Baker has focused exclusively on the federal government, the majority for the Department of Defense. This work has been comprised of full designs, preparation of RFP's for design/build solicitations, and technical design as designer-of-record in response to RFP's and normally includes design work for multiple buildings. Since 2003, all of this work has been designed to conform to

Years with Baker: 8

Years with Other Firms: 18

#### Education

B.S., 1983, Architecture, Georgia Institute of Technology

M.Arch., 1986, Architecture, Georgia Institute of Technology

#### Licenses/Certifications

LEED® Accredited Professional, 2000

NCARB, 1988

Registered Architect, Idaho, 2004

Registered Architect, Ohio, 2003

Registered Architect, Pennsylvania, 1987

Registered Architect, West Virginia, 2004

prevailing Anti-terrorism/Force Protection guidelines. In addition, all Baker projects for the federal government have been conducted according to SPiRiT or LEED®. Each year, the project requirements have increased to incrementally higher LEED® levels, requiring greater project commitments from all team members.

Mr. Pecharka's Department of Defense work has included full design projects in multiple temperate climate locations, as well as full design and master planning in remote and desert or arid climates, ranging from Fort Irwin, California and the Idaho National Laboratory site near Idaho Falls, Idaho, to Camp Arifjan in Kuwait, as well as Bagram AFB and Kabul in Afghanistan. Since the spring of 2007, Mr. Pecharka's work has been focused as Baker Project Manager and Lead Architect on the Armed Forces Reserve Center in Bell, California, working in close coordination with the prime contracting firm.

#### **Experience**

Civil Site Design Services in Support of Design-Build Projects, Quantico Marine Corps Base, Virginia. Naval Facilities Engineering Command, Atlantic Division. Consultant. Developed LEED® sustainable design rating scorecard in response to project features. Baker provides civil site design services in support of design-build projects on Naval Facilities in the Mid-Atlantic Region. On these

projects, Baker's scope includes storm-water management, erosion and sediment controls, site earthwork and grading, roads, parking, sidewalks, driveways, water supply, fire protection, sanitary sewer service, and utility connections. In keeping with the Navy's commitment to environmentally-responsible design, the facility incorporates many sustainable design features and is designed to achieve "LEED" Silver ratings from the U.S. Green Building Council.

Tenant Improvements to Flex Building 400, Airside Business Park, Moon Township, Pennsylvania. Airside Business Park, L.P. Department Manager. Responsible for architectural design and document quality oversight. Baker provided planning, architecture, and engineering design services for the shell and core structure of Building 400, as well as tenant improvement/interior design services for the project. NDC Health occupies two-thirds of the structure. The original facility design was customized for NDC, providing fewer loading docks than the six originally specified. Approximately 90% of the high-bay area is being used as office space and includes a boardroom, executive offices, and training room. The remaining tenant space was converted to at-grade storefronts and is available for lease.

Upgrade of the Kinetic Energy Missile Testing Complex, White Sands Missile Range, New Mexico. U.S. Army Corps of Engineers, Fort Worth District. Department Manager. Responsibilities included conducting an initial site visit and survey to determine project scope, architectural design, and document quality oversight. A 1,500-square-foot Missile Assembly Building (MAB) and Explosives Storage Bunker was added to the White Sands Missile Range. The project included utility installation, fire protection and lightning protection systems, and anti-terrorism and force protection measures. It also included installation of fiber optics to transmit test data from the field to the mission control blockhouse. Uniform Federal Accessibility Standards and Americans with Disabilities Act Accessibility Guidelines were followed. Services included surveying, geotechnical exploration, architecture, and multi-discipline engineering services.

Miscellaneous Facility Support Services, Confidential Site. Confidential Client. Department Manager. Responsible for architectural design and document quality oversight. Baker provided full-service architectural and engineering services under an open-end contract to a confidential client with secure campus locations in Pennsylvania and Idaho. Several task orders and administrative items were assigned to Baker under the category of Miscellaneous Facility Support Services.

Open-End Architectural/Engineering Services at West Virginia University, Morgantown, West Virginia. West Virginia University. Department Manager. Responsible for architectural design and document quality oversight. Baker was retained by the West Virginia University (WVU) under an Open-End Architectural and Engineering contract to oversee the construction implementation of the university's campus master plan. Baker's tasks include program management, programming, planning, design development, construction documentation, evaluations, feasibility studies, and construction contract administration services. Functioning as an extension of WVU's staff, Baker provided full-time, on-site owner representation to monitor the work of the design, contractor, and construction management team on various projects.

#### Non-Baker Project Experience

Municipal Courts Facility. City of Pittsburgh. Project Architect. Size 30,000 square feet. Construction cost \$10,000,000. Completion Date 1995.

L3 Housing Unit and Support Facilities Renovation, State Regional Correctional Facility, Mercer, Pennsylvania. Pennsylvania Department of Corrections, Pennsylvania Department of General Services.

Project Manager. Size 132,000 square feet. (Construction cost \$9,161,000.)

State Correctional Facility, Houtzdale, Pennsylvania. Pennsylvania Department of Corrections, Pennsylvania Department of General Services. Project Architect. Size 700,000 square feet. (Construction cost \$80,000,000.

#### **Previous Work History**

L.D. Astorino & Associates, Vice President of Sustainable Design/Vice President of Construction Design/Project Manager, 1993-2001

Image & Associates, Senior Project Architect, 1992

MacLachlan, Cornelius & Fidoni, Project Architect, 1989-1992

Hayes Large Architects, Project Architect/Intern Architect, 1986-1988

Heery & Heery, Intern Architect, 1983-1986

#### **Continuing Education/Training**

ASHE/AHA Institute on Health Facilities, Codes and Standards Update, 1987

Dale Carnegie Course in Effective Speaking and Human Relations, 1988

Volunteer, AIA Rebuilding Cities Conference and RUDAT, 1988

ASHE/AHA National Conference on Health Facilities Planning, Design, and Construction, 1989

AIA Building Connections Video Conference, 1993

National Trust for Historic Preservation, 1993"Transportation Planning for Livable Cities Conference - ISTEA", University of Wisconsin - Madison, 1998 "Detecting Deficiencies in Working Drawings and Specifications"

LEED® Training Seminar, 2000

USGBC Federal Summit, 2001, 2002

#### **Teaching and Leading**

Chairman, Steering Committee, 1996

AIA Committee on the Environment Design Charrette

"Reshaping the Region - Planning for a Sustainable Future"

AIA COTE (Committee on the Environment) / MBA Instructional Seminar, 2001

"Contractors and LEED® "

#### **Specialized Experience**

Significant time savings were realized by providing critical planning and architectural activities on-site in Afghanistan.

Constant use of our Electronic Mobile Office in Afghanistan accommodated extensive field documentation, allowing all design team members to network design drawings with each other, as well as produce printed and electronic reports while on-site.

Design criteria and assumptions made while on-site in Afghanistan, in the form of draft DD1391 documents - supported by drawings and calculations - brought TAC closer to approved cost justification to the U.S. Congress.

LEED® Accredited Professional and Experienced with Designing within USACE SPiRiT Guidelines.

#### **Computer Skills**

Adobe Acrobat Professional Autodesk AutoCAD Microsoft Excel Microsoft Power Point Sketch Up

#### **Instrument Proficiency**

#### **Professional Affiliations**

American Institute of Architects (AIA) Amnesty International Habitat for Humanity (HFHI), Volunteer

## David Hilliard

## 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

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** 

professional development through his involvement with ASHRAE and other pertinent organizations.

#### Experience

Charleston Armory Improvements, WV Army National Guard, Division of Engineering and Facilities, Charleston, WV. State of WV, Division of Engineering and Facilities. Project Engineer. Dave 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.

#### 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.

#### Recent Non-Baker Project Experience

Western Regional Jail; Barboursville, WV Project Coordinator / Mechanical Engineer Mr. Hilliard developed HVAC shop drawings, Masonry Opening drawings and worked as a construction coordinator and manager. These facilities required security bars in any wall or floor opening larger than 8"x8". Also special care was taken with the security of exposed ductwork and grilles. He also did the same type of work on various other regional jails including:

Tygart Valley Regional Jail; Belington, WV

South Western Regional Jail; Holden, WV

North Central Regional Jail; Greenwood, WV

Southern Regional

Jail:

Beaver, WV

Central Regional Jail; Sutton, WV

**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.

Renovation to Mount Olive Correctional Complex; Mount Olive WV Mechanical Engineer.

Mr. Hilliard worked on value engineered and shop /coordination drawings for this partial renovation.

FPC Alderson, Federal Prison Camp; Alderson WV Mechanical Engineer.

Mr. Hilliard worked on shop drawings, as well as construction coordination for this partial renovation.

**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.

Thomas Memorial Hospital - Clinical Pavilion; South Charleston WV Mechanical Engineer. Most recently, Mr. Hilliard developed Plumbing, HVAC ductwork, piping coordination drawings for the five story addition. Included in that building were Kitchen / Dinning and support rooms, as well as operating and patient rooms. Construction Administration was also part of his duties.

Heart and Vascular Center - CAMC Memorial Hospital, Kanawha City, WV. Mechanical Engineer. 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.

VA Hospital Addition and Renovation; Beckley WV, During the early 1990's Mr. Hilliard developed HVAC ductwork drawings for a large renovation and addition. Phasing was a large part of this

St. Marys Correction Center Expression of Interest work due to renovating under and around occupied areas. Construction Administration was also part of his duties.

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.

#### 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 infrared 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 infrared heat, gas unit heaters, auto fume exhaust and make-up air.

#### 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.

#### Jackson County High School; Jackson, OH

Mr. Hilliard worked on Design Evaluation and Coordination of the Medium Pressure VAV Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

#### Huntington High School; Huntington, WV

Mr. Hilliard worked on Design Evaluation and Coordination of the Heat Pump Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

Waverly City Schools; Waverly, OH (Three schools were built in the same complex. Elementary, Middle and High School)

#### 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.

## Craig W. West, P.E. LEED AP

## Mechanical Engineering Manager

#### **General Qualifications**

Mr. West is the Mechanical Technical Manager for His background mechanical engineering department. includes project management and providing design and specifications for HVAC, plumbing, fire protection, piping, and process exhaust systems for educational, military, commercial, institutional, healthcare, and industrial facilities. He is responsible for all facets of the job, including initial client contact, project organization and management, load calculations, equipment/system selection, layout, developing department technical standards, supervision, fan static and pump head calculations, specifications, and sequences of Mr. West has handled bidding, requests for operation. information, meetings, shop drawings, construction situations, job progress, and closeout. He is responsible for fee estimating, job cost control, and construction cost He has gained specialized experience in geothermal, DDC controls, clean rooms, and hospital work, including medical gases, labs, operating rooms, and isolation rooms.

Years with Baker: 8

Years with Other Firms: 16

#### Education

B.S., 1984, Mechanical Engineering, Youngstown State University

#### Licenses/Certifications

LEED® Accredited Professional, 2008

Professional Engineer, Connecticut, 2001

Professional Engineer, New Jersey, 2009

Professional Engineer, Ohio, 1989

Professional Engineer, Pennsylvania, 1990

Professional Engineer, Virginia, 2002

#### **Experience**

WV CAPITOL CAMPUS MASTER PLAN. State of WV General Services Division. Mechanical Engineer. Responsible for mechanical engineering services for this major state capital master plan effort.

Eastern Ohio Correctional Center, Steubenville, Ohio. Designed HVAC systems for this community based 38-bed 18,200 square foot correctional facility for male non-violent third and fourth degree offenders at an estimated construction cost of \$1,500,000 for the entire facility. HVAC system was closed loop water source heat pump.

Stark County Regional Community Corrections Center, Stark County, Ohio. Designed HVAC systems for this correctional facility for male non-violent third and fourth degree offenders at an estimated construction cost of \$1,600,000 for the total facility. HVAC system was closed loop water source heat pump.

Girard Justice Center, Girard, Ohio. Mechanical Engineer. Complete HVAC geothermal system design for a 27,000-square-foot addition including secure area, sallyport, and courtroom.

Northeast Ohio Community Alternative Program Facility, Warren, Ohio. Supervised all mechanical design for this 20,000 square foot community-based correctional facility. Mechanical bids came in at a

total of \$485,000 for HVAC, plumbing, and fire protection. The HVAC design included enthalpy energy recovery.

Mahoning County/Youngstown Justice Center, Youngstown, Ohio. Provided complete HVAC design for 190,000 square foot eight-story medium-to-maximum security jail facility including the Mahoning County 911 Center and Youngstown fire dispatch. Systems included VAV and constant volume comfort conditioning with special emphasis placed on fresh air ventilation, airside energy recovery, zoned smoke control, and stair tower pressurization. HVAC construction cost was \$4,400,000. Total project cost was \$42,000,000. Also on this project assisted with the design, start-up, and troubleshooting of the facility vacuum sanitary system, which was the first application of a vacuum system in a high-rise security application in the country. Designed and specified complete DDC control system with pneumatic actuation and integration to building electronic smoke system controls.

Allen Hall HVAC Upgrade and Asbestos Abatement, West Virginia University, Morgantown, West Virginia. West Virginia University. Mechanical Engineer. Assisted with preparation of design development phase specifications for asbestos remediation of Allen Hall, including the removal of asbestos-containing fireproofing on structural steel and metal decking, fitting insulation on domestic water piping, and asbestos-containing floor tile and adhesive. Complex renovation/asbestos abatement project for the 104,855 GSF university classroom building, Allen Hall, with \$6.6 million estimated construction cost. Scope included asbestos abatement, new ceilings and lighting systems, upgrades to existing HVAC system, and replacement of all flooring materials.

Condition Assessment of Creative Arts Center, Evansdale Campus, West Virginia University, Morgantown, West Virginia. West Virginia University. Mechanical Engineer. Provided preliminary HVAC engineering consulting to the planning team. Baker performed a facility condition assessment of WVU's Creative Arts Center to help determine a capital spending program for the building. Baker conducted physical site visits, reviewed drawings, and met with University representatives to assess and document the existing condition of the facility. In addition to identifying the physical and programmatic deficiencies of the facility, Baker prioritized the deficiencies and developed budget costs to determine the optimal correction by the University, as well as construction phasing and implementation schedules.

Lodge Complex Development, Stonewall Jackson Lake State Park, Roanoke, West Virginia. McCabe Henley Durbin. Mechanical Engineer. Provided HVAC consulting services to assist with problems uncovered during construction for this large lodge/meeting facility. Baker provided scheduling, project quality control reviews, and electrical and mechanical system design review 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 of natural stone, cast-in-place concrete, structural precast concrete, concrete masonry, structural steel, and metal decking, and includes synthetic plaster, fiber-cement siding, standing seam roofing, insulated single-ply roofing, skylights, coiling shutter doors, wood doors, and aluminum store-front windows and a curtain wall. Site work included all new infrastructure, including electrical service and an HVAC system.

Library HVAC and Direct Digital Control Upgrades, The Pennsylvania State University's Beaver Campus, Monaca, Pennsylvania. The Pennsylvania State University. Mechanical Engineer. Performed a site inspection to review the condition of the existing HVAC system including mechanical units, ductwork, and control systems. After consultation with the university to determine the scope of the

upgrade, provided mechanical engineering design consultation for the construction documents to upgrade the HVAC system. A condition assessment and inspection was performed on the existing HVAC system, including mechanical units, ductwork, and control systems, for the Library at Penn State University's Beaver, Pennsylvania campus. After consultation with the University to determine the scope of the upgrade, Baker provided mechanical engineering design and construction documents to upgrade the HVAC system. The work included replacing the rooftop mechanical unit serving the main library, making upgrades to the lower-level HVAC units, and providing a new direct digital control system that provides system information to Penn State's University Park Campus through an Internet connection.

Aviation Brigade Barracks, Ft. Campbell, Kentucky. U.S. Army Corps of Engineers, Louisville District. QA/QC. Performed quality technical review of the mechanical systems. This new Design/Build Aviation Brigade Barracks is a complex of two-bedroom, one-bath apartments, which houses 384 soldiers. The project consists of a facility which functions as an Unaccompanied Enlisted Personnel Housing (UEPH), and is designed so that this new facility is similar both functionally and technically to housing in the surrounding private sector community. Baker provided planning and full comprehensive architecture and engineering services including interior design and landscape architecture services as the prime designer on this contract. The building is designed to receive SPiRiT Gold (or LEED® Silver) accreditation.

Renovation of Historic Building 39, Fort McNair, Washington, DC. U.S. Army Corps of Engineers, Baltimore District. Mechanical Engineer. Provided HVAC engineering services and some mechanical project management services for this renovation redesign project. Baker provided services for renovation of Building 39, a 40,000 square foot building designed by the renowned American architectural firm of McKim, Mead, and White which was constructed in 1903. The renovation updated the existing building to provide sophisticated computer and office space, a SCIF (a secure space), a Command Center executive suite, an emergency operations center, and provost marshal offices.

Flex Office/Warehouse Building 400, Airside Business Park, Moon Township, Pennsylvania. Airside Business Park, L.P. Mechanical Engineer. Provided HVAC design and supervisory services. Flex Building 400 was designed to provide flexibility for tenants that need both office and warehouse space. The one-story office space surrounds the 1.5-story high-bay warehouse space on three sides. The loading dock for the warehouse was originally designed to have six depressed dock parking locations. Due to predetermined tenant needs, this building was modified to provide only two dock locations. The building was constructed using tilt-up concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.

Independence Marsh Environmental Teaching Center, Aliquippa, Pennsylvania. Beaver County Conservation District. Mechanical Engineer. Provided HVAC and plumbing design for this educational facility with special emphasis placed on "green" design, utilizing waterless urinals, low consumption plumbing fixtures, and a geothermal heating/cooling system. The facility is an earth-sheltered concrete structure containing a multi-purpose teaching room to accommodate 100 people for lectures and instructional purposes. The building systems include such environmentally sensitive features as a geothermal heat pump heating/air-conditioning system, natural daylighting, passive solar heating, a variety of low-flow plumbing fixtures (including a demonstration waterless urinal), and a roof-top garden.

Renovations to Historic Machinist Training Building #3074, Aberdeen Proving Ground, Maryland. U.S. Army Corps of Engineers, Baltimore District. Mechanical Engineer. Provided very minor consulting to main design team for mechanical issues. As a Task Order under an Indefinite Delivery Multi-Discipline Contract, Baker designed building system upgrades as well as a 7,000-square-foot

addition to the existing 36,440-square-foot historic Machinist Training Building # 3074 at Aberdeen Proving Ground.

#### Continuing Education/Training

Technical Seminar for Pumping Systems and Energy Conservation, Deckman Company and York International, November 2, 2006, 2 PDHs

Technical Seminar for Front End Loading of Hydronic Systems, Riverside Hydronics, December 6, 2006, 1 PDH

Technical Seminar for Underfloor Systems, Deckman Company and York International, 2 PDHs

Technical Web Cast for Energy Saving Strategies for Rooftop VAV Systems, Trane Corporation, 1.5 PDHs

Technical Web Cast for Waterside Heat Recovery, Trane Corporation, 1.5 PDHs

Technical Web Cast for Design for Places of Assembly, Trane Corporation, 1.5 PDHs

Technical Web Cast for Sustainability and the Building Environment, ASHRAE, Certificate and 3 PDHs

Technical Seminar on Outside Air and Energy Recovery, Deckman Company/Munters Corporation/Des-Champs, Certificate and 2 PDHs

#### Computer Skills

Autodesk AutoCAD
Bentley BIM
Dr. Checks
Microsoft Excel
Microsoft Word
SpecsIntact
Trane System Analyzer
Trane-Trace Load and Energy Modeling
WordPerfect

#### **Professional Affiliations**

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

## Owen Milligan, P.E.

## Electrical Engineering Manager

#### **General Qualifications**

Mr. Milligan is an electrical engineer who is experienced working with consulting engineering firms in the study and design of electric distribution and control systems, emergency power for process plants and facilities, water/wastewater treatment plants, government commercial projects, ASHRAE energy-efficient building design, coordination with vendor and contractors, and approval of vendor drawings. He has a strong knowledge of distribution equipment and designs, motor control center layouts and design, and start-up and services during construction. He is capable of handling multiple projects from conception to final design, working as a team member toward meeting project goals. His work includes management of Baker's electrical engineering department, supervising and providing technical advice to designers and coordinating design and construction work with engineers, contractors, vendors, and clients.

Years with Baker: 2

Years with Other Firms: 19

#### Education

B.S., 1988, Electrical Engineering, Gannon University

#### Licenses/Certifications

Professional Engineer, California, 2003

Professional Engineer, Pennsylvania, 1999

Professional Engineer, Montana, 2001

Professional Engineer, Kentucky, 2005

Professional Engineer, Oklahoma, 2008

#### **Experience**

Armed Forces Reserve Center, Grand Prairie, Texas. U.S. Army Corps of Engineers, Louisville District. QA/QC.

Provided design consultation to the electrical design team and performed a technical quality review of the construction documents. Systems included lighting, power distribution, lightning protection and grounding, telecommunications, security, and fire alarm. Designs were required to meet UFC and military design standards. The Jordan-BE&K/ Baker design/build team is constructing a new facility to serve as an Armed Forces Reserve Center (AFRC) for units of the U.S. Army Reserve (USAR) and Texas Army National Guard. The USAR uses the AFRC for administrative activities, to plan and support operations, and to train unit personnel in their engineering specialties. Four separate buildings are being constructed on various sites on the Grand Prairie Reserve Complex, including a new 78,600-square-foot Administration building, 30,070-square-foot Storage building, 30,450-square-foot Facility Maintenance Storage (FMS) building, and a 4,900-square-foot Unheated Storage building.

Croydon Station Improvements, Croydon, Pennsylvania. SEPTA. Electrical Engineer. Provided design oversight and performed a technical quality review of the electrical systems, including power distribution, public address system, snowmelt heat trace, lighting, and arrival/departure display monitor systems. Designs were required to meet NEC design standards. This project included design and construction of a completely new accessible station with contemporary passenger amenities and a much larger parking lot. Baker's scope included: high and low-level platforms; ADA-compliant ramp and stair systems; platform canopies; windscreen shelters; lighting for complete site; Audio-Visual Public Address

system; signage; bus stops with shelters. Baker's construction phase services included: administrative tasks; shop drawing review and contract clarifications for the architectural, structural and electrical components of the project; work progress inspection; punch list inspection.

U.S. Coast Guard, CEU Cleveland. QA/QC. Performed a technical quality review of the electrical design for new construction and building renovation projects, including lighting and electrical receptacles. The U.S. Coast Guard selected Baker for a \$50 million, ten-year General Architect and Engineering Services contract. The scope of the contract includes modifications and renovations to existing structures as well as new construction. Facilities types include residential and light commercial buildings and their mechanical and electrical systems, site utilities, waterfront facilities, electronic surveillance and security construction, dredging, structural inspections, safety construction, and airports and runways.

On-Call Multi-Discipline Services, Pittsburgh International, and Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania. Allegheny County Airport Authority. Technical Advisor. Provided technical direction to electrical design staff and performed a technical quality review of the construction documents. Designs were required to meet NEC standards. Since 1989, Baker has provided multidiscipline, on-call services to the Allegheny County Airport Authority (ACAA). The ACAA owns and operates Pittsburgh International Airport (PIT) and Allegheny County Airport (AGC). Baker acted as an extension to the ACAA's staff, providing the depth of resources and experience of the entire company when called upon by the ACAA. Baker provided a full range of services to ACAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, construction support, and other areas.

Aviation Brigade Barracks, Ft. Campbell, Kentucky. U.S. Army Corps of Engineers, Louisville District. Electrical Engineer. Responsible for shop drawing reviews and approval and responding to RFIs. This new Design/Build Aviation Brigade Barracks is a complex of two-bedroom, one-bath apartments, which houses 384 soldiers. The project consists of a facility which functions as an Unaccompanied Enlisted Personnel Housing (UEPH), and is designed so that this new facility is similar both functionally and technically to housing in the surrounding private sector community. Baker provided planning and full comprehensive architecture and engineering services including interior design and landscape architecture services as the prime designer on this contract. The building is designed to receive SPiRiT Gold (or LEED® Silver) accreditation.

Tactical Equipment Maintenance Facilities, MATOC TO #1, Fort Bragg, North Carolina. U.S. Army Corps of Engineers, Savannah District. Electrical Engineer. Performed electrical engineering design and coordination for site utilities, power distribution, lighting, site communications, interior communications, hard stand power and communications, ground and lightning protection, and fire alarm/mass notifications. Designs were required to meet UFC and military design standards. Baker provided complete architectural and engineering design services as a subconsultant to its construction partner, Walbridge Aldinger, for the design of six Tactical Equipment Maintenance Facilities (TEMFs) at Fort Bragg, North Carolina. The facilities provide space for the maintenance, repair, overhaul, and storage of military tactical vehicles, complete with equipment and parts storage and administrative offices.

**U.S. Armed Forces Reserve Center, Williamsport, Pennsylvania.** U.S. Army Corps of Engineers, Louisville District. Electrical Engineer. Provided technical narrative relating to the electrical engineering design for inclusion in the design/build RFP documents. Designs are required to meet UFC and military design standards. Baker developed Design/Build RFP Documents for a new 300-member Armed Forces

Reserve Center (AFRC) with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and National Guard units as directed by BRAC 05.

#### Non-Baker Project Experience

Expended Core Facility South End Extension, Confidential Location. Confidential Client. Senior Electrical Engineer. Responsible for complete electrical design of a spent nuclear fuel dry storage facility for the Department of Energy. Duties involved detailed electrical designs including a 480-volt power distribution system, indoor/outdoor lighting, embedded conduit runs, control and instrumentation, and grounding, as well as providing specifications and client interface. Also responsible for the management of two electrical designers and coordination with process and mechanical disciplines.

Materials Research Technology Center (MRTC) Preliminary Design, Confidential Location. Confidential Client. Senior Electrical Engineer. Responsible for the electrical design of a state-of-the-art Materials Research facility. Responsibilities included design of the 13,200-Volt incoming power feed, 480-Volt distribution system, indoor and outdoor lighting systems to meet ASHRAE 90.1 2004 energy guidelines, grounding, lightning protection, special electrical systems for radioactive areas, and special power distribution for laboratory equipment, as well as providing specifications. Provided field support for electrical coordination of existing laboratory equipment to be relocated to the new facility. Also responsible for the management of four electrical designers, coordination with the client, and coordination with process, mechanical, and plumbing disciplines.

Siemens Government Services, Inc (formerly SD Engineers), Pittsburgh, Pennsylvania. Senior Electrical Project Engineer. Responsibilities included Senior Electrical Engineer in charge of all electrical work at the Department of Energy's Naval Reactor Facility in West Mifflin, Pennsylvania. Duties included complete electrical design including multiple new office building designs and construction, light industrial type facilities for confidential DOE projects, retrofitting and relocation of existing laboratories, power studies, are flash calculations, and site power distribution.

#### **Continuing Education/Training**

Ground Fault and Short Circuit Analysis, offered by CJL Engineering, January 2004, 7 week course.

Grounding Course, offered by CJL Engineering, March 2004, 6 week course.

Power Distribution Course, offered by Duquesne Light, September 2000, 12 week course.

#### Computer Skills

Autodesk AutoCAD
Bentley MicroStation
Dr. Checks
Microsoft Excel
Microsoft Outlook
Microsoft Windows
Microsoft Word
SKM PowerTools
Visual Lighting Design Software

# Laura L. Cox, P.L.A., A.S.L.A.

# Landscape Architect

Years with Baker:

Education

Years with Other Firms: 26

#### **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

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.

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),

Professional Affiliations
American Society of Landscape

Architects

WV Chapter – American Society of
Landscape Architects

WV Chapter – American Institute of Architects

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 I 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 oversight 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.

# R. Todd Schoolcraft, P.L.A., A.S.L.A.

# Landscape Architect

#### General Qualifications

Mr. Schoolcraft has over 18 years of experience in the fields of landscape architecture and land planning, with over 26 years of experience in the building and construction industry. Mr. Schoolcraft has extensive experience managing complex projects and leading multi-disciplined teams of professionals resulting in the successful delivery of numerous quality projects on-time and on-budget. Major areas of specialty include commercial development, military installation design, land planning, public development, site planning and design, park and recreation design, trails and greenways, streetscape design and urban planning, and residential subdivision layout. Mr. Schoolcraft is a retired U.S. Army Officer, holding the rank of Major, with over 23 years of time in service in the U.S. armed forces. In the last years of service, he held the position of Operations Officer with the newly formed Chemical, Biological, Radiological, Nuclear or High Yield Explosive Enhanced Response Force Package Team (CERFP Team) with the West Virginia Army National Guard. Prior to this, he was a combat engineer with the Design Section of the 111th Engineer Group, West Virginia Army National Guard. The 111th Engineer Group served in the Middle East in support of Operation Iraqi Freedom and Operation Enduring Freedom. During that time, Mr. Schoolcraft was awarded the Bronze Star Medal for meritorious service associated with a multitude of engineering and architectural projects in Kuwait and Iraq. Mr. Schoolcraft has been appointed to the West Virginia State Board of Landscape Architects by Governor Joe Manchin, and currently serves as Secretary of the Board.

#### Years with Baker:

2

Years with Other Firms: 16

#### Education

- B.S. Landscape Architecture, West Virginia University, 1991
- Safe Spaces: ASLA Security Design Symposium, Chicago, IL, 2004
- AQUA Conference Educational Sessions, Las Vegas, NV, 2005
- CERFP Team Training, WV Army National Guard, 2006

#### Registrations

- PLA, West Virginia, 1995
- PLA, Ohio, 2002
- CLARB Certified, 2001

#### **Professional Affiliations**

- WV State Board of Landscape Architects
- American Society of Landscape Architects
- WV Chapter American Society of Landscape Architects
- Associate Member AIA West Virginia
- Society of Military Engineers
- National Guard Association
- WV Rails-to-Trails Society
- Elkland Pool Board

## Experience

Lost Creek Train Depot Improvements Lost Creek, West Virginia. Town of Lost Creek and the Harrison County Commission. Project Landscape Architect. Responsible for concept planning design and document quality oversight. 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. 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 will raise the finish floor elevation by 12" and provide 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 final bid award to meet the extensive Transportation Enhancement Grant funding limitations. Baker will provide construction administration and inspection services as well as periodic site review during construction.

Parkersburg Recycling Center, Site Preparation, Parkersburg, West Virginia. Wood County Solid Waste Authority. Project Manager. Responsible for Construction Document preparation and Construction Oversight. As an Engineer with the Design Section of the 111th Engineer Group, West Virginia Army National Guard, developed site preparation construction plans for a proposed multi-use recycling center to be constructed in the city limits of Parkersburg, West Virginia, as a community service. Further supervised site prep construction of the military members as they executed the project using U.S. Army heavy equipment and materials provided by the civilian client.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. State of West Virginia, Division of Engineering and Facilities. Project Manager. 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 a lump sum/fixed fee contract 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 the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space. 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 and asbestos removal. Baker worked closely with the client during the planning phase to define a project scope that would upgrade the existing facility in a fashion consistent with previous renovations and within a limited budget.

Alloy Armory Berm Repair, West Virginia Army National Guard, Alloy, West Virginia. State of West Virginia, Division of Engineering and Facilities. Project Manager. Responsible for site-civil design and document quality oversight. The existing facility had been home to various armored cavalry units of the West Virginia Army National Guard (WVARNG) over the years, and the armory and motor pool was situated directly in front and adjacent to a large stream susceptible to high-water events. During a recent flood event, the berm protecting the facility was severely damaged. A new berm was designed with gabion basket reinforcing, and a new concrete-lined trapezoidal channel was proposed to safely redirect the stream flow away from the armory and motor pool.

Parking Lot Expansion and ADA Accessibility Upgrade, Fixed Wing Army Aviation Training Site (FWAATS), Benedum Airport, Bridgeport, West Virginia. State of West Virginia, Division of Engineering and Facilities. Project Manager. Responsible for site-civil design, construction document preparation and construction administration. Conceptual and final detailed design services were provided to expand the main parking area, maintain Section 504 ADA compliance, and improve site drainage and landscaping. Recommendations for improvements to the traffic flow at the loading dock and plans for pavement striping were also developed.

130<sup>th</sup> Tactical Airlift Group Project 2000, Charleston, West Virginia. West Virginia Air National Guard. Construction Manager. Working with the United States Property and Fiscal Office (USPFO) and the 130<sup>th</sup> Tactical Airlift Group (TAG), to provide as-needed design and detailing services, periodic construction observation and resident inspection services for the construction of Project 2000, the relocation of all major base facilities from runway elevation to the former Coonskin Driving Range in the valley below.

#### Offices Held

- Current Secretary, WV State Board of Landscape Architects
- Past Treasurer, WV State Board of Landscape Architects
- Current Secretary, WV Chapter American Society of Landscape Architects
- Past President, WV Chapter American Society of Landscape Architects
- Past Treasurer, WV Chapter American Society of Landscape Architects
- Past Secretary, WV Chapter American Society of Landscape Architects

#### **Honors and Awards**

- WV Chapter American Society of Landscape Architects; 2008 Merit Award Kanawha & Putnam County Bicycle Pedestrian Master Plan
- WV Chapter American Society of Landscape Architects; 2005 Merit Award Russell Residence House and Site Improvements
- United States Army; 2003 Bronze Star Operation Iraqi Freedom
- American Society of Landscape Architects; 1999 Medallion Award Charleston Village District Streetscapes
- WV Chapter American Society of Landscape Architects; 1999 Merit Award Tamarack: The Best of West Virginia
- WV Chapter American Society of Landscape Architects; 1995 Honor Award NorthGate Business Park

# Jason T. Smithson, P.S.

#### Civil Associate

#### **General Qualifications**

Mr. Smithson is currently employed as a Civil Associate at the Charleston, West Virginia office of Baker's South Region.
Mr. Smithson has over ten years of diverse experience that includes assignments in civil design, geotechnical engineering, environmental science, surveying, drilling, construction inspection and field and laboratory materials testing.

#### **Experience**

Various Sidewalk Projects, West Virginia. Various West Virginia Municipalities. As a Project Surveyor, Mr. Smithson established horizontal and vertical control and provided topographic mapping by conventional and GPS survey methods, to provide data for the creation of plan sheets for the construction of new sidewalks, as well as civil engineering to correct existing poor drainage concerns in various communities throughout West Virginia including: Town

Years with Baker:

3

Years with Other Firms: 7

Education

B.S., 1999, Geology, West Virginia University

Licenses/Certifications

Professional Surveyor, West Virginia, 2007, 2153

OSHA 40-Hour HAZWOPER Certification, 1999

OSHA 10-Hour Safety Training, 2005

Certified Well Driller, West Virginia, 2002, WV00316

of West Milford, West Virginia; Town of Mason, West Virginia; Town of Hambleton, West Virginia; and the Town of Moorefield, West Virginia.

Various WVDOH Highway Projects, West Virginia. West Virginia Department of Transportation, Division of Highways. Geotechnical Geologist, Project Surveyor and Engineering Technician.

Mr. Smithson provided subsurface investigation data, topographic mapping, and right of way services on several WVDOH projects for various highway consulting engineering firms. Responsibilities on these projects consisted of the generation of site surveys, property boundary mosaics, courthouse research, right of way questionnaires, and the development of right of way plans and parcel descriptions. Additionally, he provided geologic analysis data for the subsurface investigation to support the Geotechnical Engineering functions toward the development of highway construction plans. This work included locating all physical and topographic features, utility locations, storm drainage features, property boundary lines, courthouse research and interaction with all existing property owners to complete property questionnaires for right of way acquisition, drill program planning, core logging and analysis, and cut-fill slope design.

**Bob Evans Farms, Inc., Columbus, Ohio.** Bob Evans Farms, Inc. Project Surveyor. Mr. Smithson provided complete services for an ALTA/ACSM Survey of the Bob Evans Restaurants in Huntington, West Virginia and Canonsburg, Kentucky. Services included field surveying (boundary and topographic), courthouse research and assessment of the Title Commitment for the subject property.

Three Gables Surgical Center, Proctorville, Ohio. *Three Gables Surgical Center*. Project Surveyor, Mr. Smithson provided complete services for an ALTA/ACSM Survey of the new surgical center in Proctorville, Ohio. Services included field surveying (boundary and topographic), courthouse research and assessment of the Title Commitment for the subject property.

**Huntington Industrial Corporation, Huntington, West Virginia.** *Huntington Industrial Corporation.* Project Surveyor, Mr. Smithson provided complete services for an ALTA/ACSM Survey of the Prichard Industrial Park in Wayne County, West Virginia. Services included field surveying (boundary and topographic), courthouse research and assessment of the Title Commitment for the subject property.

Structures Resources, Inc., Huntington, West Virginia. Structures Resources, Inc. Project Surveyor. Mr. Smithson provided complete services for numerous ALTA/ACSM Surveys of various sites in Cabell, Putnam, Kanawha, and Wayne Counties in West Virginia. Services included field surveying (boundary and topographic), courthouse research and assessment of the Title Commitment for the subject property. Sites have included the following: Commerce Park, Cabell and Wayne Counties; The Hamlets, Cabell County; Lakeview Manor, Wayne County; Carriage Hill, Kanawha County; and Teays Commons, Putnam County.

**84 Lumber Inc., Elkview, West Virginia.** 84 Lumber Inc. Project Manager/Surveyor. Mr. Smithson provided complete services for an ALTA/ACSM Survey of the Elkview 84 - Lumber site in Kanawha County, West Virginia. Services included field surveying (boundary and topographic), courthouse research and assessment of the Title Commitment for the subject property.

Wood County Schools, Parkersburg and Williamstown, West Virginia. Field Crew Supervisor. Responsible for providing complete boundary and topographic information for the upgrade of three Wood County High Schools. During this project Mr. Smithson was responsible for three survey field crews that incorporated the use of GPS and conventional survey methods.

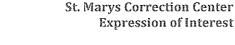
**St. Mary's Hospital, Huntington, West Virginia.** *St. Mary's Hospital.* Field Supervisor. Responsible for collecting data for drainage improvement, parcel consolidation, and right-of-way abandonment. Mr. Smithson was responsible for three survey field crews that incorporated the use of GPS and conventional survey methods. Along with these responsibilities he also interacted with St. Mary's Hospital and the City of Huntington to satisfy the requirements and needs of both parties.

Yeager Airport Runway Safety Area Upgrade, Charleston, West Virginia. Geotechnical Geologist. Throughout this project Mr. Smithson was responsible for the geologic evaluation of the soil overburden and bedrock qualities along with coordinating drilling activities for the subsurface investigation.

Grant County Airport Runway Extension, Grant County, West Virginia. Geotechnical Geologist. Throughout this project Mr. Smithson was responsible for the geologic evaluation of the soil overburden and bedrock qualities along with coordinating drilling activities for the subsurface investigation.

Tri-State Airport Runway Safety Area, Huntington, West Virginia. Geotechnical Geologist. Throughout this project Mr. Smithson was responsible for the geologic evaluation of the soil overburden and bedrock qualities along with coordinating drilling activities for the subsurface investigation.

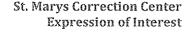
Mine Safety and Health Administration - Martin County Coal, Slurry Impoundment Failure Investigation, Martin County, Kentucky. Project Geologist. Mr. Smithson's duties included the coordination of drilling activities with multiple drilling crews supported by a team of engineers and geologists. He supervised and participated in the subsurface investigation logging activities, the creation of bedrock contour maps, report preparation, and analytical testing on samples extracted from the drilling efforts.



## PART 3 - REFERENCES

Each of the Project Profiles found in Part 4 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:

- Central West Virginia Regional Airport Authority Yeager Airport 100 Airport Road, Suite 175 Charleston, WV 25311-1080 Mr. Richard A. Atkinson, III, Airport Director (304) 344-8033
- West Virginia Division of Transportation Division of Highways 1900 Kanawha Boulevard East Building 5, Room A-109 Charleston, WV 25305 Mr. Darrell W. Allen, P.E., Deputy State Highway Engineer (304) 558-3304
- 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) 558-5380
- WV Statewide Addressing and Mapping Board 1124 Smith Street, Room LM-10 Greenbrooke Building Charleston, WV 25301 Ms. Leigh Cielensky, Executive Assistant (304) 558-4218
- U.S. Army Corps of Engineers Huntington District
   502 Eighth Street
   Huntington, WV 25701
   Mr. David Meadows, P.E.
   (304) 399-5243
- Federal Aviation Administration Beckley Airports District Office 176 Airport Circle, Room 101 Beaver, WV 25813-9350 Mr. Matthew Di Giulian, P.E. (304) 252-6216
- 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 4 - RELATED PRIOR EXPERIENCE

The following Project Descriptions illustrate Baker's related prior experience. We have included examples of building facilities used for emergency services, maintenance, training, parking and support functions for both military and civilian clients at various locations across the nation. Many of these projects are LEED® and/or SPIRIT (Sustainable Project Rating Tool) rated. We believe these projects show the depth of our expertise in all aspects of engineering and

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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 St. Marys Correction Center will have access to the human resources, expertise, and technology of all Baker locations as particular needs arise.

# **Beaver County Jail Construction Management Services**

Aliquippa, Pennsylvania

The home for the new Beaver County Jail is a 20-acre Brownfield site. The one-story, multi-level, 152,000 square-foot facility was constructed on spread footings, with a steel joist frame and masonry exterior.

Baker joined the project team early in the programming phase. Baker provided to the County, site selection criteria and analysis of over 24 different project sites. Working with the architect, the Warden and the Board of County Commissioners, Baker also addressed items



such as permitting, conditional use, buffer zones, future capacity, interior layout, functional efficiencies and transition coordination. Baker was responsible for developing the program budget and master schedule, and identifying key activities that

could impact the project. Other duties included reviewing the county's insurance coverage, assisting in negotiating engineering and consultant agreements, providing support at community meetings, and



overall responsibility for the project administration, scheduling, coordination, and quality control inspection and change management throughout the construction phase.

In addition to the actual building construction, which included

over-excavation the building footprint and 50,000 CY of placing structural fill, Baker also provided administrative and construction phase inspection oversight for the major infrastructure improvements



necessary to service the facility. This work included the procurement of land and/or RoWs related to the installation of

3/4 mile of new roadway, 3,200 lf of storm lines, 2,000 lf of gravity sanitary lines and 1,620 lf of sanitary force main. Also included in the work was the installation of a 1 million gallon water storage tank, over 19,000 lf of 16" waterline, and several railroad and roadway horizontal borings.

#### Client

Beaver County Commissioners Beaver County Courthouse 810 Third Street Beaver, PA 15009

Robert W. Cyphert
Fiscal Administrator
724-728-3934 ext. 22203

#### **Completion Date**

Estimated: 2000 Actual: 2000

#### **Project Costs**

\$24,000,000 (Construction)

#### Baker's Role

- Construction Management -Preconstruction, Bid and Construction Phases
- Program Management
- Cost Control and Costeffective Performance
- Quality Assurance/Quality
   Control
- Subcontracting
- Preparation of Division 1
   Specifications and Bid
   Package Scopes of Work
- Constructability and Value Engineering Reviews
- Submittal Management:
   Reviews, Tracking and
   Expediting
- Inspection and Testing
- Budget Control and Cost
   Reporting

The new facility handles 402 medium- and minimum-security

inmates, with the capability to expand to 501 inmates. The facility features a state-of-the-art communications and security system, kitchen, and medical facilities. The project was completed on time and under budget. The total change orders for the f



total change orders for the facility were less than 1% of the overall construction costs.

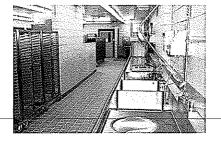
- Scheduling and Coordination
- Change Order Management and Cost Controls
- Payment Review and Processing
- Coordination with Local Municipalities and Authorities

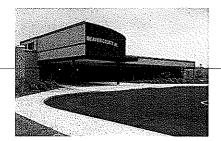
#### **Project Features**

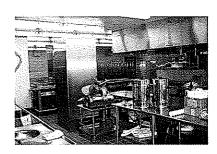
- Geothermal field consisting of more than 38,000 L.F. of underground piping
- Touch-screen control of major security functions from the control center
- Video conferencing capabilities linked with the courthouse and local district Justices

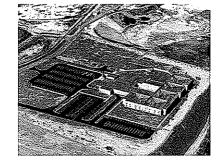
<u>Special Requirements:</u> Construction of a medium security facility with up-to-date technology features to replace a Civil War era existing facility. The project required significant off-site infrastructure improvements to service the facility which was constructed on a 20-acre Brownfield site.













# State Correctional Institution Construction Management Services

Old Route 22, Cresson, Pennsylvania

Baker was selected to provide construction management services for the construction of a Level 3 medium security unit at the State Correctional Institution (SCI) in Cresson, Pennsylvania. Work was performed as part of Baker's current statewide openend contract for construction management services with the Department of General Services (DGS).

As construction manager, Baker oversaw the schedule and progress of work, coordination of contractor operations for facility construction, as well as interface with the ongoing DOC operations, and ensuring overall quality of performance for this multi-million dollar construction project.

Based on modular design, the two-story, 128 cells with 33,300-square-foot facility will include a central control area flanked on either side by a separate housing block. The structure is of masonry and steel design, combining conventional construction methods with pre-fabricated construction elements.

Baker developed a Master Milestone Schedule that is incorporated into the bid documents released by DGS. Other key responsibilities included the following:

- Assisted prime contractors in developing a Critical Path Method Schedule in accordance with contract document provisions
- Coordination of prime contractors
- Reviewed and identified change orders
- Performed daily inspections of the project, as needed, serving as an extension of DGS' own staff
- Assisted in resolution of contractor claims



#### Client

Pennsylvania Department of General Services 530 William Pitt Highway Pittsburgh, PA 15238-1331

> Martin Barkey Regional Director 412-820-0215

## Completion Date

Estimated: 2006 Actual: 2006

#### **Project Costs**

\$8,760,000 (Construction)

#### Baker's Role

- Construction Management
- Scheduling
- Prime Consultant Coordination
- Construction Inspection
   Services



Construction of the facility was completed in September 2006.

#### **Project Features**

- Coordination of construction within a fully operational corrections facility
- Coordination of multiple "prime" contractors within an aggressive construction schedule
- On-Call Inspection Assistance
- Change Order evaluation and Claims Assistance

# Juvenile Detention Centers, National Program for Condition Assessments

Arapahoe County, Colorado, Arnold, Glenn Mills, and New Brighton, Pennsylvania

CiviGenics, Inc. is one of America's fastest-growing private developers and management companies of juvenile detention centers.

As part of their aggressive growth plans, they renovated existing facilities, constructed new ones, and acquired other companies.

CiviGenics selected Baker to become their outsourced facilities department, providing every service required to provide the environment inside of which CiviGenics's programs operate.

Assignments to Baker typically began by performing a due diligence assessment of existing conditions and assistance with acquiring the property, then moving into the design and construction of the renovations necessary to convert the site and buildings for use by CiviGenics.

- The Sleighton School at Glen Mills, Pennsylvania, was a 300-acre campus with 37 buildings acquired by CiviGenics.
- The Penn Pavilion in New Brighton, Pennsylvania, was formerly an 87,000-square-foot hospital with 190 beds.
   In addition, the acquisition featured a nurses' training center that was 19,100 square feet with an additional 90 beds.
- The Alle-Kiski Pavilion in Arnold, Pennsylvania, was an old school building that was converted into a minimum security halfway house that was operated by Fenton Securities. When CiviGenics acquired Fenton Securities, these facilities were evaluated by Baker as part of the due diligence.

Client

Civigenics, Inc. 200 East Main Street Milford, MA 07157

Sam Sacco (DO NOT USE)
Chief Operating Officer
800-525-9479 ext. 133

**Completion Date** 

Estimated: 1996 Actual: 1996

#### Baker's Role

- Condition Assessment
- Field Survey
- Document Review
- Architecture
- Mechanical Engineering
- Electrical Engineering
- Plumbing, Fire Protection
- Structural Engineering
- Phase I Environmental
- Cost Estimating

For all of the above projects, Baker performed a complete, multi-discipline, full-service condition assessment field survey, report, and cost estimate.

# **Prison Planning Study**

U.S. Naval Base, Guantanamo Bay

In recent years, the Naval Base at Guantanamo Bay has played an increasing role as a holding facility for unlawful combatants.

This study consisted of the development of a conceptual plan for a proposed new maximum-security prison at the Base to meet Federal Bureau of Prison standards.

The study included analysis of potential building configurations, and development of block diagrams. The plans were accompanied by order of magnitude cost estimates for the construction of this prison facility.

#### Client

U.S. Navy, Atlantic Division (LANTDIV) Naval Facilities Engineering Command 6506 Hampton Boulevard Norfolk, VA 23508-1278

> Manoo A. Shivaee 757-322-4155

#### **Completion Date**

Estimated: 2003 Actual: 2003

#### Baker's Role

Planning Services

# Youth Correctional Facility Geotechnical Investigation

Marienville, Pennsylvania

Baker performed a subsurface investigation for new dormitory and classroom expansions and expansion of existing parking area.

Also, provided information for recommending allowable bearing pressure for footing foundations, asphalt and concrete pavement design, flooding and soil corrosivity.

#### Client

Abraxas Facilities Management 71 C Wildwood Avenue Parkersburg, WV 26101

> John Stephens Facilities Manager 304-863-9838

Completion Date Estimated: 1998 Actual: 1998