

5088 West Washington Street
Second Floor
Charleston, WV 25313

304.769.0821 Phone
304.769.0822 Fax

April 12, 2012

Ms. Krista Ferrell, Senior Buyer
State of WV Department of Administration
Purchasing Division
Building 15
2019 Washington Street East
P.O. Box 50130
Charleston, West Virginia 25305-0130

**RE: Expression of Interest to Provide Architectural / Engineering Design Services
GSD126401 – Building 4 Renovation Project
State of WV – General Services Division**

Dear Ms. Ferrell:

Michael Baker Jr., Inc. (Baker) is pleased to respond to the Request for Expression of Interest for the design of Building 4 Renovations including an architectural / engineering evaluation, design and construction phase services for the General Services Division (GSD). Michael Baker Jr., Inc., Charleston WV office, has teamed with CAS Structural Engineering, Inc. (CAS), Lerch Bates, Inc. (LB) and Convergent Technologies Design Group, Inc. (CT) to provide the combined skills and experience required to address this important project on the West Virginia Capitol Campus. It is our understanding that the state intends to have the renovations developed while maintaining the existing facility and building intact.

Baker, CAS, LB, and CT (the Baker team) are ideally suited for this project. Our Principal and project staff are very familiar with the Capitol Complex having recently completed historic research, a survey of utilities and an existing conditions assessment tasks during the West Virginia Capitol Complex Master Plan project. Our proposed management team for the Building 4 Renovations project is:

- Russell Hall, P.E., P.S., Baker Principal In-Charge
- Ron Bolen, R.A., AIA, Baker Project Manager

The Baker Team will bring all of the technical and design skills required to scope, plan, and deliver this assignment efficiently and effectively. With the Baker Team's diverse areas of expertise, we will bring all of the required professional expertise to the project with all of the evaluation and design for the renovation and enhancement to Building 4.

The overall approach to this project will follow these steps:

- Survey existing site and utility conditions and prepare the assessment of the existing building needs.
- Coordinate with the GSD for the complete program of the proposed project.
- Prepare Schematic Design Documents and Preliminary Budget.
- Prepare Design Development Documents and Refined Budget.

- Prepare Construction Documents and Final Budget.
- Provide Construction Administration.

We have reviewed the terms and conditions of this Expression of Interest as set forth by the Purchasing Division, and will fully comply. It is understood that the vendor relationship is that of an independent contractor. Insurance coverage at the appropriate levels is in place. No price or fee was requested or permitted, and none has been included. Form WV-1, Vendor Registration, has been provided, as well as a signed Affidavit indicating that no debit is owed to the state. Michael Baker Jr., Inc.'s business and professional licensing is in place. Confidentiality in the preparation of this EOI is certified. There is no conflict of interest, no gratuities have been extended, and we have engaged in no lobbying efforts. The required forms are included in the binder, behind this letter, for this EOI response.

We appreciate your consideration and would be pleased to respond to any questions and to participate in the interview process.

Sincerely,

MICHAEL BAKER JR., INC.



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

Assistant Vice President / Principal-In-Charge



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

**Request for
 Quotation**

RFQ NUMBER
 GSD126401

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

VENDOR

RFQ COPY
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SHIP TO

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 BUILDING FOUR
 112 CALIFORNIA AVENUE
 CHARLESTON, WV
 25305 304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
04/10/2012				

BID OPENING DATE: 04/12/2012 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
THIS ADDENDUM IS ISSUED TO ANSWER ALL TECHNICAL QUESTIONS SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE ORIGINAL EXPRESSION OF INTEREST (GSD126401)						
BID OPENING DATE REMAINS: 04/12/2012						
BID OPENING TIME REMAINS: 1:30 PM						
***** END ADDENDUM NO. 1 *****						
0001	1	LS		906-07		
A&E SERVICES BUILDING 4 RENOVATION						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGN <i>Krista Ferrell</i>	TELEPHONE 304-769-0821	DATE 4/12/12
Asst. Vice Pres. <i>Krista Ferrell</i>	FAX 251228638	ADDRESS CHANGES TO BE NOTED ABOVE

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



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03/21/2012				

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LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-07		
<p>A&E SERVICES BUILDING 4 RENOVATION</p> <p>EXPRESSION OF INTEREST (EOI)</p> <p>THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF GENERAL SERVICES, IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR RENOVATIONS TO BUILDING #4 LOCATED ON THE WEST VIRGINIA STATE CAPITOL COMPLEX IN CHARLESTON, WEST VIRGINIA PER THE ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA FAX AT 304-558-4225 OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV.</p> <p>DEADLINE FOR ALL TECHNICAL QUESTIONS IS 04/05/2012 AT THE CLOSE OF BUSINESS.</p> <p>ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL WRITTEN ADDENDUM TO BE ISSUED AFTER THE DEADLINE HAS LAPSED.</p> <p>VERBAL COMMUNICATION: ANY VERBAL COMMUNICATION BETWEEN THE VENDOR AND ANY STATE PERSONNEL IS NOT BINDING. ONLY INFORMATION ISSUED IN WRITING AND ADDED TO THE EOI BY FORMAL WRITTEN ADDENDUM BY PURCHASING IS BINDING.</p>						

SEE PENALTY USE SIDE FOR TERMS AND CONDITIONS

SIGNATURE: *Krista Ferrell* TELEPHONE: 304-769-0821 DATE: 4/12/12

TITLE: Asst. Vice President 251228638 ADDRESS CHANGES TO BE NOTED ABOVE

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<p>NO CONTACT BETWEEN THE VENDOR AND THE AGENCY IS PERMITTED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE STATE BUYER. VIOLATION MAY RESULT IN THE REJECTION OF THE BID. THE STATE BUYER NAMED ABOVE IS THE SOLE CONTACT FOR ANY AND ALL INQUIRIES AFTER THIS EOI HAS BEEN RELEASED.</p> <p>EXHIBIT 10</p> <p>REQUISITION NO.:</p> <p>ADDENDUM ACKNOWLEDGEMENT</p> <p>I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.</p> <p>ADDENDUM NO.'S:</p> <p>NO. 1</p> <p>NO. 2</p> <p>NO. 3</p> <p>NO. 4</p> <p>NO. 5</p> <p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p> <p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE</p>						

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<p>INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p>..... SIGNATURE</p> <p>..... COMPANY</p> <p>..... DATE</p> <p>NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE EOI.</p> <p>REV. 09/21/2009</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> <p>NOTICE</p> <p>A SIGNED EOI MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p>						

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<p>THE EOI SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE EOI MAY NOT BE CONSIDERED:</p> <p>SEALED EOI</p> <p>BUYER: KRISTA FERRELL-FILE 21</p> <p>EOI. NO.: GSD126401</p> <p>EOI OPENING DATE: 04/12/2012</p> <p>EOI OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR EOI:</p> <p>-----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):</p> <p>-----</p> <p>***** THIS IS THE END OF RFQ GSD126401 ***** TOTAL: _____</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

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

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

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

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

WITNESS THE FOLLOWING SIGNATURE

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

Authorized Signature: *Russell E. Hall* Date: 4/12/12

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 12th day of April, 2012.

My Commission expires April 14, 2013.

AFFIX SEAL HERE

NOTARY PUBLIC

Stephanie A. Hef

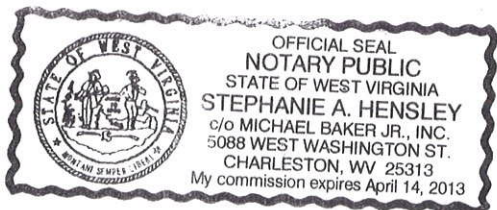


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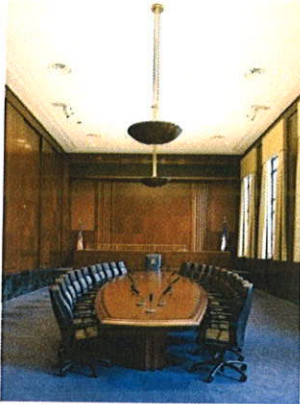
4.2.4 Demonstrated Experience in Completing Projects of a Similar Size and Scope

Project Examples

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DIVISION



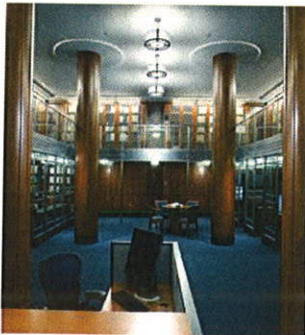
INTRODUCTION



The Baker Team is extremely pleased to submit to the West Virginia General Services Division for the Building 4 Renovation Project. With this vital project the future of the Capitol Complex becomes an important center and will assist in future expansion to the east region of the Capitol Complex.



The State Capitol has served the citizens and Legislature of West Virginia well for over 70 years. However, additional space needs, requirements of the Legislature, revisions to building codes, security and safety issues, the Capitol Complex is in need of additional space and renovation of existing facilities to accommodate those needs. From our understanding of the building from the master plan and recent site visit we think that after a renovation this building will be ably prepared to continue its service to the Legislature minimally for another 70 years.



The objectives of the Building 4 Renovation are to utilize space that is not currently occupied and to modernize the building for better utilization of the facility. We understand the first step of analyzing the existing conditions of the facility will be critical to the program and design needs. This baseline of information will inform the development of a design with construction plans and specifications, a well defined cost plan, and a phasing strategy to address the long term vision for a complete renovation of the Building 4 will assist the General Services toward their ultimate goal of acquiring high tech office space for the future of the Capitol Complex. We understand the limits and potential of this type of 1950's construction and are familiar with the historic features to be maintained as a building within the fabric of this complex.



The proposed project envisages a full renovation of the interior of at least two floors, HVAC renovations and means of egress adjustments at the Building 4 with a view to a broader rehabilitation and revitalization proper functioning of this facility is an essential attribute of the vitality of the Capitol Complex. This, in its turn, will bring a substantial space needs benefit to the Capitol. We are aware of the multiple renovations and of some of the existing condition issues to be addressed in the renovation of this building. Some of these conditions to be repaired may provide opportunities for increased flexibility in use of the interior space and circulation. Our team has experience in modernizing circulation within buildings of this period and in creating a compliant solution we are often able to increase flexibility of use of the floor plate and improve circulation.

The renovation of WV State Capitol Complex Building 4 will renew the facility spirit of the workers and will achieve an inviting, accessible, safe, and secure design appropriate for the Capitol Complex the following goals are proposed:





- Identify and prioritize the immediate and long term improvements for the Building 4 Renovations, and develop a phased implementation plan for creating the long term value.
- Enhance the Building 4 as an inviting open office environment for the agencies and users that will be pleasantly happy to occupy the spaces and developing the state of art needs for the daily needs this facility.
- Ensure the facility's longevity through code updates, and infrastructure improvements while preserving the historic elements and character of the facility.
- Improve security, safety and accessibility within the facility for all employees, daily users and visitors.
- Establish and implement state of the art energy efficient lamps, luminaries, and controls to respect the sensibilities of sustainable practice while honoring the history of this building at the Capitol.
- Provide as a design goal of LEED Silver for this project.

The outstanding historical and cultural value of Building 4 at the State Capitol, as well as its excellent location, adjacent to the Capitol along California Avenue makes the site an attractive destination as well as a pleasant environment for the state employees and daily users. The rehabilitation of this project at the WV State Capitol Complex works into the implementation of the West Virginia State Capitol Complex Master Plan and will elevate the importance of the East Campus for the future of the Complex.



4.2.1 CONCEPT

Concept

Provide a general discussion of the project and the firms approach to addressing issues and concerns including anticipated concepts, proposed methods of design and project sequence as explained in the Background, General Requirements, and Project Description. Include a description of similar previous projects and how these issues were resolved.

Baker's proposed approach to this project will require a collaborative effort with the West Virginia General Services Division (GSD) and the Baker Team to assess the project requirements, goals and the GSD's conditions of satisfaction for the project, and to balance the desired aesthetic effects with an energy-conscious design. These topics, as well as the schedule and budget for the project, will be discussed at a project kick-off meeting, after which the Baker Team will commence the initial evaluation phase.



The initial phase involves a thorough investigation and evaluation assessment of the existing Building 4 conditions including the historic nature of the facility, space planning, life safety, data /communications, mechanical, electrical and fire protection. A report will be issued upon conclusion of the assessment which will be presented to the GSD in a review meeting; the results of this meeting will determine the direction of the next phase. Baker will utilize our laser scanning capabilities to create current existing condition digital cadd files for the plans and elevations of the site and building. This is

critical as a baseline for survey and to ensure that the explored concepts are laid on an accurate canvas.

Based on the team's findings from this investigation, guidance from the GSD and our understanding of the project programming, we will develop concepts and make recommendations to the GSD for the phased renovation of Building 4. These recommendations will be reviewed with the GSD, using plans, elevations, cut sheets, sketches, and computer-generated drawings to communicate the visual effects of the proposed design.

Upon approval from the GSD of the design recommendations, the Baker team will proceed with Construction Documents. This phase will follow a specified process with established milestones for submittals and approvals in order to maintain target dates in accordance with the GSD's conditions of satisfaction. At the conclusion of the Construction Documents phase, drawings and specifications will be delivered to the GSD for bidding, contractor procurement, and construction.

The Baker team will continue to support the GSD during the construction phase, answering bid questions, developing clarification sketches or other documents as necessary, providing periodic site observations, reviewing submittals, and responding to RFIs (contractor's requests for information to clarify the design). The primary purpose of these activities is to assure the GSD that the construction is proceeding in accordance with the intent of the approved design.

During the West Virginia State Capitol Complex Master Plan project, Baker prepared an inventory of building facilities within the study area. The following information was noted for Building 4.



Building 4 - Original Construction



The building is located at the corner of California Avenue and Washington Street East in Charleston. In the late 1940s, the facility was designed as a state office building to house the Department of Employment Security, Department of Workmen's Compensation and the Merit Council.

Rectangular in plan, the building featured a central core with two elevators and stairwells. Two east-west corridors flanked the core. Offices were laid out around the perimeter of the building.

The limestone-clad building is six stories in height with a smaller mechanical penthouse above and a basement below. The eight-bay west elevation façade, is symmetrical. A large central entrance dominates the first story of the west elevation. The second through the sixth stories were articulated with regular fenestration:

- ◆ The facility originally had a single double-hung window each of the interior six bays, while the outer bays featured paired double-hung windows.
- ◆ The secondary elevations were also regular, with single double-hung windows in each bay at each story.

Excavation and foundation work began in the fall of 1951, but because of steel shortages triggered by the Korean War, it was not until the middle of 1953 that the steel skeleton of the building was erected. By February 22, 1954, Building 4 was nearly complete, and it opened in May 1954.

Building 4 - Modifications

In early 2009, the windows in Building 4 were replaced with aluminum framed insulated windows due to disrepair and lack of efficiency and functionality.

Various interior modifications have occurred over time to suit the tenant's needs and repairs to existing infrastructure have been necessary. Most modifications and repairs have been minor in nature, and the main systems remain.

Design Considerations for Building 4 at the West Virginia State Capitol Complex

Once the Evaluation Report is complete and approved by GSD, design considerations will be established with the GSD. However, there are some elements that will need to be considered in the program and are listed below:

- ◆ Maintaining the existing architectural style and character of the facility.
- ◆ Two floors require complete renovation due to water leaks and other issues of the facility's aging systems.
- ◆ Means of egress, code compliancy and mechanical / electrical issues should be addressed on all floors during the first design phase.
- ◆ The project is to be designed with a goal as a LEED Silver project.
- ◆ The facility will require being brought up to current codes and standards



- ◆ Flexible state of the art open office design for multiple agencies and users.
- ◆ Current office standards of communication and data systems.
- ◆ Continued integration into the Capitol Complex with future facility needs.

Other programmatic components will be considered for the facility's needs and efficient adjacencies of the spaces to order to respond to their function and purpose, including corridors placements, room types, sizes and configurations, ceiling heights, and finishes. The facility design needs to provide visual control of the entire building, manage any risk, and be easily adaptable and relatively maintenance-free.

Natural light from exterior and interior windows enhanced with artificial lighting should be considered to generate a bright, positive environment for the occupants. The locations of lighting fixtures should be coordinated with the proposed furniture and space layout to provide an efficient and pleasant building. All millwork corners should have a radius to help prevent injury and corner guards and/or chair rails in high-traffic areas to prevent damage.

The goal is to provide a positive, safe, and healthy workspace, while offering a building that provides an environment conducive to the needs of the employees for the tasks of the tenants. Selected materials should provide an enriching ambiance and a clean appearance that creates a productive and inviting atmosphere with timeless flexibility.

The specific scope of services that support this approach is outlined below.

Scope of Services

Task 1 – Comprehensive Building Code, Life Safety and MEP Assessment

The architectural design effort involves the following general aspects. Life Safety and egress issues, mechanical, electrical, plumbing, fire protection and structural engineering. Civil engineering and landscape architecture will support these efforts.

- ◆ **Survey existing site conditions:** Document existing building-related conditions and physical features. Determine building envelope, available utility resources and other existing conditions that would likely remain constant in the building renovation process.
- ◆ **Identify and verify the existing building shell and major MEP components:** Annotated as found building plans will be prepared as required for use in developing construction documents. Indicating the type, size, and location of existing lines, current conditions, and what upgrades may be required.
- ◆ **Pre-Design Planning:** During this phase Baker will collect all available data including utility maps, record drawings, etc. We will hold discussions with the GSD's selected groups for goals, aspirations, budget constraints, and timelines. We will work with the GSD and the end users to develop the basic program and all other functional elements and complete through a "Design Charrette" with the design team.



Task 2 – Schematic Design

Establish program, criteria, and preliminary scheme. Based on documented GSD and team input, and design practice, a proposed program of visual hierarchies, needs, and related criteria will be developed. Once all programming data has been acquired, we will work with the GSD and the end users to develop conceptual layouts for the building program and all other functional elements.

The Baker Team proposes to prepare preliminary annotated site plans, floor plans, elevations and schematic details with supporting documentation and functional needs, along with preliminary cost opinions that will be developed and presented for GSD review. This document will describe the individual elements required for the architectural, historic preservation, engineering, public safety, and environmental issues associated with the proposed renovations to the facility.

Task 3 – Design Development

Once conceptual plans have been approved by the GSD, the Baker Team will refine the program and scheme to reflect findings in Schematic Design, and address ongoing client and team input. Preliminary plans and outline specifications, based on the approved schematic design and GSD comments, will be developed, along with an updated cost opinion and cut sheets for various architectural, civil, landscaping, and HVAC amenities for submission to the State Fire Marshal's Office. The Design Development submittal will also be presented to the GSD at this time for review and approval.

Task 4 – Comprehensive Construction Documents

Upon receipt of comments from the Design Development submittal, Baker will finalize the construction plans, technical specifications, bid documents, final construction estimates, and all necessary permit applications. Initial survey data, topography, and physical features will be collected electronically and downloaded into our CADD system for use by the designers. Plan and/or Profile sheets are then developed. Detail Sheets are created from our Detail Library then modified to suit specific project applications. Specifications are created from our Master Spec Library and tailored to meet individual project requirements. The construction plans, specifications, and final cost opinion with implementation priorities will be presented for GSD review.

Task 4a – Project Bid Evaluation

During this phase, if needed, Baker will assist with the Bid Advertisement, conduct the Pre-Bid Conference, prepare any necessary Addenda, perform the Bid Opening, create and distribute the Bid Tabulation, provide a recommendation of award of contract, and complete the Notice of Award for execution by the GSD.

Bids will be scrutinized by the Project Manager along with the GSD. Likewise, detailed bid tabulations will be developed to allow the GSD and funding sources to work with the Project Manager toward the development of Construction Contract award.



Task 5 – Construction Phase Services

- ◆ Review contractor proposals and assist in evaluating best value to the GSD.
- ◆ Review shop drawings and submittals for conformance to the design requirements.
- ◆ Provide periodic site observations to assure GSD that the work is proceeds in accordance with the design intent.
- ◆ Answer requests from the contractor to clarify design or address unanticipated field issues.
- ◆ Review contractors' requests for payment for congruence with actual installed work.
- ◆ Observe contractors' construction development to achieve the designed effect.
- ◆ Develop a punch list at substantial completion.
- ◆ Perform final inspection for acceptance.
- ◆ Finalize the project close-out documents.

Initially, the Baker Team will assist the GSD in obtaining from the contractor the necessary insurance and scheduling information from the successful bidder and complete the Contract Documents and Notice to Proceed. Construction administration services may consist of shop drawing reviews, processing requests for information, monitoring construction progress, conducting construction meetings, processing payment applications, Wage rate compliance interviews, and providing construction inspection.

The Baker Team is well equipped to provide the administration and inspection of construction projects. Pre-Construction and regular job-site meetings, as well as shop drawing reviews, requests for information, pay requests, and all other construction-related correspondence that is the responsibility of the Project Manager. Inspection services will be conducted by Baker technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation (i.e. concrete placement, steel erection, HVAC installation, compaction, asphalt, trenching, etc.). Constant communication between field and office is essential for a successful project.

Task 5a – Project Closeout

The Baker Team will develop the final punch list for incomplete work. Once these items have been completed, we will coordinate a final walk-through inspection with representatives of the Owner, Contractor, and Baker personnel to ensure that the facility and project site are complete and in a clean condition prior to releasing the Contractor, as well as to ensure that the occupants are completely familiar with the systems operation. Baker will collect and deliver to the GSD any Operation and Maintenance information, as well as all final documentation for the project.

The one-year warranty period will commence at that time. The GSD will be encouraged to contact the Baker Project Manager, Mr. Bolen, during that time, should any problems arise at the facility. We will promptly respond with a confirmation site visit and follow-up with the Contractor to ensure compliance.

Quality Management Plan

The guiding principles for the Quality Management Plan (QMP) are rooted in a Quality Policy, which has three essential tenets: Client Satisfaction Comes First; Prevention vs. Correction; and Quality is Foremost a Management Responsibility. Our Quality Process involves these three elements:



- ◆ **Quality Planning.** In the planning stage, we identify clients' program requirements, determine which quality standards apply, and determine what will be done to satisfy these program requirements.
- ◆ **Quality Assurance.** In this effort, we make sure that quality control efforts are taking place; we verify that efforts are producing the desired results, and we make adjustments to the processes as necessary.
- ◆ **Quality Control.** In this effort, we perform inspection directly on the product itself to determine if it meets the requirements developed in the quality planning stage. We also identify ways to eliminate causes of unsatisfactory results such as change orders created by errors and omissions.

Quality Planning is done up front. Quality Assurance and Quality Control are continuous over the life of the project.

Prior to the start of work, Mr. Bolen will develop the Quality Control Plan (QCP) as a part of the overall Project Management Plan. He will review the QCP with Quality Assurance/Control Managers, Mr. Ron Kretz and Mr. Ralph Deffenbaugh, and gain concurrence with the appropriate State representatives. Among other items, the QCP outlines all project procedures, routing of correspondence, design criteria, quality assurance and quality control procedures, and submittal requirements.

Quality Control Procedures for Plans, Specifications, and Design Analysis, and Electronic Documents

Our procedures consist of the following steps that are performed at specified milestones and submissions:

- ◆ **Intra-discipline Check.** Each discipline checks drawings, specifications, and design calculations for accuracy, as well as consistency, between the drawings and specifications when design revisions are made.
- ◆ **Independent Technical Review.** One or more appropriately skilled individuals will perform an Independent Technical Review of the documents on a discipline-by-discipline basis.
- ◆ The Quality Plan includes a **checklist of all design criteria and submittal requirements.** This checklist will be used by the Independent Review Team to be sure that the project criteria is met.
- ◆ **Construction cost estimates** will be performed at each submission and checked by the team's professional construction cost estimators. Designs will be adjusted or scopes and cost-cutting ideas will be discussed with the appropriate State representatives as the designs progress.
- ◆ All **electronic documents and files** are stored using a standard directory structure and all submissions are saved on DVDs to keep an accurate record of the project. All electronic documents are under the care of Baker's strict firewall and antivirus software policies. Baker will provide to the GSD electronic AutoCAD formatted files.



Previous Similar Projects



West Virginia State Capitol Complex Master Plan – this project was developed with phased facility needs of the Capitol Complex over approximately the next 15 years.

- The project included a comprehensive assessment of the existing conditions and recommendations for the historic West Virginia State Capitol facilities.
- The recommendations addressed vital needs of the Capitol, such as security, parking and office space needs.
- The recommendations of the Master Plan are phased over time to allow the growth to occur in a manner as to not encumber the day to day activities and allow the function of the government to continue uninterrupted.

Baker has recently completed two projects for the GSD. These projects have similar characteristics to the proposed Building 4 Renovations and are summarized as follows:



West Virginia State Capitol Restrooms Renovations / Restorations – this project was developed with a phased approach to completely renovate 34 restrooms and various adjacent spaces (Janitor Closets and Lounges). The project was developed to address the original Architect's design as well as, Plumbing Infrastructure, Ventilation, Electrical systems and ADA compliance. This project is currently under review by State Purchasing to begin the bidding process.

- The project included an assessment of the existing conditions and recommendations for upgrade of the historic West Virginia State Capitol restrooms.
- The accepted design completely renovated the facilities with a sympathetic approach to the restrooms original architectural design while enhancing them with hands free electronic devices, current codes, ADA compliancy.
- The phased design will enable the construction to be developed while the Capitol remains operational with inconveniences kept to a minimum.



4.2.2 FIRM/TEAM QUALIFICATIONS

- a. *Provide the name, address, phone number, e-mail address and signature of the firm's contact person responsible for the project and having full authority to execute a binding contract on behalf of the firm submitting the proposal.*

Firm name and address: **Michael Baker Jr., Inc.**
 5088 West Washington Street, 2nd Floor
 Charleston, West Virginia 25313

Contacts: **Principal-In-Charge**, Russell Hall, PE, PS
 304-769-2154 (Direct)
 RHall@mbakercorp.com

Project Manager, Ron Bolen, RA, AIA, LEED GA
 304-769-2133 (Direct)
 RBolen@mbakercorp.com

- b. *Provide the names, function, and resume of individuals within the lead firm's organization who will be assigned to this project.*

PROPOSED PERSONNEL	
Name	Function
Russell Hall, PE, PS	Principal-In-Charge
Ron Bolen, AIA, LEED GA	Project Manager
Ronald Kretz, AIA, LEED GA	QA-QC Architecture
Ralph Deffenbaugh, PE LEED AP	QA-QC Engineering
R. Joseph Chaffin, AIA	Lead Design Architect
Gretchen Pfaehler, AIA	Preservation Architect
Eamon Geary, LEED AP ND ID+C	LEED Sustainable Designer
Anita Myers, NCIDQ	Lead Interior Designer
Alana Pulay, RID, LEED AP	Interior Designer
Laura Cox, LA, ASLA, LEED GA	Landscape Architect
David Cameron	Cost Estimating
Patrick Fogarty, PE, PS	Site / Civil Engineer
David Hilliard, PE, LEED GA	Lead Mechanical / Plumbing Engineering
Craig West, PE, LEED AP	Mechanical / Plumbing Engineering
Thomas Basch, PE	Electrical Engineer
Andrew Weisfield, PE, LEED GA	Fire Protection / Life Safety
Gary Case, EPA-Certified	Environmental / Hazardous Materials
Carol Stephens, PE	Structural Engineer
Bob Uber	Elevator Design
D. William Holaday, CTS- D	Telecommunications / Audio-visual/ Acoustics Design

Resumes for the Baker Team are provided at the end of this proposal section. An Organization Chart is provided in Section 4.2.3 of this submittal, along with key personnel highlights.



Project Team

The Baker Team's proposed approach to this project will require a collaborative effort with West Virginia General Services Division (GSD) to assess the existing building, project requirements, goals, and GSD's conditions of satisfaction for the project, and to balance the desired aesthetic effects with an environmentally-conscious LEED Silver design. In order to accomplish the project goals, we will consider GSD the central member of the project team. We have assembled an outstanding project team. Proposed Baker Team members and their respective responsibilities are listed below:

Michael Baker Jr., Inc. (Baker)

- ◆ Principal-in-Charge / Quality Control
- ◆ Architecture / Interior Design
- ◆ Historical Architecture
- ◆ Sustainable Design
- ◆ Site / Civil Engineering / Landscape Architecture
- ◆ Mechanical / Electrical / Plumbing Design
- ◆ Fire Protection / Life Safety
- ◆ Construction Administration

CAS Structural Engineering, Inc. (CAS)

- ◆ Structural Engineering

Convergent Technologies Design Group, Inc. (CT)

- ◆ Audio / Acoustics

Lerch Bates, Inc. (LB)

- ◆ Elevator Design

- c. *The design team must have expertise in the A/E areas previously mentioned. Provide information on all other project consultants, sub-consultants, and firms proposed to be employed by the lead firm for this project.*

The Baker Team's subconsultants bring to the project very valuable expertise and provide the Building 4 Renovations with the enhanced design capabilities for the agencies and users that will occupy the facility.

CAS Structural Engineering

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

- ◆ Governmental Facilities (including facilities at the WV State Capitol)
- ◆ Industrial Facilities
- ◆ Commercial Facilities



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

Convergent Technology Design Group

Convergent Technology personnel are certified through accredited industry associations in the design of multimedia systems, telecommunications systems, security, and architectural acoustics. They draw from years of "hands on" project management/engineering experience when assisting owners and end users in planning technology design options and performance specifications.

Convergent Technologies provides:

- ◆ Audiovisual Systems
- ◆ Telecommunications Cabling Systems
- ◆ Security Systems
- ◆ Acoustics, Noise & Vibration Control design services

Convergent Technologies delivers quality technology design solutions that compliment the projects objectives and the pedagogical teaching mission of each client. Their design team's role as the technology systems consultant includes a responsive attitude and a sensitivity to detail that results in the seamless integration of technology systems and architectural design.

Lerch Bates

Lerch Bates brings together expertise in consulting, engineering and technology for the design and management of vertical and horizontal transportation systems, including high rise elevators, commercial elevators, freight elevators, escalators and moving walkways. Our qualified consultants provide clear analysis, cost effective recommendations and attention to detail – ranging from code compliance to aesthetic considerations.

Site Investigations Phase

- ◆ Equipment survey field measurements
- ◆ Survey and Report
- ◆ Modernization Report includes schedule, work by other trades, handicapped upgrading requirements, ANSI 17.3 and local Code compliance, elevator budgets, and pre-maintenance/bid repairs

Bidding Documents Phase

- ◆ Prepare Bid Specifications
- ◆ Prepare Bid Form
- ◆ Prepare an "after" modernization continuing Maintenance Contract; contract maintenance, proration schedule, and pre-modernization repairs (if any)
- ◆ Prepare Modernization Work Schedule



Bidding Assistance Phase

- ◆ Conduct pre-bid jobsite review and interviews
- ◆ Bid reviews and negotiations with Elevator Contractors
- ◆ Bid review report and recommendations

Construction Services Phase

- ◆ Shop Drawing/Submittals review
- ◆ Conduct periodic progress inspections, reviews and reports
- ◆ Review Contract Change Orders
- ◆ Approve Payment Requests if requested by Owner
- ◆ Perform final equipment inspections and tests
- ◆ Review Contract close-out documents

d. Provide a statement of the firm's ability to handle the project in its entirety.



Over the last decade, Baker has designed several new, as well as renovations to, office facilities for several clients including our government clients. Facilities have been designed for the various users and tenants.

With Renovation Projects of this type we have included the following elements for developing the project:

- ◆ Providing Building Assessment and Evaluation Documents for projects to assist the Client's programming.
- ◆ Performing Design Charrettes with project stakeholders to develop programming and planning documents.
- ◆ Preparing conceptual designs and Design/Build RFP documents for bidding by design/build delivery teams.
- ◆ Preparing designs and design-bid-build construction documents for traditional project delivery.
- ◆ Assigning the designer-of-record on the team for final project delivery, including construction administration services to ensure the projects' design intent remains intact.

Baker is a full-service planning, architectural, engineering, and construction management firm. However, because of the historic nature of this project, the various program component needs and complexity of the project, we have looked to the group of professionals from CAS Structural Engineering, Convergent Technologies and Lerch Bates for their expertise in the fields they represent. We have worked with each of the subconsultants previously and are proposing the team we have assembled is the best for the Building 4 Renovations Project. With the Baker Team will have assembled, we will be able to provide to General Services Division all of the services required for the successful completion of this project.

Baker provides all of the traditional consulting services provided by design firms, including: programming and planning; architecture and interior design; civil, structural, mechanical,



plumbing, fire protection, and electrical engineering; and communications systems design. But, beyond that, Baker provides expanded, truly full-service in-house delivery capabilities, including NEPA, environmental, and hazardous materials remediation, archeology, historic preservation, landscape architecture, virtual reality design, emergency response planning and management, and the full complement of program management and construction management services.

Examples of our recent project experiences for the Building 4 Renovations are provided in the tabbed section titled Project Examples of this submission.



Expertise with Contract Documents and Specification Preparation

Baker has, and routinely uses, AIA Master Spec and AutoCAD software packages in the preparation of the drawings and specifications, which will be provided as a requirement of this project.



As an example of our experience with contract documents and specification preparation for the State of West Virginia, Baker is currently providing architectural, mechanical and electrical engineering, and cost estimating coordination with other team members for the renovation and rehabilitation of the existing historical West Virginia State Capitol's Restrooms. Baker is leading the effort to assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with

Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and other related services.

The Building 4 Renovations Project design will comply with all regulations including: State of West Virginia, City of Charleston Zoning Ordinances, State of West Virginia Fire Codes and NFPA regulations; the International Building Code (IBC), local electric utility company (AEP) and the requirements of the National Electrical Code and the National Electrical Safety Code.

The Baker Team would also work with the Division of Culture and History's State Historic Preservation Office if required for this project for any historical aspects to the project.



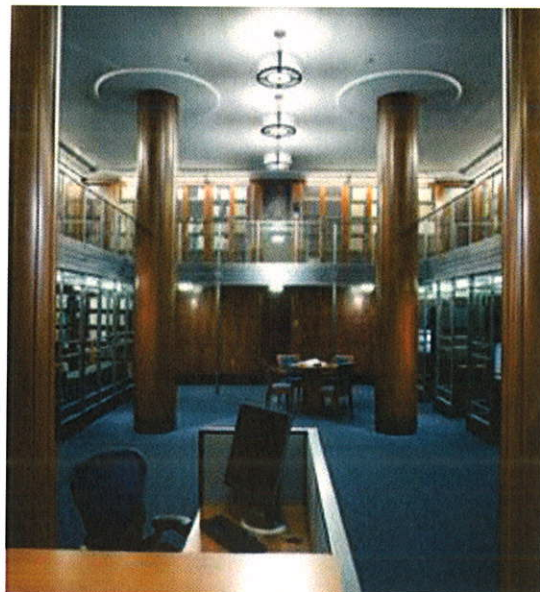
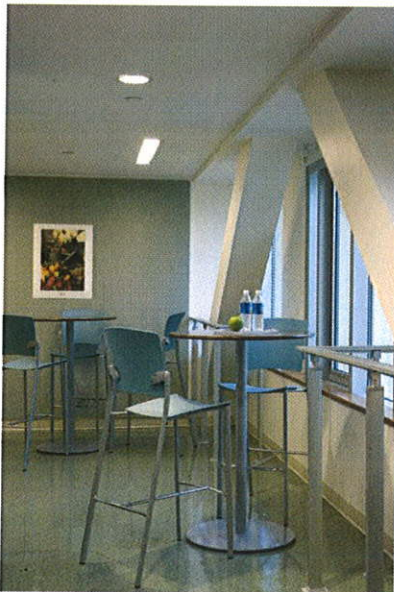
The project manager and project staff have worked closely with the WV State Fire Marshal's office. We will coordinate throughout the project for a smooth review process with that state agency and other agencies having jurisdiction.

While developing the West Virginia Capitol Complex Master Plan, it was necessary to review the current campus utilities including electric power and other in-ground service feeds. Baker has worked with representatives from American Electric Power Company regarding power feeds both to and around the campus, the West Virginia Office of Technology regarding campus fiber optic cabling, Verizon Corporation on phone lines, and the GSD regarding private power feed to campus buildings and site electric power and lighting feeds.

The lighting design development will consider the City of Charleston Zoning Ordinance as it may relate to light trespass and light pollution and will include any applicable requirements outlined in the Illuminating Engineering Society of North America (IESNA) Publication RP-33-99, Lighting for Exterior Environments; and Publication DG-13-98 Selection of Photo-controls for Outdoor Lighting Applications.

- e. ***Provide a statement of the firm's acceptance and full understanding that any and all work produced as a result of the contract will become property of the Agency and can be used or shared by the Agency as deemed appropriate.***

We understand and accept that any work produced as a result of this contract will become the property of The State of West Virginia, Department of Administration, and can be used or shared by the Agency as deemed appropriate.



- f. ***Provide evidence of the firm's ability to formulate designs in conformance with all local, State, and Federal regulations applicable to the project. These requirements shall include building exterior lighting and related life safety code requirements.***

The Building #4 renovation will comply with all regulations including: State of West Virginia and City of Charleston Zoning Ordinances (Section 22-040-08); State of West Virginia Fire



Codes and NFPA regulations; the International Building Code (IBC); local electric utility company (AEP) requirements (where applicable); and the requirements of the National Electrical Code and the National Electrical Safety Code.



While developing the West Virginia Capitol Complex Master Plan, it was necessary to review the current campus utilities including electric power and other in-ground service feeds. Baker has worked with representatives from American Electric Power Company regarding power feeds both to and around the campus, the West Virginia Office of Technology regarding campus fiber optic cabling, Verizon Corporation on phone lines, and the GSD regarding private power feed to campus buildings and site electric power and lighting feeds.

The lighting design development will consider the City of Charleston Zoning Ordinance as it may relate to light trespass and light pollution and will include any applicable requirements outlined in the Illuminating Engineering Society of North America (IESNA) Publication RP-33-99, Lighting for Exterior Environments; and Publication DG-13-98 Selection of Photo-controls for Outdoor Lighting Applications.

The project manager and project staff have worked closely with the WV State Fire Marshal's office. We will coordinate throughout the project for a smooth review process with that state agency and other agencies having jurisdiction. This involves early communication about the issues with the baseline condition and then communication as the solution is developed to achieve the new use goals demonstrating compliance with critical life safety and code issues.

- g. Provide a description of any litigation or arbitration proceedings, including vendor complaints filed with the State's Purchasing Division, disputes with other Agencies of the State of West Virginia that involved legal representation by either party relating to the firm's delivery of design services, if applicable. Also, any disputes with other Agencies of the State of West Virginia that involved legal representation by either party.*

Michael Baker Jr., Inc. (Baker) is involved in such claims, arbitration proceedings and suits as is typical for the work it performs. Baker's legal department may provide certain non-confidential details relating to any such individual matter after receipt of a specific written request. Baker is not involved with litigation or arbitration proceedings, including vendor complaints filed with the West Virginia Purchasing Division or disputes with other Agencies and the State of West Virginia that involved legal representation by either party relating to Baker's delivery of design services.

Resumes for the Baker Team are provided in the following tabbed section titled Personnel Resumes of this submission.



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

Principal-in-Charge

General Qualifications

Mr. Hall currently serves as an Assistant Vice President of Michael Baker Jr., Inc., as well as Office Manager of our Charleston, WV office. He is an experienced transportation engineer who has been involved in numerous bridge and highway design projects in West Virginia for over 25 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He also has over nine years of office management experience. His office management responsibilities include financial oversight and accountability for a staff of over 40 engineers, scientists, and administrative personnel for Baker's Charleston office. His major strengths include organizing and managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

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

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Principal-In-Charge. Responsible for oversight of Project Management. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Principal-In-Charge. Responsible for oversight of Project 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 a lump sum/fixed fee contract for architectural and engineering services. 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.

Years with Baker: 8

Years with Other Firms: 18

Education

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

Licenses/Certifications

Professional Engineer, West Virginia, 1990

Professional Surveyor, West Virginia, 1996

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Principal-In-Charge. Responsible for oversight of Project Management. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Principal-In-Charge. Responsible for oversight of Project Management. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Principal-In-Charge. Responsible for oversight of Project Management. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Parsons City-Wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia. *Parsons Park Board, Inc.* Principal-In-Charge. Responsible for oversight of Project Management. Baker prepared a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the City of Parsons, WV. The City, over time, had acquired many parcels of FEMA-condemned properties due to the flood-prone topography of Parsons; in an effort to properly manage existing facilities, yet prepare for the future of the additional facilities scattered throughout the community, this master planning effort was begun.

Appalachian Corridor H Environmental Impact Statement, Appalachian Highlands Region, Elkins, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for ensuring quality and timely deliverables since 2006. The Appalachian Corridor H is a 100 mile proposed four-lane highway intended to provide access from Interstate 81 in Northwestern Virginia through the rugged, mountainous terrain of West Virginia's Appalachian Highlands Region. Baker was responsible for preparing the tiered Corridor H Supplemental EIS study. This consisted of a corridor-level study evaluation (Corridor Selection EIS) to determine the environmental and engineering constraints existing along 24 potential alternative corridors (Tier 1) and a follow-on Alignment Selection FEIS (Tier 2). Baker also provided advanced preliminary engineering on the preferred alignment. Following the 1996 Record of Decision, the WVDOT and FHWA were sued in Federal District and Appeals Courts by a coalition of 13 environmental groups. Baker provided lawsuit support for legal council during that period-project is now under construction and Baker is providing environmental monitoring and engineering services.

Ron L. Bolen, R.A., A.I.A., LEED Green Associate

Project Manager

General Qualifications

Mr. Bolen brings more than 36 years of design and project coordination experience to the project. 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, from the early assessment of project planning stages to the construction implementation. Increasingly, Mr. Bolen's facilities have become the result of collaborative problem solving with other design professionals and our clients.

Years with Baker: 4

Years with Other Firms: 36

Education

1980, Architectural Design,
Parkersburg Community College

Licenses/Certifications

Registered Architect, West Virginia,
1999

LEED Green Associate, 2010

Experience

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Architect. Responsibilities includes working in conjunction with the owner and a team of specialized sub-consultants, Ron is currently providing elements including Master Planning Programming, Architectural / Review, Document Management, Project Scheduling, Cost Estimating, Facilities Planning, Sub-consultant Management and Client Coordination. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Lost Creek Train Depot Rehabilitation, Lost Creek, West Virginia. *Town of Lost Creek.* Architect. Responsibilities included are Architectural support during construction, cost estimating for future phases of the over all project, Architectural design for rehabilitating the existing Historical Train Depot. 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. 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. Baker provided construction administration and inspection services as well as periodic site review during construction.

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Architect. Responsibilities included are Architectural coordination with the Architectural team members (RMJM) and the Mechanical /Electrical staff during design and construction, cost estimating project, Architectural design for rehabilitating the existing historical West Virginia State Capitol Restrooms. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Architect. Responsibilities included providing a complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and to provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Architect. Responsibilities include providing a complete design and detailed construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Architect. Responsibilities included providing a complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and to provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. 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. 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.

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.

Science Hall, Glenville, West Virginia. *Glenville State College.* Mr. Bolen provided Project Manager Services through Pre-design and all phases of Document Preparation, Consultant Coordination, Client Relations, and Construction Administration. Design for an addition of four-story office complex with elevator, making an existing building ADA accessible.

Ronald W. Kretz, R.A., A.I.A., LEED Green Associate

Quality Assurance/Quality Control, Architecture

General Qualifications

Mr. Kretz is a registered architect with over 20 years of experience as project manager, designer, and principal. As Operations Manager of Baker's North Region Facilities Group, he has direct management responsibility over all architectural and building engineering personnel, project designs, and office functions, as well as serving as project manager for design projects. Mr. Kretz's project experiences includes various building types for military, educational, institutional, commercial, health care, aviation, transit, and housing clients in public and private sector facilities. Building types include readiness training centers and classrooms with sophisticated telecommunication systems, fitness centers, airport facilities, vehicle maintenance and intermodal transit facilities, warehouses, parking garages, and rail stations. Mr. Kretz is well versed in a variety of project delivery systems including fast-tracked designs, traditional design-bid-build, design-build RFP documents, design-build delivery as a member of the contractor's team, bridging documents, and site adapt designs.

Experience

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio, and Wood County, West Virginia.

West Virginia Department of Transportation, Division of Highways. Architect. Responsibilities included providing design assistance to the project architect. Baker provided engineering services for the Blennerhassett Island Bridge; the "missing link" final segment of Appalachian Highway Corridor D. Baker's services included project management, environmental engineering and location studies, permitting, preliminary and final design, and construction services for this network tied-arch bridge that carries U.S. 50 over the Ohio River. The bridge is 100 feet, six inches wide, and the total length of the structure is 4,008 feet, nine inches. It has an 878-foot, six-inch-long main span with a rise of 175 feet.

Office Complex and Testing Laboratory Renovation - Adaptive Reuse of Maintenance Garage, Ottawa, Illinois. *Illinois Department of Transportation, District 3.* Architect. Responsibilities included a field investigation of the existing facility, renovation design and construction documents, and bid documentation. Baker performed architectural, engineering, and construction services for the conversion and renovation of the garage structure attached to the Illinois Department of Transportation, District 3 Headquarters in Ottawa, Illinois. The existing one-story maintenance garage was converted into additional office space and materials testing laboratories for the Department.

Design-Build Addition to Communication Equipment Building 246 & Renovation & Repair of Critical Power Systems, Fort Belvoir, Virginia. *U.S. Army, Fort Belvoir.* Architect. Responsibilities included architectural design, preparing construction documents, assisting with the bidding phase, and providing construction oversight. The 20,000-gross-square-foot Communications Equipment Building (CEB) is an

Years with Baker: 13

Years with Other Firms: 9

Education

B.Arch., 1990, Architecture,
University of Cincinnati

Licenses/Certifications

Registered Architect, Connecticut,
2011

Registered Architect, Pennsylvania,
1993

Registered Architect, Michigan

Registered Architect, Washington
D.C., 2010

LEED Green Associate

Registered Architect, Maryland,
2010

Registered Architect, Ohio, 2010

Registered Architect, Colorado,
1997

Registered Architect, Delaware

essential mission-critical facility at Fort Belvoir, Virginia. The design-build team of Baker and Mascaro Construction Company, LP was tasked with providing a new electrical service for the facility, which was to be powered from two separate 34.5 KV electrical sources as well as redundant diesel-driven standby generators for N+3 reliability. The critical nature of the existing equipment installed at the facility required redundant Uninterruptible Power Supply (UPS) systems for N+1 reliability. All new components are housed in a 42- x 70-foot, single-story, 3,000-square-foot addition to this historic structure. All support systems for the addition were included in the design, such as HVAC, electrical, plumbing, communications, fire detection and protection, security, grounding, lightning protection, and site lighting. Overall building envelope and equipment energy performance, and efficiency of system components must meet or exceed Bronze SPiRiT level sustainable requirements and ASHRAE Standard 90.1-2001.

Renovations to Building 4305, Aberdeen Proving Ground, Maryland. *U.S. Army Corps of Engineers, Baltimore District.* Project Manager. Responsibilities included performing project management duties, and design and preparation of construction documents. Building 4305 at Aberdeen Proving Ground (APG) was an existing three-story concrete framed structure with concrete slab floors. Baker designed the interior office renovations to the 25,000-square-foot second floor, including new offices, conference rooms, and training facilities. An addition to the building provided space for a new elevator and stairs, providing for emergency and ADA egress to the upper two floors. The new roof-mounted HVAC system and second floor build-out, which included extending the new exterior wall treatment to match what had previously been finished, were completed while the building remained partially occupied. The first floor had been renovated prior to Baker's contract, including the exterior.

New Warehouse and Special Purpose Brigade Operations Buildings, Fort Jackson, Columbia, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Provided design oversight and supervision to the architectural team. Baker prepared a Design-Build RFP Document for an Operations Building for the U.S. Army Recruiting Command. The 11,000-square-foot facility provided office and storage space and a professional, comfortable work atmosphere to allow the Recruiting Command to meet its important mission of attracting potential soldiers to aid in the defense of the United States. The project consisted of the renovation of an existing three-story building for office space and the construction of a new 3,250-square-foot warehouse structure. Anti-terrorism and force protection measures included progressive collapse analysis, setback requirements, and blast-proof window installation.

Task 0026, Renovation of Communications Center, Building 209, Arifjan, Kuwait, Kuwait. *U.S. Army Corps of Engineers, Middle East District (formerly TAC).* QA/QC. Provided design oversight and supervision to the architectural team. Baker provided planning, architectural, and engineering services to plan and design the renovation of Building 209 at Arifjan, Kuwait. The project involved a site survey to determine the extent of the renovations needed to upgrade the facility to the user's requirements. After completion of the site survey, Baker conducted a charrette design process engaging client personnel and other clients to ensure that the final design would consider all user requirements. Baker completed the final ready to advertise (RTA) design package on schedule. An on-site survey of the Communication Center, Buildings 209 and 229, was performed under an earlier task order in order to evaluate the conditions of the existing buildings.

Rehabilitation of the Ernie Pyle U.S. Army Reserve Center, Fort Totten, Queens, New York. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Provided QA/QC oversight on the project. Baker was tasked to provide Design-Bid-Build documents for the renovation of a 41,312-square-foot U.S. Army Reserve Center, the addition of a 4,994-square-foot Unheated Storage Building, and the addition of POV and MEP parking. The renovation included storage and office areas on two floors, electrical, mechanical, plumbing, and fire protection on all three floors, as well as vault and elevator construction and asbestos removal. Renovation included compliance with Anti-terrorism and Force Protection Requirements, as well as Handicapped Accessibility.

Ralph T. Deffenbaugh, P.E., LEED AP

Quality Assurance/Quality Control, Engineering

General Qualifications

Mr. Deffenbaugh provides leadership for project quality and interdisciplinary coordination for the engineering group. In his wide-ranging experience, he has provided oversight of the engineering efforts focusing on integration of systems, development of energy reduction strategies, and detailed quality assurance reviews of various types of facilities for military, government, commercial, public, and private clients. His experience includes serving as project manager, lead structural engineer, resident structural engineer, or project/design engineer for various types of facilities, including tactical equipment maintenance facilities, vehicle maintenance facilities, barracks, military facilities, administrative/office buildings, bus maintenance facilities, manufacturing plants, fabrication facilities, utility buildings, clean rooms, administrative facilities, transit stations and park-n-rides, water storage, and water/wastewater treatment facilities. In 2007, Mr. Deffenbaugh received his LEED® accreditation from the U.S. Green Building Council.

Years with Baker: 6

Years with Other Firms: 26

Education

B.A.E., 1980, Architectural Engineering (Structural Design Option), The Pennsylvania State University

Licenses/Certifications

Professional Engineer, West Virginia, 2004

NCEES Certified, 1986

LEED Accredited Professional, 2007

Experience

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* QA/QC. Responsibilities included quality assurance reviews for civil, structural, architectural, mechanical, and electrical drawings and specifications. Facilitated QC review process utilizing discipline review checklists, RFP scope checklists, and coordination of drawings. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* QA/QC. Responsibilities included quality assurance reviews for civil, structural, architectural, mechanical, and electrical drawings and specifications. Facilitated QC review process utilizing discipline review checklists, RFP scope checklists, and coordination of drawings. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.*

QA/QC. Responsibilities included coordinating the quality assurance reviews for architectural, mechanical, and electrical drawings. Facilitated QC review process utilizing discipline review checklists, RFP scope checklists, and coordination of drawings. 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. 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.

Research and Development Facility, Institute for Scientific Research, Fairmont, West Virginia. *BE & K Building Group.* Technical Manager. Coordinated final project closeout for the engineering designs and completed LEED® certification documentation. Using a design-build delivery method, a new 263,000-square-foot, five-story Research and Development Facility was constructed for The Institute for Scientific Research (ISR). The facility was outfitted with advanced technology features and amenities that included: distance learning centers; voice/data systems; two-story exhibit hall; heavy research floor with high bay area; prototype workshop and 10-ton crane; fitness center; and full-service kitchen/restaurant. In addition to the environmentally sensitive design features, a number of unique energy-efficient strategies were used to accomplish LEED® certification.

U.S. Army Reserve Center OMS/AMSA/STRG, North Canton, Ohio. *U.S. Army Corps of Engineers, Louisville District.* Technical Manager. Responsible for reviewing the contractor's requests for change orders for this design-build delivered Army Reserve Center. The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88th Reserve Support Command. Approximately 400 reservists work and train in the new Silver SPiRiT-certified, 61,344-square-foot complex. The Training Center and OMS/AMSA is comprised of a one-story L-shaped building with a two-story element at the connection of two wings. The Training Center portion of the complex includes offices and administrative spaces, caged unit storage, classrooms, library, learning center, physical readiness, engagement skills trainer, COMSEC training room, arms vault and armorer's room, assembly hall, kitchen, toilets, lockers, showers, and building support functions. The OMS/AMSA portion of the building includes office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Responsibilities included review of the anti-terrorism/force protection upgrade approach. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

R. Joseph Chaffin, R.A., A.I.A.

Lead Design Architect

General Qualifications

In balancing creative, organizational, and technical strengths, Joseph Chaffin's professional experience demonstrates a broad practice of architecture from residential through complex institutional projects. He challenges current capabilities, cultivates leadership, and develops new strengths through his position at Baker. As Director of Architecture, Mr. Chaffin is responsible for the daily operations, design quality, and project execution of the architectural and interior design staff. He performs interdisciplinary technical reviews for all designs and oversees coordination of related engineering disciplines. Ensuring the highest quality design services within budget and schedule parameters, he also emphasizes a "world view," or comprehensive perspective, within which professional services are delivered prioritizing and maintaining client expectations.

Years with Baker: 5

Years with Other Firms: 17

Education

B.Arch., 1990, Architecture,
University of Cincinnati

Certificate, 1988, Architecture,
Ecole d'Art Americaines - Ecole des
Beaux Arts

Licenses/Certifications

Registered Architect, West Virginia,
2011

NCARB, 1999

Experience

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio, and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Architect. Responsible for the design of a conceptual tower/beacon woven into the proposed bridge span over the Ohio River at historic Blennerhassett Island. Baker provided engineering services for the Blennerhassett Island Bridge; the "missing link" final segment of Appalachian Highway Corridor D. Baker's services included project management, environmental engineering and location studies, permitting, preliminary and final design, and construction services for this network tied-arch bridge that carries U.S. 50 over the Ohio River. The bridge is 100 feet, six inches wide, and the total length of the structure is 4,008 feet, nine inches. It has an 878-foot, six-inch-long main span with a rise of 175 feet.

Building 12 Defense Logistics Agency Headquarters Renovation Design, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker prepared design documents for the partial renovation of Building 12 to serve as the new Defense Logistics Agency headquarters building. Work was performed under a three-year indefinite delivery-indefinite quantity contract. Baker's tasks included architectural design, building systems engineering, construction cost estimate development, and as-built plans development.

Restroom Renovation Design, TISCOM, Alexandria, Virginia. *U.S. Coast Guard, CEU Cleveland.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker is developing specifications, construction drawings, a detailed cost estimate, and a projected construction schedule to renovate two male and two female restroom areas in the Telecommunication and Information Systems Command Navigation Center. The renovated restrooms will be compliant with the Americans with Disabilities Act and will include new plumbing fixtures, toilet partitions, floor coverings, wall coverings, electrical fixtures, and exhaust fans.

U.S. Armed Forces Reserve Center, Rutland, Vermont. *U.S. Army Corps of Engineers, Louisville District.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Responsibilities also included detailed interdisciplinary reviews of the RFP design criteria documents with an emphasis on architecture. Baker developed design-build RFP documents for a new 600-member Armed Forces Reserve Center meeting Silver LEED® standards. A 97,634-square-foot training building (AFRC), a 14,600-square-foot multi-use classroom, a 7,302-square-foot Organized Maintenance Shop (OMS), and a 3,113-square-foot unheated storage (UHS) building were included in the RFP package. The center accommodates training and mobilization, and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Vermont Army National Guard and Army Reserve units. RFP development consisted of conducting a design charrette; providing a topographical survey and geotechnical investigation; performing a utility survey; developing conceptual site plans, floor plans, and building elevations; developing RFP specifications; preparing DD Form 1354 – Transfer of Real Property; and providing a PACES construction cost estimate.

General Architect and Engineering Services Contract, U.S. and its Territories. *U.S. Coast Guard, CEU Cleveland.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker is providing services under a U.S. Department of Homeland Security \$50 million, 10-year indefinite delivery-indefinite quantity general architect and engineering contract for work at U.S. Coast Guard facilities within the 50 U.S. states and territories. The scope of the contract includes modifications and renovations to existing structures as well as new construction. Facility types and applications include space planning, light commercial buildings and their mechanical and electrical systems, site utilities, waterfront facilities, dredging, structural inspections, and runways.

Design of U.S. Army Reserve Center Renovation and Expansion, Homewood, Illinois. *U.S. Army Corps of Engineers, Louisville District.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. As designer of record, Baker provided architectural and engineering services for the renovation and expansion of a 400-member U.S. Army Reserve Center to provide a 60,374-square-foot Training Building, including an approximately 3,500-square-foot Unheated Storage Building. The project also includes construction of a 22,300-square-foot parking area for military equipment, and 130 parking spaces for privately owned vehicles. Tasks were performed under an indefinite quantity-indefinite delivery engineering agreement. Baker designed the training facility to meet LEED® Silver certification. Baker's services included architectural design, surveys, environmental and geotechnical investigation, all site and building engineering, cost estimating, value engineering, and LEED® certification administration.

Unit Operations Facilities, SATOC TO #4, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0004 was for the design-build delivery of a medium-sized, 32,290-square-foot TEMF, a 6,300-square-foot Organizational (Deployment) Storage facility, a 540-square-foot oil storage facility, and a 540-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

Gretchen K Pfaehler, A.I.A.

Preservation Architect

General Qualifications

Ms. Pfaehler has over two decades of experience in the preservation, restoration, and renovation of historic buildings and landscapes across the United States. She is knowledgeable on the issues of preservation project delivery methods, technical building documentation and assessments, building material treatments, preservation laws, review processes and regulations applied to historic preservation projects. She is experienced with review, approvals and documentation with many federal state regulatory and review commissions.

Ms. Pfaehler has extensive experience leading planning and design teams for government, cultural and academic projects. Her experience with existing buildings provides a solid understanding of the requirements for determination of significant building elements and developing design solutions integrating new uses that maintain the historic character of the building. Widely recognized as an expert in her field, Pfaehler has lectured and published extensively on the subjects of historic preservation and sustainability within the existing building context. Her work has been recognized with more than twenty-seven national, regional, state and local preservation awards. Her professional qualifications with a degree in Architecture and more than 10 years of working on historic preservations projects in the US- greatly exceed the minimum requirements of the Secretary of the Interior Standards and Guidelines' Professional Qualifications Standards for Architecture and Historic Architecture.

Experience

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Preservation Architect for final edits and review. Responsibilities included working in conjunction with the owner and a team to provide appropriate preservation compliance documentation and edits to existing master plan to ensure that long term facility goals are balanced with significant historical features of the buildings and site. Review included editing of code documentation for required compliance interpretations for the campus site and buildings. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

West Virginia State Capitol Restroom Renovations. State of WV General Services Division. Preservation Architect and Technical Reviewer. Responsibilities included review of disciplines for constructability and

Years with Baker: 1

Years with Other Firms: 21

Education

BS, 1991, Architecture, University of Wisconsin-Milwaukee
Certificate of Architecture, 1991, Ecole Spéciale d'Architecture, Paris France
Political Science and Art History, University of Wisconsin- Madison

Licenses/Certifications

Registered Architect, Wisconsin, 2007

Affiliations

DC Historic Preservation Review Board, Board Member
Vice President, Association for Preservation Technology International
Member, American Institute of Architects
Associate Member, American Institute for Conservation of Historic & Artistic Works
Member, National Trust for Historical Preservation
Member, American Association for State and Local History

preservation compliance. Baker led the phased renovation of 31 restrooms in this National Landmark legislative building to ensure viability for the state.

Architect of the Capitol, US Supreme Court Exterior Façade Cleaning and Restoration, Washington DC. Ms Pfaehler is providing design review and quality assurance for the restoration and cleaning of Cass Gilbert's US Supreme Court Building. Much of the exterior marble on this building is damaged and eroding from pollution. This condition is more than an aesthetic issue, the wearing and damage provides opportunities for water infiltration into the building that could cause further damage. The project begins with the west façade, and each phase will be coordinated with the judicial schedule and access as security permits. Concepts for repair methods were reviewed with the Architect of the Capitol and the US Supreme Court at each step in the development of the project.

The Patrick Henry Executive Office Building (Formerly the Old State Library and Supreme Court), Richmond, Virginia. Project Manager and Lead Preservation Specialist for an adaptive re-use conversion to the Commonwealth of Virginia Executive Office Building. The "Old Library Building" was built in Richmond's Capitol Square in 1939, and housed the Supreme Court of Virginia and the Commonwealth's Library and Archives. The structure was built with two distinct sections, entrances, facilities and elevators, one for the Library and one for the Supreme Court. Originally, there were 211,000 square feet of offices, public spaces, courtrooms, and library stacks, occupying a large portion of the center and upper floors. In 1973, an addition was put on the building, providing four additional floors for stack storage. The ziggurat addition created the tiered top to the original building and increased the building to 258,876 square feet. The project consists of a complete renovation of the building and all building systems and adapting the building for office use in two phases. In the first of the two renovation phases, the Old Library Building will provide office and support space for two types of functions: permanent relocations for government agencies and temporary relocations for legislative functions currently operating in the Virginia Capitol Building. The second phase of the renovation will involve converting the legislative spaces into office space for governmental agencies, currently in leased space throughout the Richmond Metropolitan area.

St Louis Public Library, St Louis Missouri. Preservation Architect for phase one established in the master plan for the renovation of the Central Library in downtown St. Louis. The library resides in an historic Cass Gilbert building built in 1912. With an already extensive rare books collection, the Library is on the brink of becoming a world-class research facility, with special emphases in history, fine arts, and genealogy. The first phase of the project include the renovation of the central reading court and the rare books room to highlight the potential for fundraising to complete the renovation of the entire facility.

Architect of the Capitol Indefinite Quantities Contract, Washington DC. Project Manager and Preservation Architect for two sequential 10-year, \$20 million fee capacity for a broad range of project scope and construction cost. The Architect of the Capitol is responsible to the United States Congress for the maintenance, operation, development, and preservation of the United States Capitol Complex, which includes the Capitol, the Congressional office buildings, the Library of Congress buildings, the Supreme Court building, the US Botanic Garden, the Capitol Power Plant, and other facilities. Today, in addition to the Capitol, The Architect is responsible for the upkeep of all the congressional office buildings, the Library of Congress buildings, the United States Supreme Court building, the Federal Judiciary Building, the Capitol Power Plant, the Capitol Police Headquarters, and the Robert A. Taft Memorial.

Ada County, Courthouse and Idaho State Capitol Mall Plan, Boise, Idaho. Preservation architect with responsibilities including survey of existing conditions and analysis of a 1930's Moderne courthouse as a component of the Idaho State Capitol Mall Planning project. The survey and documentation included assessment of significance and feasibility of re-use of the existing building configurations, original artwork, plaster, stone and terrazzo finishes, as well as steel windows for reuse as expansion office space in the relocation of the courts and judicial functions. Public hearing presentation for recommendations.

Wisconsin State Capitol Renovation, Madison, Wisconsin. Preservation Architect developing survey and writing for historic structures report; created schematic, design and construction documents; specification writing; drafting; conservator selection; managing consultants; construction administration; built close productive relationship with contractor team; development and maintenance of logs and budget; coordination of publicity and video documentary development. Built between 1906 and 1918 by architect George B Post, the Capitol is inventive in its construction, detailing and decorative finishes. As a National Landmark, the renovation continued the heritage while creating a high-tech functioning interior. Restoration of the wings included chambers and office spaces and primary building spaces with preservation of finishes and integration of new educational technology. The rotunda included conservation of mosaics, paintings; preservation of decorative plaster, stone and windows; new sound and lighting technology and surveillance security was integrated into and concealed in the 265 foot high volume. These projects won several awards, including: Grand Prize, Building Renovation Award, Buildings Magazine, 1996; First Place, Madison Magazine Annual Building Design Awards, 1997; Honor Award, Wisconsin Chapter AIA, 1998; Best of Division in the Commercial / Renovations / Remodeling / Addition / Restoration, Madison Magazine Annual Building Design Awards, 1998; Winner, Top Projects of 2001, Restoration Category, Wisconsin Building Magazine, 2001; Winner, 2002 Special Recognition Award, AIA Wisconsin; Winner, 2001 Illumination Design Award, Milwaukee Section of the Illuminating Engineering Society of North America; Participant, National Lighting Awards Program in a Project that Demonstrates the Benefits Attainable through the Effective, Energy - Efficient Application of Electric Illumination, Nation Lighting Bureau.

Capitol of the Commonwealth of Virginia, Richmond Virginia. Project Manager for the marketing, pre design, and contract negotiations phases for the renovation of the Capitol, New Visitor Center, and Landscape Restoration. The Virginia State Capitol is one of the most historic structures in America. One of four structures designed by Thomas Jefferson, it is considered as the first classical structure in America designed in 1785 and has been in continuous use since 1788. The project addresses a wide range of issues including but not limited to: Identification, dating and documentation of the historic fabric of the building, Extensive historic research to determine the appropriate preservation / restoration period, Long-term preservation and restoration of materials, systems and assemblies, Unobtrusive introduction of new building systems and 21st-century technology, Security enhancements, Design and addition of a below-grade visitor center and support facility, Retention and restoration of the John Nottman landscape design, Integration of and interpretation of highly significant historic artifacts in the overall visitor experience. The work is to be completed by January 2007, in time for the statewide Jamestown celebration marking Virginia's 400th anniversary

University of Michigan School of Natural Resources and Environment, Dana Building Renovation, Ann Arbor, Michigan. Design team member for roofing assessment and detailing and interior architecture in the \$25 million dollar renovation that promoted sustainability and is certified at LEED gold certification. The purpose of the project was to add office and class room space that demonstrates state-of-the-art environmentally and teaches environmental sensibility and awareness. The goals in the project included renovation of the Historic 1906 landmark while increasing day lighting, decreasing energy usage, water conservation material efficiency and maximum reuse and recycling. At its completion the central light well of this building was filled with a sky lit office, classroom and atrium.

Smithsonian Institution Arts & Industries Building Historic Structure Report, Washington DC, Preservation Architect for the Historic Structure Report (HSR) for the Arts & Industries Building. Identified, compiled, organized, and interpreted previously produced research, and to develop new research and a current conditions assessment. The document included an evaluation and statement of significance to assist the Smithsonian in identifying preservation objectives and guidelines for future building preservation, maintenance, and revitalization. The Arts & Industries Building (1879-1881), originally known as the National Museum building, was built not only to house the vast foreign and domestic exhibits donated to the United States government following the 1876 Centennial Exposition in Philadelphia but also to accommodate

the rapidly growing collections of the Smithsonian Institution (SI) which had exceeded the capacity of the Castle. The AIB was the first of a group of purpose-built museums built by the SI with a combination of federal and private funding. Globally, the Smithsonian Institution was at the forefront of institutions developing public museums.

Frist Center for the Visual Arts, Nashville Tennessee. Preservation Architect for the survey and documentation developed to convert the post office into a museum and meeting space. The conversion of this 1934 United States Post Office included restoration of steel windows and stone exterior. The architect of record renovated the interior of the building and coordinated the installation of new building systems to support the museum and gallery environment.

Eamon T. Geary, LEED AP ND ID+C

LEED Sustainable Designer

General Qualifications

Mr. Geary has spent the last eight years working in the Pittsburgh-region, nationally, and internationally, to encourage and support green development and to curb greenhouse gas emissions. Since 2010, he has been responsible for overseeing and auditing many aspects of sustainable design and construction for Baker's projects. For building projects, he ensures that all sustainable design and Energy Policy Act of 2005 features have been incorporated in order to meet the appropriate levels of LEED® certification, as well as the owner's energy requirements. Project types include: U.S. Army and Armed Forces Reserve Centers with administrative offices, training centers, vehicle maintenance facilities, and storage buildings; NCO Academy; training mobilization barracks; billets; container loading facility; 1000-room lodge; company operations facility; tactical equipment maintenance facilities; fitness center; cargo logistics training complex; warfighter and family support center; research and development laboratory building; parking garage; and aviation hangar.

In November, 2011, Mr. Geary received an additional LEED AP credential, specifically for Neighborhood Development. **The LEED AP ND credential provides a standard for professionals participating in the design and development of neighborhoods that meet accepted high levels of environmentally responsible, sustainable development.** The Green Building Certification Institute (GBCI) created this specialty credential to denote practical knowledge of the LEED for Neighborhood Development rating system. In 2010, Mr. Geary received the ID+C credential, representing a standard for professionals participating in the design and construction of environmentally responsible, high-performance, commercial spaces and tenant improvements. The GBCI created this specialty credential to denote practical knowledge of the Green Interior Design + Construction LEED rating system for Commercial Interiors.

Mr. Geary's previous positions include project specialist for Green Building Alliance (GBA) and program officer for International Council for Local Environmental Initiatives (ICLEI), Local Governments for Sustainability. During his tenure at GBA, Mr. Geary provided technical assistance to large-scale development projects that were interested in sustainable design and construction. His enthusiasm for sustainable design motivated a partnership with Pittsburgh City Councilman Bill Peduto and led to two unique pieces of local legislation that were designed to encourage the development of green buildings in Pittsburgh. In addition, Mr. Geary served as project manager for the Pittsburgh Climate Initiative (PCI). PCI worked to develop a comprehensive carbon-reduction strategy for Pittsburgh's municipal, business, community, and higher-education sectors. Governor Edward G. Rendell recognized the project with a Governor's Award for Environmental Excellence saying "Their leadership is inspiring."

In 2008, Mr. Geary was invited by the British Consulate to visit London as part of an international program to promote cooperation and thought sharing among the nations and participants involved. In the last year, he worked with ICLEI to develop a national-level sustainability initiative in the cities of Cleveland, Denver, and Pittsburgh, to assist with the successful implementation of their greenhouse gas emission-reduction goals. Through assisting local governments, he also serves as a community resource for reducing greenhouse gas emissions.

Years with Baker: 2

Years with Other Firms: 7

Education

B.A., 2005, Environmental Policy, Allegheny College

Licenses/Certifications

LEED Accredited Professional ID+C, Pennsylvania, 2007

LEED Accredited Professional ND, Pennsylvania, 2011

Experience

Design of U.S. Army Reserve Center Renovation and Expansion, Homewood, Illinois. *U.S. Army Corps of Engineers, Louisville District.* Technical Specialist. As a member of the design team, developed the LEED checklist for the project and supervised the integration of green building features into the project. Also responsible for all LEED documentation and submittal. Green features of this project include significant recycled content, energy and water efficient fixtures, regionally produced construction materials, and healthier indoor finishes. As designer of record, Baker provided architectural and engineering services for the renovation and expansion of a 400-member U.S. Army Reserve Center to provide a 60,374-square-foot Training Building, including an approximately 3,500-square-foot Unheated Storage Building. The project also includes construction of a 22,300-square-foot parking area for military equipment, and 130 parking spaces for privately owned vehicles. Tasks were performed under an indefinite quantity-indefinite delivery engineering agreement. Baker designed the training facility to meet LEED® Silver certification. Baker's services included architectural design, surveys, environmental and geotechnical investigation, all site and building engineering, cost estimating, value engineering, and LEED® certification administration.

U.S. Armed Forces Reserve Center, Scranton, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Technical Specialist. Member of compliance review team, responsible for overseeing and auditing many aspects of sustainable design and construction. Sustainable features of this project include green space, high recycled content, water and electrical efficiency, and daylighting. Baker developed Design-Build RFP Documents for a new 650-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and National Guard units as directed by BRAC 05. The facility provides administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and four Pennsylvania Army National Guard units, as well as provides adequate MEP and POV parking. A 166,000-square-foot training building (AFRC), a 7,300-square-foot multi-use classroom, a 6,400-square-foot Organized Maintenance Shop (OMS), and a 1,700-square-foot unheated storage (UHS) building was included in the RFP package. The buildings are permanent construction with reinforced concrete foundations, concrete floor slabs, and include mechanical, electrical, and information systems including SIPRNET rooms, interior finishes, window systems, roof decks with 50-year asphalt shingles, and exterior finishes. Supporting facilities include site preparation, paving, fencing, and extension of utilities to serve the project.

U.S. Armed Forces Reserve Center, White River Junction, Vermont. *U.S. Army Corps of Engineers, Louisville District.* Technical Specialist. Member of compliance review team, responsible for overseeing and auditing many aspects of its sustainable design and construction. Baker developed Design-Build RFP Documents for a new 300-member Armed Forces Reserve Center (AFRC), meeting Silver LEED® standards. An 88,400-square-foot training building (AFRC), a 4,600-square-foot Organized Maintenance Shop (OMS), and a 9,900-square-foot unheated storage (UHS) building is included in the RFP package.

U.S. Armed Forces Reserve Center, Naval Station Newport, Rhode Island. *U.S. Army Corps of Engineers, Louisville District.* Technical Specialist. Member of compliance review team, responsible for reviewing the LEED Implementation Plan, submitting monthly reports and providing technical assistance to project team members. Baker was tasked to provide design-bid-build documents for a 400-member, 64,828-square-foot U.S. Army Reserve project. The new 7.5-acre site was developed to include three structures including a USARC Readiness Training Center, Organizational Maintenance Shop, and an Unheated Storage facility. Sustainable Design and Development and Energy Policy Act of 2005 features were provided to meet the Silver level of LEED® certification.

Anita Myers, NCIDQ

Lead Interior Designer

General Qualifications

Ms. Myers' more than 20 years of experience includes programming, planning, design and project management. She has worked on commercial, industrial, governmental, retail, educational, religious, and financial projects. Ms. Myers is responsible for overseeing the interior design of all projects and ID personnel. She also performs interdisciplinary technical reviews of all designs.

Experience

Years with Baker: 2

Years with Other Firms: 22

Education

B.S., 1988, Interior Design, Indiana University of Pennsylvania

Licenses/Certifications

National Council for Interior Design Qualification, Pennsylvania, 1997

Advanced Training Center Facilities Design Oversight, Harpers Ferry, West Virginia. *U.S. Army Corps of Engineers, Fort Worth District.* Designer. Responsible for cost estimating of the interior furniture. Baker assisted in the development of construction documents for the Advanced Training Center for the Shower/Locker Room Facility, Dining Facility, Welcome/Security Command Center, and Dormitory/Conference Area. Baker participated in design reviews, provided technical support, created cost estimates during the development of the construction documents, ensured that the drawings and specifications were properly formatted according to client standards, created the construction request for proposals and ready-to-advertise package, and provided support through construction contract award and during construction.

Cathedral of Learning Financial Operations Office Renovation. *University of Pittsburgh.* Interior Designer. Project consisted of restacking several floors in the building to create an office environment for the Finance Department. Selected new finishes, furniture, produced construction documents for bidding.

Parran Hall Office Renovations. *University of Pittsburgh.* Project Manager / Interior Designer. Designed an office environment for the Radioactive Testing Department in the basement of Parran Hall. They needed more durable finishes and a more aesthetically pleasing space. Their furnishings needed to be updated to better suit their needs.

Learning Research and Development Center Building Interior Renovations. *University of Pittsburgh.* Interior Designer. Designed a flexible office environment in an unutilized space that was originally designed to accommodate an escalator to "Upper campus". The space was designed in multiple levels to maximize the use of the escalator well. The user was looking for a unique approach to their solution because they needed flexibility. They were high tech designers themselves developing interactive kiosks for education to be used in public areas such as museums. She solved their request by designing non-traditional walls made of metal and fiberglass and incorporating a ceiling system with moveable industrial pull downs for power and electric. Rubber flooring was used to assist in the room acoustics since carpet was only an option in the closed offices. All of the furniture was mobile including marker boards.

University Place Building Office Renovations. *University of Pittsburgh.* Project Manager / Interior Designer. Complete interior redesign of the Main lobby and 6th floor. Created an office environment for an executive group. The new space included offices, waiting, kitchenette and reproduction. The building was an older facility with many challenges with regards to hazardous building materials and utilities.

Building 12 Defense Logistics Agency Headquarters Renovation, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.* Baker prepared design documents for the partial renovation of Building 12 to serve as the new Defense Logistics Agency headquarters building. Work was performed under a three-year indefinite delivery-indefinite quantity contract. Baker's tasks included architectural design, building systems engineering, construction cost estimate development, and as-built plans development.

Frances Warde Hall Renovations, Oakland, Pennsylvania. Project Manager / Interior Designer. *Carlow University.* Complete interior renovation of Main Lobby and Student Union. Goal was to create an inviting, relaxing, environment for the students to use during downtime. It was also critical that this space market the University to new students and parents as it is one of the first spaces seen upon visiting the University. New technologies were introduced such as LCD screen to market, and provide pertinent school information. Recreational items were designed into the space such as pool table, electronic dart boards and tv's.

Thomas Boulevard Interior Renovations. *University of Pittsburgh.* Project Manager / Interior Designer. Project consisted of relocating staff from another building into this one. The challenge was that this building was a warehouse and she needed to design it to accommodate workstations and offices. Space planning was the key to allow everyone to fit.

Cathedral of Learning - Interior Renovations to the Caf, Oakland, Pennsylvania. *University of Pittsburgh.* Project Manager / Interior Designer. Designed new interior finishes and furniture to update the space from its last renovation in the 80's. The aesthetics were critical to attract patrons on campus when there are so many eateries available. Selected new finishes, furniture, produced construction documents for bidding and administered construction.

Rehabilitation of the Ernie Pyle U.S. Army Reserve Center, Fort Totten, Queens, New York. *U.S. Army Corps of Engineers, Louisville District.* Designer. Responsible for the selection of interior finishes and furniture based on the UFC guidelines. Developed construction documents for bidding and compiled binders for furniture specifications and finish specifications per USACE submission requirements. Baker was tasked to provide Design-Bid-Build documents for the renovation of a 41,312-square-foot U.S. Army Reserve Center, the addition of a 4,994-square-foot Unheated Storage Building, and the addition of POV and MEP parking. The renovation included storage and office areas on two floors, electrical, mechanical, plumbing, and fire protection on all three floors, as well as vault and elevator construction and asbestos removal. Renovation included compliance with Anti-terrorism and Force Protection Requirements, as well as Handicapped Accessibility.

Information Sciences Building Interior Renovations, Oakland, Pennsylvania. *University of Pittsburgh.* Project Interior Designer. Consisted of space planning, selecting interior finishes and furniture for the IT department renovation on two floors. The goal for this project was to change the current traditional closed layout to an open plan concept including offices and conference rooms.

Petersen Events Center - Athletic Department Interior Renovations, Oakland, Pennsylvania. *SMG University of Pittsburgh.* Project Manager and Project Interior Designer. Programmed and planned existing office space to be remodeled for expansion of the Athletic Departments Offices.

Alana S. Pulay, R.I.D., LEED AP

Interior Designer

General Qualifications

Ms. Pulay is a hard working, energetic professional interior designer with comprehensive knowledge of architecture and the design industry with over seven years of experience in commercial and residential design, project budgeting, specifications writing, bid preparation and contract negotiations, construction job site scheduling, and green building design. Ms. Pulay has led and managed numerous interior design projects where she was responsible for the design, development, and coordination of all interior elements of the projects, including selection of all finishes, furnishings, and equipment.

Ms. Pulay also taught junior level interior design studio classes for the University of Charleston, which included syllabus preparation and development of the course interior design project for the semester. She also mentored senior interior design students.

Ms. Pulay is a well organized professional who enjoys a challenge and is committed to lifelong self-improvement. She is an effective team player with proven listening, interpersonal, and communications skills. Ms. Pulay is proficient in AutoCAD, SketchUp, Adobe Photoshop, MS Word, MS Excel, and MS PowerPoint.

Experience

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Designer. Responsible for interior design support for a comprehensive restroom renovation and upgrade effort for Building 1 of the West Virginia Capitol. Working in conjunction with the Owner and a team of specialized sub-consultants, Ms. Pulay is currently assisting the MEP effort to replace and update the plumbing and lighting fixtures in all the restrooms to meet new ADA standards, yet remain sympathetic to the original and historic Cass Gilbert original design. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Erma Byrd Higher Education Center, Beaver, Raleigh County, West Virginia. *Southern West Virginia Community and Technical College.* Project Interior Designer. Responsible for space planning and the selection of finishes and furnishings. This project provides a central location for classroom and administrative space to be shared by six different colleges and universities. It is the first building of a planned campus environment comprised of other classroom buildings and research facilities. The project consists of 29,700 SF on the main level and 3,300 SF of mechanical mezzanine. Being a teaching facility the building itself is designed to be a teaching tool. Day lighting is incorporated throughout the building and the mechanical

Years with Baker: 2

Years with Other Firms: 7

Education

B.S., 2003, Interior Design, The Ohio State University

M.S., 2010, Architecture, University of Nebraska at Lincoln

Licenses/Certifications

LEED Accredited Professional, 2008

Registered Interior Designer, West Virginia, 2005

equipment is designed to be viewed and monitored by students in a learning environment. Using data collected by various sensors, the control system can graphically display how all systems react to changes in environmental conditions. The design concept was based on "green" principles. Fritz tile, linoleum flooring, and low VOC paints were specified to complete the design. Total project cost: \$7.5 million. Completion date: September 2007.

Lincoln County High School, Hamlin, West Virginia.*Lincoln County Board of Education.* Interior Designer. Prepared complete construction drawings for entire project interior. Lincoln County High School combines four existing high schools into one school. Completed in August 2006, the new \$31.4 million facility provides 217,000 SF for 950 enrolled students. To formulate a more comprehensive approach to this project, the Owner also added the vocational school's curriculum to broaden students' learning opportunities. Students can now attend regular curriculum classes and vocational classes under one roof. The classrooms themselves provided a showcase for state-of-the-art technology. By simply observing how automatic lighting controls enhance natural day lighting in their classrooms, students are able to visualize sustainable design, energy conservation, and technology working in tandem. A full integrated computer system allows students and faculty computer access throughout the entire facility and in every typed of classroom. The interior design combines concepts from "green" design and bright colors to make a dynamic environment for the students in the shared common areas. The classrooms were designed in neutral color palette for an optimized learning environment. Linoleum flooring was selected along with carpet tiles to help achieve a sustainable design.

Wayne Elementary School, Wayne, West Virginia.*Wayne County Board of Education.* Interior Designer. Prepared complete construction drawings for entire project interior. The new 48,276 SF Wayne Elementary School replaces an outdated facility on a more centrally located site. This school included new kindergarten rooms, classrooms, art instruction studio, music room, separate dining and physical education spaces, a state of the art media center, and other academic areas. This project was funded mostly by a West Virginia School Building Authority grant. The outstanding use of color throughout the building creates a bright, exciting environment for learning. The interior design for this project included creating the interior floor pattern, selection of finished and furnishings, developing the construction documents and following through with the final punch list after completion of construction. The color scheme was developed as a collaborative effort with the school's "Color Committee." This group consisted of teachers, parents, community members, and faculty who are involved within the school system. There was also collaboration with the project architect to align architectural elements with the floor pattern. Total project cost: \$7,132,429.00. Completion date: Fall, 2006.

Gene Spadaro Juvenile Center, Mt. Hope, West Virginia.*West Virginia Division of Corrections.* Interior Designer. Prepared complete construction drawings for entire project interior. This is a prototype juvenile center design evolving from a hardware-secured correctional institution to a staff-secured, rehabilitative center for at risk youths. Completed in October 2004, the building is constructed of load-bearing masonry walls with brick and natural stone veneer. The interior steel structure is exposed and painted. Innovative color schemes were used to create stimulating variety in the spaces. Lighting was carefully designed to supplement natural sunlight and ensure comfortable lighting levels. The shift to staff-secured programming required even greater levels of observation, communication and control, and the open layout of the plan meets these objectives. To offset the comfortable spaces of the shared areas, sleeping quarters resemble those in more institutional facilities, thus educating the youth about what their future could be if efforts to turn them away from delinquency and crime are ignored.

Laura Cox, LA, ASLA, LEED GA

Landscape Architect

General Qualifications

Ms. Cox is a Registered Landscape Architect with more than 30 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

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia.

State of WV General Services Division. Landscape Architect. Responsibilities include assisting in various phases of the Master Planning effort including site analysis, design recommendations and coordination of graphics for publication. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Landscape Architect. Assisted in the preparation of the construction documents. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

Valley Park Sidewalk Improvements, Hurricane, West Virginia. *Putnam County Parks.* Landscape Architect. 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. Baker performed complete planning, design, and construction management services for new sidewalks and street 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, crosswalks, and storm water improvements. The park sidewalks now have

Years with Baker: 5

Years with Other Firms: 29

Education

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

Certificate, 1995, Computer Aided Drafting, Putnam County Technical Center

Licenses/Certifications

NICET III Transportation-Highway Construction, West Virginia, 1983

Registered Landscape Architect, West Virginia, 2008 and New Jersey, 2010

LEED Green Associate, 2010

a unique colored stamping of natural elements found in West Virginia, such as bear and raccoon tracks, leaves and flowers. Baker also provided construction administration and periodic inspection services.

Parsons City-Wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia.

Parsons Park Board, Inc.. Landscape Architect. Assisted in the plan preparation and public outreach for this project. Baker prepared a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the City of Parsons, WV. The City, over time, had acquired many parcels of FEMA-condemned properties due to the flood-prone topography of Parsons; in an effort to properly manage existing facilities, yet prepare for the future of the additional facilities scattered throughout the community, this master planning effort was begun. Through a series of public meetings and stakeholder meetings, a final plan was developed with recommendations for ball fields, hiking and biking trails, recreation center, miniature golf course, play structures, picnic facilities, ADA-compliant fishing access, interpretive signage, and landscaping improvements for existing and new park areas.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.*

Landscape Architect. Responsible for all aspects of site/civil design for this project. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

Ararat River Restoration, Greenway, and Parks Project, Mount Airy, North Carolina. *City of Mount Airy, North Carolina.* Landscape Architect. 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. Baker is preparing construction documents and construction administration and inspection services for three parks along the Ararat River in North Carolina: 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 will showcase environmental issues in the park design and construction including an outdoor amphitheater/classroom, picnic facilities, nature trails, parking area, pedestrian bridge to nearby middle school, fishing access and canoe launch facility.

Historic Wellsburg and Bethany Scenic Byway Corridor Management Plan, Brooke County, West Virginia. *Brooke County Commission.* Landscape Architect. 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 in preparation for Federal recognition in the National Scenic Byway Program. Baker is developing a corridor management plan (CMP) for 20 miles of roadway extending from S.R. 27 near Brooke Hills Park and onto S.R. 2 to S.R. 67 near Bethany College, as part of the application process to have the corridor designated a scenic byway by the West Virginia Department of Transportation and to encourage recreational use and economic development along the corridor.

Kanawha-Putnam Bike/Pedestrian Plan, Phase I, South Charleston, West Virginia. *Regional Intergovernmental Council.* Landscape Architect. 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. Baker performed a cursory inventory of existing bicycle and pedestrian facilities, identified areas with a high level of bicycle and pedestrian activity, collected existing resources and performed a broad base public outreach effort to identify bicycle and pedestrian issues in Kanawha and Putnam Counties for the Regional Intergovernmental Council (RIC).

David J. Cameron

Cost Estimating / Construction Services

General Qualifications

Mr. Cameron has direct responsibility for the implementation of Baker's facilities construction management program. In addition to managing specific projects, his responsibilities include oversight project management, providing design and construction phase services to both internal and external clients. Services provided include project/program planning, design management, value analysis/engineering, budgeting, cost estimating, construction scheduling, project phasing and logistics, bid phase services, subcontractor coordination, inspection, forensic investigation, claims mitigation, litigation support, and overall construction administration of Baker's facility construction management practice. In addition to his client service responsibilities, Mr. Cameron also serves as the liaison between the office and field staff, ensuring appropriate coordination and communication among all parties involved with the projects. Well versed in general contracting, design-build and construction management-At Risk & for Fee contracting services, Mr. Cameron has worked for a variety of public and private sector clients including military, judicial/corrections, commercial, government (non DoD), mining, educational, transit, hospitality, aviation, health care, and recreational. As a project manager, he is responsible for the successful completion of individual projects ranging in value from \$1 million to \$800 million.

Years with Baker: 41

Years with Other Firms: 10

Education

A.S., 1980, Construction Management, Community College of Allegheny County

Experience

Creative Arts Center, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Project Manager. Responsibilities included oversight of activities of full-time, on-site project managers functioning as an extension of WVU's staff to assist the University with the implementation of its Master Plan. Responsibilities also included providing contracts administration, quality assurance oversight, coordination with facility administration and maintenance staff, scheduling and change order analysis, as well as monitoring the work of the designer and contractor. Baker provided Program Management Services to West Virginia University for renovations to their Creative Arts Center, which included a 1,445 seat concert theatre, 155-seat recital hall, main entry lobby, ADA access and installed handicapped restrooms, and the installation of a fire alarm and sprinkler system throughout the building.

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio, and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Technical Advisor. Responsibilities included assisting the design team in constructibility review and cost of construction issues. Baker provided engineering services for the Blennerhassett Island Bridge; the "missing link" final segment of Appalachian Highway Corridor D. Baker's services included project management, environmental engineering and location studies, permitting, preliminary and final design, and construction services for this network tied-arch bridge that carries U.S. 50 over the Ohio River. The bridge is 100 feet, six inches wide, and the total length of the structure is 4,008 feet, nine inches. It has an 878-foot, six-inch-long main span with a rise of 175 feet.

Program Management and Construction Management Services for New Addition and Renovations to the Wise Library, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Project Manager. Responsibilities included oversight of activities of full-time, on-site project managers functioning as an extension of WVU's staff, to assist the University with the implementation of its Master

Plan. Responsibilities also included providing contracts administration, quality assurance oversight, coordination with facility administration and maintenance staff, scheduling and change order analysis, as well as monitoring the work of the designers, contractor, and construction management team. Baker provided program management, construction management, and construction inspection services for the renovation, restoration, and addition to the Charles C. Wise Library. A five-story, 120,000-square-foot addition was constructed in front of the 86,000-square-foot original library and connects to the original building via hallways and an atrium. The new addition features state-of-the-art group study and multimedia rooms, computer terminals, and wireless Internet access, while the original building was renovated and restored to its 1930s-era ambiance, including an elliptical staircase. Baker's construction management services included cost estimating, scheduling, budget controls, change-order review, inspection, and closeout support.

Student Recreation Center, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Project Manager. Responsibilities included oversight of activities of full-time, on-site project managers functioning as an extension of WVU's staff, to assist the University with the implementation of its Master Plan. Responsibilities also included providing contracts administration, quality assurance oversight, coordination with facility administration and maintenance staff, scheduling and change order analysis, as well as monitoring the work of the designers, contractor, and construction management team. Baker provided program management services to West Virginia University (WVU) through an open-end architectural and engineering services agreement to oversee the construction program for the university's campus master plan. Baker's responsibilities as a full-time on-site representative of WVU included monitoring the work of the designers, contractors, and construction management teams for the university's new 170,000-square-foot Student Recreation Center. The facility includes seven basketball courts, three racquetball courts, a squash court, a 17,000-square-foot weight/fitness area, three multipurpose sports rooms, a three-story-tall indoor rock-climbing wall, large-lap swimming pool, leisure pool, spa, elevated indoor jogging track, and food court, as well as administrative offices.

Life Sciences Building, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Project Manager. Responsibilities included oversight of activities of full-time, on-site project managers functioning as an extension of WVU's staff, to assist the University with the implementation of its Master Plan. Responsibilities also included providing contracts administration, quality assurance oversight, coordination with facility administration and maintenance staff, scheduling and change order analysis, as well as monitoring the work of the designers, contractor, and construction management team. Functioning as an extension of West Virginia University's staff, and as a part of their master plan implementation, Baker continues to provide construction program management services to the University for its buildings programs. Our responsibilities include providing full-time on-site owner representation to monitor the work of the design, contractor, and construction management teams. The University's new 190,000 square foot Life Sciences Building was one of five projects constructed at the Morgantown, WV campus under our program management.

Open-End Architectural/Engineering Services at West Virginia University, Morgantown, West Virginia. *West Virginia University.* Project Manager. Responsibilities included oversight of activities of full-time, on-site project managers functioning as an extension of WVU's staff, to assist the University with the implementation of its Master Plan. Responsibilities also included providing contracts administration, quality assurance oversight, coordination with facility administration and maintenance staff, scheduling and change order analysis, as well as monitoring the work of the designers, contractor, and construction management team. 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.

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

Site / Civil Engineer

General Qualifications

Mr. Fogarty has over 26 years of civil engineering project design and management experience. He is responsible for the technical and management aspects of civil design and surveying projects within Baker's Charleston, West Virginia office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural, and transportation engineering; site development planning; and surveying. He will serve as Site Design/Civil Engineer and Surveyor for the project if these services are required. He will also be responsible for QA/QC of structural design.

Experience

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Project Manager. Responsible for the overall management of the project including the coordination of the subconsultant. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Project Manager. Responsibilities included project management of the planning and infrastructure analysis and the coordination of six (6) specialized subconsultants. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Years with Baker: 7

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

Coursework, Business Administration, Heriot-Watt University, Edinburgh College of Art

Licenses/Certifications

Professional Engineer - Civil/Structural, West Virginia, 1990

Professional Surveyor, West Virginia, 1993

Construction Documents Technologist, 1996

FAA, Eastern Region Laboratory Procedures Manual Certificate (P-401), 1992

Asphalt Paving Technician, West Virginia, 1991

Concrete Technician, West Virginia, 1991

Soils Compaction, West Virginia, 1991

Aggregate Sampling Inspector, West Virginia, 1991

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Responsible for the management and coordination of all activities. 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. 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.

Lost Creek Train Depot Rehabilitation, Lost Creek, West Virginia. *Town of Lost Creek.* Project Manager. Responsible for the management and coordination of all activities as well as all engineering design. 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. 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. Baker provided construction administration and inspection services as well as periodic site review during construction.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Project Manager. Responsible for the civil, site and structural engineering components of the project. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Engineer of Record responsible for the coordination of all activities. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

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

David J. Hilliard, P.E., LEED GA

Lead Mechanical / Plumbing Engineer

General Qualifications

Mr. Hilliard has a wide range of "hands on" design, engineering, and construction experience. From his beginnings as a carpenter he has expanded his professional abilities to a senior designer for Baker. His recent design experience has included the complex mechanical design of such projects as a large Charleston, West Virginia hospital, a Bus Maintenance Garage and office building for the West Virginia Department of Transportation, an Army National Guard Armory HVAC/Electrical renovation, Planning and engineering at the West Virginia Capitol Complex including plumbing renovation design on the historic State Capitol Building. His resume covers over 30 years of real world work in engineering, design, fabrication and construction in both the mechanical and general trades.

Over the years, while practicing his profession, Mr. Hilliard continued his education by studying mathematics, civil and mechanical engineering, finally taking degrees in both mathematics and mechanical engineering. He has continued his professional development through his involvement with ASHRAE, ASME, ASPE, USGBC, and other pertinent organizations.

Years with Baker: 3

Years with Other Firms: 19

Education

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

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

Licenses/Certifications

Professional Engineer - Mechanical, West Virginia, 2011

LEED Green Associate, West Virginia, 2010

Experience

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Plumbing Engineer. 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 West Virginia State Capitol Building. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Planner. 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, currently providing programming, cost estimating and facilities planning support. Services included HVAC Loads as well as utility evaluation and planning for future growth. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Mechanical Designer. 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 performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Mechanical Designer. Responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for a new bus maintenance and office facility for Gilmer County. Duties include the design of the vehicle storage, cleaning and maintenance mechanical systems, as well as oil pumping and collection systems. The design of an energy efficient HVAC system for the entire building is also part of his responsibilities. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Mechanical Designer. 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 a lump sum/fixed fee contract for architectural and engineering services. 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.

Renovations to Building 5, Bay 1, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.* HVAC Designer. Designed HVAC systems for general offices, latrines, a large work room with humidification and a computer/office areas. Also detachable AC systems were designed for a number of removable Mobile Computer Control Shelters. Baker is serving as the designer of record on a design-bid-build project to renovate Building 5, Bay 1 at the Tobyhanna Army Depot. Work is being performed under a three-year indefinite delivery-indefinite quantity contract. The scope of work involves adding HVAC capacity, installing a drop-ceiling system, expanding existing restrooms, and enhancing door systems. Baker will prepare design and construction plans and construction cost estimates.

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

Mechanical / Plumbing Engineer

General Qualifications

Mr. West is a Senior Mechanical Engineer for the mechanical engineering department currently responsible for HVAC system engineering. His background includes providing design and specifications for HVAC, plumbing, piping, and process exhaust systems for educational, military, commercial, institutional, healthcare, and industrial facilities, as well as technical lead responsibilities. 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 operation. Mr. West has handled bidding, requests for information, meetings, shop drawings, construction situations, job progress, and closeout. He is responsible for fee estimating, job cost control, and construction cost estimating. He has gained specialized experience in geothermal systems, DDC controls, arctic HVAC system design, clean rooms, and hospital work including medical gases, labs, operating rooms, and isolation rooms. Mr. West has participated in a six-step SAVE International Process value engineering analysis.

Years with Baker: 11

Years with Other Firms: 16

Education

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

Licenses/Certifications

Professional Engineer, West Virginia, 2000

LEED Accredited Professional, 2008

Experience

Advanced Training Center Facilities Design Oversight, Harpers Ferry, West Virginia. *U.S. Army Corps of Engineers, Fort Worth District.* Reviewer. Provided general technical review or Independent Technical Review (ITR) to main project team. Baker assisted in the development of construction documents for the Advanced Training Center for the Shower/Locker Room Facility, Dining Facility, Welcome/Security Command Center, and Dormitory/Conference Area. Baker participated in design reviews, provided technical support, created cost estimates during the development of the construction documents, ensured that the drawings and specifications were properly formatted according to client standards, created the construction request for proposals and ready-to-advertise package, and provided support through construction contract award and during construction.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Mechanical Engineer. Responsible for mechanical engineering services for this major state capital master plan effort. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Mechanical Engineer. Responsibilities included the design of HVAC systems for the facility, which includes variable refrigerant flow, constant-volume air conditioning with energy recovery ventilators, overhead gas-fired radiant heating in the garage, exhaust reels, and CO/NO2 detection and alarm systems. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The

5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

U.S. Army Reserve Center OMS/AMSA/STRG, North Canton, Ohio. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Responsibilities included QA/QC of the HVAC system design. The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88th Reserve Support Command. Approximately 400 reservists work and train in the new Silver SPiRiT-certified, 61,344-square-foot complex. The Training Center and OMS/AMSA is comprised of a one-story L-shaped building with a two-story element at the connection of two wings. The Training Center portion of the complex includes offices and administrative spaces, caged unit storage, classrooms, library, learning center, physical readiness, engagement skills trainer, COMSEC training room, arms vault and armorer's room, assembly hall, kitchen, toilets, lockers, showers, and building support functions. The OMS/AMSA portion of the building includes office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* Mechanical Engineer. Responsibilities included providing an interdisciplinary quality assurance/quality control review. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

U.S. Armed Forces Reserve Center, Rutland, Vermont. *U.S. Army Corps of Engineers, Louisville District.* Mechanical Engineer. Responsible for providing mechanical engineering support for generation of design-build RFP for this project (Rutland). Baker developed design-build RFP documents for a new 600-member Armed Forces Reserve Center meeting Silver LEED® standards. A 97,634-square-foot training building (AFRC), a 14,600-square-foot multi-use classroom, a 7,302-square-foot Organized Maintenance Shop (OMS), and a 3,113-square-foot unheated storage (UHS) building were included in the RFP package. The center accommodates training and mobilization, and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Vermont Army National Guard and Army Reserve units. RFP development consisted of conducting a design charrette; providing a topographical survey and geotechnical investigation; performing a utility survey; developing conceptual site plans, floor plans, and building elevations; developing RFP specifications; preparing DD Form 1354 – Transfer of Real Property; and providing a PACES construction cost estimate.

Thomas A. Basch, P.E.

Electrical Engineer

General Qualifications

Mr. Basch is a senior electrical engineer with experience providing engineering services to the consulting, electric power, and ship building industries. His work history includes engineering design, analysis, material specification, purchasing, operations, maintenance, construction, and start-up and training duties for commercial and industrial clients, the electric utility industry, and the United States military.

Experience

Allen Hall HVAC Upgrade and Asbestos Abatement, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Electrical Engineer. Responsibilities included developing construction documents to replace the interior lighting for a multi-story classroom/administration building, conducting photometric analysis of several light fixture types to determine the best fit for customer illumination level requirements assessing the condition of the existing fire alarm system and determining that the existing system could presently remain intact but a replacement system was designed. 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.

Network Operations Center, Quantico Marine Corps Base, Virginia. *Naval Facilities Engineering Command, Atlantic Division.* Electrical Engineer. Responsibilities included conceptual engineering and design of power distribution, interior and exterior lighting, telecommunications, and fire alarm systems. This 42,000-square-foot Network Operations Center at the U.S. Marine Corps Base in Quantico, Virginia, manages all of the military's computer network traffic throughout the region. This includes remote operations and monitoring of servers and server farms, routers, networks, along with prevention, detection, and rapid response to attempts to penetrate network security. The project features two SCIF spaces, raised flooring throughout the majority of the facility, and a Command Center designed for 24/7 operation.

Design of 1,000-Room Lodge, Fort Lee, Virginia. *U.S. Army Family, Morale, Welfare and Recreation Command (FMWRC).* Electrical Engineer. Responsible for electrical power and lighting design. Developed construction documents including calculations, specifications and drawings. Baker provided design services for a 1,000-room Lodge, comparable to a commercially branded hotel, with associated grounds building and site development. The architectural design approach was influenced by several important factors, including proximity to the Petersburg Battlefield National Park and the adjacent four-story Army Logistics University, for which the Lodge was constructed. Design features include integrated stormwater management with landscape design, wireless communications, Onity system lodging controls, multistory fire protection and alarm systems, and High-Risk Target antiterrorism and force protection measures. The "green building" is designed and constructed to obtain LEED® Silver certification, achieving LEED® points in the categories of Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental

Years with Baker: 7

Years with Other Firms: 27

Education

M.S., 1988, Business Administration, Indiana University of Pennsylvania

B.S., 1978, Electrical Engineering Technology, The Pennsylvania State University

A.A.S., 1976, Electrical Engineering Technology, The Pennsylvania State University, McKeesport Campus

Licenses/Certifications

Professional Engineer, Pennsylvania, 1999

Professional Engineer, Colorado, 2000

Quality, and Innovation In Design. Energy conservation is integral with the building envelope design and includes a continuous, spray-applied, soy-based polyurethane foam insulating air barrier system.

Civil Site Design Services in Support of Design-Build Projects, Quantico Marine Corps Base, Virginia. *Naval Facilities Engineering Command, Atlantic Division.* Electrical Engineer. Responsibilities included conceptual engineering and design of power distribution, interior and exterior lighting, telecommunications, and fire alarm systems. 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 stormwater 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.

West Ox Bus Operations Facility, Fairfax, Virginia. *County of Fairfax.* Electrical Engineer. Responsibilities included providing a technical review of the electrical design drawings. The West Ox Bus Operations Facility can accommodate operations and maintenance for a combined fleet of up to 300 Washington Metropolitan Area Transit Authority (WMATA) and Fairfax Connector buses, including approximately 26 maintenance bays, provide fuel, wash, and body shop facilities. Baker was responsible for planning, architecture, mechanical engineering, electrical engineering, structural engineering, and transportation engineering in the design of this facility.

Aircraft Carrier Power Distribution System Designs, Newport News, Virginia. *Newport News Shipbuilding and Dry Dock Co.* Electrical Engineer. Responsible for providing electrical engineering for power distribution systems during the design and construction of two aircraft carriers. Responsibilities included fault current, load flow, and voltage drop calculations, and design of power distribution for various shipboard systems such as propulsion, fire fighting, weapons, communications, avionics, and hotel loads.

On-Call Multi-Discipline Services, Pittsburgh International, and Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Electrical Engineer. Responsibilities included an in-house review of an engineering study developed for an emergency generator, and field work to identify a power source for new panel boards for the ACAA office renovations. 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.

Pharmaceutical Laboratory Renovation Project – Yellow Fever Vaccine, Swiftwater, Pennsylvania. *Aventis Pasteur.* Electrical Engineer. Project electrical scope included power, lighting, and special systems for renovation of an approximate 2,000-square-foot yellow fever vaccine production facility. This work included gutting the existing space of all architectural features and equipment, and retrofitting new process equipment into the redesigned space. The renovation followed the required biological safety level classifications and pharmaceutical design standards.

Andrew F. Weisfield, P.E., LEED Green Associate

Fire Protection / Life Safety

General Qualifications

Mr. Weisfield is a licensed professional fire protection engineer with more than 14 years of experience in the fire and life safety industry. His experience includes over seven years in fire protection engineering with consulting and engineering design firms and seven years working with a fire alarm and fire suppression system contractor. Mr. Weisfield performs fire alarm and sprinkler designs, including pipe sizing, water supply analysis, system layouts, and specifications. He is in responsible charge of several designs while directing additional engineers in performance of the work. Mr. Weisfield prepares fire hazard, code, and life safety analyses that include review of code requirements, egress analyses, construction type requirements, and fire dynamics analyses for various applications. His seven years of experience working with a fire alarm and sprinkler contractor involved the evaluation of facilities for sprinkler requirements, preparation of cost estimates, project management of systems design and installation, and supervising and managing service businesses to troubleshoot fire protection system issues and to assist customers in maintaining systems in compliance with manufacturer, NFPA, IBC, and local code requirements.

Years with Baker: 3

Years with Other Firms: 12

Education

M.B.A., 2003, Business (Finance),
University of Pittsburgh, Katz
Graduate School of Business

B.S., 1996, Fire Protection
Engineering, University of Maryland,
College Park Campus

Licenses/Certifications

Professional Engineer, Pennsylvania,
2001

Professional Engineer, California,
2000

Professional Engineer, Idaho, 2010

LEED Green Associate, 2010

Experience

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Fire Protection Engineer. Responsible for design of fire alarm system improvements associated with the Capitals rest room renovations including evaluation of the backbone for a new fire alarm system network in the building. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Rehabilitation of the Ernie Pyle U.S. Army Reserve Center, Fort Totten, Queens, New York. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Provided fire protection and life safety code support, and reviewed and approved shop drawing submittals. Baker was tasked to provide Design-Bid-Build documents for the renovation of a 41,312-square-foot U.S. Army Reserve Center, the addition of a 4,994-square-foot Unheated Storage Building, and the addition of POV and MEP parking. The renovation included storage and office areas on two floors, electrical, mechanical, plumbing, and fire protection on all three floors, as well as vault and elevator construction and asbestos removal. Renovation included compliance with Anti-terrorism and Force Protection Requirements, as well as Handicapped Accessibility.

Building 12 Defense Logistics Agency Headquarters Renovation Design, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.* Fire Protection Engineer. Responsible for fire protection sprinkler and fire alarm system design and specification for the remodeled office areas in the building. Baker prepared design documents for the partial renovation of Building 12 to serve as the new Defense Logistics Agency headquarters building. Work was performed under a three-year indefinite delivery-indefinite quantity contract. Baker's tasks included architectural design, building systems engineering, construction cost estimate development, and as-built plans development.

Building 8 Renovation Construction Documents USCG Station New York, Staten Island, New York. *U.S. Coast Guard, CEU Providence.* Fire Protection Engineer. Responsible for design and specification of all modifications to the fire alarm and sprinkler systems in the existing building for the areas being renovated. Designs include code review of applicable criteria, placement of fire alarm devices and determination of fire protection sprinkler criteria and system design. Baker is preparing construction documents to convert the existing first floor engineering shop space of Building 8 to a finished space suitable for meetings, presentations, training, class work, and similar activities. Baker will design new interior finishes and modifications to the building's HVAC, electrical, plumbing, and fire suppression systems; and will provide a complete set of construction documents, professional consultation, and cost estimates.

Renovation Designs for Building 4A Firefinder Area, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.* Fire Protection Engineer. Responsible for fire alarm system modification and design and specification as well as the specification of the fire sprinkler system upgrades for the remodeled building 4a facility. Baker field-verified existing conditions and developed design and construction drawings and construction cost estimates for the renovation of the Firefinder components area of Building 4A. Work was performed under a three-year indefinite delivery-indefinite quantity contract.

U.S. Army Reserve Center Design-Build Request-for-Proposal Document Development, Attleboro, Massachusetts. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Performed an internal technical review of the RFP including the life safety, fire alarm, and fire protection documentation to ensure that project met the requirements of the applicable codes. Baker prepared design-build request-for-proposal performance specifications for the construction of a 300-member U.S. Army Reserve Center (ARC). The project was performed under an indefinite delivery-indefinite quantity contract. Baker developed conceptual-level architectural design and engineering drawings for the ARC buildings and the site to achieve LEED® Silver certification and included options to satisfy LEED® Gold certification. Features and approximate specifications include a 43,500-square-foot, two-story training building; a 16,400-square-foot, one-story Area Maintenance Support Activity building-Organizational Maintenance Shop; a 2,300-square-foot, one-story unheated storage building; a 43,560-square-foot Deployable Medical Systems (DEPMEDS) site; and 19,455 square yards of paved parking for privately owned vehicles and military equipment.

Design of U.S. Army Reserve Center Renovation and Expansion, Homewood, Illinois. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Engineer-of-record for design of fire protection sprinkler and combination fire alarm and mass notification system. Assisted and reviewed the life safety and building code analysis. Supervised fire protection engineer working on the project. As designer of record, Baker provided architectural and engineering services for the renovation and expansion of a 400-member U.S. Army Reserve Center to provide a 60,374-square-foot Training Building, including an approximately 3,500-square-foot Unheated Storage Building. The project also includes construction of a 22,300-square-foot parking area for military equipment, and 130 parking spaces for privately owned vehicles. Tasks were performed under an indefinite quantity-indefinite delivery engineering agreement. Baker designed the training facility to meet LEED® Silver certification. Baker's services included architectural design, surveys, environmental and geotechnical investigation, all site and building engineering, cost estimating, value engineering, and LEED® certification administration.

General Qualifications

Mr. Case is a senior environmental scientist with over 22 years of professional experience in the comprehensive management of asbestos and lead, as well as health and safety, industrial hygiene, risk assessment, and environmental compliance. He has conducted and managed many projects that include asbestos and lead surveys/assessments, management planning, project design, project supervision, material testing, air monitoring, and training. His work has encompassed environmental site assessments, site characterization, project cost development and data tracking, and traditional industrial hygiene project performance.

Experience

Environmental Services, Confidential Location, West Virginia. *Confidential Client.* Team Member. Responsible for development of risk-based soil cleanup levels as part of a RCRA closure plan. Also consulted on hazardous waste. The project involved the investigation of 21 Solid Waste Management Units (SWMU) and 4 areas of concern or spill areas to determine if any of the sites posed risks to human health or the environment. The project involved negotiating with US EPA Region III regulators, meeting the environmental indicators established for the site, and designing a field approach to provide necessary data to evaluate risk and determine extent of contamination.

Building 801 Dormitory Renovation, Fort Belvoir, Virginia. *U.S. Army Corps of Engineers, Baltimore District.* Industrial Hygienist. A hazardous materials survey was completed along with preparation of drawings, specifications, comprehensive interior design package, and cost estimates. Baker designed upgrades to the mechanical and electrical systems, and to the interior finishes of this three-story 21,000-square-foot dormitory.

Military Housing Public-Private Venture Environmental Baseline Surveys (EBS), Mid-Atlantic and CHESDIV, NSWC Dahlgren, VA; Indian Head, MD, USNA Annapolis, MD; NAS Patuxent River, MD. *U.S. Navy, Atlantic Division (LANTDIV).* Team Member. Responsible for hazardous materials investigations. Baker performed Phase I and II EBS in support of real estate transactions for the Atlantic Division of the Naval Facilities Engineering Command. Under this contract, EBS and Lead and Asbestos surveys were completed at each of four Naval Facilities (Naval Academy, Dahlgreen, Indian Head, Patuxent River), in anticipation of privatization of Family and Bachelor Housing facilities on those installations. The assessments included environmental surveys at 1,642 housing units, including site walkovers, evaluation of past uses, and review of all available

Years with Baker: 20

Years with Other Firms: 4

Education

B.S., 1987, Petroleum Engineering/Natural Gas Engineering, The Pennsylvania State University

Licenses/Certifications

EPA AHERA Asbestos Bldg Inspector and Mgmt Planner Refresher Trng, 2008

OSHA 40-Hour HAZWOPER Certification

Lead-Based Paint Building Inspector and Lead-Based Paint Inspection System

Certified Playground Safety Inspector, 2009

Asbestos Project Designer, 2009

Asbestos Hazard Evaluation Specialist, Ohio

EPA Lead Risk Assessor, 2006

Lead Risk Assessor License, Virginia, 2008

Lead Risk Assessor License, Maryland, 2008

Lead Risk Assessor License, Washington D.C., 2010

records and title searches. Asbestos samples were collected from two random housing units per housing area and three samples were taken from each unit, totaling 210 samples.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* Team Member. Provided hazardous materials design services, and asbestos-containing materials (ACM), lead-based paint (LBP) investigations and designs. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

IDQ for Miscellaneous Environmental Engineering and Design Services, Various Locations, Washington D.C.. *U.S. Navy EFA Chesapeake.* Team Leader. Developed asbestos and lead-based paint abatement specifications and design documents for a multiple phase (ten phases) renovation project at Bancroft Hall. Conducted comprehensive surveys of the renovation areas for asbestos-containing materials, lead-based paint, and PCBs prior to design efforts. Under an indefinite quantity contract with the U.S. Navy, Baker provided environmental engineering and design services at various sites within the U.S. Navy's Engineering Field Activity Chesapeake.

Historic Restoration of John Sutton Hall, Indiana University of Pennsylvania, Indiana, Pennsylvania. *Indiana University of Pennsylvania.* Team Member. Responsible for asbestos investigation and sampling, asbestos design documents prior to renovation, asbestos oversight and air monitoring during removal, and consulting services during renovation. Baker designed the Phase I historic restoration of the first building on the campus of Indiana University of Pennsylvania (IUP), the prestigious "Old Main" constructed in 1875, listed as a landmark on the National Register of Historical Places. The 135,000-square-foot building consists contains offices for human resources, university housing, and admissions. Major project components included replacement of the heating and ventilation system, addition of an air conditioning system; interior space planning and relocation of departments; a new service entrance and freight elevator; replacement of all windows with energy-efficient units capable of meeting historic guideline standards; toilet room, including upgrades consistent with the Americans with Disabilities Act; and exterior work, including new storm drains, sanitary lines, fire lines, water lines, foundation drains, site lighting, walkways, handicapped-accessible entrances, and other exterior treatments.

Fitness Center Expansion and Renovation, McGuire Air Force Base, New Jersey. *U.S. Air Force, Headquarters Air Mobility Command.* Team Member. Conducted a hazardous materials investigation of the existing gymnasium prior to the renovation project, also provided report and documented design documents for abatement of asbestos prior to renovation. Expansion and renovation of this existing gymnasium created a 64,000-square-foot facility offering a health and welfare center for assessments and education, two gymnasiums, aerobics rooms, weight facilities, racquetball courts, a distinguished visitor area, a juice bar, offices, and support facilities such as lockers and laundry.



Structural Engineering, Inc.

Carol A. Stevens, P.E., F.ASCE Structural Engineer

EDUCATION

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

PROFESSIONAL REGISTRATION

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

BACKGROUND SUMMARY

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

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers – Past President
National Society of Professional Engineers
American Concrete Institute
American Institute of Steel Construction
West Virginia University Department of Civil and
Environmental Engineering Advisory Committee Chair
West Virginia University Institute of Technology
Department of Civil Engineering Advisory Committee

CIVIC INVOLVEMENT

ASCE Christmas in April Project
Engineer's Week Speaker

EXPERIENCE

West Virginia, State Capitol Complex, Main Capitol Building Toilet Room Renovations: Prepared structural details for renovations of existing toilet rooms in entire facility. Building is on the National Register of Historic Places and was constructed in the 1920's and 1930's.

West Virginia, Roane County Courthouse: Structural analysis of existing floor framing for addition of new high-density file storage system on upper floor level.

West Virginia, Lewis County Courthouse: Structural investigation for work required to update structure and apply for grant monies through WVCFIA.

West Virginia, Tucker County Courthouse: Structural investigation for work required to update structure and apply for grant monies through WVCFIA.

West Virginia, Boone County Courthouse: Structural analysis of existing floor framing for addition of high-density file storage systems at different locations.

West Virginia, Gilmer County Courthouse: Structural analysis of existing floor framing for addition of high-density file storage system on upper floor level.

West Virginia, State Capitol Complex, Main Capitol Building Exterior Façade Restoration: Investigation and preparation of details for repairs to limestone and terra cotta exterior façade. Building is on the National Register of Historic Places and was constructed in the 1920's and 1930's.

West Virginia, First Presbyterian Church Restoration: Structural renovations of steel in lantern level and terra cotta cornice, overview of repairs to limestone and terra cotta façade of 1920's structure.

West Virginia, State Capitol Complex, Governor's Mansion: Structural analysis and design in addition to evaluation report for modifications and renovations to several areas of mansion. Building is on the National Register of Historic Places and was constructed in the 1920's.

West Virginia, Upshur County Courthouse: Developed construction documents for structural repairs to main entrance, dome and monumental sandstone columns of

P.O. Box 469

Alum Creek, WV 25003-0469

(304) 756-2564 (voice)

(304) 756-2565 (fax)

A West Virginia Certified DBE Consultant
Certified in the Practice of Structural Engineering

1899 structure. Work was recently completed and received a WVAIA Honor Award for Design Excellence.

West Virginia, State Capitol Complex, Holly Grove Mansion: Structural evaluation report for preliminary condition assessment of building structure. Building is on the National Register of Historic Places and was constructed in 1815.

West Virginia, State Capitol Complex, Main Capitol Building Dome: Exploratory investigation of structural steel components of Lantern Level of dome and development of contract documents for repairs. Building is on the National Register of Historic Places and was constructed in the 1930's.

West Virginia, State Capitol Complex, Main Capitol Building Parapet: Exploratory investigation of limestone/brick parapet/balustrade of Main Capitol Building to determine cause of movement/cracking/leaks. Construction contract for repairs has been completed. Building is on the National Register of Historic Places and was constructed in the 1920's and 1930's.

West Virginia, Hampshire County Courthouse: Structural design for new elevator for existing historic building.

West Virginia, Historic Putnam-Houser House (Parkersburg): Designed system for stabilization and upgrades to floor framing of building that was constructed in the 1700's.

Ohio, Mahoning County Courthouse: Completed preliminary structural observation report of exterior façade conditions to recommend phased repairs for terra cotta and granite façade. Building is on the National Register of Historic Places and was constructed in the early 1900's.

West Virginia, Hawks Nest State Park Lodge: Repairs to spandrel beams at roof level and analysis of structural cracks in stairtower.

West Virginia, Twin Falls Resort State Park: Structural evaluation of existing recreation building.

West Virginia, Pipestem Resort State Park: Structural evaluation of existing recreation building.

West Virginia, State Capitol Complex, Building 5: Structural design and analysis for support of new boilers and other mechanical equipment to be placed in mechanical penthouse.

West Virginia, State Capitol Complex, Building 7: Investigation and development of Construction Documents for new elevators.

West Virginia, State Capitol Complex, Building 3: Structural design and construction administration of repairs to limestone canopy. Building is eligible to be placed on the National Register of Historic Places and was constructed in the early 1950's.

West Virginia, State of West Virginia Office Building #21, Fairmont, WV: Preliminary structural observation report for condition assessment of building structure.

PREVIOUS EXPERIENCE

West Virginia, State Capitol Building, North Portico Steps: Designed structural system to replace deteriorated reinforced concrete slab at landing on north side of Capitol steps. Building is on the National Register of Historic Places and was constructed in the 1930's.

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

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

West Virginia, Canaan Valley Resort and Conference Center: Structural feasibility study to upgrade lodging units.

West Virginia, West Virginia University Masterplan: Investigated structural floor load capacity of several university buildings as a consultant to a large national architectural firm for masterplan.

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

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

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

**BOB UBER
Regional Manager****Elevator Consulting Group**

Bob Uber, Regional Manager, began working for Lerch Bates in 1999. He is currently working in the Lerch Bates Cleveland Ohio office providing vertical transportation analysis and design. Previously, Bob Uber worked for Lerch Bates as District Manager in Phoenix Arizona.

PROJECT RESPONSIBILITIES

As Regional Manager, Mr. Uber is responsible for the following functions:

- Vertical Transportation System Studies
- Complete Administration of Design and Construction Services for the Vertical Transportation Equipment
- Design and Contract Documents for the Vertical Transportation Equipment
- Vertical Transportation Maintenance Evaluations
- Due Diligence Studies
- Administration of Design and Construction Services for the Façade Access Systems
- Administration of Design and Construction Services for the Materials Handling Systems

RELATED EXPERIENCE

- The Ohio State University Facilities, Columbus, OH
- The Ohio State Medical College, Columbus, OH
- Renaissance Hotel, Cleveland, OH
- Midland Building, Columbus, OH
- The Ohio State Student Affairs, Columbus, OH
- Columbus Regional Airport Authority, Columbus, OH
- Hocking Correctional Institute, Nelsonville, OH
- Federal Office Bldg., Huntington, W VA
- The Ohio State University Facilities, Columbus, OH
- The Ohio State Medical College, Columbus, OH
- University of Pittsburgh Medical College, Pittsburgh, PA
- Housing Authority of the City of Pittsburgh (HACP), Pittsburgh, PA
- Veterans Memorial, Columbus, OH
- University Hospitals Cleveland, OH
- Franklin County Courthouse, Columbus, OH
- Franklin County Pavilion, Columbus, OH
- Nationwide Insurance, Columbus, OH
- Franklin County Hall of Justice, Columbus, OH
- University of Pittsburgh Medical College, Pittsburgh, PA
- Housing Authority of the City of Pittsburgh (HACP), Pittsburgh, PA

EDUCATION

Akron University, Akron, 2 yr.

United Electronics Inst. - Electronics Technician

Philip Crosby - Quality College

Ohio Department of Commerce, Division Elevator Inspection; Commission ID #980

AFFILIATIONS

C.E.I. #C-2396 Certified Inspector

NAESA - National Association of Elevator Safety Authorities

Elevator U- Association of Universities and Educational Facilities

D. William Holaday, CTS-D

Professional Experience

Mr. Holaday brings with him over ten years of education and experience in project management, audiovisual systems design, architectural acoustics, noise & vibration control, telecommunications cabling systems design, and security systems design. Project exposure includes the design of nation wide multimedia presentation systems, video conferencing systems, collaborative education, large venue audio systems & high-resolution displays, television/radio broadcast & recording studios, co-axial broadband video distribution, telecommunications cabling systems, PBX/LAN/Wi-Fi electronics, access control, and video surveillance systems.

Mr. Holaday serves as Project Manager and Primary Designer for projects involving audiovisual systems, telecommunications cabling systems, security system, and acoustics, noise & vibration control. His responsibilities include project management, performing quality control reviews, conducting product research, managing client interaction, architectural coordination, and implementing the latest technologies into our current design projects. Project management experience includes technology rich municipal, higher education, government, healthcare, military, cultural, historical renovation, residential, commercial, and K-12 projects. Mr. Holaday has hands on experience with non-linear editing systems, multi-media presentation systems, broadcast/production systems, live sound reinforcement, programming remote control systems, as well as performance experience at an array of professional music venues.

Project Experience

New York State Office of General Services - Cityscape Complex
City of Alexandria - City Hall Conference Center
Verizon Government Markets - Network Operations Center & Executive Briefing Room
Caroline County - Public Services Building Auditorium Renovation
City of Alexandria - Public Council Hearing Chambers Historic Renovations
Haverford College - Stokes Hall Renovation and Addition (houses administrative/ academic computing centers, language learning center, business office, and dept of economics)
Maricopa County Community College District - District Office Hearing Room
Bowie City Hall - New City Hall
J. Sergeant Reynolds Community College -- Burnette Hall Renovation (classroom & faculty office space)
Montgomery County - County Council Chambers
City of Rockville - New Courthouse
City of Glendale - B3 Conference Center Renovation
City of Casa Grande - Public Safety Facility
Federal Aviation Administration - Auditorium & Conference Rooms

Education

Certified Technology Specialist – Designer (CTS-D), ICIA/ 2009.
DigitalMedia Certification – Designer (Crestron Electronics, Inc.)
BiCSi Certificate of Completion – Comprehensive Medical Technology Planning – Bridging the Design Gap, 2009; Disaster Recover for Your Business, 2008; Secure Facilities & Infrastructure, 2008; Cable Antenna Television & Distribution Systems, 2004; Outside Plant Cabling, 2004; Optical Fiber Cabling Distribution, 2003.
The Johns Hopkins University, Baltimore, MD., M.A. Acoustics, 2001.
Peabody Conservatory of Music of the Johns Hopkins University, Baltimore, MD., B.M Recording Arts & Sciences, 2001.
Peabody Conservatory of Music of the Johns Hopkins University, Baltimore, MD., B.M. Trumpet Performance, 2000.

Professional Affiliations

Audio Engineering Society (AES)
Building Industry Consulting Services International (BiCSi)
International Communications Industry Association (ICIA)
Society of College and University Planners (SCUP)
American Institute of Architects (AIA)
Society for Simulation in Healthcare (SSH)



4.2.3 PROJECT ORGANIZATION

- a. *Provide information on the personnel who will manage and persons proposed to be assigned to the project. Provide locations of firm's offices and indicate from where the project will be managed and the work performed. Provide a project organizational chart including key personnel and the proposed organization of the project team.*

Key Management Personnel

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

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

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

Each individual on this project team has extensive experience in their field of expertise and have demonstrated success on projects of similar size and scope, as well as experience with all regulatory agencies that will be involved. The following provides a brief discussion of each team member's experience base relevant to this project. The Baker Team's Organization Chart is provided at the end of this section.

Project Manager – Ron Bolen, RA, AIA, LEED GA (Charleston, West Virginia): Mr. Bolen brings over 38 years of design and project management experience to the project. He recently managed the West Virginia State Capitol Restroom Renovation / Restoration project for the General Services Division He is currently serving as architect for the West Virginia General Services Division's project for Complex Master Planning and Architectural and Engineering Services for the State Capitol Complex. Over the past decade, he has been involved in a variety of projects with a wide range of expertise for Renovation projects of this type. This effort involved assessing the governmental office facility, developing an evaluation report, the design of the phased renovations, cost estimates, bidding assistance and construction administration services are reflective of the projects that Mr. Bolen has been involved in. Mr. Bolen will act as Project Manager for the West Virginia Building 4 renovations project.

Principal-In-Charge – Russell E. Hall, PE, PS (Charleston, West Virginia): Mr. Hall, Assistant Vice President, is Office Manager of Baker's Charleston, WV office. He is an experienced engineer who has been involved in numerous design projects in West Virginia for over 22 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met. His strengths include organizing and managing project teams, quality control and



quality assurance, and problem resolution. Mr. Hall provides overall direction and maintains direct communications with all clients. His responsibility is to ensure that Mr. Bolen has all of the resources that he needs for the successful execution of your project, and that all quality programs are followed.

QA/QC – Ronald Kretz, RA, AIA, LEED GA (Moon Township, Pennsylvania): Mr. Kretz is a registered architect with over 20 years of experience as principal, project manager, and designer. He is the A/E Operations Manager of Baker's North Region Facilities Group with direct management responsibility over all architectural and building engineering personnel, project designs, quality practices, and office functions. His project experience includes designs for office spaces of a variety of clients facilities. Mr. Kretz is well versed in a variety of project delivery systems including fast-tracked designs, traditional design/bid/build, design/build RFP documents, design/build delivery as a member of the contractor's team, bridging documents, and site-adapt designs. He will serve as co-QA/QC Manager and be responsible to administer Baker's quality processes.

QA/QC – Ralph Deffenbaugh, PE, LEED AP (Moon Township, Pennsylvania): Mr. Deffenbaugh is Director of Facilities Engineering for Baker, providing leadership for project quality and interdisciplinary coordination for the engineering group. Mr. Deffenbaugh will provide QA/QC Management and be responsible to administer Baker's quality processes. As Director of Baker's Facilities Engineering services, Mr. Deffenbaugh is responsible for all design projects under his management, ensuring quality and client satisfaction. His project experience includes a wide array of engineering applications including many of the projects in this submittal.

Lead Design Architect – Joseph Chaffin, AIA (Moon Township, Pennsylvania): In balancing creative, organizational, and technical strengths, Mr. Chaffin's professional experience demonstrates a broad practice of architecture from residential through complex institutional projects. As Director of Architecture, Mr. Chaffin is responsible for the daily operations, design quality, and project execution of the architectural and interior design staff.

Preservation Architect – Gretchen Pfaehler, AIA (Alexandria, Virginia): Ms. Pfaehler has over two decades of experience in the preservation, restoration, and renovation of historic buildings and landscapes across the United States. She has worked on many Cass Gilber Buildings across the United States and is working with the Baker West Virginia office on the toilet room restoration and the final edits of the master plan. Ms Pfaehler understands the construction from this period and has renovated similar buildings to serve as modern functioning office buildings. She is knowledgeable on the issues of preservation project delivery methods, technical building documentation and assessments, building material treatments, preservation laws, review processes and regulations applied to historic preservation projects. She is experienced with review, approvals and documentation with many federal state regulatory and review commissions.

LEED Sustainable Design – Eamon Geary, LEED AP (Moon Township, Pennsylvania): A few years ago, Baker added Eamon Geary, LEED AP to our team of Baker professionals for the singular purpose of having a full-time sustainability expert dedicated to coordinating the LEED® design process on Baker's projects. Mr. Geary spent the last seven years working in the tri-state region, nationally, and internationally to encourage and support green development and curb greenhouse gas emissions. Mr. Geary held the position of Project Specialist for the Green Building Alliance (GBA) and served as Program Officer for ICLEI - Local Governments for Sustainability. At Baker, he is responsible for overseeing and auditing many aspects of our project's sustainable design and construction practices. In



conjunction with the USGBC, he provides third-party verification that a building or community was designed and built using strategies aimed at improving performance across all of the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. Focused on sustainable design, Mr. Geary's expertise is included on our team to provide all stakeholders with an outlet for any technical questions and advice.

Lead Interior Designer – Anita Myers, NCIDQ (Moon Township, Pennsylvania): Ms. Myers' more than 20 years of experience includes programming, planning, design and project management. She has worked on renovations projects for commercial, industrial, governmental, educational, religious, and financial facilities. Ms. Myers is responsible for overseeing the interior design of all projects and ID personnel. She also performs interdisciplinary technical reviews of all designs.

Interior Designer – Alana Pulay, IIDA, LEED AP (Charleston, West Virginia): Ms. Pulay is a professional interior designer with comprehensive knowledge of architecture and the design industry with over seven years of experience in educational, commercial, and residential design, project budgeting, specifications writing, bid preparation and contract negotiations, construction job site scheduling, and green building design. Ms. Pulay has led and managed numerous interior design projects where she was responsible for the design, development, and coordination of all interior elements of the projects, including selection of all finishes, furnishings, and equipment. She has experience in open and flexible office interiors and she understands the sensitive nature of using color and texture to promote creative thinking in the work place, while maintaining durability of surfaces and finishes.

Landscape Architect – Laura Cox, RLA, ASLA (Charleston, West Virginia): Ms. Cox is a Registered Landscape Architect with over 30 years of experience in 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, stormwater conveyance and detention, and utility and infrastructure design.

Constructibility, Cost Estimating, and Value Engineering – David Cameron, AVS (Moon Township, Pennsylvania): Mr. Cameron has direct responsibility for the implementation of Baker's facilities construction management program. In addition to managing specific projects, his responsibilities include oversight project management, and providing design and construction phase services to both internal and external clients. Services provided include project/program planning, design management, value analysis/engineering, budgeting, cost estimating, construction scheduling, project phasing and logistics, bid phase services, subcontractor coordination, inspection, forensic investigation, claims mitigation, litigation support, and overall construction administration of Baker's facility construction management practice.

Site Design/Civil Engineer and Surveyor – Patrick Fogarty, PE, PS (Charleston, West Virginia): Mr. Fogarty has over 24 years of civil engineering project design and management experience. He is responsible for the technical and management aspects of civil design and surveying projects within Baker's Charleston, West Virginia office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural, and transportation engineering; site development planning; and surveying. He



will serve as Site Design/Civil Engineer and Surveyor for the project if these services are required. He will also be responsible for QA/QC of structural design.

Mechanical Engineer – Craig W. West, PE, LEED AP (Moon Township, Pennsylvania):

Mr. West is Baker's Mechanical Engineering Manager with a background that 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. His responsibility will be to support all facets of the job, including load calculations, equipment/system selection, layout, technical standards, fan static and pump head calculations, specifications, and sequences of operation. Mr. West's project experiences include design of mechanical systems of all types. His 28 years of experience will bring a wealth of knowledge and understanding to this project. Some of Mr. West's design projects are included in this submittal.

Mechanical Design – David Hilliard, PE, LEED GA (Charleston, West Virginia):

Mr. Hilliard is a mechanical engineer with a wide range of hands-on design and construction experience. Some of his recent local project experience include providing plumbing and HVAC design, as well as overseeing the electrical and fire protection design for the West Virginia Capitol Restroom project. He recently completed work on the West Virginia State Capitol Complex Master Plan by providing mechanical, electrical and utility evaluations and recommendations and documentation. Mr. Hilliard will be the main client contact for all MEP and fire protection services.

Electrical Engineer – Thomas Basch, PE (Moon Township, Pennsylvania):

Mr. Basch is a senior electrical engineer with experience providing engineering services to the consulting, electric power, and ship building industries. His work history includes engineering design, analysis, material specification, purchasing, operations, maintenance, construction, and start-up and training duties for commercial and industrial clients, the electric utility industry, and the United States military. Mr. Basch will support all electrical needs for this project and assist in the building assessment process.

Fire Protection Engineer – Andrew Weisfield, PE, LEED GA (Moon Township, Pennsylvania):

Mr. Weisfield is a licensed professional fire protection engineer with more than 14 years of experience in the fire and life safety industry. His experience includes over seven years in fire protection engineering with consulting and engineering design firms and seven years working with a fire alarm and fire suppression system contractor. Mr. Weisfield performs fire alarm and sprinkler designs, including pipe sizing, water supply analysis, system layouts, and specifications. He is in responsible charge of several designs while directing additional engineers in performance of the work. Mr. Weisfield prepares fire hazard, code, and life safety analyses that include review of code requirements, egress analyses, construction type requirements, and fire dynamics analyses for various applications.

Environmental / Hazardous Materials – Gary Case, EPA-Certified (Moon Township, Pennsylvania):

Mr. Case is a senior environmental scientist with over 22 years of professional experience in the comprehensive management of asbestos and lead, as well as health and safety, industrial hygiene, risk assessment, and environmental compliance. He has conducted and managed many projects that include asbestos and lead surveys/assessments, management planning, project design, project supervision, material testing, air monitoring, and training. His work has encompassed environmental site assessments, site characterization, project cost development and data tracking, and traditional industrial hygiene project performance.



Structural Engineering – Carol Stevens, PE, FASCE (Charleston, West Virginia): Ms. Stevens is a Structural Engineer with CAS Structural Engineering, Inc. She brings to this project 28 years of experience, most of which had included similar scope project in West Virginia.

Elevator Design – Bob Uber (Cleveland, OH): Mr. Uber, Regional Manager, began working for Lerch Bates in 1999. He is currently working in the Lerch Bates Cleveland Ohio office providing vertical transportation analysis and design. Previously, Bob Uber worked for Lerch Bates as District Manager in Phoenix Arizona. His responsibilities will include Vertical Transportation System Studies; Complete Administration of Design and Construction Services for the Vertical Transportation Equipment; Design and Contract Documents for the Vertical Transportation Equipment; Vertical Transportation Maintenance Evaluations; and Due Diligence Studies.

Communications Design – D. William Holaday, CTS-D (Baltimore, Maryland): Mr. Holaday, of Convergent Technologies, brings with him over ten years of education and experience in project management, audiovisual systems design, architectural acoustics, noise & vibration control, telecommunications cabling systems design, and security systems design. Project exposure includes the design of nationwide multimedia presentation systems, video conferencing systems, collaborative education, large venue audio systems & high-resolution displays, television/radio broadcast & recording studios, co-axial broadband video distribution, telecommunications cabling systems, PBX/LAN/Wi-Fi electronics, access control, and video surveillance systems. Mr. Holaday serves as Project Manager and Primary Designer for projects involving audiovisual systems, telecommunications cabling systems, security system, and acoustics, noise & vibration control.

The following Organization Chart clearly defines the lines of authority for Baker's proposed team.





**West Virginia
General Services Division**

Principal-in-Charge
Russell Hall, PE, PS (B)

Project Manager
Ron Bolen, AIA, LEED GA (B)

QA/QC Architecture
Ronald Kretz, AIA, LEED GA (B)
QA/QC Engineering
Ralph Deffenbaugh, PE LEED AP (B)

Architecture / Engineering

Lead Design Architect
R. Joseph Chaffin, AIA (B)

Historic Preservation Architect
Gretchen Pfaehler, AIA (B)

LEED Sustainable Design
Eamon Geary, LEED AP ND ID+C (B)

Interior Designer
Alana Pulay, RID, LEED AP (B)

Landscape Architect
Laura Cox, LA, ASLA, LEED GA (B)

Site / Civil Engineering
Patrick Fogarty, PE, PS (B)

Mechanical / Plumbing Engineering
David Hilliard, PE, LEED GA (B)
Craig W. West, PE, LEED AP (B)

Electrical Engineering
Thomas A. Basch, PE (B)

Fire Protection / Life Safety
Andrew Weisfield, PE, LEED GA (B)

Environmental / Hazardous Materials
Gary Case, EPA-Certified (B)

Structural Engineering
Carol Stephens, PE (S)

Elevator Design
Bob Uber (L)
Bradford Welsh (L)

Electrical Engineering
Thomas A. Basch, PE

Telecommunications / Audio-Visual
William Holaday, CTS- D (C)

Legend

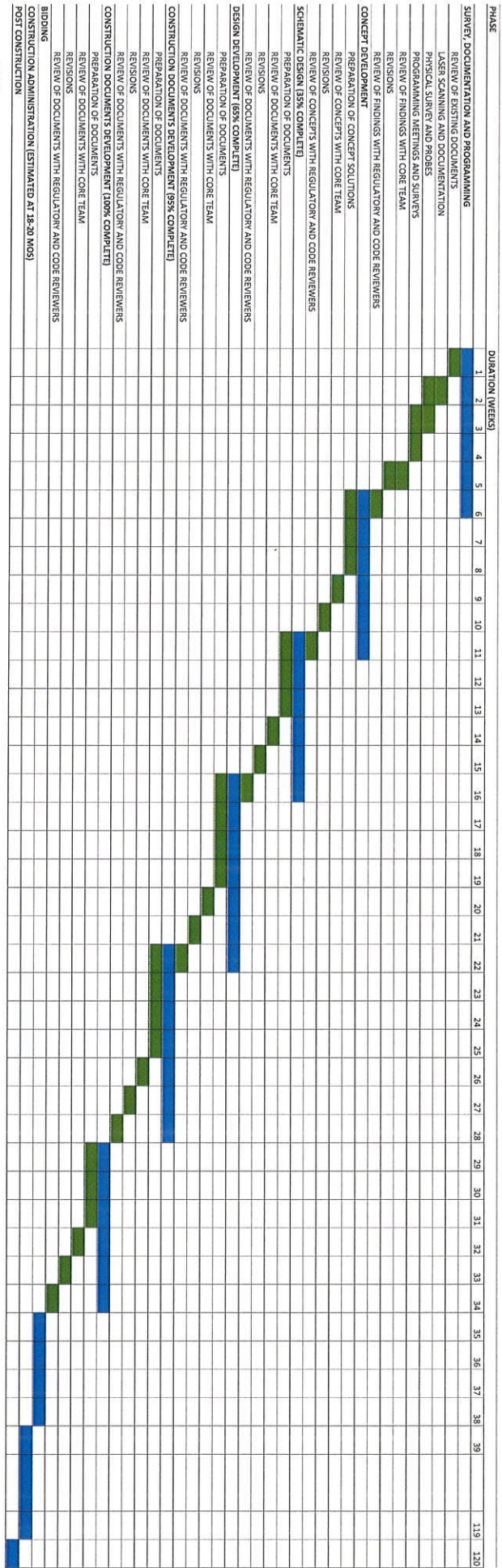
- (B) Michael Baker Jr., Inc.
- (S) CAS Structural Engineering
- (L) Lerch Bates
- (C) Convergent Technologies

b. Provide a statement or evidence of the firm or team's ability to provide services within the project time frame and a proposed project schedule outlining the key phases.

The proposed members of the Baker Team, as described in this submittal, are available for the execution of the Building 4 project for the timeline described on the following detailed project schedule. Baker's local/regional professionals and technical personnel number in excess of 800, in all disciplines. Should additional personnel be required, in any discipline, the Baker Team has the capacity to fulfill those requirements.

The attached Project Schedule timeline is detailed, by week, under major work categories including surveying and assessment of existing conditions, schematic design, design development, contract documents preparation, and construction administration services. Time allotments for permitting and approval processes, and coordination with the appropriate officials, is included in our proposed schedule. Since specific schedule details such as contract award, and start and completion dates, were not included in your RFQ, Baker's proposed schedule is presented with the understanding that the State of West Virginia may need to adjust our timeline.





4.2.4 DEMONSTRATED EXPERIENCE IN COMPLETING PROJECTS OF A SIMILAR SIZE AND SCOPE

- a. Provide descriptions of relevant projects demonstrating the firm's ability to execute projects similar to those described in this Expression of Interest. Firm's managing personnel for this project must have at least five years of experience in evaluating and designing commercial office buildings as described herein. Provide descriptions of not more than ten projects performed in the last ten years. Projects of interests should include work performed within the State of West Virginia.*

As requested, the Baker Team has provided ten project examples of work performed during the last ten years that demonstrate our ability to execute projects similar to the proposed Renovations to Building 4, as well as projects that demonstrate experience working within the State of West Virginia.

The project examples are included following this proposal section.

- b. Provide references for the last five clients for whom the firm has conducted projects of a similar size and type; include the name of the contact person along with the addresses, telephone numbers and short description of the project.*

Project Information	Reference Contacts
Program Management and Construction Management Services for New Addition and Renovations to the Wise Library Creative Arts Center Allen Hall HVAC Upgrade and Asbestos Abatement	<i>West Virginia University Mr. John Thompson, Manager, Design & Construction P.O. Box 6570 Morgantown, WV 26506 304.293.3625</i>
Little Kanawha Bus Maintenance / Administrative Facility A & E services for an energy efficient facility near Grantsville, West Virginia.	<i>West Virginia Division of Public Transit Ms. Susan O'Connell, Director Building 5, 1900 Kanawha Boulevard, East Charleston, West Virginia 23505 304.558.0428</i>
TAG Wing Renovations, Charleston, WV Complete HVAC renovation of the 55,000 sq ft Army National Guard Headquarters in Charleston, West Virginia. The construction was completed in phases to keep disruptions to a minimum.	<i>West Virginia Army National Guard Division of Engineering and Facilities Maj. Michael Beckner 1703 Coonskin Drive Charleston, West Virginia 25311-1085 304.561.6333</i>
Open End Contract, Institute Campus Various facility upgrades and repairs are in the works, as well as mapping of campus underground waterlines in preparation for a new domestic water loop design.	<i>West Virginia State University Mr. Marvin W. Smith Harold McNeill Building 124 Institute, West Virginia 25112-1000 304.766.3181</i>
Lost Creek Train Depot Restoration Phased Restoration of this historic train depot, Phase 1 Construction is completed – raised the facility out of the sinking ground level. Phase 2 is now beginning for the restoration of the exterior façade and various site work. Phase 3 Interiors will begin after the exterior is complete	<i>Harrison County Planning Commission Ms. Terri Schulte 301 West Main Street Clarksburg, WV 26301 304.624.8690</i>



Master Planning and Architectural and Engineering Services for the West Virginia State Capitol Complex

Charleston, West Virginia

The Baker Team developed a comprehensive master planning document for West Virginia General Services Division which included, a history of the development and planning of the capitol, existing conditions assessment, recommendations, and overall plans for future development and improvements to the historic West Virginia State Capitol Complex.



The campus is a 54-acre site on which the state capitol building, the governor's mansion, state offices, a culture center and museum, a historic mansion dating back to 1820, and several statues and fountains are located. The complex is part of the City of Charleston's historic district, and several of the buildings are listed in the National Register of Historic Places. The capitol complex is frequently used for festivals and other public events, and is a major tourist attraction.

The capitol complex has grown from 12 to 54 acres since its founding in the early 1920s, and currently has approximately 768,000 feet of office space and employs approximately 3,400 people. The last complete capitol complex master plan was completed in the late 1960s and updated in the mid 1990s.

Baker's master planning services included planning for proposed expansion; pedestrian and traffic circulation plans; parking plans; plans for the location of new buildings and facilities; site utility planning, including buried utilities and lighting; site security planning, and landscaping.

Client

State of WV General Services
Division
Department of Administration
1900 Kanawha Boulevard East
Building 1, Room MB-60
Charleston, WV 25305

Robert P. Krause, P.E., A.I.A.
Architect/Engineer
304-558-9018

Completion Date

Estimated: 2012

Project Costs

\$976,039 (Fee)

Types of Services

- Master planning
- Architectural design
- Civil, mechanical, and electrical engineering
- Historic preservation
- Energy conservation and LEED®
- Construction administration



Possible additions to the complex include a financial center, a judicial building and additional office buildings and parking facilities. New redundant central plants were also proposed.

All of the concepts were required to be compatible with the original plans for the site, which were developed by the capitol building's architect in 1925, while also accommodating current and future state government needs.

In addition to developing a comprehensive master plan, Baker prepared concept drawings for architectural, engineering, landscaping, security, parking, pavement, utilities and other improvements recommended by the master plan. Design services included architectural, civil, mechanical, and electrical engineering services, and energy conservation (LEED®). The 2012 Master Plan proposed a phasing sequence for implementation of the plan over a 15 year period.



West Virginia State Capitol Building Restroom Assessment and Renovations

Baker led a planning study for the renovation of public restrooms in the West Virginia Capitol Building. The planning study assessed the facilities, plumbing infrastructure and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol.



The Capitol building was built between 1925 and 1932, and is on the National Register of Historic Places. The renovation design was sensitive to the historic nature of the Capitol, while incorporating modern materials and water saving technologies into the project.

The study addressed the design framework for the renovation of the selected restrooms, provide an overall project cost, and propose a logical sequence of design, construction, and schedule of implementation for the next three years. The study first identified and verified physical characteristics, including room layouts; fixture counts; location of all mechanical, electrical, and plumbing (MEP) devices; current level of ADA compliance; and location and condition of Vitrolite and Carrara glass panels. The study also included an analysis of building population issues, building code issues, and the potential impacts of construction.

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Robert P. Krause, P.E., A.I.A.
Architect/Engineer
304-558-9018

Completion Date

Estimated: 2013

Project Costs

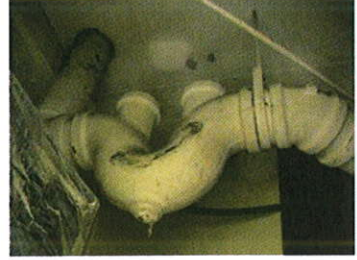
\$1,271,716 (Fee)

Types of Services

- Planning
- Mechanical and electrical engineering
- Plumbing and fire protection
- Preparation of construction documents
- Construction administration



The preliminary findings of the assessment included recommendations for construction sequencing and scheduling, replacement of the vitrolite and carrara glass, options for reassigning purpose based on gender parity and ADA requirements, and preliminary cost estimates. Testing of existing plumbing piping and the use of camera technology was used to assess the extent of plumbing renovations that would be required. The final plan incorporated all of this information as well as the client's comments into the schematic and design development documents.



Upon approval of the schematic design, Baker prepared construction documents that included 34 renovated restrooms and adjacent spaces. The construction documents provided clear direction on the phasing of work so as not to disrupt to operations of state government. Plumbing, electrical, mechanical and fire alarm upgrades were also included in the project.



Baker will provide construction administration services during the renovation. The project will begin construction in 2012.

Chancery Renovation Project for the U.S. Embassy

Brussels, Belgium

As designer of record, Baker provided architectural and interior design; mechanical and electrical engineering; plumbing design; structural engineering; telecommunications engineering; and construction administration services for the renovation of the chancery to the U.S. embassy in Brussels.

The U.S. embassy, located at 27 Boulevard du Regent, was constructed by the U.S. Department of State (DOS) in 1952. It is situated on a one-third acre lot. The 64,583-square foot chancery comprises a seven-story tower on Boulevard du Regent and a two-story back wing that abuts the chief of mission residence, and accommodates DOS and tenant organization functions.

The building forms a U-shape around a paved interior courtyard, and a full basement extends under the entire floor plate of the building. The basement level was constructed as a parking garage, and evidence remains of the irregular column spacing and ramps. A subbasement was built under the tower portion of the building, where the building's mechanical services are housed. The entire building, except the top floor, was constructed with cast-in-place concrete columns, beams, joists, floor, and roof slabs. The top floor of the tower is framed with structural steel and is roofed with concrete slabs. The exterior walls are clad with flat, French limestone panels set in a stacked pattern. The original aluminum and double-insulated glass windows are set in punched openings.

Renovation design requirements included upgrading fire protection, life safety, and emergency egress for the entire building; designing a new, seven-story enclosed fire stair, with utility shafts; upgrading the electrical, mechanical, and telecommunications infrastructure for the entire building; renovating part of the ground, basement and subbasement floors; renovating the first-floor corridor; renovating the second, third, fourth, and sixth-floor elevator lobbies; and renovating part of the fourth floor and the entire fifth floor.

Baker also designed the computer room air conditioning system, a make-ready fire alarm and sprinkler system, a kitchen hood smoke exhaust, and a signage package for the entire building. Baker upgraded the basement mechanical and electrical systems, the telecommunications and electrical closet fan coils and added fan coils for future renovation. Other design tasks included miscellaneous plumbing and mechanical items, second-floor material procurement and scope adjustments, exterior stair balconies and finishes, and revising the ground-floor office renovation.

Client

United State Department of State,
Overseas Buildings Operations
(OBO)

US Embassy Brussels
Blvd du Regent 27
1000 Brussels
Belgium, BEL

Christopher Dudding
Project Director
32-2-508-2115

Tyler Sinclair
Contracting Officer
703-875-6110

Completion Date

Actual: 2010

Project Costs

\$11,000,000 (Construction)
\$681,533 (Fee)

Types of Services

- Architectural design
- Interior design
- Mechanical and electrical and engineering
- Plumbing design
- Structural engineering
- Telecommunications engineering
- Construction administration

Baker's design team had to comply with the host nation's requirements, DOS's schedule requirements, and DOS security procedures, which involved obtaining proper clearances for the staff members who conducted the site survey and following appropriate protocols for sending and receiving information and documents.



Open-End Architectural/Engineering Services at West Virginia University

Morgantown, West Virginia

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 specific 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 the projects noted below.

- New Life Sciences Building
- Wise Library Renovation and Expansion
- New Student Recreation Center
- Creative Arts Center Facility Condition Assessment
- Creative Arts Center Renovation
- Allen Hall HVAC Upgrade and Asbestos Abatement
- Clark Hall and Boreman Hall South Roof Assessments
- Boreman Hall South Roof Repairs

The duties of Baker's on-site program managers include the following:

- Maintain the project program
- Manage and administer the contract requirements of the A/E and construction manager
- Review the bid packaging strategies with the owner
- Assisting in the review and recommendation of apparent responsible low bidders
- Coordinate owner-directed change orders, and reviewing and recommending acceptance or rejection of, and/or modifications to, contractor requests
- Monitor and maintain project budgets on behalf of the University
- Review Requests for Information and responses
- Monitor contractor progress related to the project schedule and contract requirements and provide daily updates to the owner
- Provide quality review of ongoing work activities
- Perform daily inspection of the site to mitigate future quality and/or schedule impact issues
- Prepare bid proposal documents for FF&E and reviewing FF&E items to account for field requirements
- Review of project site and notifying the construction manager of safety concerns and/or potential violations
- Attend project progress and coordination meetings, as well as University facility and administration meetings related to the various projects

Client

West Virginia University
P.O. Box 6570
Morgantown, WV 26506

John Thompson

Manager, Design & Construction
304-293-3625

Completion Date

Actual: 2006

Project Costs

\$137,269,280 (Construction)
\$1,859,125 (Fee)

Types of Services

- Program Management
- Construction Management
- Architecture
- Multi-Discipline Engineering
- Cost Estimating
- Scheduling
- Inspection QA/QC

- Offer constructive suggestions to the construction manager for areas requiring attention, along with methods to expedite the work
- Review and assist with schedule updates
- Review and recommend payment for construction manager and contractor invoices
- Assist in move coordination functions with the various College Deans, their designated representatives, physical plant personnel, and the construction manager
- Schedule, coordinate, and participate in the Labor and Industry and local Fire Marshall inspections, as well as following up with the appropriate parties for any action required as a result of the inspections
- Schedule and coordinate the participation of the appropriate university maintenance staff in the contractor/vendor training sessions for new facilities
- Participate in preparation of punchlists and monitor satisfactory completion

New Life Sciences Building

The new 190,000-square-foot Life Sciences Building was one of five projects constructed at WVU's Morgantown, West Virginia, campus under Baker's program management. The Life Sciences Building is home to the Biology and Psychology Departments and the Quin Curtis Center, as well as an Animal Facility group to support the research. Key components of the \$49,000,000 facility include 29 teaching and research labs, 10 holding rooms for research animals, six greenhouses on rooftop with temperature and humidity controls, a 265-person capacity auditorium, a 125-person capacity lecture hall, and four classrooms. Multi-level entrances encourage and enhance the flow of pedestrian traffic from the adjacent neighborhood while defining the northern border of the campus. The structure's facade incorporates both traditional and innovative building materials. Brick was used to match the nearby Woodburn Hall, while pre-painted copper soffit and siding with matching frit glass was incorporated to project the image of a new, yet ageless, high-tech facility.



Wise Library Renovation and Expansion

The university's new 90,000-square-foot addition to and 120,000-square-foot renovation of the historic Wise Library was one of the five projects constructed at the Morgantown, West Virginia, campus under Baker's program management. The Wise Library contains more than 300,000 books and processes over 1,200 visitors daily. The library is now equipped with electronic classrooms, group study rooms, 180 public computers, wireless web capabilities, and reading tables with electric power and data capabilities. The renovation focused on the restoration of two large reading rooms and original furniture. The combined construction cost for both the new addition and renovation work was \$37,000,000.



New Student Recreation Center

The new 170,000-square-foot Student Recreation Center provides a focal point for campus life and includes seven basketball courts, three racquetball courts, a squash court, a 17,000-square-foot weights/fitness area, three multi-purpose sports rooms, a three-story tall indoor rock climbing wall, large lap swimming pool, leisure pool, spa, elevated

indoor jogging track, food court area, and administrative offices. The building was designed to serve the entire student population, along with university staff.

Creative Arts Center Facility Condition Assessment

Located at WVU's Evansdale Campus, the Creative Arts Center is the focal point for the arts, music, theatre, and other cultural amenities and serves the needs of both WVU and the City of Morgantown as a venue for national performers and a learning environment for students in the fine arts and graphics arts programs. Baker conducted a facility condition assessment that identified the building's physical and programmatic deficiencies to determine a capital spending program for improvements. The university's goal was to maximize the facility's potential for expansion, as well as its adaptability. Tasks performed by Baker in determining physical deficiencies and documenting the facility's existing condition include conducting site visits, reviewing drawings, and meeting with university representatives. Baker prioritized the physical deficiencies according to need for correction, and identified the optimal solutions to be implemented by the university and associated budget requirements, as well as potential phasing and implementation schedules.

Creative Arts Center Renovation

Following Baker's recommendations from its facility condition assessment of the Creative Arts Center, renovations were completed for the 1,445-seat theatre, 155-seat recital hall, administrative offices, main lobby, and ticket office. Renovations included upgrading the entire building to conform to current safety codes through the installation of a fire alarm and sprinkler system. Americans with Disabilities Act requirements were addressed through the installation of handicap-accessible restrooms, numerous access ramps, and specially designed seating areas. In addition, new stage rigging equipment was installed in the theatre to allow for better and larger productions.



Allen Hall HVAC Upgrade and Asbestos Abatement

In the late 1960s, Allen Hall was constructed as a 104,885 GSF addition to Percival Hall. Baker was responsible for providing complete design services to upgrade the facility which included extensive asbestos abatement and interior renovations, including an HVAC system upgrade. Baker's services ranged from preliminary field investigations to construction administration.

Asbestos remediation services included 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. The design also involved the cleaning, removal, and/or encapsulation of asbestos-contaminated building components such as ceiling tile, non-asbestos-containing pipe insulation, electrical floor duct banks, walls, floor surfacing materials, pipe chases, perimeter fan coil unit enclosures, and other building components. Hydronic heating and cooling piping and insulation serving the perimeter two-pipe fan coil units was replaced because it had deteriorated due to condensation between the piping and the elastomeric insulation.

Baker conducted site investigations to identify partition revisions required for the drawings of existing conditions provided by WVU and to identify specific areas requiring special protection considerations during the remediation work. An Asbestos National Emissions Standards Hazardous Air Pollutants report was prepared as required by the EPA. The university's drawings were updated to document existing conditions for general construction partitions, the sprinkler system, HVAC ductwork, and the fire alarm system. Baker prepared a Site Setup Plan as well as plans and specifications for asbestos abatement and building renovations

that included ceiling/lighting restoration, sprinkler system extensions, hot and cold domestic water piping insulation replacement, and hydronic heating/cooling pipe and insulation replacement. Baker's services also include development of contractor prequalification packages, design and construction schedules, construction cost estimates, bid and construction documents, shop drawings, and a final punchlist, as well as participation in bi-weekly construction meetings.

Clark Hall and Boreman Hall South Roof Assessments

Baker was responsible for site investigations, evaluation, and scope definition for the repair and replacement of the roof systems for both Clark Hall and Boreman Hall South.

Baker performed a comprehensive observation of the roofs to develop preliminary design data. The detailed assessment of the structures' roofs, vertical wall construction and installation aided in the development of design criteria based on environmental and operational constraints. Baker performed cross-sectional analyses of core samples of the roofs, sealant, and coating system assemblies. Cost estimates were developed based on primary roofing, waterproofing, and related components. Baker also made recommendations for repair or replacement based on the assessments and on the information provided by the university pertaining to chemicals that may be potentially exhausted from the fume collection hoods.

Following the initial discovery period, and upon the university's concurrence, Baker prepared design construction documents for the re-roofing of both facilities. A low-cost design specification was developed for Clark Hall that provided for short-term protection from further damage to the roof and building interior until the university could obtain budget approval for a more comprehensive long-term solution.

Boreman Hall South Roof Repairs

Following the roof assessment of Boreman Hall South in 2003, Baker was tasked to prepare construction documents for repair/replacement of the structure's steep-slope slate tile roof, low-slope membrane roof sections, and gutter system. The replacement of the roof system included verification of the slate type and identification of a replacement source for the tile, field verification of the roofing substrate, and gutter repairs. In addition to creating design construction documents for the project, Baker provided a list of prequalified roofing contractors experienced in the installation of the specific roofing assemblies. Baker's services during the construction phase included conducting a pre-bid meeting with interested contractors, assisting in bid reviews and contractor selection, conducting a pre-construction meeting and weekly progress meetings, preparing the final punchlist, and securing project closeout on behalf of the university.

Project Features

Special Requirements: Each of the facilities required significant coordination between the contractors design professionals, University administration, University faculty and the testing and commissioning agents. Wise Library - construction of a major addition on a very limited downtown campus parcel. Creative Arts Center and Allen Hall - maintaining facility operations throughout renovations.



WVARNG Charleston Armory HVAC & Architectural Renovations

Charleston, West Virginia



The existing building/facility started as the Coonskin Armory constructed in 1961. The Headquarters Building was constructed simultaneously with the Coonskin Armory and occupied the

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

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

Client

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

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

Completion Date

Estimated: Spring 2010

Project Costs

\$3,346,120 (Construction)
\$72,100 (Fee)

Types of Services:

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



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

The water source heat pump system is modular and ductwork is much smaller than other systems. Heat can be moved around the building such that the equipment would not energize during certain outside air conditions. By treating the building as one, as opposed to three, there is a greater opportunity to share energy produced by the office equipment and occupants located within the building during off peak hours. Although it was decided not to seek LEED certification for the building, many of the principals of the LEED program were use. The system was built around two High Efficiency Pulse Boilers and a Fluid Cooler system to maintain the loop glycol/water at a 75 to 95 degree fairinhite temperature.

Other project elements included humidity control, electrical service upgrades, new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, new interior doors and hardware, new wall finishes and asbestos removal.



Patrick Henry Executive Office Building Restoration

Richmond, VA

This project consisted of an adaptive re-use conversion to the Commonwealth of Virginia Executive Office Building. The "Old Library Building" was built in Richmond's Capitol Square in 1939, and housed the Supreme Court of Virginia and the Commonwealth's Library and Archives. The structure was built with two distinct sections, entrances, facilities and elevators, one for the Library and one for the Supreme Court. Originally, there were 211,000 square feet of offices, public spaces, courtrooms, and library stacks, occupying a large portion of the center and upper floors. In 1973, an addition was put on the building, providing four additional floors for stack storage. The zigurat addition created the tiered top to the original building and increased the building to 258,876 square feet. The project consists of a complete renovation of the building and all building systems and adapting the building for office use in two phases. In the first of the two renovation phases, the Old Library Building will provide office and support space for two types of functions: permanent relocations for government agencies and temporary relocations for legislative functions currently operating in the Virginia Capitol Building. The second phase of the renovation will involve converting the legislative spaces into office space for governmental agencies, currently in leased space throughout the Richmond Metropolitan area.

Client

Virginia Department of General Services

Patrick Henry Building - Office of the VA Governor (formerly the Virginia State Library and Supreme Court)

1111 East Broad Street

Richmond VA 23219

Shirley McNutt, VCCO, VCO

804.786.4538

Completion Date

Actual: 2005

Project Costs

\$ 65,000,000 (Total Construction)

Type of Services

- Exterior Restoration

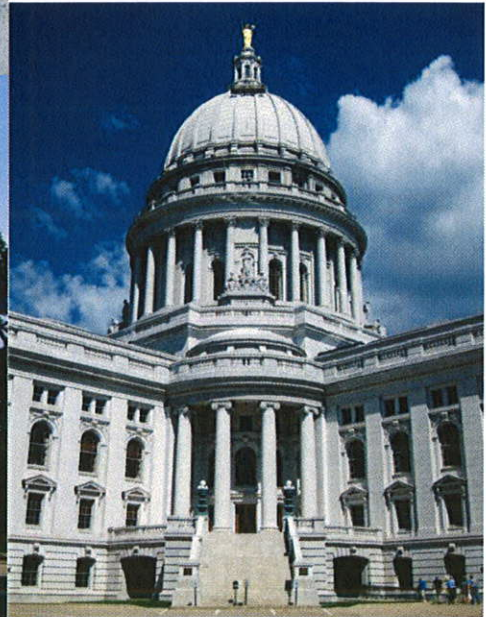
The exterior restoration included cleaning, pinning and dutchman repairs of limestone cladding on this steel framed State Supreme Court and Library building constructed in the late 1930's. Cleaning required testing for removal of copper and iron staining as well as accretions of pollution on the surface of the limestone panels and carved details.



Wisconsin State Capitol Restoration

Madison, WI

This comprehensive phased restoration of this 1904-12 building designed by George B Post was originally design by Cass Gilbert earlier in his career. The building remained occupied as each wing and the rotunda were completely renovated. The exterior renovation occurred in three separate phases of the lantern and dome stone cleaning and repair, followed by the dome drum peristyle and observation deck restoration completed with the cleaning and minor repairs of the exterior of each wing of the building. Exterior cleaning utilized multiple techniques including water misting, gommage, poultices to remove pollution and metal staining from carved and flat stones. Bird proofing included design and pinning solutions for netting systems. The Wisconsin Capitol exterior is constructed completely from Bethel White Granite.



Client

State of Wisconsin Department of
General Services
Wisconsin State Capitol
1 West Washington Ave
Madison WI 53701

Daniel Stephans, AIA
(608) 266.1417

Completion Date

Actual: 2004

Project Costs

\$63,000,000 - \$14,000,000 per Wing
(4 total) and \$6,200,000 for the
Rotunda

Type of Services

- Phased Exterior Renovation

Syngy World Headquarters

Chester, PA



Syngy, a 600-person software development company, relocated to The Chester Waterside Power Station, now known as The Wharf at Rivertown. Syngy selected the architectural firm to transform the massive industrial-age structure into their new world headquarters. The award-winning project turns an abandoned century-old neoclassical power station into an environment where this technology-based company can set the benchmark for industry leadership, corporate responsibility and community involvement. Named the “Best Adaptive Reuse Project of the Year” by the International Design Association, Philadelphia City Center Chapter in 2006, the architectural firm’s transformation of the aging power station has also been honored by the Philadelphia Preservation Alliance and received the 2006 Commonwealth Design Award from 10,000 Friends of Pennsylvania. The original power station was a monument to the production and marketing of electricity in the early 20th century, featuring advances in power generation and industrial construction. Accommodating today’s technology first required the removal of much of the equipment from the past to enable a design that facilitates future growth. The old Turbine Hall, with its 100-foot vaulted ceiling, now houses two new freestanding structures, incorporating a data center, cafeteria and conference center. The roofs of these structures serve as a plaza, an open patio and a multi-functional theater/trade show area. Overlooking Turbine Hall, in the historic Main Switch Room, is now an Executive Briefing Center, to provide prospective clients a view to the company’s data operations. Open office space, distinguished by unusually large floor plates, replaces an area previously occupied by boilers. The Coal Tower, where coal was once hoisted from barges then dropped into the tops of sifters and boilers, houses an employee fitness center and a residence for visiting executives.

Client

Syngy, Inc.
2501 Seaport Drive
Suite 100
Chester, PA 19013-1889
610-494-3300

Completion Date

Actual: 2002

Project Costs

Not available at the request of the Owner.

Types of Services

- Exterior Renovation
- Interior Renovation
- Mechanical Upgrades
- Office and Meeting Space Renovation
- Life Safety Improvements



Russell Senate Office Building Exterior Restoration Survey and Documents, Washington, DC

The Cannon House Office Building (CHOB) (built 1903-1908) is the oldest of the House office buildings and is a significant example of the Beaux Arts style of architecture. It occupies a site south of the Capitol bounded by Independence Avenue, First Street, New Jersey Avenue, and C Street. The CHOB was occupied in 1908 by the House of Representatives of the 60th Congress. The five-story building, with additional levels below grade, comprises 671,921 square feet in area.

The Russell Senate Office Building is the oldest of the United States Senate office buildings. Designed in the Beaux-Arts architectural style, it was built from 1903 to 1908, opened in 1909. It occupies a site north of the Capitol bounded by Constitution Avenue, First Street, Delaware Avenue, and C Street N.E. The Russell Building was occupied in 1909 by the Senate of the 61st Congress. The growth of staff and committees in the twenty years following its completion resulted in the addition of a fourth side, the First Street Wing, to the originally U-shaped building. Nathan Wyeth and Francis P. Sullivan were the consulting architects for the new wing, which was completed in 1933.



This project included survey, analysis, cleaning and repair with marble of similar color, petrographic type, water absorption rate, geological age and era of construction. Additionally this survey included analysis of pervious consolidation efforts on the Vermont White Danby at balustrades, recommendation and testing for the removal of both copper and iron staining. The scope included recommendations for removal of earlier bird proofing methods and the design of new bird proofing netting. Some of the recommended stone repairs, cleaning and bird proofing have been self performed by the AOC and Senate.

Ms. Pfahler served as the lead for the project establishing the process and methodologies and then reviewing and monitoring results. The team worked on the occupied building for survey coordinating with the Architect of the Capitol (AOC), the US Senate, and the US Capitol Police. Survey included coring samples for compression testing and analysis of feasibility of cleaning methodologies. The team kept all parties informed about progress and kept the AOC informed of technical findings and results as they impacted recommended solutions.

Client

Architect of the Capitol
Design Services Division
Cannon House Office Building
Constitution Avenue and
1st Street, NE
Washington, DC 20002

*Marty Shore, Preservation
Architect, Architect of the
Capitol, 202.226.6193,
mshore@aac.gov*

Completion Date

Actual: 2009 (Study)

Actual: 2011 (Contract Document)

Project Costs

\$1,233,834.00

Types of Services

- Historic Assessment
- Exterior Renovation
- Cost Estimating & Phasing

Stone Survey and Recommendations

The original street façades are constructed with gray New Hampshire granite and white Vermont marble; the east wing addition and parts of the north elevation use Mount Airy (New Carolina) granite and Georgia marble. The interior courtyard elevations have a Mount Airy (New Carolina) granite base (basement level) and a main section faced with Bedford (Indiana) limestone. Besides the stone façade survey, the scope of work includes survey of the terraces, stairs (with the exception of southwest entrance stairs), retaining walls and balustrades along areaways as well as other stone/granite balustrades at grade and terraces.

The granite was in generally good condition and required minimal work. The limestone was also in good condition and required cleaning and minor repairs. The marble is where the majority of the restoration and repair effort was recommended to include replacement, repairs and cleaning. Many of the modillions needed to be replaced as the condition of the stone had degraded to a point where consolidation was not recommended, while others were repaired. The entire building will require that a façade is surveyed per year, or the entire building is surveyed every five years to ensure that there are no changes to the integrity of the stone.

Balustrade Survey and Recommendations

The purpose of this survey was to update two surveys conducted in 2003 and 2004 by James Posey Associates and a team of consultants for the AOC and included in two volumes: “Study Report and Field Survey, Replace Balusters and Balustrades, Phase II for the Russell Senate Office Building”, Volume 1 dated February 22, 2005 and Volume 2 dated December 14, 2004. The scope was to assess if the conditions of the balustrades and balusters along the entire street perimeter of the building as well as the courtyard perimeter changed and, if so, to identify and document the respective changes. The limestone roof level balustrades were in good condition requiring only cleaning and minor repairs. The marble roof balustrades required at minimum cleaning and some repairs; few needed to be replaced as they presented structural problems. It was also recommended that some of the marble balusters at the roof level were rotated to present a less worn face and prolong their function. Many of the marble balustrades at the third floor level, particularly along the east and west façades, needed to be replaced.

Exterior Pointing and Caulking Survey and Recommendations

The purpose of this survey was to update the findings and recommendations included in the final report “Russell, Dirksen and Hart Senate Office Buildings and Senate Underground Garage: Pointing and Caulking Survey” prepared by Oehrlein & Associates Architects and dated September 29, 2000. The team agreed with the conclusions of this survey for the complete repointing of the marble exterior and limited pointing of the granite and limestone. All sealant needed to be removed at stone to stone joints and the locations pointed or left open as noted in the detail of the final report. The repointing mortar was selected to match the color, texture, and profile of the historic pointing, but to be softer to minimize damage of the stone, particularly of the marble units.

Bird Proofing System

The survey inspected the current system and the bird activity around the building and found that it has been detrimental to the marble, particularly where pins were located close to the edges of stone. A netting approach is recommended focused on the specific species to this region.

Survey and Recommendations for the Exterior Lighting and Metal Railings

The survey found the fixtures in fair condition and needed to be restored. These fixtures required cleaning and minor treatments to ensure gasketing to keep water and insects out of the globes. Restoration of metal light fixtures and railings was added to the scope after the building survey was completed. An estimated amount was included to restore and refinish all exterior lighting and handrails. The scope was defined from

photographs and limited at grade survey of the fixtures and railings. No serious degradation was noted for either feature limiting the scope to minor repairs, cleaning and finishing.

Cost Estimate and Phasing

The overall approach to completing the effort of restoring the exterior envelope consisted of a proposed phased project, with work divided per elevation to minimize the impact on the building occupants. This effort was projected at a cost, based on FY 2012 construction funding, of \$49,067,352. This assumes that there would be no gaps between phases and that a single general contractor and set of subcontractors would perform all of the work. The cost of the project could go up if different phasing and project delivery methods are selected.

Wood and Metal Windows



From survey and an energy evaluation the team determined that the existing original wood windows from the 1905 construction had a significant amount of life left in them, and with repair and general maintenance they may be retained and continue to function well and preserve the historic envelope of the building. The quality of the wood stock ensures that with repairs made the windows can continue to sustain the historic aesthetic and material of the building. Repairing the existing windows had the lowest embodied energy associated with its construction. Options were prepared to include all new windows, replacement of the glass with new insulated units and replacement of only broken glass units in kind. The calculations showed that the combination of restoring the existing sashes with new insulated units yielded the highest life cycle cost value and was selected by the Senate Committee and the Architect of the Capitol.



Cannon House Office Building Survey, Exterior Restoration and Interior Office Renovation for Life Safety Improvements

Washington, DC



The Cannon House Office Building (CHOB) (built 1903-1908) is the oldest of the House office buildings and is a significant example of the Beaux Arts style of architecture. It occupies a site south of the Capitol bounded by Independence Avenue,

First Street, New Jersey Avenue, and C Street. The CHOB was occupied in 1908 by the House of Representatives of the 60th Congress. The five-story building, with additional levels below grade, comprises 671,921 square feet in area.

Exterior Scope



The exterior stone project included the survey and contract documents to repair all the deteriorating stone modillions and the marble elements projecting from the elevations on these historically significant buildings and to renovate and improve exiting for the

US House of Representatives. Four primary issues appeared to be the cause of the stone deterioration outlined in this report: bulk moisture management and accumulation of pollution particulates; quality of stone; original stone detailing; and stone repair details and past maintenance. The overall recommendation was to adopt a conservative approach to stone treatment tailored for specific stone elements based on their condition and location. Solutions ranged from composite patch repairs, dutchman repairs, and full replacement for deteriorated stone elements undertaken for all cases where the condition of the stone affects the proper drainage of the water along the façade and could lead to moisture-related damage. These solutions were applied to elements in prominent locations that affect the public perception of the structure. For locations less critical, stone elements are being monitored to insure that they do not develop conditions that affect public safety. An immediate scope of work to pin 23 modillions identified as being in unsafe condition in lieu of netting was recommended, construction documents prepared and completed as an architect led design build emergency project.

Client

Architect of the Capitol
Design Services Division
Cannon House Office Building
Independence Avenue and 1st
Street, SE
Washington, DC 20003

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Architect, Architect of the
Capitol, 202.226.6193,
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Completion Date

Actual: 2009

Project Costs

Award for repairs \$108,000.00* no change orders were included in this project.

*Note - this award included \$12,000.00 for the initial Longworth Volute repairs to distribute the cost of the lift rental over multiple projects and expedite the Longworth schedule.

Types of Services

- Exterior Renovation
- Interior Renovation
- Mechanical Upgrades
- Office and Meeting Space Renovation
- Life Safety Improvements

The project began with the survey of all the marble modillions below the cornice at the street elevations of the CHOB as well as all the projecting features of the elevations: watercourses, columns and pilasters, window surround, balconies and balustrades, brackets and miscellaneous ornamental features. The cornice and of the decorative rows directly below the modillions were also observed and cracks or other deterioration were noted. The assessment was performed using a 150-foot boom lift. The building was surveyed during 12 days between February 10, 2009 and February 28, 2009. The survey included sounding of all the modillions using a plastic mallet, manually handling each stone, and taking digital photographs to record the existing condition at the time of the survey. Sounding of all architectural and decorative features projecting from the elevations, including capitals of columns and pilasters, watercourses, window surround and balusters, the fluted sections of the columns and pilasters was done selectively based on visual assessment and any cracks or veining noted in the stone.

Digital photos of all the modillions were taken as well as of areas in distress, where stone was cracking or disintegrating. Any loose material from the areas included in the scope was removed during the survey. Stone removed during the survey was used for petrographic analysis and consolidation testing. In addition to the field survey, the team researched the AOC Archives for original drawings and records of original construction. Original elevations and sections drawings were located; however no construction details were found. During construction the team provided review of all submittals for pinning and dutchman solutions, on site review of each step in the pinning process to ensure proper preparation and execution of all repairs. The team coordinated regular onsite meetings and provided written reports and photographs for the Architect.

Interior Scope

The CHOB did not comply with the current applicable codes for occupant egress. An alternate egress approach was developed for the CHOB. The Alternate Life Safety Approach provided a horizontal exit with cross corridor doors at each of the corner stairs and the stairs adjacent to the Rotunda, effectively creating five vertical fire compartments for the CHOB extending from the Basement Level to the Attic Level; and from exterior wall to exterior wall, which will prevent fire and smoke spread into other vertical compartments. The team surveyed existing conditions to ensure that all of the compartment walls would retain their ratings vertically through the building regardless of construction or infrastructure conditions. The team prepared solutions to providing corridor separations in the historically significant primary corridors that were approved by the House and the Architect of the Capitol. With this baseline information the team prepared a detailed set of documents in this aging landmark to provide the required separations without renovation to modification to the existing building layout or systems configurations. All changes were consistent with the Secretary of Interior Standards.

