

**Expression of Interest**  
**Redesign & Enhancement**  
**North Plaza Fountain**  
**West Virginia State Capitol Complex**  
**Charleston, WV**



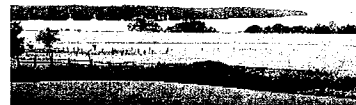
**Baker**

**Credentials**

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WV PURCHASING  
DIVISION



Heritage Landscapes I.L.C.  
Preservation Landscape Architects & Planners



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  
 GSD096437

PAGE  
 1

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

RFQ COPY  
 TYPE NAME/ADDRESS HERE  
**Baker**  
 MICHAEL BAKER JR., INC.  
 5088 West Washington Street  
 Charleston, WV 25313

DEPARTMENT OF ADMINISTRATION  
 GENERAL SERVICES DIVISION  
 BUILDING 1  
 1900 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25305 304-558-3517

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
02/05/2009				

BID OPENING DATE: 03/05/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-07		
A&E SERVICES: REDESIGN/ENHANCEMENT: N PLAZA FOUNTAIN						
EXPRESSION OF INTEREST (EOI)						
<p>THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF GENERAL SERVICES, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES FOR THE REBUILDING AND ENHANCEMENTS TO THE FOUNTAIN AND APPURTENANCES LOCATED ON THE NORTH PLAZA OF THE WEST VIRGINIA STATE CAPITOL COMPLEX IN CHARLESTON, WEST VIRGINIA. THE FOUNTAIN IS LOCATED ADJACENT TO BUILDING ONE (MAIN CAPITOL).</p> <p>TECHNCIAL QUESTIONS CONCERNING THIS EXPRESSION OF INTEREST MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA FAX AT 304-558-4115 OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV. DEADLINE FOR ALL TECHNICAL QUESTIONS IS 02/20/2009 AT THE CLOSE OF BUSINESS. ALL TECHNICAL QUESTIONS RECEIVED, IF ANY, WILL BE ANSWERED BY ADDENDUM AFTER THE DEADLINE HAS LAPSED.</p> <p>QUESTIONS CONCERNING THE ACTUAL PROCESS BY WHICH A VENDOR MAY SUBMIT AN EXPRESSION OF INTEREST TO THE STATE ARE NOT CONSIDERED TO BE TECHNICAL QUESTIONS AND MAY BE SUBMITTED AT ANY TIME PRIOR TO THE BID OPENING AND IN ANY FORMAT.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Russell E. Hall</i>	TELEPHONE (304) 769-0821	DATE March 5, 2009
TITLE Asst. Vice President	FEIN 251228638	ADDRESS CHANGES TO BE NOTED ABOVE

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



State of West Virginia  
 Department of Administration  
 Purchasing Division  
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 25305 304-558-3517

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02/05/2009				

BID OPENING DATE: 03/05/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT MAY BE DEEMED NULL AND VOID, AND TERMINATED 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> <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.: GSD096437</p> <p>EOI OPENING DATE: 03/05/2009</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR EOI:</p>						

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SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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State of West Virginia  
 Department of Administration  
 Purchasing Division  
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 CHARLESTON, WV  
 25305 304-558-3517

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/05/2009				

BID OPENING DATE: 03/05/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
				(304) 769-0822		
CONTACT PERSON (PLEASE PRINT CLEARLY):						
R. Todd Schoolcraft, ASLA, PLA						
***** THIS IS THE END OF RFQ GSD096437 ***** TOTAL: _____						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE \_\_\_\_\_ TELEPHONE \_\_\_\_\_ DATE \_\_\_\_\_

TITLE \_\_\_\_\_ FEIN \_\_\_\_\_ ADDRESS CHANGES TO BE NOTED ABOVE

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

STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

### VENDOR OWING A DEBT TO THE STATE:

*West Virginia Code* §5A-3-10a provides that: 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.

### PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code*. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code* and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the *West Virginia Code* may take place before their work on the public improvement is begun.

### ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

### LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

### CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

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.

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

Authorized Signature: 

Date: March 5, 2009



Expression of Interest for A & E Services  
Redesign/Enhancement of North Plaza Fountain  
West Virginia Capitol

Michael Baker Jr. Inc. & Heritage Landscapes LLC

5 March 2009

Department of Administration  
Purchasing Division  
Building 15  
2019 Washington Street, East  
Charleston WV 25305-0130  
Attention: Krista Ferrell, Senior Buyer

Re: Expression of Interest A & E Services Redesign/Enhancement of North Plaza Fountain  
West Virginia Capitol

Dear Krista Ferrell and Project Selection Committee Members,

We appreciate the opportunity to respond to the Request for Expression of Interest in the redesign and enhancement of the North Plaza Fountain. This fountain and plaza were originally constructed under plans by Cass Gilbert Jr. and have been renovated and altered since that time. The central, round fountain in this plaza responds to the proportions of the space, and echoes the curving forms of the dome. Michael Baker Jr., Charleston WV office, has teamed with Heritage Landscapes 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 rebuild and enhance the North Plaza water fountain feature. The purpose of the project is to design, approve and prepare bid documents for the renewal of this fountain and surrounding area and provide the completed ACAD documents and specifications to the Owner.

Michael Baker Jr. and Heritage Landscapes are ideally suited for this renovation and enhancement project. Principals and project staff from both firms are familiar with the North Plaza and fountain having recently completed historic research, a survey of utilities and an existing conditions assessment of the West Virginia Capitol landscape as a part of the master planning project that is currently underway. Our proposed team for the North Plaza Fountain projects is:

- Michael Baker Jr. Inc, Survey with Civil, Mechanical and Structural Engineering and Landscape Architecture and local project management, Russell Hall, PE, Project Principal and Todd Schoolcraft, ASLA, Project Manager
- Heritage Landscapes LLC, for Fountain and Plaza redesign, Preservation Landscape Architecture and project management, Patricia M. O'Donnell, FASLA, AICP, Principal, and Peter Viteretto, ASLA, Project Manager
- Roman Fountains, for technical review and refinement of fountain systems water supply, pump and filtration, details and specifications, Bryan Had, ME



Expression of Interest for A & E Services  
Redesign/Enhancement of North Plaza Fountain  
West Virginia Capitol  
  
Michael Baker Jr. Inc. & Heritage Landscapes LLC

These team members bring all the technical and design skills required to this work and have worked together effectively. Heritage Landscapes, Roman Fountains and Robert Silman Associates have completed successful projects on fountain and water system renovations. With these diverse areas of expertise, this team will bring all the required professional and technical skills to the project.

The overall approach to this project would follow these steps:

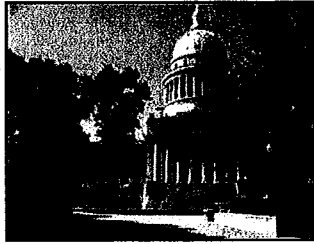
- Clarify North Plaza Fountain program details articulating the mission/vision stated in the request
- Understand the background, history and evolution
- Document the existing conditions and related issues
- Explore and present a range of appropriate alternatives
- Work with the Owner to select and refine the proposed design
- Develop the required construction project documents

In our multiple related projects we have identified three logical components that will also apply to the North Plaza Fountain project. Each component requires a sequential approach to developing the knowledge base and proceeding with the design and construction documents process, following the general steps listed above.

#### **Fountain Basin**

The basin today is a concrete bowl with a center jet and a limestone coping. The cover photograph on this submittal, taken in July 2008, shows that the jet was working at that time. A field inspection would be undertaken to review the condition of the basin, look for failures and leakage points and assess the condition of the concrete, surface sealant, caulk, waterstops and limestone copings. Basic field observation would likely be augmented by some simple testing such as filling with water and observing stability, chipping off flaked surface coatings, probing caulk and waterstops. A focused report on the conditions of each element would be developed to record field findings. Further investigations may be warranted and would be outlined in the memo.

Once conditions are fully known, a range of approaches to their resolutions can be proposed and discussed. For example if the basin has failed there are several approaches to reline it to form a water barrier. Products to be tested for application to this project may include which include paint on cementitious coating, elastomeric spray-on coating and a heavy mil thickness pool liner. If the structural integrity of the basin is in question, another approach is to carefully remove the limestone coating and store it for reinstallation; demolish and remove the basin and, in coordination with mechanicals systems, repour a 5,000 psi concrete basin with waterstops; reinstall the stone coping. If repair is the proposed direction the fountain form would remain intact, if repoured with the coping to be reused depth and profile may be altered, if the coping is not reused, other design approaches could be explored. For example in the reconstruction of the swimming tank at Bamboo Brook, the water depth was reduced to 9 inches as a public safety regulation response in order to avoid perimeter fencing at the pool edge. As the conditions are fully vetted the alternatives can be fully explored and discussed with a direction determined.



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West Virginia Capitol

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### **Mechanical Equipment**

Fountain mechanical systems include electric supply and water supply piping with backflow preventers, water drains conforming to local health and safety regulations, efficient pumps and water cleansing filters, as well as valves, fittings and spray nozzles at the jet. While there are some standard elements, technology continues to improve in terms of reducing equipment bulk and improving function. Determining all the details of the fountain mechanical system as it exists would be an initial step. Field review and interviews with maintenance staff about the system would be followed by clear reporting. Once conditions are known options of retaining and repairing the system or replacing components can be vetted. Repair can be a viable option. For the recent work on the Mary Schenley fountain a trench was opened to see the piping, parts were replaced and the constricted water flow was resolved. Once a trench is opened replacement components could be made more accessible by sleeving them in large pipes that can be reached at the vault end for ease of future maintenance and repair. The size, position and detailing of the vault itself would be explored. At the Highland Park Fountain a large below grade vault with a ladder, equipment space, drains and movement space to carry out repairs was created. Replacement is also worth considering. At the Lombard Street Fountain, Patterson Park, the pump vault was abandoned and the new basin formed with a deeper pocket for a submersible pump. This relatively lightweight, inexpensive pump was used during the season and removed and stored over the winter. A useful range of options will be explored for the repair and replacement of the mechanical systems. We fully recognize that the systems work will include verification and coordination of utilities, documentation of all utility tie-ins and any relocation of utilities with an accompanying ACAD record for the as-built work.

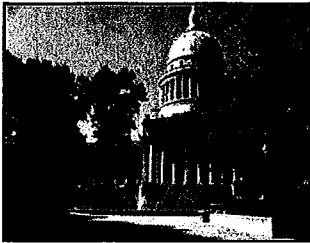
When the fountain systems approach is clear and document begin another team member will participate. As an added value service, Roman Fountains, experts in this field who worked with Heritage Landscapes on the complicated detailing at the Highland Park Welcome Entry, will work with the team to review and refine the plumbing and mechanical systems and parts selection details.

### **North Plaza**

The North Plaza area that surrounds the central fountain basin includes mature oak trees planted in the 1950s, soils, small scale plantings, the plaza paving, cast stone seating and tables, retaining walls and concrete walks leading to the plaza area from buildings 1, 2 and 3 and from the north side. All of these elements were recently reviewed in the field condition field. The conditions of hardscape and furnishings were generally good to fair, while the oak trees were judged as good, fair and poor. They would be studied at the outset of this project again with the scope and objectives in mind.

The relevant functions of the plaza area are constant use for pedestrian movements around the campus, lunch and break time use, various types and sizes of events and emergency access by first responders. It has been noted that the pavements in this area are not strong enough to support heavy vehicles, such as fire trucks, and loads may be a factor in the design process. In addition comments about the circuitous routing for pedestrians have been made. The redesign may be able to overcome existing barriers to universal access at the below 5% gradient. Informed by the historic evolution the redesign may consider a return to the Cass Gilbert Jr. design as constructed and documented as one option. The grace and simplicity, durability and flexibility of the North Plaza would all be considered in the redesign process.






Expression of Interest for A & E Services  
 Redesign/Enhancement of North Plaza Fountain  
 West Virginia Capitol  
 Michael Baker Jr. Inc. & Heritage Landscapes LLC


State of West Virginia  
 General Services Division

Redesign/Enhancement of North Plaza Fountain



**Michael Baker Jr. Inc.**  
**Baker**

**Heritage Landscapes LLC**



*Project Principal*  
 Russell Hall, PE

*Principal*  
 Patricia M. O'Donnell, FASLA, AICP

*Project Manager*  
 Todd Schoolcraft, ASLA

**Roman Fountains**  
 Bryan Had, ME

*Project Manager*  
 Peter F. Viteretto, ASLA

**Engineering Staff**  
 Louis Mittelman, PE, PMP, LEED AP-QAQC  
 Todd Dorius, PE-MEP  
 Patrick Fogarty, PE, PS, Civil/Structural Engi.  
 Rachel Sharp, PE, Civil/Structural Engineer

**Survey**  
 Jason Smithson, PS

**Landscape Architect**  
 Laura Cox, ASLA

**Preservation Landscape Architects**  
 Carrie A. Mardorf, ASLA  
 Kimball Erdman, ASLA  
 Sarah L. Gaulty, MSHP



Expression of Interest for A & E Services  
Redesign/Enhancement of North Plaza Fountain  
West Virginia Capitol

Michael Baker Jr. Inc. & Heritage Landscapes LLC

**Assurances**

The team has reviewed the terms and conditions of this Expression of Interest as set forth by the Purchasing Division and will fully comply with those terms and conditions. It is fully understood that the vendor relationship is that of an independent contractor. The term of contract is 12 months. 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. 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 no lobbying effort. The required forms are included in the binder for this EOI response.

**Closing**

The Michael Baker Jr. and Heritage Landscapes team is pleased to submit this Expression of Interest in the project at the West Virginia Capitol to address the redesign and enhancement of the North Plaza Fountain. We appreciate your consideration and would be pleased to respond to any questions and to participate in the interview process.

On behalf of the team,

Russell Hall, PE, Project Principal  
Michael Baker Jr. Inc.

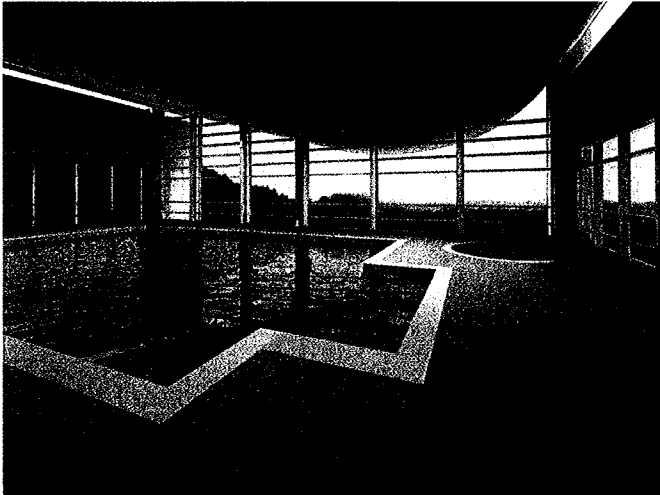
Patricia M. O'Donnell, FASLA, AICP, Principal  
Heritage Landscapes LLC

# Baker Introduction

The West Virginia Department of Administration, General Services is seeking a highly qualified team experienced in program management, planning, and design of the renovation of the north plaza fountain for the West Virginia State Capitol Complex that will be both functional and architecturally compatible with the existing facilities. Michael Baker Jr., Inc. (Baker) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in establishing a professional relationship with the West Virginia Department of Administration, General Services.

To begin this process, we are already very familiar with the State Capitol complex due to our involvement with the master planning of the Capitol campus. During this time we have been able to better define the scope of the project and identify key issues. From the information collected, Baker has assembled a "Dream Team" of consultants specialized in master planning of these types of projects. Baker has formed an association with the renowned practice of Heritage Landscapes, LLC, a historic landscape architecture and planning firm with a wealth of experience in historic fountains, capitol campuses, and specific experience with Cass Gilbert designs. We also have included Roman Fountains as a team member to provide mechanical, electrical and plumbing expertise as it relates to the fountain mechanics, specifically.

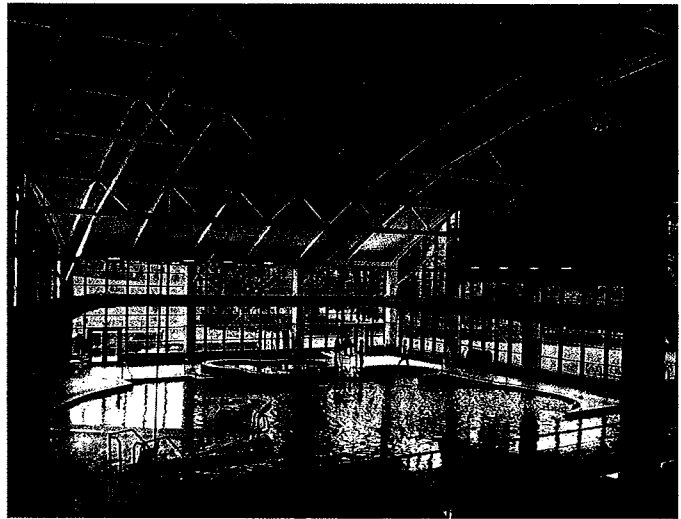
***"...and we are extremely interested in establishing a professional relationship with the West Virginia Department of Administration, General Services."***



*Pool Fitness Center, Institute of Scientific Research, Fairmont, WV*

## Baker Corporate Overview

Baker is a wholly owned subsidiary of the Michael Baker Corporation (a publicly owned company traded on the American Stock Exchange), employs over 4,700 people in 50 offices world-wide, and ranks in the top 10% of the nation's top 500 engineering firms. Baker provides consulting, engineering, architecture, landscape architecture, operations, and technical services worldwide. The firm has a national practice with 34 offices throughout the U.S. from



*West Virginia University Student Recreation Center*

which to serve our domestic clients. Our multi-national architectural/engineering services result in over \$400M gross revenue per year. Since our founding in 1940, Baker has compiled an outstanding record of transportation engineering design achievements including more than 1,000 bridges of every description and over 100,000 miles of roadway. We are committed to using computer technology and provide services in the areas of Water Resources, Environmental Design and Permitting, Geographic Information Systems, GPS and Field Data Collection, Infrastructure Management, Database Development, Computer/Web Programming, and CADD.

Baker has extensive resources and the required qualifications to provide planning and design services for the West Virginia Department of Military Affairs and Public Safety - Division of Protective Services for this important project. We have nationally recognized experts with the technical experience necessary for this assignment. In addition, Baker's team of experienced professionals have an established record of delivering quality work products to our clients, on schedule and within budget.

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

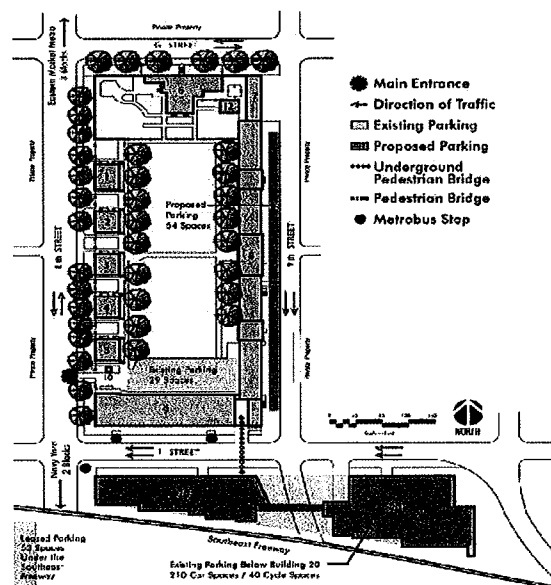
- Nationally recognized expertise in Program Management Assignments
- Facilities (Buildings, Access, Parking, Site Development) Plan Preparation
- Full range of Public Safety Services
- Graphic Design Skills (CADD)
- Coordination with State and Federal Agencies, as required

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

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

Baker routinely provides architectural/engineering services and project management for the design of municipal facilities, and the associated construction oversight when required. Project assignments have included maintenance facilities, garage facilities, emergency services facilities, and office buildings. Services for these assignments have included planning, surveying, mapping, right of way services, geotechnical design, architecture, civil, mechanical, electrical, plumbing and structural engineering, public safety programming, permitting and cost estimating. Specific project elements have included, architecture, landscaping, retainage structures, access road design, utility adjustment/relocation, storm drainage, water, and sewer connections, site design, parking, fire protection design, pump stations, electrical duct banks, gas mains, fiber optic communication systems, and corrosion control systems, HVAC design, oil/water separators, and security systems.

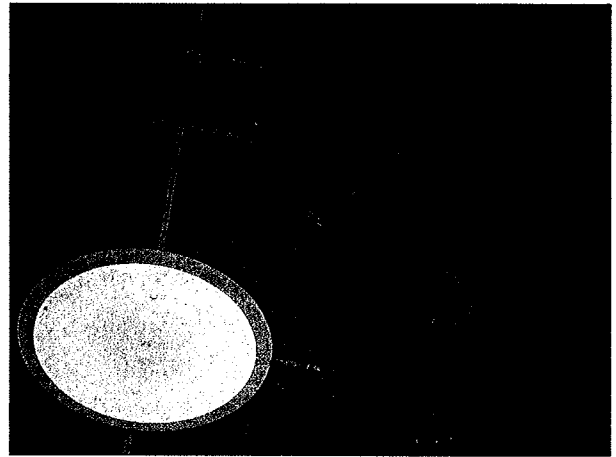
- Program Management
- Conceptual Planning
- Design Charrette
- Coordination and Public Involvement
- Sub-surface Investigation
- Land Development Planning
- Building Facility Siting
- Architecture and MEP
- Screening and Noise Abatement
- Landscape Architecture
- Permitting
- Construction Cost Estimating
- Right of Way and Easements



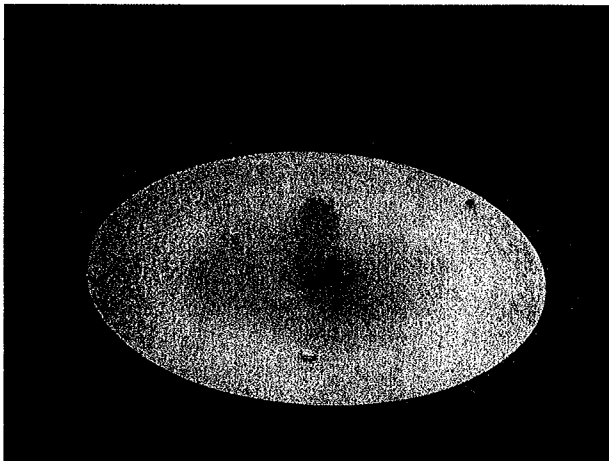
Naval Facilities Planning, Chesapeake, Virginia

- 
- Pre-Bid Meeting
  - Bidding and Contracting
  - Construction Inspection Services

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



*Partial aerial view of North Plaza and Fountain*



*Aerial view of North Plaza Fountain*

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## Related Prior Experience

The following Project Descriptions illustrate Team Baker's related prior experience. We have included examples of building facilities and master plans for campuses, government facilities, municipalities and other organizations for both public and private sector clients at various locations across the nation.

Many of these projects are LEED® and/or SPiRiT (Sustainable Project Rating Tool) rated. We believe these projects show the depth of our expertise in all aspects of planning, engineering and architecture. While we propose to spearhead our activities from our West Virginia operation, these diverse project locations are meant to emphasize our **One Baker** philosophy, which simply means that the West Virginia Department of Administration - General Services will have access to the human resources, expertise, and technology of all our Team Baker locations as particular needs arise.

***"...the West Virginia Department of Administration, General Services will have access to the human resources, expertise, and technology of all Baker locations should the need arise."***

Mr. R. Todd Schoolcraft, PLA, ASLA, our proposed project manager has provided program management services on engineering/architecture projects in West Virginia for the past 18 years. His experience includes numerous urban planning and public space improvements for both public sector and private clients, elements of which are similar to those which will be required for this project.

In addition to this project experience, members of Baker's Charleston office have established relationships with the numerous funding and regulatory agencies including:

- Federal Highway Administration (FHWA)
- USDA Rural Utility Service
- US Department of Commerce E.D.A.
- US Environmental Protection Agency
- WV Department of Environmental Protection
- WV Department of Transportation / Division of Highways
- HUD Small Cities Block Grant
- HUD Community Development Block Grant

# Bessemer Court at Station Square Commercial Development

Pittsburgh, Pennsylvania

The centerpiece of Station Square's development, Bessemer Court, is a riverfront restaurant, nightclub, and festival venue. It features 57,000 square feet of retail, restaurant, and entertainment venues overlooking the best views of downtown Pittsburgh. Bessemer Court, which opened in the summer of 2002, includes Bar Louie, Funny Bone Comedy Club, Hard Rock Cafe, Joe's Crab Shack, and Red Star Tavern. In addition to serving as the entrance to the Riverwalk (paved riverside trail) and The Landing (marina), the plaza features café-style seating, trees, and park benches, forming the backdrop for street theater, live entertainment, and pushcart retailers. It also is home to a 100-foot, state-of-the-art water fountain (40-60 foot sprays) with multi-colored lighting and dancing waters set to music.

In conjunction with the Bessemer Court development, a Riverwalk/Artifact Park, and an overhead bridge to a marina have also been constructed on adjoining properties to enhance the usable area and accessibility to the new development.

Baker was retained to perform engineering services associated with the development of the Bessemer Court area and portions of the Riverwalk/Artifact Park. During the project, Baker provided a wide range of engineering studies, permitting, surveying, final site layout and engineering design, preparation of construction plans and specifications, and construction phase services to facilitate development of the property.

Specific engineering services provided by Baker for each project are outlined below:

## Bessemer Court Project

- Base mapping for the project area – topographic map with existing conditions
- Property boundary plan and survey control points
- ALTA / ACSM land title survey plan
- Master Plan update
- Investigation of existing utilities
- Civil / site design – site layout plan, grading, utilities, erosion control, pavement, storm water management
- Site work construction plans and technical specifications
- Agency submissions and coordination
- Construction-phase services

## Client

Forest City Enterprises, Inc.  
1100 Terminal Tower  
50 Public Square  
Cleveland, OH 44113-2203

*Will Voegele*  
216-416-3230

## Completion Date

Estimated: 2004  
Actual: 2004

## Project Costs

\$279,385 (Fee)

## Baker's Role

- Base / topo mapping
- Property boundary plan
- ALTA / ACSM land title survey
- Master Plan update
- Document existing utilities
- Civil / site design
- Site layout plan
- Grading plan
- Utilities plan
- Erosion control plan
- Pavement design
- Stormwater management
- Technical specifications
- Geotechnical investigation
- Structural design
- Culvert tunnel design
- Retaining wall design
- Agency submissions
- Bidding / construction admin

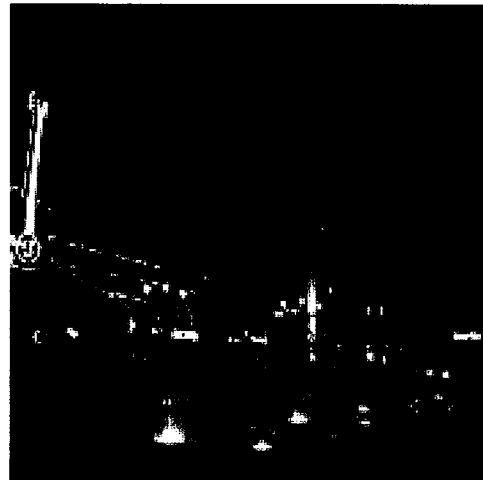
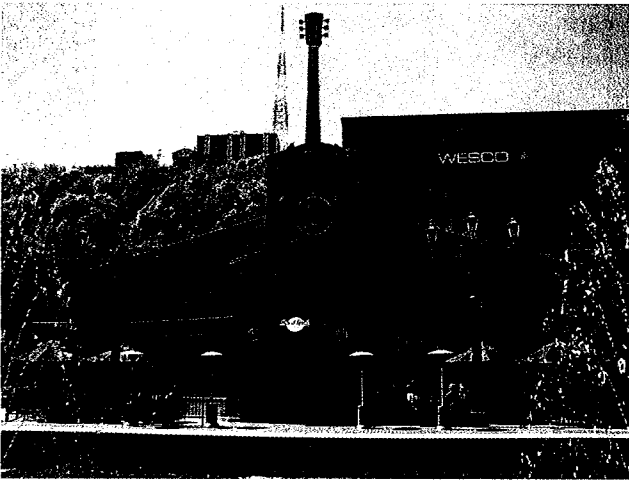


## Riverwalk / Artifact Park

- Base mapping – topographic map with existing conditions
- Field surveys
- Master plan update
- Civil / site design – site layout plan, grading, utilities, erosion control, pavement, stormwater management
- Site work construction plans and technical specifications
- Agency submissions and coordination
- Bid-phase support services
- Construction-phase services – oversight and administration

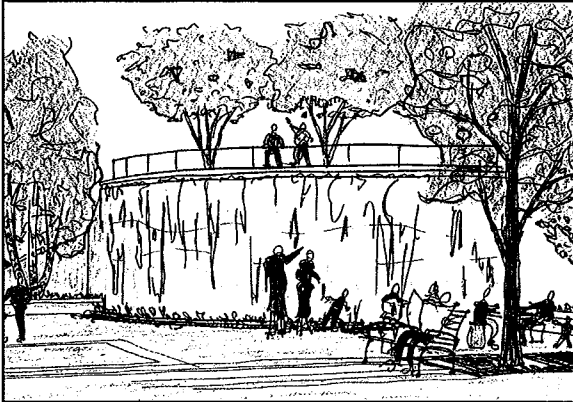
## Boardwalk / Access Tunnel

- Geotechnical investigation
- Structural design of culvert tunnel and associated retaining walls
- Construction-phase services



# Starburst Plaza

Washington, DC



The "Starburst Plaza" is a complicated junction of six roadways - H Street NE, Florida Avenue NE, Bladensburg Road NE, Maryland Avenue NE, Benning Road NE, and 15th Street NE. Baker provided design and public outreach services for the District Department (DDOT) of Transportation following the completion of the H Street NE Transportation and Streetscape Study completed by Baker in 2004. Baker worked closely with the local community, government agencies, and the client to develop a design for the plaza including the design of a major fountain, the selection of a public artist, and the integration the artwork into the programmed open space.

A key factor in the success of the plaza's design was the public engagement process. The process involved two separate advisory boards consisting of local business leaders, civic leaders, government officials, and other pertinent stakeholders. This process provided a venue for the community to express its concerns and needs to the client. In addition, the process allowed the design team to educate participants about the value of open space and jointly develop a plan that works for the community and DDOT.

The vision for the plaza is as a destination for the neighborhood and a gateway to the U.S. Capitol, as well as a catalyst for future development. The plaza will reflect the history and character of the local community while also providing convenience and comfort for transit users.

## Client

DC Department of Transportation  
2000 14th Street, NW  
7th Floor  
Washington, DC 20009-4473

*Zahra Dorriz, P.E.*  
Project Manager  
202-671-4653

*Karina Ricks*  
202-671-2542

## Completion Date

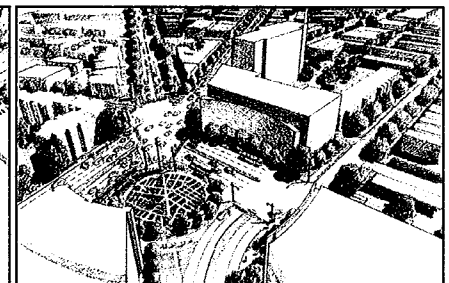
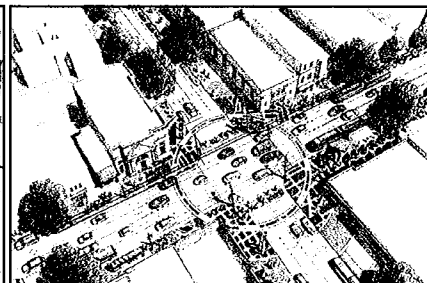
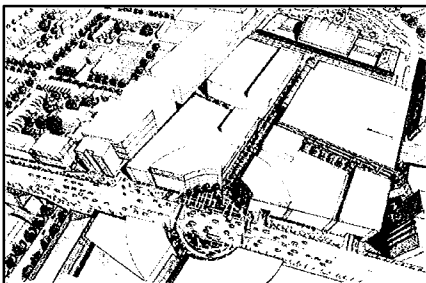
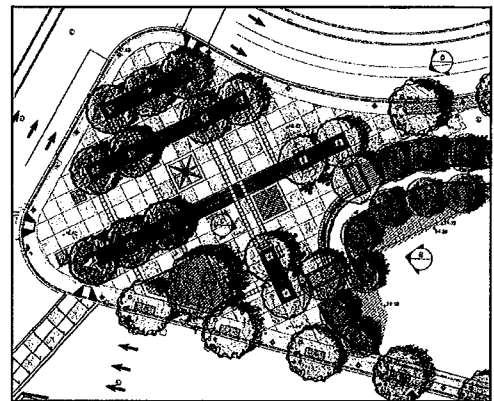
Estimated: 2007  
Actual: 2005

## Project Costs

\$193,623 (Fee)

## Baker's Role

- Landscape Architecture
- Urban Design
- Site Planning
- Place Making
- Public Engagement



# North Shore Riverfront Park

Pittsburgh, Pennsylvania

The North Shore Riverfront Park project consists of a new public park along the Ohio and Allegheny Rivers. The project involved a multi-discipline civil, structural, transportation, electrical and landscape architectural design team for a large urban riverfront park. Park design included specialty water features with recirculating waterfalls, pedestrian bridges, piers, commercial and private river traffic docking facilities, utility relocations, new utilities, public art, and landscaping. The project presented all the challenges of design in a highly urbanized area: coordination with numerous underground utilities, relocation of facilities to accommodate construction, water and sewer lines for future development and coordination with permitting agencies. Additional challenges included mitigation of project impacts to Threatened and Endangered Species river habitat; design coordination with concurrent Steelers Stadium, PNC Park (baseball stadium), and North Shore Infrastructure design projects; and a fast-track design schedule.

Baker participated in public design meetings with user groups, schematic phase design, design development, and construction document preparation.

## Client

Sports and Exhibition Authority of Pittsburgh and Allegheny County  
Regional Resource Center  
425 Sixth Avenue, Suite 2750  
Pittsburgh, PA 15219

## Completion Date

Estimated: 2004

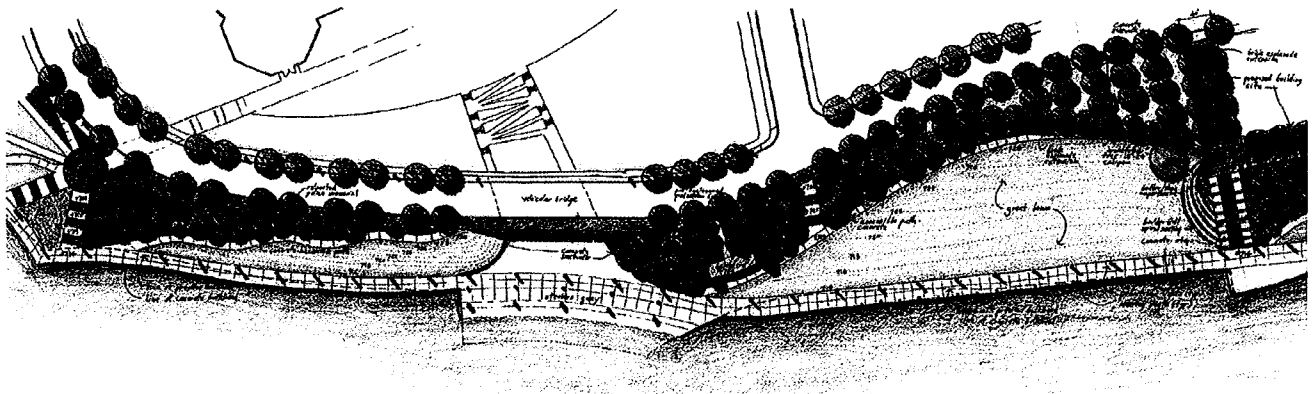
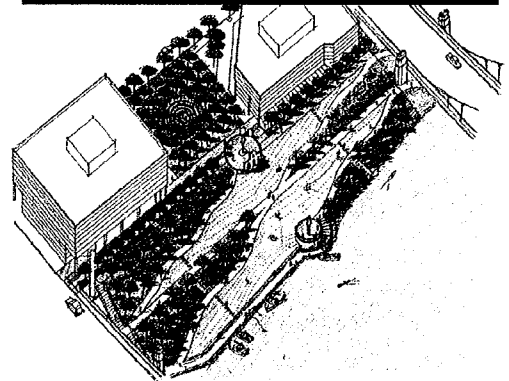
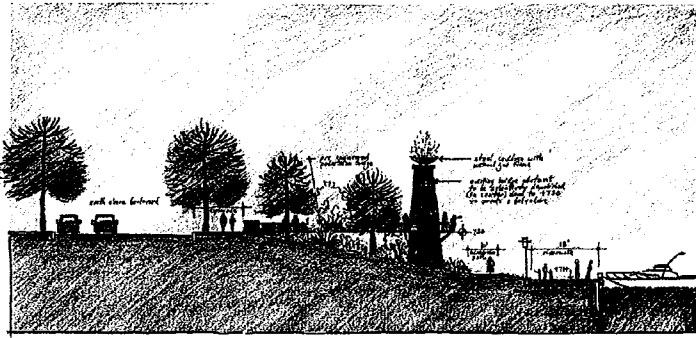
Actual: 2004

## Project Costs

\$475,788 (Fee)

## Baker's Role

- Engineering Design
- Permitting
- Preparation of Construction Plans and Specifications
- Construction Phase Services



# Tempe Town Lake Marina/Lagoon Design

Tempe, Arizona



Baker played an integral part in the development of the City of Tempe's Rio Salado Town Lake, having performed three projects associated with the development. The Marina

project was comprised of a lagoon with a large water feature and boat docks, a boat launch ramp, a boat storage facility and parking lot facilities. In-depth knowledge of project issues and experience in working with the Flood Control District of Maricopa County and FEMA regulations were important factors in completing the work and enabling the lake to fill on schedule.

Baker was responsible for providing development of the site plan as well as final design of the civil and structural engineering elements of the project, including drainage, the design of a water circulation system for the fountain, and a cofferdam for portions of the construction. Civil and structural design services, including specialized engineering for levee and floodwalls were provided. Baker reviewed existing hydrologic analyses of the project area and designed the levee penetrations. Final construction plans, specifications and cost estimates were prepared for modifications to the existing storm drain outfall and the three levee penetrations (including two new box culverts) and a partial penetration for access to the future marina.

A portion of the Salt River North Levee and an existing reinforced concrete box culvert were removed due to the proposed lagoon and the boat launch ramp. Detention basins



were constructed to retain the runoff from the off-site area north of the freeway and the on-site drainage before metering into the lagoon. An interactive water circulation system was built to improve the water quality for the marina lagoon. This circulation system was integrated with a water feature 'Water Muse', designed by a local artist. Up to five cubic feet of water per second can be pumped from the Town Lake through an underground pipe to begin

## Client

City of Tempe, Arizona  
31 East Fifth Street  
Tempe, AZ 85280

*James Bond*  
Principal Engineer  
480-350-8897

## Completion Date

Estimated: 2004  
Actual: 2004

## Project Costs

\$3,000,000 (Construction)  
\$720,952 (Fee)

## Baker's Role

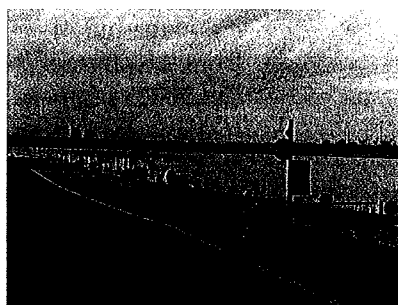
- Civil Engineering
- Development of Site Plan
- Structural Engineering
- Reviewed Existing Hydraulic Analyses
- Levee Lowering Hydraulic Modeling
- Final Construction Plans and Specifications
- Developed Condition Letter of Map Revision (CLOMR)
- Levee Penetration (Civil and Structural Design)
- Marina Design
- Utility Coordination
- Agency Coordination
- Cost Estimating

the journey through the Water Muse. Water emerges from underground into a quiet source pool located at the top of the amphitheater. From the source pool it flows down an aerating waterfall into the main sluiceway. Visitors to the site can walk across metal grating that spans the sluiceway to try their hand at controlling the flow of water through the site. Hand operated wheels can be turned by children or adults to open and close water gates that direct the flow into underground pipes. The water feature was designed to echo the traditions of water distribution found throughout the Salt River Valley and to encourage contemplative interaction with flowing water.

Substantial utility and agency coordination were vital to the success of this two-phase project. The Flood Control District of Maricopa County was consulted for compliance of levee protection and penetration to the lagoon as part of the Phase 1 portion of this two-year construction project. Salvage, storage, and reconstruction of the National Weather Station and artistic plaza constructed with Transportation Enhancement Funds were coordinated between both project construction phases.

One acre of critical right-of-way was acquired from the Arizona Department of Transportation to accommodate parking, the loop road, and the relocation of the multi-use trail. Special design and coordination was required with the Salt River Project to comply with safety with the 230 Kv overhead power lines poles to avoid the arcing of power to boat masts, light poles, sluice gates, and drilling equipment while installing dry wells during the construction. The 54" sewer line, owned by the City of Phoenix, required new lining installation prior to the installation of the cast-in-place lagoon walls. The Maricopa Association of Government was consulted for relocation of the multi-use trail. National Pollutant Discharge Elimination Systems EPA permitting and Maricopa County Dust Control Permits were obtained for construction activities. Coordination with Papago Stables was required during construction to not impact this business operation. The construction and maintenance of a cofferdam was of prime importance to allow installation of the lagoon walls and clay liner. Considerable cost and environmental concerns/mitigation of draining the lake were avoided through the use of the cofferdam.

The marina was designed to accommodate rising floodwaters and to drain the lake without removal of boats. In addition, the design also incorporated a floating dock concept, which can adapt to the fluctuating water levels. Upland amenities and retail space surround the marina, providing attractions and services to the public.



# David L. Lawrence Convention Center Infrastructure

Pittsburgh, Pennsylvania

Baker provided both professional construction management and construction inspection services on this high profile, fast-track project. The project was quite unique since the majority of the infrastructure work that Baker was involved with lies directly beneath the construction of the new David L. Lawrence Convention Center. Coordination between the two projects was critical, particularly since multiple contractors were sharing the same work areas. The Infrastructure was completed in three phases. Descriptions of the Phases are as follows:

Phase I - \$8.5 million construction value; 4.2 month construction duration; reconstruction of Fort Duquesne Boulevard and Tenth Street Bypass; realignment of Tenth Street; 1000 LF tangent caisson wall; concrete retaining wall new signalization and lighting; pin pile and "H" pile bridge foundation; landscaping.

Phase II - \$6 million estimated construction value; six-month construction duration; new Tenth Street Bypass pre-cast concrete bridge; realignment of Tenth Street; reconstruction of French Street and Garrison Place; water feature pump room; new signalization and lighting.

Phase III - \$10.3 million estimated construction value; six-month construction duration; reconstruction of the Tenth Street Bypass, Eleventh Street and Penn Avenue; construction of a new pedestrian walk and bridge including water feature; new signalization and lighting; landscaping.

## Client

Sports and Exhibition Authority of  
Pittsburgh and Allegheny County  
Regional Resource Center  
425 Sixth Avenue, Suite 2750  
Pittsburgh, PA 15219

*Doug Straley*

Project Executive

412-393-0207

## Completion Date

Estimated: 2006

Actual: 2004

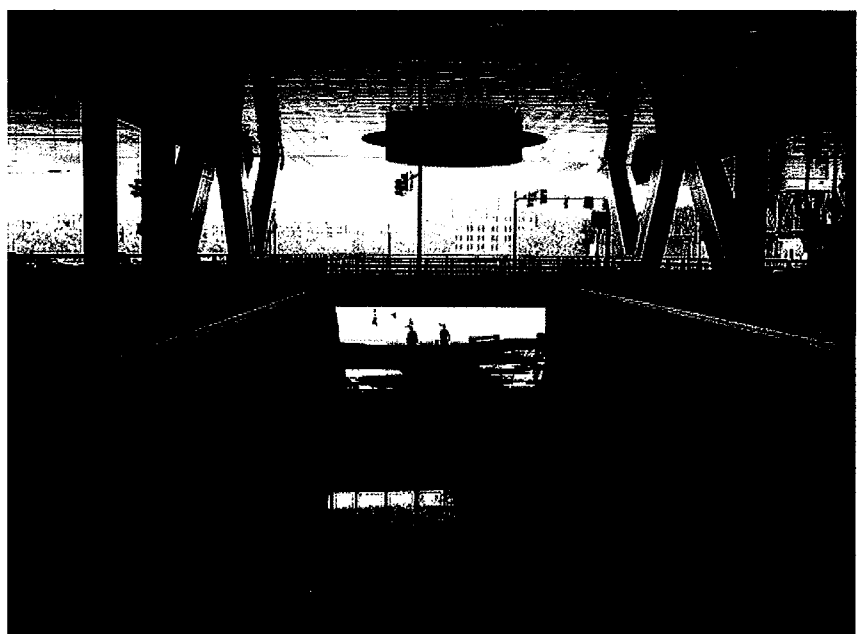
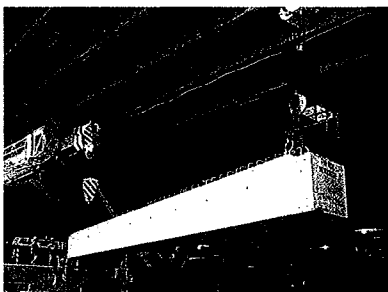
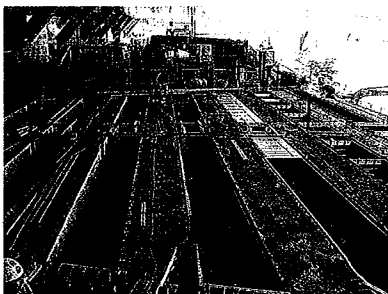
## Project Costs

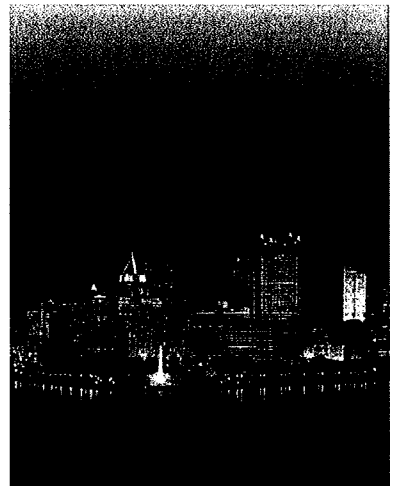
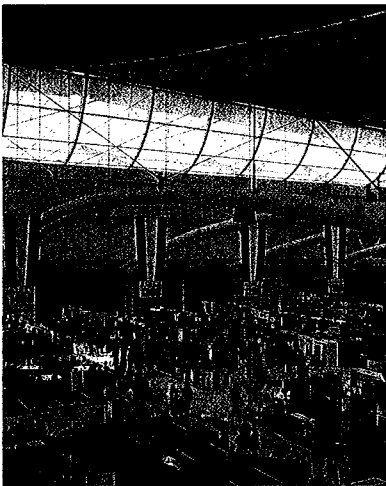
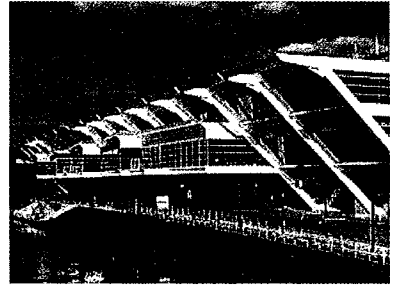
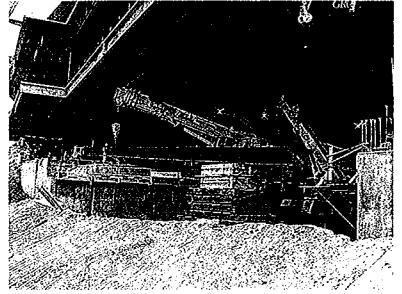
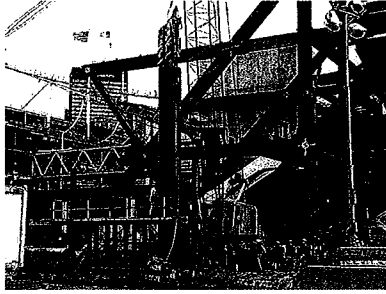
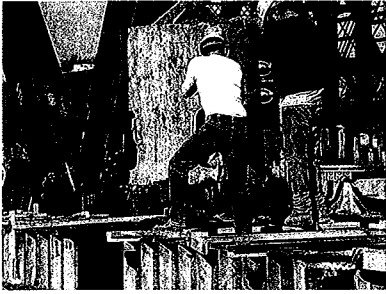
\$22,000,000 (Construction)

\$2,944,876 (Fee)

## Baker's Role

- Construction Management and Construction Inspection





# Glendale Downtown Plaza Bead Museum and Civic Center Annex Glendale, AZ

The City of Glendale is one of the fastest growing cities in the United States. Baker was selected to provide our planning, design and streetscape expertise to the development of a new plaza and adjacent facilities. The plaza and building designs are based on the city's primary goal - to create an environment with a small town atmosphere, yet able to provide a solid foundation towards the economic growth of downtown Glendale.

The schedule called for the design and completion of construction within 18 months of design team selection. A plan and process was developed to accomplish the work that involved very close coordination and collaboration with City of Glendale and Glendale Economic Development representatives to assure that their needs and concerns were incorporated into the project development.

The design solutions were developed utilizing information from a variety of sources. Baker conducted on-site interviews of facility managers and select department managers to gather information on operations and space requirements. Questionnaires were distributed to gather statistics such as number of anticipated conference attendees and museum visitors at peak periods of the year.

A collaborative design charrette was accomplished with City of Glendale participation. Several preliminary schemes were generated for each facility and the plaza. This intense process resulted in the development of final concepts within only a few days.

## Client

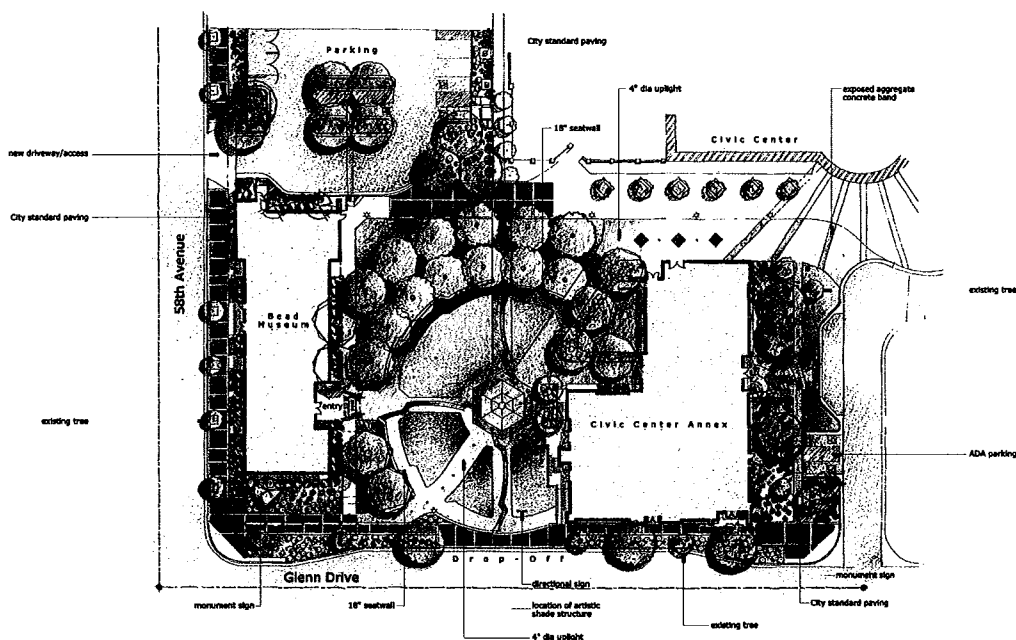
City of Glendale

## Location

Glendale, Arizona

## Baker's Role

- Architectural Programming
- Space Planning
- Conceptual Layouts
- Cost Estimating
- Cost/Benefit Analysis
- Architecture
- Civil Engineering
- Construction Administration





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# Resumes

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

## Assistant Vice President

### General Qualifications

Mr. Hall currently serves as an Assistant Vice President of Michael Baker Jr., Inc., as well as Office Manager of our Charleston, West Virginia office. He is an experienced transportation engineer who has been involved in numerous bridge and highway design projects in West Virginia for over 22 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He also has over seven 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

#### **I-64/U.S. 35 Interchange Study, I-64 to WV 34 Interchange, Putnam County, West Virginia.**

*West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge.

Responsible for oversight of project finances, schedules and quality control. This project under first phase was for the study of two interchange sites on I-64, Cow Creek and Crooked Creek. This project under the final phase was for the complete preparation of right of way plans and construction plans for a new location of US 35 from I-64 (Crooked Creek location) to and including an interchange with WV 34.

#### **Gypsy Bridge, Gypsy Bridge over West Fork River, Gypsy, West Virginia.**

*West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. This project involved the study, design and preparation of construction contract plans and related documents for the replacement of the Gypsy Bridge carrying US 19 over West Fork River and located approximately 0.12 miles north of the intersection of US 19 and Harrison CR 19/63 for a distance of approximately 0.4 miles.

**NPDES Permit Review, Boone County, West Virginia.** *Consol, Inc.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker developed a geologic model in SurvCADD, utilizing the core hole data provided by the client for the approximately 11,500 acre Miller Creek Project Area in Mingo County and completed a reserve analysis for the entire area. In addition, Baker developed a general

**Years with Baker:** 3

**Years with Other Firms:** 19

#### **Education**

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

#### **Professional Registrations**

Professional Engineer, West Virginia, 1990, 10947

Professional Surveyor, West Virginia, 1996, 1878

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mine plan and layout for a variety of permitting options for the client and subsequently completed an overall AOC+ spoil optimization for the initial permit area to be developed by the client.

**On-Call Engineering/Architectural Services, Yeager Airport (CRW), Charleston, West Virginia.** *Central West Virginia Regional Airport Authority.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker provided multi-discipline, on-call services to the Central West Virginia Regional Airport Authority (CWVRAA), which owns and operates Yeager Airport (CRW). Baker provided a full range of services to CWVRAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, surveying, and construction management.

**WV Enhanced Hazard Mitigation Plan, Charleston, West Virginia.** *West Virginia Division of Homeland Security and Emergency Management.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker is preparing an Enhanced Hazard Mitigation plan for the state of West Virginia to comply with the requirements of the Disaster Mitigation Act of 2000 (DMA 2000) and 44 CFR 201-5.

**Veteran's Memorial Six Year Bridge Inspection, Route 22 over the Ohio River.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker was selected by the West Virginia Division of Highways (WVDOH) to provide bridge inspection and load rating services per NBIS and WVDOH standards. The project is 6 years in length with an inspection required every year from 2005 through 2010.

**Fort Pleasant Farms Two Lane Road Design, Moorefield, West Virginia.** *Fort Pleasant Farms, Inc.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. This project involved the study, design and final construction plan development for a new two-lane access road approximately 1500' in length. This access road was designed to connect a commercial/residential development to the Moorefield Interchange on Corridor H in Moorefield, West Virginia.

**Fort Pleasant Access Road Project, Moorefield, West Virginia.** *Fort Pleasant Farms, Inc.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker prepared contract construction plans and related documents for a 3-lane access road connecting Corridor H to private property in Moorefield, West Virginia.

**Corridor D over Ohio River Post Design Services, Washington, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker provided shop drawing review services for the bridge over the Ohio River and Blennerhassett Island.

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

**Design Manual for Deep and Shallow Foundations, Statewide, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of

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project finances, schedules and quality control. The goal of this project is to develop geotechnical factors for LRFD, as found in AASHTO Specifications and update other geotechnical guidelines for the WVDOT/DOH Bridge Design Manual.

**Drainage Manual, Charleston, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker prepared a revised Drainage Manual for the West Virginia Department of Highways. The manual was completely rewritten based on the AASHTO Model Drainage Manual.

**Fort Henry Six-Year Bridge Inspection, Wheeling, West Virginia.** *West Virginia Department of Transportation, Division of Highways, District 6.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker has performed annual condition inspections over a six-year period for the Fort Henry Bridge. The first inspection performed in 2001 was an in-depth inspection, which included cleaning and testing. The remaining five yearly inspections are of varying magnitude with Interim Inspections alternating with Periodic Inspections. The Interim Inspections highlight critical (defective) areas only while the Periodic Inspections require inspection of the entire bridge.

**Flood Protection Options Report-Bonham Elementary School, Kanawha County, West Virginia.** *West Virginia Division of Homeland Security and Emergency Management.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker was retained by the West Virginia Division of Homeland Security and Emergency Management to prepare a report to address flood protection options for Bonham Elementary School in Kanawha County, West Virginia.

**Appalachian Corridor H, Section 6, E. Hardy County 220/8 to WV 55 Interchange, Moorefield, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. This project involved the study, design and final construction plan development for a new roadway beginning 0.6 miles southeast of Hardy County 220/8 and continuing eastward 6.6 miles to an interchange with WV 55. This project included an interchange with the Moorefield Bypass, a ramp connector road south of the corridor west from the possible future Moorefield Bypass to a proposed reconstruction of US 220, a closure study of the floodwall on the north end of Moorefield near this Section 6 proposed highway location, six bridges and completion of an interchange (two ramps) with WV 55 on the east end of the project.

**Consol-Miller Creek, Consol, Inc.** Principle-in-Charge. Oversight of project finances, schedule and quality control.

#### ***PRIOR-BAKER PROJECT EXPERIENCE***

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

- **WV 9, Charles Town Bypass to Virginia State Line, Jefferson County** – The project provided for the preparation of construction and right of way plans for an approximately five mile section of 4-lane highway. This project included the design of two interchanges, four bridges, and multiple intersections and access roads. This project was divided into seven construction contracts.
- **Fetterman Truss Bridge, Taylor County** – The project provided for the preparation of construction and right of way plans for the replacement of the existing Fetterman Bridge in Grafton, West

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Virginia. This project included the design of a multiple span curved bridge over the Tygart River and a 200,000 gallon CSO tank.

- **Corridor H, Hardy County** – The project provided for the preparation of construction and right of way plans for a two mile section of 4-lane divided highway. This project included the design of one interchange, two bridges, and multiple intersections and access roads. This project was divided into three construction contracts.
- **Wellington Bridge, Roane County** – The project provided for the preparation of construction and right-of-way plans for the replacement of the existing Wellington Bridge over Spring Creek.
- **I-64 Widening, Putnam County** – This project provided for the preparation of a design report and contract plans for the upgrade of I-64 to six-lane for the proposed US 35 interchange to the existing six-lane section at the 25<sup>th</sup> Street Overpass Bridge. Neff is a subconsultant to Site-Blauvelt and is responsible for surveys, right-of-way plans, all bridges except the Kanawha River bridge crossing, and the St. Albans interchange. The project is in the final stage of the design report phase. The design report phase assesses the engineering and environmental impacts of multiple alignments and interchange configurations.
- **US 35/I-64 Interchange, Putnam** – Neff was a subconsultant to Baker responsible for all right-of-way plan development.
- **New River Parkway, Summers and Raleigh counties** – Neff is a subconsultant to Kimley-Horn responsible for all right-of-way plan development.
- **US 52, King Coal Highway, US 119 Mingo County to US 460 Mercer County** – Neff was program manager for the entire corridor. The responsibilities include all engineering design review and approval; develop and maintain schedules; and coordinate with all resource agencies, the WVDOH, and the public.

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

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

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

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

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

# R. Todd Schoolcraft, PLA, ASLA

## *Project Manager*

### **General Qualifications**

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

### **Experience**

**Lost Creek Train Depot Improvements, Lost Creek, West Virginia.** *Town of Lost Creek and the Harrison County Commission.* Project Landscape Architect. Responsible for concept planning design and document quality oversight. The Town of Lost Creek retained Baker for the planning and design of the rehabilitation of a historic train depot adjacent to the Harrison County Rail Trail. The existing building was constructed of non-dimensional timber framing and board with batten siding. The perimeter posts were originally buried below grade and the primary floor beams rested on the ground. Over the years, surface drainage had migrated under the building and deteriorated many of the posts and portions of the beams. Baker prepared a plan to raise the structure, make repairs to the deteriorated timber, excavate and place the concrete foundation system, then lower the structure to rest on the new foundation. The perimeter concrete wall will raise the finish floor elevation by 12" and provide a barrier against storm water intrusion. Unit costs and additive/deductive alternates were used in the bidding of the project, allowing the Town flexibility in final bid award to meet the extensive Transportation Enhancement Grant funding limitations. Baker will provide construction administration and inspection services as well as periodic site review during construction.

**Years with Baker:** 2

**Years with Other Firms:** 16

#### **Education**

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

#### **Registrations**

- PLA, West Virginia, 1995
- RLA, North Carolina, 2008
- PLA, Ohio, 2002
- CLARB Certified, 2001

#### **Professional Affiliations**

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

**Parsons City-Wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia.** *Parsons Parks Board.* Project Manager. Responsible for master planning design and document quality oversight. 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.

**Ararat River Greenway Parks Projects, Mount Airy, North Carolina.** *City of Mount Airy, North Carolina.* Project Landscape Architect. Responsible for design and document quality oversight. Baker prepared construction documents and provided 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. The final park, Tharrington Park, will include a premier soccer field, additional soccer fields to create a soccer complex, access road and parking, fitness trail, restroom facility, concessions, and maintenance building.

**Valley Park Sidewalk Improvements Project, Hurricane, West Virginia.** *Putnam County Parks and Recreation Commission.* Project Manager. Responsible for design and document quality oversight. 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 a unique colored stamping of natural elements found in West Virginia, such as bear and raccoon tracks, leaves and flowers. Baker provided construction administration and periodic inspection services, as well.

**City of Parsons Sidewalk Improvements Project, Parsons, West Virginia.** *City of Parsons.* Project Manager. Responsible for design and document quality oversight. Baker performed complete planning, design, and construction management services for new sidewalks and storm sewer improvements for various locations in historic Parsons, Tucker County. The improvements included concrete sidewalks with adjacent 2-foot lawn panels, new curbing, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, storm water improvements, benches, trash receptacles, and landscaping. The final design made accommodations for original wrought-iron fencing at various locations, and a historic "carriage step" from the turn of the century. Baker is currently providing construction administration and periodic site review during construction.

**WV Route 62 Phase II Streetscape Improvements, Mason, West Virginia.** *City of Mason.* Project Landscape Architect. Responsible for detailed design and construction document preparation. Baker performed complete detailed design, construction document preparation and construction management services for new sidewalks and storm sewer improvements the Mason Phase II Streetscape Project. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, storm sewer improvements, benches and trash receptacles. Baker will soon provide construction administration and inspection services.

**Maple Avenue Streetscape, Moorefield, West Virginia.** *City of Moorefield.* Project Landscape Architect. Responsible for detailed design and construction document preparation. Baker performed complete detailed design, construction document preparation and construction management services for

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new sidewalks and storm sewer improvements for the Maple Avenue Streetscape Project, Moorefield, WV. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA curb ramps with truncated domes, crosswalks, storm sewer improvements, and landscaping.

**Kanawha & Putnam County Bicycle – Pedestrian Master Plan, South Charleston, West Virginia.** *Regional Intergovernmental Council (RIC).* Project Landscape Architect. Responsible for field inventory and analysis, and plan preparation and review. Baker performed a two-phase bicycle and pedestrian circulation study for Kanawha and Putnam Counties. Under Phase I, 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 including traffic volumes and comprehensive plan documents and performed a broad base public outreach effort to identify bicycle and pedestrian issues in Kanawha and Putnam Counties. Under the Phase II effort, Baker incorporated the inventories into a series of public meetings, garnering input from each community and the client, and then summarizing the findings in the Plan. Based on these efforts, a list of recommended improvements to the 2-county area was proposed to improve bicycle and pedestrian safety and user-friendliness throughout the project area.

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

#### **Non-Baker Project Experience**

**Huntington Museum of Art Sensory Trail and Butterfly Garden, Huntington, West Virginia.** *Huntington Museum of Art.* Project Manager. Responsible for field inventory and analysis, base map preparation, concept development, detailed design, and construction documents preparation. The Huntington Museum of Art was awarded a TE grant, as well as an endowment from a private donor, to construct a butterfly garden and the first known handicap accessible sensory trail in WV. The garden was planted with extensive butterfly-attracting plants and flowers, and plants that support larvae development of butterflies. A stone planter with seatwalls, and a contemplation fountain were also included in the garden. The trail was adapted for use by the blind and the hearing impaired, with textured pavement and brail interpretive signage. Unique features along the trail included a sound attenuation device, olfactory sensory hood, rock sculpture, and a trail surface constructed of native soils and Polypavement.

**Tamarack Arts Center, Beckley, West Virginia.** *West Virginia Parkways Authority.* Project Landscape Architect. Responsible for conceptual design, detailed design, construction documents, and construction administration. Was instrumental in the design and construction of all site-civil and landscape architectural improvements and amenities for the Tamarack Arts Center. Improvements included extensive landscaping, festival promenade, brick plaza spaces, geyser fountain at main entry, center courtyard with bubbler fountains, children's playground, natural stone seatwalls, public and employee parking, loading dock, nature trail through nearby woods. Storm sewer, lighting, and grading improvements were also included in the final design.

**Brooke-Hancock County Veterans Memorial Park, Weirton, West Virginia.** *Brooke County Commission and Brooke-Hancock County Veterans Memorial, Inc.* Project Manager. Responsible for conceptual design, detailed design, construction documents, bidding, and construction administration. Developed a concept plan for the expansion of the Veterans Memorial Park in Weirton. Improvements to the Park included brick sidewalks, parking, lawn area, Vietnam-era fighter jet display, WWII naval anchor, and a 911 Twin Towers display. The 911 Monument consisted of a contemplation garden with a bench and sculpture constructed from steel salvaged from the aftermath of the Twin Towers site in New York City. Landscaping, lighting, and grading improvements were also included in the final design.



**Summers and Christopher Streets Streetscape Concept Master Plan, Charleston, West Virginia.** *Charleston Urban Renewal Authority (CURA).* Project Manager. Responsible for field inventory and analysis, conceptual design and cost estimate preparation. Developed design and concept plans for the development of new streetscape improvements for three blocks of Summers Street and one block of Christopher Street in Charleston's Downtown Village District. Amenities included new concrete sidewalks with brick appointments, brick crosswalks, granite curbing, period light fixtures, wrought-iron benches and trash receptacles, overhead utility relocations, storm sewer improvements, and landscaping. Also prepared cost opinions in unit cost format for use in funding applications.

**Star City Phase II Streetscape and Trailhead Improvements, Star City, West Virginia.** *Town of Star City.* Project Manager. Responsible for conceptual design, detailed design, construction documents, bidding, and construction administration. Developed schematic concepts, complete detailed design and construction documents, and provided bidding and construction management services for a phase II streetscape and trailhead improvements project for Star City, Monongalia County, WV. Project consisted of five blocks of streetscapes along the scenic riverfront of the Monongahela River, tying into the Caperton Trail, a destination rail-trail in northern West Virginia. Amenities included concrete sidewalks with brick accents, architectural brick gravity retaining wall with lighting niches, "gas light" period light fixtures, concrete curb and gutter, driveway curb cuts, ADA accessible curb ramps with truncated dome specialty pavers, crosswalks, storm sewer improvements, benches, trash receptacles and landscaping.

**Sophia Main Street Improvements, Sophia, West Virginia.** *Town of Sophia.* Project Manager. Responsible for conceptual design, detailed design, construction documents, bidding, and construction administration. Prepared concept designs for public input meetings, then further developed detailed design and construction documents, and provided bidding and construction management services for sidewalk improvements and streetscape enhancements for the Town of Sophia, Raleigh County, WV. Project consisted of four blocks of city street improvements to include concrete sidewalk replacement, period light fixtures, concrete curbing, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, storm sewer improvements, benches, trash receptacles and landscaping.

**Hale Street Morrison Building Streetscape Repair, Charleston, West Virginia.** *R. Brawley Tracy, Esq., Owner.* Project Landscape Architect. Responsible for field inventory and analysis, conceptual design and cost estimate preparation. Developed design and concept plans for the repair of an existing streetscape along the Morrison Building of Hale Street in Charleston's Downtown Village District. Amenities included new stamped colored concrete sidewalks, granite curbing, period light fixtures, and wrought-iron trash receptacles. The stamped colored concrete was specified to match the existing red bricks found in the sidewalks throughout Charleston, while also providing a watertight solution for a leaky basement that protruded two feet under the existing sidewalks.

#### **Offices Held**

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

#### **Honors and Awards**

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

# Louis Mittelman, P.E., PMP, LEED® AP

QA/QC Manager

## General Qualifications

Mr. Mittelman is a program/project manager with experience in the government, military, power, pharmaceutical, industrial, commercial, and educational/institutional industries. He is responsible for all Baker work within the Department of Energy. Program/Project management responsibilities include proposal preparation, contract negotiations, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and oversight, change management, risk management, document management, Sarbanes-Oxley compliance, project closeout, and business development.

Mr. Mittelman's management experience includes private and public projects and programs, utilizing design/bid/build and design/build approaches with cost-plus and lump-sum contracts. Industries/building types include laboratories, office buildings, industrial manufacturing/processes, pharmaceutical manufacturing, research and development, guardhouses, kitchens, shipping and receiving, recreation, warehouses, locker rooms, schools, banks, computer centers, military facilities, district heating/cooling-central utility plants, utilities, barracks, and aviation.

His engineering experience includes design of HVAC and utility systems from the conceptual phase through construction and validation, including design basis, equipment procurement, and subcontracts. Industry and technology experience includes desiccant dehumidification, bag-in/bag-out HEPA filters, explosion relief, explosion suppression, process heating and cooling systems, cold rooms, fuel oil, natural gas, steam and condensate, heating hot water and glycol, chilled water, condenser water, compressed air, nitrogen, custom air handling units, VAV fume hoods, dust collection, heat recovery, Class 100 to Class 100,000 clean rooms, containment systems, and noise control.

## Experience

**Production Support Complex, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker prepared design/build RFP documents for a 50,000-square-foot, two-story administrative office building that includes a complete kitchen serving up to 1,500 people and dining area, and an emergency control center. The server area offers a range of "a la carte" stations for self-service. Beyond the fixed seating area in the dining room, there is a multi-purpose space that accommodates up to 300 people. Additionally, partitions are provided that can create smaller dining or conference spaces. The Emergency Control Center (ECC), located near the secure campus gate, is two-stories with a mezzanine, and is equipped to accommodate up to 70 personnel. In

Years with Baker: 8

Years with Other Firms: 19

### Education

B.S., 1985, Architectural Engineering, The Pennsylvania State University

A.S., 1982, Solar Heating & Cooling Technology, The Pennsylvania State University

### Licenses/Certifications

LEED® Accredited Professional, 2006, 1705

Project Management Professional (PMP), 2006, 318455

Professional Engineer - Mechanical, Idaho, 2004, P-11332

Professional Engineer, Pennsylvania, 1988, PE037429E

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the event of extreme weather or other emergency, internal and external communications will be maintained in this space where any situation can be safely monitored and controlled.

**Renovations to Cask Shipping and Receiving Building, Confidential Location.** *Confidential Client.* Program Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker provided complete design and cost estimating services for a major reconfiguration and renovation of this 22,000-square-foot heavy-industrial production facility with a 90-foot tall high-bay. The design includes demolition of multiple existing platforms and overhead crane, and addition of a new railroad spur, gates, fences, utility relocations, structural platforms, massive (W33) floor inserts, articulating catwalks/platforms, installation of a new 310-ton overhead crane, seismic restraints, process and material flow, HEPA exhaust, recirculating (radioactive) water systems, hydraulic systems, and associated electrical modifications. Baker's team prepared a LEED® scorecard and sustainable design report. The Department of Energy requires projects of this size to meet the Gold rating.

**Renovation of Historic Building 39, Fort McNair, Washington, DC.** *U.S. Army Corps of Engineers, Baltimore District.* Technical Manager. Responsible for performing an intra-disciplinary quality review of the mechanical engineering design. Baker provided services for renovation of Building 39, a 40,000 square foot building designed by the renowned American architectural firm of McKim, Mead, and White which was constructed in 1903. The renovation updated the existing building to provide sophisticated computer and office space, a SCIF (a secure space), a Command Center executive suite, an emergency operations center, and provost marshal offices.

**Radioactive Liquid Processing System, Title II Design, Confidential Site, Idaho.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker worked with the user and the Nuclear Services Facility Planning Yard (NSFPY) in Newport News to complete the detail of the design of a radioactive liquid processing system. The design included an impervious containment reservoir/curb, PLC controls, processing tanks, filters, pumps, and piping distribution system, connection to existing systems, and 3D CAD design.

**Office Building 100 and Parking Structure, Airside Business Park, Moon Township, Pennsylvania.** *Airside Business Park, L.P.* Technical Manager. Responsibilities included intra-discipline quality control reviews and mechanical engineering design of the HVAC system, as well as start-up and commissioning. This new 117,000-square-foot design/build-to-suit office building was custom-designed to serve as a corporate headquarters, yet offers the built-in flexibility to accommodate potential new tenants in the future. A training facility is provided, as well as a suite of conference rooms on each floor. The combined use of both movable glass and solid wall partitions enable quick and easy reconfiguration of spaces. Under-floor power and communications cabling and carpet squares allow easy reconfiguration of networks and electrical outlets. Phones run from a data network, so that each phone is addressable through programming and extensions can be redirected without moving wires. Separate air handlers are provided for each floor, to accommodate future usage by multiple tenants. A parking deck was constructed to accommodate the office park tenants. The three-level 260-vehicle structure, constructed above ground-level surface parking for 150 vehicles, was designed using precast concrete panels to match the office building design.

**NRF Utility Expansion, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker designed

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expansions to campus utilities to the northeast quadrant of the site for future planned development, including the following: sanitary sewer extension; stormwater drainage; 2,500 volt 4x4 power distribution duct banks; 2x4 communication duct bank; domestic water system; and firewater distribution piping. The utilities expansion also included: Idaho Department of Environmental Quality permits; duplex VFD sanitary and triplex VFD stormwater lift stations; tie-in to and relocation of existing sanitary force main; manholes; fire hydrants; and multiple utility crossings and encasements.

**West Busway, Pittsburgh, Pennsylvania.** *Port Authority of Allegheny County.* Mechanical Engineer. Responsible for providing mechanical engineering consultation. Baker served as the General Architectural and Engineering Consultant, providing Program Management, Design Services, and Construction Phase Services for the West Busway, a five-mile, two-lane buses only roadway. The busway runs from Carnegie to downtown Pittsburgh and includes an interchange with the Parkway West (Interstate 376), a rehabilitated and widened railroad tunnel, six stations, and four park-n-ride lots adjacent to the facility. The total project budget was \$326 million.

**West Substation Replacement, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker prepared the conceptual design and cost estimates for the replacement of the west electrical substation at an Extended Core Facility. The work included: installation of new substation equipment, associated structural support, and associated amenities; installation of raceways, pull boxes, junction boxes, and supports; installation and connection of the medium voltage main feeder cables from the new substation to manhole #1; testing the new substation and putting it into service; power management system communication wiring; lightning protection system; and a life-cycle-cost analysis. Replacement transformers were increased in capacity from 750 to 1,000 kVA each.

**West Ruislip Family Housing, London, England.** *Naval Facilities Engineering Command, Atlantic Division.* Technical Manager. Responsible for performing an intra-disciplinary quality review of the mechanical engineering design. Located in the United Kingdom, this project included comprehensive design and construction documentation for a total of 69 single family homes. Nearby historic buildings and traditional English landscapes were the inspiration for renovation of these two military family housing neighborhoods.

**West Cargo City Hardstand Deicing System, Philadelphia International Airport (PHL), Philadelphia, Pennsylvania.** *US Airways.* Technical Manager. Responsible for performing an intra-disciplinary quality review of the mechanical engineering design. In an exclusive design/build teaming arrangement, Baker designed the Phase 3A Deicing System for Philadelphia International Airport. US Airways selected the patented Ice Wolf system for installation at Philadelphia due to the cost savings and reduction in environmental impacts. The project included the installation of twelve "hardstand" deicing stations. Each deicing station includes two hardstand booms with enclosed cab for the operators; each hardstand is provided with a boom enclosure in which in-line mixing of the deicing fluids occurs. The two booms serving each deicing station work in tandem to ensure the same mix is used on each plane. Also included in the project is a central pump house for distributing fluids to each boom, and an interface with a central control room for monitoring the deicing operations. The central control room proceeded as a separate project phase; the previous project phases included site preparation work for the pad and the extension of underground utilities to the vicinity of the deicing booms. Baker coordinated these activities to assure compatibility with the boom design requirements.

**Subgrade Evaluation, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk

management, document management, Sarbanes-Oxley compliance, and project closeout. Baker evaluated the existing parking lot subgrade material to determine suitability for repaving or replacement to eliminate future asphalt failures.

**Design/Build RFP Documents for the Central Office Building, Confidential Site, Idaho.** *Confidential Client.* Project Manager. Responsibilities included project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, document management, Sarbanes-Oxley compliance, and project closeout. Baker prepared Design/Build Request for Proposal documents, an energy conservation report, and cost estimate for construction of a \$4 million office building. The structure will be a 33,000-square-foot, three- or four-story office building to accommodate up to 200 personnel.

**Design/Build Addition to Communication Equipment Building 246 & Renovation & Repair of Critical Power Systems, Fort Belvoir, Virginia.** *U.S. Army, Fort Belvoir.* Technical Manager. Responsible for performing an intra-disciplinary quality review of the mechanical engineering design. The 20,000-gross-square-foot Communications Equipment Building (CEB) is an 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.

**Architectural/Engineering Services, Air Force Center for Environmental Excellence, Worldwide.** *Air Force Center for Environmental Excellence.* Engineering Manager. Responsibilities included coordination of structural, mechanical, electrical, plumbing, and fire protection scope, schedule, and budget with branch office architectural and civil departments for the task orders performed under this agreement. The work under this worldwide indefinite delivery indefinite quantity architectural-engineering services contract consisted of architectural and planning services. Task orders included design services and construction surveillance. The following projects are samples of work completed under this contract: Visiting Quarters, Temporary Lodging Facility, and Geothermal System Design at McGuire Air Force Base, NJ; Temporary Lodging Facility at Dover Air Force Base, DE; and New Dormitory at Thule Air Base, Greenland.

**APG 2nd IDC Contract for Master Planning and GIS, Aberdeen Proving Ground, Aberdeen, Maryland.** *U.S. Army Corps of Engineers, Baltimore District.* Technical Manager. Responsible for performing technical quality reviews. Baker held a second five-year contract with the Baltimore District Corps of Engineers to provide U.S. Army Master Planning, GIS, other computerized and digital technology applications and related services for U.S. Army Aberdeen Proving Ground (APG), Maryland. This re-bid was from September 1999 through September 2004 and allowed the Baker Team to continue to provide master planning, GIS, related computer and web-based applications and general A/E services to APG.

**2004 Facilities Engineering Contract, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout.

**Airside Business Park Master Planning and Design Services, Moon Township, Pennsylvania.** *Airside Business Park, L.P.* Technical Manager. Responsibilities included conducting a technical quality control review. Baker worked with Airside Business Park, LP and The Elmhurst Group to develop Airside Business

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Park, approximately 26 acres of property owned by Allegheny County at the Pittsburgh International Airport. The site is the location of the old airport terminal parking lot along Business Route 60, between University Drive and the Thorn Run interchange. The Elmhurst development, under long-term land lease, was planned and designed to include five buildings - three 63,000-square-foot flex buildings, one 93,000-square-foot three-story office building, and one 117,000-square-foot three-story office building - plus all the associated site work.

**2007 General Task Order, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. This omnibus task order included multiple tasks including the following: cost estimates for an emergency vehicle garage; expansion of the overpack storage building; enhancement to the Plant Services' building egress and locker room addition; fuel transfer station; structural analysis of a concrete vault; seismic analysis of the container processing pit; structural analysis of two stack platforms; geotechnical analysis of a million-pound crawler path; and 3D laser imaging and virtual AutoCAD modeling of the container processing pit.

**2006 General Task Orders for Open-End Facilities Engineering Services, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout.

**Domestic Water Distribution System Evaluation, Confidential Site.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout. Baker performed a condition assessment and feasibility study to evaluate the campus domestic water distribution system. Recommendations were made for modifications and alternate protection methods to eliminate bacteria contaminants, and to ensure that safe drinking water was supplied to sinks and fountains.

**ECF Subst Title III, Confidential Location.** *Confidential Client.* Project Manager. Responsibilities included business development, proposal preparation, negotiation of contracts, project financial administration, quality management, client relations, development of project scope, controlling project schedules, budgets, and construction costs, reporting and projects oversight, change management, risk management, document management, Sarbanes-Oxley compliance, and project closeout.

### **Non-Baker Project Experience**

**Mechanical System Renovation, Cheltenham, Pennsylvania.** *Cheltenham High School.* Lead Mechanical Engineer. Design for a three-year phased renovation of entire mechanical systems including kitchen/cafeteria, auditorium, gym, pool, science rooms, classrooms, administration wing, central boiler and chiller plant.

**Young Conaway Stargatt and Taylor, Wilmington, Delaware.** Project Manager/Lead Mechanical Engineer. Tenant fit-out of 3 floors of Class A law offices on top floors of 18-story building utilizing fan powered VAV and straight shut-off VAV terminals.

**Voorhees Police Station, Voorhees, New Jersey.** Project Manager/Lead Mechanical Engineer. Renovation of existing post office into police station with Sallyport, dispatch, evidence room, and holding cells.

**Wyeth Lederle, Pearl River, New York.** Project Manager/Lead Mechanical Engineer. Various projects including central plant control room, steam vent project, fume hood exhaust fan replacement, and low humidity warehouse study.

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**Liberty Bell Bank, Cherry Hill, New Jersey.** Project Manager/Lead Mechanical Engineer. Fit-out of shopping center bank for new financial service center.

**Bristol Myers Squibb, Lawrenceville, New Jersey.** Project Manager/Lead Mechanical Engineer. Investigation and installation of two 4,000-ton field-built concrete shell cooling towers above existing utility tunnel and associated pumps to support central utility building.

**Leggat McCall Properties, Various locations in New Jersey and Pennsylvania.** Lead Mechanical Engineer. Tenant improvement/fit-out projects including Trox, Krantz, Titus and York underfloor air conditioning systems, heat recovery systems, VAV systems, single zone systems, etc.

**Silver Lake, Camden County, New Jersey.** Lead Mechanical Engineer. Commercial building utilizing bypass-type VAV system.

**PP9, Riyadh, Saudi Arabia.** *SCECO (C)*. Lead Mechanical Engineer. Responsible for ventilation, plumbing, and fire protection for 2 square kilometer site including 17 main buildings/areas and interfacing with 15 support buildings/areas for 1,200 mW combined cycle electric generating plant. (1995-1996)

**Atlantic Thermal Systems, Atlantic City, New Jersey.** Lead Mechanical Engineer. District Cooling and Heating Plant. Responsible for developing system concept for proposal for 30,000-ton chiller plant. (1996)

**American Trading and Real Estate Properties Incorporated I and II, Christiana, Delaware.** Lead Mechanical Engineer. Packaged VAV systems with perimeter radiation for two, four-story 90,000 square foot speculative office buildings.

**Provident National Bank, Philadelphia, Pennsylvania.** Lead Mechanical Engineer. Completed the construction documentation for the renovation of several floors of office space.

**White Clay Center IV, Newark, Delaware.** Lead Mechanical Engineer. Packaged heat pump, VAV and bypass systems for 56,000 square foot credit card processing computer facility.

**First Pennsylvania Bank, Philadelphia, Pennsylvania.** Lead Mechanical Engineer. Fit-out VAV system for full service center city branch bank and automated teller center.

**Ethyl Corporation, Richmond, Virginia.** Lead Mechanical Engineer. Built-up VAV systems for Management Information Center, including kitchen/dining, telecommunications boardroom, and exercise area with swimming pool. Special emphasis on noise control.

### **Presentations**

"HVAC Systems for Pharmaceutical Manufacturing Facilities," ISPE Seminar, Iselin, New Jersey, September 1991; Tampa, FL, December 1992; and Boston, MA, May 1993

"Pressurization in HVAC Systems," Pennsylvania Environmental Balancing Association (PEBA) annual meeting, Philadelphia, Pennsylvania, 1999

### **Computer Skills**

ARCOM MASTERSPEC

Dr. Checks

MasterWorks

Microsoft Excel

Microsoft Power Point

Microsoft Project

Microsoft Word

### **Professional Affiliations**

Project Management Institute (PMI)

# Todd Dorius, P.E.

## Mechanical Engineer

### General Qualifications

Mr. Dorius is a mechanical engineer with over 23 years of experience. His facility consulting experience includes government, commercial, institutional, retail, educational, residential, and medical buildings. Duties involved project management, production of complete construction documents, and construction management services. The initial ten years of his career were focused on the design and manufacturing of process equipment, including product design and oversight, and project management.

### Experience

#### **RTC Common Support Building.** *C&H Construction.*

Mechanical Engineer. As Lead Mechanical Engineer, provided oversight of the mechanical and plumbing designs, and production of construction documents for a new office building. This design/build project consists of providing space for operations and engineering personnel at the Reactor Technology Complex (RTC). The RTC Common Support Building (CSB) will contain approximately 17,000 square feet and house 50 to 75 offices plus space for electronic control development. The objective is to maximize office space in the facility, including offices, conference room, control laboratory area, and restrooms and other support areas such as mechanical, electrical, and communications. Baker's team prepared a LEED® scorecard and design qualifying this building for a LEED®-certified rating.

**Staff Augmentation, Confidential Location.** *Confidential Client.* QA/QC. Performed an interdisciplinary technical quality review of a study of existing conditions and recommendations for a site problem. As an extension of our client's staff, Baker personnel provided design services for multiple projects, including the following representative projects: documenting as-built conditions and modifying existing Information Technology systems in approximately 50 buildings; designing modifications to water pit gates; designing stormwater management upgrades; designing railroad switch and pedestrian crossing repairs and upgrades; and documenting fire protection sprinkler as-built conditions for all buildings on site.

**Clove Road Facilities Upgrade, Staten Island, New York.** *New York City Department of Environmental Protection.* QA/QC. Conducted an interdisciplinary quality review of the project prior to submission. Baker was selected by the New York City Department of Environmental Protection (DEP) to provide full architectural and engineering services and design services in connection with the construction of the Department's newest full-service vehicle facility in Staten Island, New York. Baker's responsibilities under this multi-disciplined project included: site analysis; conceptual, preliminary and final design; contamination removal; and community outreach.

**Armed Forces Reserve Center, Camp Bullis, San Antonio, Texas.** *U.S. Army Corps of Engineers, Louisville District.* Mechanical Engineer. Responsible for LEED® documentation related to energy consumption for the three-building complex. Estimated the total energy savings with respect to ASHRAE Standard 90.1-2004, with the goal of an overall 30% energy savings, to meet Silver LEED® certification. Baker teamed with builders Walbridge / Bartlett Cocke, J.V. under a Design/Build contract for the full design of an Armed Forces Reserve Center (AFRC) to be located at Camp Bullis, Texas. The \$39 million, 189,071-

**Years with Baker:** 1

**Years with Other Firms:** 23

#### **Education**

M.S., 1993, Mechanical Engineering,  
University of Utah

B.S., 1985, Mechanical Engineering,  
University of Utah

#### **Licenses/Certifications**

Professional Engineer, Utah, 1993,  
189171-2202

Professional Engineer - Mechanical,  
Nevada, 1999, 013851

Professional Engineer, Washington,  
2005, 42121



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square-foot complex consists of five buildings, including a Training Center, Organizational Unit (Heated) Storage building, Vehicle Maintenance Shop, and two Unheated Storage (UHS) buildings. Designs are also required for Comprehensive Interior Design (CID) and Structural Interior Design (SID), utilities, storm drainage, communications, electric, HVAC, fire protection/alarm systems, Intrusion Detection System, Emergency Management Communication System, anti-terrorism and force protection measures, paving, walks, curbs, parking, access roads, exterior lighting, site improvements, grading and landscaping. The project will be designed to meet the Silver Level of LEED®.

**91st Military Police Operation Facilities Design/Build, Ft. Drum, New York.** *U.S. Army Corps of Engineers, New York District.* Mechanical Engineer. Responsible as the lead mechanical engineer to complete the mechanical and plumbing design for the TEMF building. This effort involved all mechanical and plumbing systems associated with a large vehicle maintenance facility with office and training spaces. The MP Unit Operations Facilities design-build project consists of the design and construction of three facilities: one FIVE-Company Operations Facility (COF); a Battalion Headquarters (BNHQ) building; and one Tactical Equipment Maintenance Facility (TEMF).

### **Non-Baker Project Experience**

#### **Chilled Water Systems (up to 1350-tons)**

- All types of chillers including liquid-cooled by way of cooling towers, air-cooled chillers, and remote dry-cooled refrigerant
- Natural cooling systems utilizing heat exchangers and cooling towers to take advantage of low local wet bulb temperatures
- Chiller replacements with active data center systems

#### **DX Refrigeration Systems**

- Several system conversions from R-12 to R-22
- Staged systems utilizing VFD condensing units, electronic unloaders and split coils
- Several Mitsubishi City Multi systems (Diamond Designer) using essentially pump refrigerant technology
- Several stand-alone remote condenser and packaged systems

#### **Air Handling Systems**

- Design of multiple N+1 Data Center systems utilizing custom air handlers with critical temperature maintenance requirements
- Several conversions of multi-zone systems to VAV
- All types of systems from constant volume to VAV reheat
- Several designs with rooftop packaged systems utilizing hot water coils or gas-fired heat exchangers

#### **Plumbing Systems**

- Commercial and residential plumbing systems
- Domestic water pressurization systems
- Instantaneous and storage hot water systems with recirculation
- Water softening systems

#### **Humidification Systems**

- Data Center steam humidification systems with building steam plants
- Ultrasonic humidification systems for various electronic rooms utilizing stainless steel piping and de-ionized reverse osmosis water treatment

#### **Smoke Control Systems**

- Smoke control system for a data center involving six floors of mainframe computer rooms and office space. The smoke control system was capable of isolating each floor through pressurization utilizing control dampers, exhaust fans, and air handler air pressure control.

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## **Retail & Office Space**

- Complete HVAC and Plumbing for several retail stores in strip malls and enclosed malls
- Complete HVAC and Plumbing for restaurants in malls and stand-alone buildings
- Complete HVAC and Plumbing for professional office space including medical

## **Lodging**

- Several hundred thousand square feet of condominium and hotel space in resort centers. Systems ranged from simple DX systems to four-pipe complete hydronic and air systems. Most systems included significant snow melt systems and pool equipment. All included parking garages. All included all plumbing.
- Multi-million dollar home HVAC and plumbing design

## **Steam Systems**

- Steam distribution systems for utility tunnels on college and university campuses
- Steam distribution for separate buildings from campus central plants
- Central plant systems including new boilers

## **Hot Water Systems**

- Hot water system design on several projects utilizing pre-heat coils with glycol loops in air handlers, and internal VAV reheat systems
- Heat exchanger designs for glycol loops and swimming pool systems
- Residential radiant floor heating
- Snow melt systems

## **Industrial Control Systems**

- Complete control panel, wiring, PLC programming, and commissioning of industrial filtration and separation systems
- Automated control systems for equipment and pump systems located on oil platforms and remote locations (i.e. Yemen and Amazon)

## **Building Control Systems**

- Fully versed in the layout and operation of several building automation systems, including a good background in BACnet- and Lon-based systems
- System consulting on controls for various projects including hospitals, three-stage air handlers, museums, and various office complexes
- Certified in Phoenix laboratory control systems. Consulted on the design of several university laboratory designs.

## **Commissioning**

- Experienced in commissioning and installation of industrial equipment including steel domes and structures, heavy equipment, and control systems
- Experienced in commissioning and testing of all types of building mechanical and control systems mentioned in this document

## **Pumping Systems**

- High volume industrial pumping systems for filtration and separation equipment
- Pumping systems for chilled water, hot water, fire protection, irrigation, and domestic building water systems

## **Equipment Design**

- High-volume industrial filtration and separation equipment and systems
- Large mixing and aeration equipment with direct and geared down drives

## **Process Systems**

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- Process equipment system layout utilizing P&IDs

### **Investigation**

- Building energy studies
- Industrial trouble shooting

### **Previous Work History**

Heath Engineering Co., ECE, ICPE, Lead Consulting Engineer, 1995-2001

- Experience involved designing building systems and industrial processes for clients including designs, documents, and project management. Systems experience with HVAC, plumbing, industrial processes, and controls.

Spectrum Engineers, Lead Consulting Engineer, 2003-2008

- Experience involved designing building systems and industrial processes for clients including designs, documents, and project management. Systems experience with HVAC, plumbing, industrial processes, and controls.

Atkinson Electronics, Project/Sales Engineer, 2001-2003

- Experience involved working with consulting engineers and contractors in the layout and design of building DDC control systems. Projects included designs, bids, proposals, and marketing for a variety of clients.

Baker-Hughes Process Systems (EIMCO, WEMCO), Product / Project Engineer, 1986-1990, and 1991-1995

- Experience involved design and fabrication of process equipment including product engineering, control automation, new product development, marketing support, and field commissioning. Projects include several equipment lines, support structures, and control systems used in large industrial facilities, worldwide, designed for automated remote operation.

Nevada Power, Technical Representative, 1985-1986

- Technical representative for the local power utility in Las Vegas, NV

Hawk Autogiro, Engineering Manager, 1990-1991

- Start-up aircraft company working on FAA certification for an experimental aircraft, in conjunction with M.S. degree.

### **Community Activities**

Boy Scouts of America, Scout and Cub Master, 20 years

UYSO Little League Soccer, Coach, 8 years

### **Continuing Education/Training**

Management Supervisory Certificate, University of Utah, May 1993

### **Honors and Awards**

Department Scholarship and Honors at Entrance, University of Utah at Salt Lake City, UT

24 Hours A.P. College Credit, National Honors Society, Skyline High School, at Salt Lake City, UT

Eagle Scout and Order of the Arrow, Boy Scouts of America

### **Presentations**

Dorius, Todd, Sales Demonstrations for DDC Controls for Atkinson Electronics, 2001-2003

### **Publications**

Dorius, Todd, 1993, Master's Thesis. *Yaw Aerodynamics of Horizontal Axis Wind Turbines*. Submitted to the University of Utah.

### **Research**

University of Utah, Master's Thesis Research. Horizontal axis wind turbine load research including a series of Fortran 77 simulation programs designed and operated.

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

## *Civil Services Group Leader*

### **General Qualifications**

Mr. Fogarty is an asset to the Michael Baker Jr., Inc. team with over 22 years of project management experience. He is responsible for technical and management aspects of civil design and surveying projects within the office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included retail/commercial site preparation, airports, streets/highways, bridges, parking lots, buildings, retaining walls/foundations, sanitary systems and structures, as well as boundary and topographic and photogrammetric surveys. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation. Management duties include financial planning, management and staff utilization for two departments, human resource planning, marketing, and strategic planning for the 250 member firm as a member of the board of directors.

### **Experience**

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

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

**Years with Baker:** 3

**Years with Other Firms:** 19

#### **Education**

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

Diploma 1993, Surveying and Mapping, International Correspondence Schools

#### **Registrations**

Professional Engineer, West Virginia

Professional Engineer, Kentucky

Professional Engineer, Virginia

Professional Engineer, Pennsylvania

Professional Engineer, Maryland

Professional Engineer, Ohio

Professional Engineer, North Carolina

Professional Surveyor, West Virginia, Kentucky and Ohio

#### **Certifications**

Laboratory Procedures, FAA 1992

Construction Document Technologist, CSI 1996

Roadway Worker for Rail Line Sites, CSX 2001

40 Hour HAZWOPER, OSHA 29 CFR 1910.120, OSHA 2001

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

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

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

*Notable clients included the following:*

- City of Parsons;
- Town of Moorefield;
- Town of Hambleton;
- Town of Mason;
- Town of Lost Creek;
- Town of West Milford;

**PRIOR BAKER EXPERIENCE**

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

*Notable clients included the following:*

- Town of Poca;
- City of Buckhannon;
- City of St. Albans;
- City of Williamson;
- City of Bridgeport;

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

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

### ***Notable sites have included the following:***

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

**Infrastructure, Safety and Security Planning and Design, Various Airports. State of West Virginia.** Project Manager. Performed numerous assignments for various airports over the past 20 years, including: Pavement Design, Storm Water Management, Security and Access Control Systems, Lighting, and Fencing, Landslide Abatement, Spill Control, Containment and Countermeasures Plans, Environmental Site Assessments, FAA Forms A and C, Obstruction Lighting and Removal, Edge and Centerline Lighting and Airfield Signage System, VASI and PAPI Systems, and NAVAIDS.

### ***Some notable airport clients include the following:***

- Central WV Regional Airport Authority, Charleston;
- Mercer County Airport Authority, Bluefield;
- Wood County Airport Authority, Parkersburg;
- Raleigh County Airport Authority, Beckley;
- Grant County Airport Authority, Petersburg;
- Eastern WV Regional Airport Authority, Martinsburg;
- Nicholas County Airport Authority, Summersville;

## **Professional Affiliations**

American Society of Civil Engineers

Construction Specifications Institute

American Water Works Association

West Virginia Society of Professional Surveyors

Kentucky Association of Professional Surveyors

West Virginia Airport Managers Association

## **Previous Work History**

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

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

Chapman Technical Group, Project Engineer, 1986-1991

**Rachel A. Sharp, P.E.**  
*Civil Engineer, Structures*

**General Qualifications**

Ms. Sharp spent a year of her five plus years at Baker in a rotation program. This experience includes three months of experience in each of the following departments: Construction Management, Airport Design, Cultural Resources, and Traffic Engineering. Beyond that rotation experience, Rachel has roughly 5.5 years of experience in the design and construction inspection of bridges for transportation projects. This experience includes analysis and design of bridges and retaining walls. Prior to joining Baker, Ms. Sharp had completed an internship for the Pennsylvania Department of Transportation (PennDOT), District 12-0, Bridge Inspection and Rating Unit.

**Experience**

**S.R. 1014 over I-70, Collapsed-Beam Emergency Inspection, Washington, Pennsylvania.** *Pennsylvania Department of Transportation, Central Office.* Civil Associate.

Responsibilities included performing a sensitivity study and conduct an emergency bridge analysis for several noncomposite prestressed bridges in PennDOT District 12. Baker conducted an emergency inspection of the bridge after one of the fascia beams collapsed onto I-70. Non-destructive testing was performed on the remaining beams. Structural analysis was performed to determine the structural capacity of the remaining beams as well as a sensitivity analysis to determine the effects of the loss of various numbers and patterns of prestressing strands.

**S.R. 18 Relocation Project (Geneva College) - Preliminary Engineering, Beaver County, Beaver Falls, Pennsylvania.** *Pennsylvania Department of Transportation, District 11-0.* Civil Associate. Responsible for determining noise impacts on relocation alternatives and collected socio economic data. The proposed project will realign S.R. 0018 to eliminate the two 90-degree turns on 32nd Street by providing a sweeping diagonal curvilinear alignment with two travel lanes, sidewalks and standard width parallel parking lanes on both sides of the roadway between 4th and College Avenues. In addition, the intersection of S.R. 0018 and 31st Street will have curb bulbouts to enhance pedestrian safety at the street crossing.

**S.R. 0279, Section A33, Fort Pitt Boulevard Reconstruction, Pittsburgh, Pennsylvania.** *City of Pittsburgh, Pennsylvania.* Civil Associate. Responsibilities included performing final design services for the rehabilitation of a five-span steel plate-girder bridge and three-span prestressed concrete girder bridge. Responsibilities included the design of the elastomeric bearings and other miscellaneous items. Performed geometry calculations. Baker and SAI Consulting Engineers, Inc. joined forces to complete design for reconstruction of Fort Pitt Boulevard to improve interstate connection between State Routes 279 and 376. Baker's responsibilities encompassed geotechnical engineering for the entire project, WELCOM scheduling, right-of-way plans, and utility coordination. Baker was also responsible for a portion of the structural design; namely, relocated Fort Pitt Boulevard from Wood Street to Smithfield Street, the Smithfield Street Bridge approach spans over the Parkway, and Ramp B from Smithfield Street to Grant Street.

**S.R. 0219, Section 022, Design/Build Best Value, Somerset, Pennsylvania.** *New Enterprise Stone & Lime Co., Inc.* Civil Associate. Assisted with proposal. Baker was the design subconsultant to the prime construction contractor, New Enterprise Stone & Lime Co., Inc., under contract to Pennsylvania Department

**Years with Baker:** 8

**Years with Other Firms:** 0

**Education**

M.S.C.E., 2000, Civil and Environmental Engineering/Structures, West Virginia University

B.S.C.E., 1998, Civil and Environmental Engineering, West Virginia University

**Licenses/Certifications**

Professional Engineer, Pennsylvania, 2006, PE073266

Engineer-In-Training, West Virginia, 1999, EI 7342

of Transportation, District 9-0, for this first ever Design/Build Best Value project in Pennsylvania. This \$23 million project included the design and rehabilitation of ten existing structures and approximately 4.3 miles of pavement (four lanes) on S.R. 0219, Section 022 in Somerset Township, Somerset County. Also included within the project scope was the rehabilitation of the ramps comprising the S.R. 8001 and 8003 interchanges and the installation of interchange lighting for the six interchanges included within the overall project area.

**S.R. 0079, Section A23, Interstate 79 Missing Ramps, Collier and Robinson Townships, Pittsburgh, Pennsylvania.** *Pennsylvania Department of Transportation, District 11-0.* Civil Associate. Responsible for Foundation Submission MPT. Project consisted of an addition of two direct connection ramps to an existing interchange, plus widening and realignment of more than a mile of limited access highway. Estimated construction cost \$60 million.

**S.R. 0218, Section A10 - Highway/Railroad Grade Separation Project, Waynesburg, Pennsylvania.** *Pennsylvania Department of Transportation, District 12-0.* Bridge Engineer. Responsibilities included preparing the foundation, TS&L, and final design submissions for a seven-span continuous composite prestressed concrete PA 24/45 I-beam bridge. Baker was selected to perform preliminary engineering and prepared final design documents for a grade separation structure spanning Norfolk Southern Railroad tracks, South Fork Ten Mile Creek, and local streets of Waynesburg. The designed structure was approximately 595 feet in length and consisted of a 7-span P/S I-Beam superstructure on curved alignment with a radius of 3,820 feet. S.R. 0218 was realignment for 1,615 feet to accommodate two 12-foot lanes, 2'-0" curb gutters, and a 5-foot sidewalk. Preliminary engineering involved environmental, H&H, traffic control, geotechnical, TS&L and drainage studies, in addition to required surveying, utilities, and right-of-way investigations.

**S.R. 4009, Section A02, Widening of Asbury Road and Replacement of Two Overhead Railroad Structures, Millcreek Township, Pennsylvania.** *Pennsylvania Department of Transportation, District 1-0.* Civil Associate. Assisted with signing and pavement. Baker performed preliminary and final design for widening 0.6 miles of S.R. 4009, Section A02 (Asbury Road) from two lanes to five lanes including replacement of a CSX railroad bridge (four tracks) and a Norfolk Southern railroad bridge (two tracks).

**Woodhill-Buckeye-Shaker Bridge Replacement (CUY-87-4.24), Cleveland, Ohio.** *Ohio Department of Transportation, District 12.* Civil Associate. Responsibilities included performing a preliminary traffic signal design for the intersection. Conducted signal warrant analysis, capacity analysis, left turn conflict factor calculations, and signal timing calculations. Developed traffic control plans for the reconstruction which included specifications and cost estimates for the project. Baker provided preliminary and final design engineering services for the replacement of an 86-year-old reinforced concrete and steel frame bridge that carries a high volume of traffic through a six-legged signalized intersection over the Greater Cleveland Regional Transit Authority System.

**Tunkhannock Transportation Improvement Project, S.R. 0006, Sections E10 and E11, Tunkhannock, Pennsylvania.** *Pennsylvania Department of Transportation, District 4-0.* Civil Associate. Responsibilities included performing field traffic counts and assisted in data reduction. Baker was the lead design consultant for the Tunkhannock Transportation Improvement project. This project consisted of constructing a rural, two-lane limited-access bypass of S.R. 0006 (U.S. Route 6) around the Tunkhannock Central Business District. The major project features included - one three-span, one four-span, and one five-span bridge constructed over Tunkhannock Creek; a grade-separated interchange with S.R. 0006; an at grade intersection with S.R. 0006 and signalized intersections with S.R. 0029 and S.R. 0092; 4,000 feet of noise walls; a pedestrian underpass; and a runaway truck escape ramp.

**Saltillo, MS Signal Project, Saltillo, Lee County, Mississippi.** *Mississippi Department of Transportation.* Civil Associate. Assisted with traffic analysis and signal timings report. Projected volumes and determined level of Service for the intersections using Synchro. Baker provided professional engineering services for traffic signal plans and permanent signing plans for the US Highway 45 and MS Highway 145 bypass in Saltillo, MS. The project included the design of five (5) new traffic signals located on MS Highway 145, at the intersection with US Highway 45.



**Security Upgrades to Perimeter Fence, Guard Shelters, and Gates, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania.** *Allegheny County Airport Authority.* Civil Associate. Assisted with determining a cost estimate for four retaining walls. Designed the foundations for each retaining wall, which included several spread footings and footings supported by piles using PennDOT Abutment and Retaining Wall Design Program (ABUT 5 v5.3). This project included the design of numerous upgrades to the perimeter fence, security gates, and guard shelters at the Pittsburgh International Airport (PIT). The perimeter fence and gates demarcating the Air Operations Area (AOA) were visually inspected for deficiencies, and sections were replaced as needed. This project updated the existing West Vehicle Guard Shelter with a new guard shelter configured in a much more desirable location, and includes a new guard shelter at the Hangar 1 AOA entrance. Tire shredders were added to the new Hangar 1 and West Vehicle Gates to prevent access to the AOA through the gate exit lanes.

**S.R. 0018 Geneva College, Beaver Falls, Pennsylvania.** *Pennsylvania Department of Transportation, District 11-0.* Civil Associate. Responsible for preparing Signing and Pavement Marking Plans as well as designed a signal at an intersection. Baker was responsible for the final design and construction services of the relocation of S.R 0018 between 4th and College Avenues passing through the Geneva College Campus. The realignment of S.R. 0018 (1,700 feet) eliminated the two existing 90 degree turns on 32nd Street and provided improved safety for vehicular and pedestrian traffic.

**David L. Lawrence Convention Center Infrastructure, Pittsburgh, Pennsylvania.** *Sports and Exhibition Authority of Pittsburgh and Allegheny County.* Civil Associate. Responsibilities included performing Cost Estimate for water feature / pump room and saved client money through negotiations, mapped cracks, reviewed shop drawings and submittals, assisted in writing work orders (change orders), and project correspondence such as invoice documentation, coordinated construction effort between contractors and client. Baker provided CM/CIS services for the \$22 million reconstruction of the transportation infrastructure associated with the construction of the David L. Lawrence Convention Center. This multi-phased work included renovation of major roadways and construction of new bridges and retaining walls.

**31st Street Bridge Rehabilitation, S.R. 2122, Section A03, Pittsburgh, Pennsylvania.** *Pennsylvania Department of Transportation, District 11-0.* Bridge Engineer. Responsibilities included performing final design services for the rehabilitation of a twenty-eight span bridge. Responsibilities included the analysis of the girders, floorbeams, and stringers for retrofit purposes and design of floorbeam splices for the main spans. As part of Construction Consultation Services, responsible for reviewing shop drawings, RFI's, and calculations. Baker provided preliminary and final design services for the rehabilitation of the historic 31st Street Bridge in the City of Pittsburgh, Pennsylvania. In addition to structural rehabilitation, the objective of this project is to widen the bridge deck as much as possible. Investigations included consideration for replacement of approach spans versus rehabilitation.

**LRFD for Highway Bridge Substructures and Earth Retaining Structures, Nationwide.** *U.S. Department of Transportation.* Bridge Engineer. Responsibilities included modifying the courses so they were 504/508 Compliant. Under a Task Order from FHWA, Baker was awarded development and delivery of a training course that provided a "core-curriculum" in the application of the AASHTO LRFD Bridge Design Specifications and AASHTO LRFD Bridge Construction Specifications. The full course was 5 days in length and included LRFD theory geared toward application to design examples, and illustrated step-by-step LRFD design procedures through a series of detailed process flowcharts. The course materials included the extensive use of student exercises and example problems to demonstrate overall design and construction principles addressed in the reference materials. Options were provided to tailor courses for 1-day, 3-day and 4-day presentations.

**Roadway Rehabilitation, S.R. 2001, Sections 401, 402, and 405, Lehman and Delaware Townships, Pennsylvania.** *Pennsylvania Department of Transportation, District 4-0.* Civil Associate. Responsibilities included performing crash / safety study. Calculated crash rates, determined crash clusters from collision diagrams, and analyzed crash patterns. Determined probable cause for crash clusters and developed a list of potential countermeasures for remedial action. The project consisted of a 17-mile, two-lane, rural arterial

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roadway in the Pocono region with several single span bridges and culverts. The project included wetland and exceptional value stream impact mitigation; Phase I archaeology, historical evaluations and preparation of a Categorical Exclusion Evaluation, Section 4(f) involvement with National Park Services, design of drainage systems, design of traffic control plans to maintain traffic during construction, right-of-way plans, utility relocation, erosion control, hydraulic reports, and final bid documents for three construction projects.

### **Community Activities**

Baker Employees Combined Charities 2002-2006.

### **Presentations**

"Comprehensive Package for Design of Short-Span Steel Bridges" (01-0391), Washington, D.C. Presentation at TRB 80th Annual Meeting, January 8, 2001.

### **Publications**

Barth, K.E., C.W. Roeder, R.A. Christopher, and H. Wu. 2003. Evaluation of Live Load Deflection Criteria for I-Shaped Steel Bridge Design Girders. *ASCE Journal of Structural Engineering Special Publication. High Performance Materials in Bridges*. 193 – 208.

Roeder, C.W., K.E. Barth, A. Bergman, and R.A. Christopher. 2001. Improved Live Load Deflection Criteria for Steel Bridges. *Interim Report to NCHRP 20-7*, National Research Council, Washington, D.C.

*Comprehensive Package for Design of Short-Span Steel Bridges*. January 8, 2001 (01-0391), Washington, D.C. Presentation at TRB 80th Annual Meeting.

### **Teaching**

Performed duties as a Teaching Assistant at the West Virginia University during graduate school. Duties included tutoring students, grading homework, and assisting professors in the instruction of undergraduate engineering courses.

### **Computer Skills**

Bentley MicroStation

COGO Classic

LRFD Abutment and Retaining Wall Analysis and Design (ABLRFD)

LRFD Prestressed Concrete Girder Design and Rating (PSLRFD)

LRFD Steel Girder Design and Rating (STLRFD)

Mathcad

MDX

Microsoft Excel

Microsoft Power Point

Microsoft Word

PCA Column

PennDOT Bridge Design and Rating Programs (BAR7)

Pennsylvania Pier Analysis (PAPIER)

RISA-3D

Steel Girder Splice Design and Analysis

Structural Analysis and Design (STAAD)

Synchro (Trafficware)

Visio

### **Professional Affiliations**

Association for Bridge Construction and Design (ABCD).

# Jason T. Smithson, P.S.

## *Civil Associate*

### **General Qualifications**

Mr. Smithson is currently employed as a Civil Associate at the Charleston, West Virginia office of Baker's South Region.

Mr. Smithson has over nine years of diverse experience that includes assignments in civil design, geotechnical engineering, environmental science, surveying, drilling, construction inspection and field and laboratory materials testing.

### **Experience**

#### ***SIDEWALK AND DRAINAGE***

As a Project Surveyor, Mr. Smithson established horizontal and vertical control and provided topographic mapping by conventional and GPS survey methods to provide data for the creation of plan sheets for numerous sidewalk enhancement projects, as well as civil engineering to correct existing poor drainage concerns in various communities throughout West Virginia including:

- Town of West Milford, West Virginia
- Town of Mason, West Virginia
- Town of Hambleton, West Virginia
- Town of Moorefield, West Virginia

Additionally, he is familiar and has been successful in assisting municipalities with West Virginia grant preparation and the securing of grant funds.

#### ***GEOTECHNICAL AND SURVEYING***

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

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

**Years with Baker:** 2.5

**Years with Other Firms:** 7

#### **Education**

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

#### **Licenses/Certifications**

Professional Surveyor, West Virginia, 2007, 2153

OSHA 40-Hour HAZWOPER Certification, 1999

OSHA 10-Hour Safety Training, 2005

Certified Well Driller, West Virginia, 2002, WV00316

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

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

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

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

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

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

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

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

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

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

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# Laura L. Cox, PLA, ASLA

## *Landscape Architect*

### **General Qualifications**

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

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

### **Experience**

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

Project Planner. Responsible for assisting in the master planning design. Baker is preparing a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the city limits of Parsons, Tucker County, West Virginia. The City of Parsons, over time, has acquired many parcels of FEMA-condemned properties due to the flood prone topography of Parsons. In an effort to properly manage the 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 will be realized with recommendations for ball fields, hiking and biking trails, a recreation center, miniature golf course, additional play structures, picnic facilities, ADA-compliant fishing access, interpretive signage, and landscaping improvements for the existing and new park areas.

**Ararat River Greenway Parks Projects, Mount Airy, North Carolina. *City of Mount Airy, North Carolina.*** Project Landscape Architect. Responsible for design and construction document preparation. Baker will prepare construction documents and provide construction administration and construction inspection for three (3) parks along the Ararat River in North Carolina. The designs will be prepared on a previously developed master plan of the Ararat River Greenway. The first park, Riverside Park, includes basketball courts, playground structures, parking areas, a premier soccer field, picnic shelters, nature trails, canoe launch facility, restrooms, fencing, signage and landscaping. Rowe Environmental Park will showcase environmental issues in the park design and construction, including an outdoor amphitheater and classroom, picnic facilities, nature trails, parking area, pedestrian bridge to nearby middle school, fishing access and canoe launch facility. The final park design is for Tharrington Park, which will include a premier soccer field, additional soccer fields to create a soccer complex, access road and parking, fitness trail, restroom facility, concessions, and a maintenance building.

**Years with Baker: 1**

**Years with Other Firms: 26**

#### **Education**

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

Computer Aided Drafting, Putnam County Technical Center, 1995

#### **Registrations**

CLA, Virginia, 1987

PLA, West Virginia, 2008

NICET Level 3 (Highway Design), 1983

#### **Professional Affiliations**

American Society of Landscape Architects

WV Chapter – American Society of Landscape Architects

WV Chapter – American Institute of Architects

**Kanawha & Putnam County Bicycle – Pedestrian Master Plan, South Charleston, West Virginia.** *Regional Intergovernmental Council (RIC).* Project Planner. Providing assistance in field inventory and analysis, plan preparation and graphic support. Baker performed a two-phase bicycle and pedestrian circulation study for Kanawha and Putnam Counties. Under Phase I, 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 including traffic volumes and comprehensive plan documents and performed a broad base public outreach effort to identify bicycle and pedestrian issues in Kanawha and Putnam Counties. Under the Phase I effort, Baker incorporated the inventories into a series of public meetings, garnering input from each community and the client, and then summarizing the findings in the Plan. Based on these efforts, a list of recommended improvements to the 2-county area was proposed to improve bicycle and pedestrian safety and user-friendliness throughout the project area.

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

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

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

#### **Non-Baker Project Experience**

**Erma Byrd Center, Beaver, Raleigh County, West Virginia.** *Southern West Virginia Community and Technical College.* Project Landscape Architect. Responsible for master planning of the campus, detailed design, and site construction document preparation. Developed site design and construction documents for the development of a new multi-purpose education facility. Future plans for the campus include additional buildings arrayed around a central water feature.

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

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

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

**Logan Readiness Center, Logan, West Virginia.** Staff Landscape Architect. Designed parking lot and sidewalk system and prepared Landscaping Plan

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

**Morgantown National Guard Facility, Morgantown, West Virginia.** Staff Landscape Architect. Provided conceptual site plan for submission to client.

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

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

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

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

#### **PREVIOUS WORK HISTORY**

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

**Self Employed as a Design Consultant, April 1995 - May 2000,** Provided civil, architectural, and environmental design and drafting services, Provided Instruction of on and offsite AutoCAD classes. Provided comprehensive design and drafting services for clients in the Charleston/Huntington area; Services included Land Use Planning, Civil Design and Drafting, Architectural Drafting, Environmental Design, and Landscape Architecture. Served as trainer for Mountain CAD, Charleston's Autodesk software reseller.

**Fauquier County Department of Community Development, August 1990 - December 1993, Chief of Planning Division,** Supervisor of the processing of land use applications. Supervision of a design review team; Organization and implementation of office procedures; Enforcement of subdivision and zoning ordinances; Review and evaluation of preliminary and final subdivision plans, special exceptions and rezoning; Answering public inquiries; Representing the county at public meetings. Providing reports and recommendations directly to the Fauquier County Planning Commission and Board of Supervisors.

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**Land Design Concepts, Incorporated, JUNE 1989 - AUGUST 1990, *Senior Planner/Office Manager*,** Oversight of office procedures and performed and supervised a broad spectrum of planning tasks. Staffing, organizing, marketing and supervising the equipping of an office for a new planning firm; Management of both office and planning staff; Overseeing all client contacts; Preparation and negotiation of contracts and billing; Preparing and processing rezoning applications, preliminary plans, feasibility studies, site and land use analysis, yield studies and conceptual design in Stafford and Spotsylvania Counties.

**Kidde Consultants, AUGUST 1986 - MAY 1989, *Chief, Planning & Landscape Architecture Section*,** Supervisor of all phases of planning and landscape architecture. Responsibilities included: Management of a planning team involved in various planning functions; Coordinating with and assisting clients' attorneys in obtaining rezoning, special exceptions and special use permits; Involved in contract preparation, negotiation and billings; Representing clients at public hearings and meetings with civic groups in Arlington, Fairfax, Prince William and Stafford Counties.

**Huntley, Nyce and Associates, P. C., OCTOBER 1984 - AUGUST 1986, *Staff Landscape Architect*,** Responsible for small and large scale landscape design, civil design and graphics presentations. Staffing and supervision of a squad of design and drafting personnel; Preparation of site, subdivision and landscape plans in Fairfax and Loudon Counties.

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

**WVDOT Division of Highways, DECEMBER 1980 - APRIL 1984, *Highway Design Technician*,** Responsible for highway design including repair and improvement. Horizontal and vertical layout of roads, quantity calculations, report graphics and drafting.





## FIRM DESCRIPTION & APPROACH TO PROJECTS

**Heritage Landscapes LLC**, a woman-owned professional firm, has offices in Charlotte, Vermont and Norwalk, Connecticut. Since 1987 we have specialized in projects focusing on culturally valuable landscapes. Nearly 400 projects for the landscapes of communities, parks, parkways, campuses, institutions, museums, estates, historic sites, cemeteries and residential grounds are credited to the firm. This diverse group of works addresses landscapes of various types and sizes, from a few to several hundred acres and includes single, multiple property, neighborhood, community and linear corridor landscapes. Our cultural landscape project scopes include historic research, existing conditions documentation, analysis, design studies, community outreach, public education and interpretation, heritage tourism, construction documents, management, maintenance and implementation initiatives. Products take the form of focused and comprehensive plans, cultural landscape reports, guidelines, signage, brochures, fund-raising materials, staff and volunteer guidance, construction documents and maintenance calendars. Heritage Landscapes expertise in cultural landscape preservation and stewardship embraces all aspects of the renewal and vibrancy of these important properties. We begin our projects by understanding the values inherent in and ascribed to cultural properties and from this basis conduct our work toward safeguarding, modifying to suit current needs, communicating about and seeking to ensure the perpetuation of cultural landscapes. Though treasured for their multiple values, the viability of cultural landscapes depends on projects that bring them to full use, enjoyment, and sustainability for the people of today and tomorrow.

In addition to recognizing cultural landscape values, our work is grounded in principles of landscape sustainability, functionality, and aesthetics. Preservation is a deeply sustainable practice. The convergence of cultural and natural resource considerations is an important element in Heritage Landscapes work. Our projects incorporate a solid understanding of natural systems and promote sustainable places. A holistic approach to sustainability addresses multi-functional aspects of planning and implementation. To provide visitor access, safety and comfort projects resolve issues of arrival, parking, circulation and ease of movement. Our design approach addresses functions and aesthetics simultaneously using traditional, durable materials with a grace of application and simple elegance of detail. We draw on the unique character of the place for design inspiration. Based on our extensive work in landscape management we provide our clients with designs that incorporate maintenance concerns, tools to manage change and schedules to direct maintenance efforts.

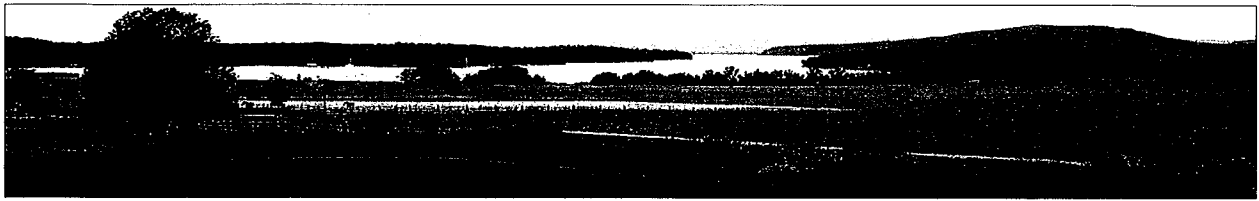
Another hallmark of Heritage Landscapes work is the importance we place on clearly conveying information about the heritage property and its cultural or historic values to users and visitors. We seek to communicate appropriate messages to the public through an array of media, including layout and design cues, focal elements, signs, brochures, etc. Because we believe that public landscapes are places for people of all abilities to experience and enjoy we are committed to providing universal access by upgrading circulation systems in a manner that respects historic landscape character while accommodating access.

Our diverse clients include not-for-profit entities, citizen advocacy groups, museums and institutions, private owners and municipal, state and federal agencies. We are effective members of multi-disciplinary teams in both team leader and subconsultant roles. Our clients are full partners in project work, articulating goals, shaping project programs, providing data on staffing and funding capabilities, clarifying community and visitor issues, weighing alternatives, and making decisions. Staff functions with current technology in computers, printers, plotters, scanners and software. Working with our clients, teams, stakeholders, community leaders and the involved public, Heritage Landscapes envisions a positive, informative, sustainable and satisfying future for heritage landscapes of all types. Plans and implementation strategies ensure that functional needs are met and cultural, ecological, social, and recreational values are incorporated.

# Heritage Landscapes LLC

Preservation Landscape Architects & Planners

PO Box 321 Charlotte, Vermont 05445 802-425-4330 34 Wall Street Norwalk, Connecticut 06850, 203-852-9966



## PROFESSIONAL AWARDS DESIGN, PLANNING & IMPLEMENTATION PROJECTS

- 2008 Honor Award, CT ASLA, New York Botanical Garden Cultural Landscape Report: Landscape History, NYBG, Bronx, NY  
Merit Award, Vermont Public Space Awards, VTASLA, AIA VT, VPA, and SCE VT, Tree Allée Replanting Program Implementation, Shelburne Farms, Shelburne, VT
- 2007 Cuban National Award for Architectural Preservation, Cuban Government for Finca Vigia, Ernest Hemingway Property, US-Cuba Technical Team. Havana, Cuba  
Honor Award, Planning, VT ASLA, Historic Mount Zion Neighborhood Cultural Landscape Report, Town of Somers, NY  
Merit Award, Planning, VT ASLA, Lockwood House Cultural Landscape Report, National Park Service, Harpers Ferry, WV  
Merit Award, Planning, VT ASLA, Childs Park Cultural Landscape Report, National Park Service, Scenic Delaware Region, PA  
Merit Award, Vermont Public Space Awards, VT ASLA, AIA VT, VPA, and SCE VT, Shelburne House Precinct Gardens & Landscape Stewardship Plan, Shelburne Farms, Shelburne, VT
- 2006 Mayor's Award for Excellence in Historic Preservation, Tregaron Estate Historic Preservation Award, for Tregaron Limited Partnership Design and Preservation Team, Tregaron Conservancy & Washington International School, Washington, DC  
New Jersey Historic Preservation Award, New Jersey DEP, Natural and Historic Resources, Historic Preservation Office, Hopewell Township Design Guidelines, Historic Landscape Guidelines, lead PDP Architects, Hopewell Township, NJ
- 2005 Merit Award for Communication, CTASLA, Sunnyside Landscape Master Plan for Historic Hudson Valley, Tarrytown, NY  
Preservation Award, Pittsburgh History & Landmarks, Highland Park Welcome Entry Rehabilitation for Pittsburgh Parks Conservancy, Pittsburgh, PA  
Merit Award, Design, VTASLA, Highland Park Welcome Entry Fountain and Gardens, Pittsburgh Parks Conservancy, Pittsburgh, PA  
Merit Award, Design, VTASLA, Camden Grounds, Harbor Park, Garden Amphitheatre, Camden Public Library, Camden, ME  
Honor Award, Planning & Analysis, VTASLA, Sunnyside Landscape Master Plan for Historic Hudson Valley, Tarrytown, NY  
Merit Award, Planning & Analysis, VTASLA, Garfield Park Cultural Landscape Report, Friends of Garfield Park, Indianapolis, IN  
Honor Award, Planning & Analysis, VTASLA, Marshlands Conservancy and Jay Property Cultural Landscape Report, Westchester County, NY, Planning Department, Rye, NY  
Baltimore Heritage 2005 Preservation Project Award, Druid Hill Park Conservatory Palmhouse & Greenhouses Rehabilitation, for Baltimore Public Works & Recreation & Parks, Baltimore, MD
- 2003 Excellence in Planning, Outstanding Community Initiative, Indiana Planning Association, Memorial, Lakeside and Sweeney Parks, Cultural Landscape Reports, for Departments of Planning & Parks & Recreation, Fort Wayne, IN

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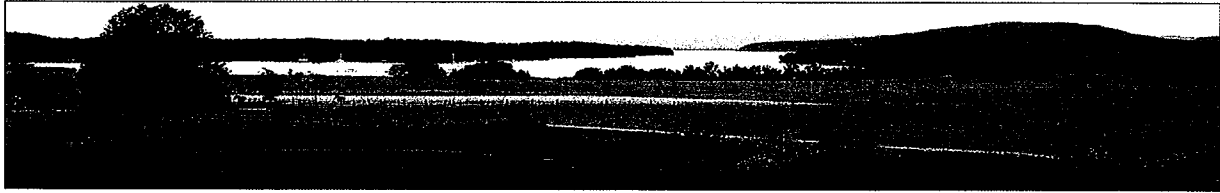
## Heritage Landscapes LLC Professional Awards, Page 2

- Honor Award Planning & Analysis, VTASLA, Memorial, Lakeside and Sweeney Parks, Cultural Landscape Reports, for Departments of Planning & Parks & Recreation, Fort Wayne, IN  
Honor Award, Design, VTASLA Oldfields Estate Landscape, Ravine Garden, House, Entry Gate, and Wall, with Hillier Architecture for House, Indianapolis Museum of Art, Indianapolis, IN  
Honor Award, Planning & Analysis, VTASLA, Tudor Place Cultural Landscape Report: Phase 1 History, for Tudor Place Foundation, Georgetown, Washington, DC  
Merit Award VTASLA, Shelburne Farms Landscape Stewardship Plan, for Shelburne Farms, Shelburne, VT
- 2002 Merit Award, Vermont Public Space Awards, VTASLA, AIA VT, VPA, and ASCE VT for Shelburne Farms Landscape Stewardship Plan, for Shelburne Farms, Shelburne, VT  
Best of 2002, McGraw Hill Midwest Construction, Oldfields Estate, Ravine Garden Reconstruction, House Landscape Rehabilitation, Entry Gate, Wall Reconstruction, with Hillier Architecture for Indianapolis Museum of Art, IN  
Preservation Award, Pittsburgh History & Landmarks, Schenley Park Visitor Center, for Pittsburgh Parks Conservancy, Pittsburgh, PA  
Merit Award, Kentucky ASLA, Barringer Springs Rehabilitation, Cherokee Park, Environs RLA lead, for Louisville Olmsted Parks Conservancy, Louisville, KY
- 2001 Preservation Award, Pittsburgh History & Landmarks, Frick Park Entry Rehabilitation For Pittsburgh Parks Conservancy, Pittsburgh, PA  
President's Award for Excellence, Vermont ASLA, Jefferson's Poplar Forest Historic Landscape Schematic Master Plan, for The Corporation for Poplar Forest, Forest, VA  
President's Award for Excellence, Vermont ASLA, Bamboo Brook Historic Landscape Report, for Morris County Parks Commission, Morristown, NJ
- 2000 Honor Award, Connecticut ASLA, Taconic Parkway Corridor Management Plan, for New York State Department of Transportation, Region 8, Poughkeepsie, NY  
Merit Award, Rhode Island ASLA, Conanicut Battery Preservation & Vegetation Management Plans, for Conanicut Battery Friends, Jamestown Historical Society, Jamestown Planning, Jamestown, RI
- 1998 Merit Award, National ASLA, Colonial Parkway Cultural Landscape Report, Part 1, for National Park Service, Colonial National Historic Park, Yorktown, VA
- 1997 Merit Awards, ASLA Boston and Connecticut Chapters, Colonial Parkway Cultural Landscape Report, Part 1, for National Park Service, Colonial National Historic Park, Yorktown, VA
- 1996 Honor Award, NY Preservation League, Seneca Park Master Plan, lead Environmental Design & Research, for Monroe County Parks, Rochester, NY
- 1994 Honor Award, Connecticut Public Space Awards, Vanderbilt Mansion National Historic Site Cultural Landscape Report Part 1, for National Park Service Northeast, ROVA, Hyde Park, NY
- 1992 Honor Award, Connecticut Public Space Awards, Hartford Parks Master Plan, for 31 parks leader of multi-disciplinary team, for City of Hartford, CT  
Honor Award, Connecticut Public Space Awards, Downing Park Preservation, Renewal Plan, for Downing Park Alliance, Newburgh, NY
- 1989 Merit Award, Connecticut Public Space Awards, Preservation & Scenic Conservation Master Plan, for Guilford Preservation League, Town of Guilford, CT
- 1987 Planning & Analysis Award, National ASLA, Preservation & Scenic Conservation Master Plan, for Guilford Preservation League, Town of Guilford, CT

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## PROJECT EXPERIENCE

### **Highland Park Welcome Entry, Pittsburgh, PA**

Construction Cost: \$ 1.1 million total project  
\$ 550,000 for fountain with all mechanicals and paving deck  
Service Provided: Welcome Entry Fountain & Public Gardens Design and Construction  
Project Size: 2 acres  
Owner: Pittsburgh Parks Conservancy, 2000 Technology Drive, Suite 300  
Pittsburgh, PA 15219 412-682-7275  
Meg Cheever, President [mcheever@pittsburghparks.org](mailto:mcheever@pittsburghparks.org)  
Phil Gruszka, Director of Park Management and Maintenance, [pgruszka@pittsburghparks.org](mailto:pgruszka@pittsburghparks.org)  
Date of Completion / Percent Complete: 2004  
Team Members Included RSA Structural Engineers, Roman Fountains, and Grenald Waldron Lighting

### **Mary Schenley Fountain, Schenley Park, Pittsburgh, PA**

Construction Cost: approximately \$ 200,000  
Service Provided: Preservation Landscape Architects, redesign of fountain setting and assisted in the fountain plumbing and coating design approach  
Project Size: 3 acres  
Owner: Pittsburgh Parks Conservancy 2000 Technology Drive Suite 300  
Pittsburgh, PA 15219 412-682-7275  
Phil Gruszka, Director of Park Management and Maintenance, [pgruszka@pittsburghparks.org](mailto:pgruszka@pittsburghparks.org)  
Date of Completion/ Percent Complete: October, 2008

### **Patterson Park Historic Lombard Street Fountain & Heart of the Park, Baltimore, MD**

Construction Cost: approximately \$ 125,000  
Service Provided: Fountain Rehabilitation & Heart of the Park interpretation  
Project Size: one-half acre  
Owner: Baltimore Department of Recreation and Parks, 2600 Madison Avenue  
Baltimore, MD 21217 410-396-7948  
Gennady Schwartz, Chief of Capital Projects, [gennady.schwartz@Baltimorecity.gov](mailto:gennady.schwartz@Baltimorecity.gov)  
Date of Completion/ Percent Complete: 2003

### **Eldridge R. Johnson Park, Camden, NJ**

Construction Cost: approximately \$ 100,000  
Service Provided: Historic Landscape Report & Preservation Treatment Plan; Fountain Rehabilitation & Sculpture Restoration  
Project Size: Entire park, 4 acres; Buddha Fountain, approximately 1,200 sf  
Owner: Rutgers University, Former staff unavailable  
Date of Completion/ Percent Complete: 2000

**H e r i t a g e L a n d s c a p e s L L C**  
P r e s e r v a t i o n L a n d s c a p e A r c h i t e c t s & P l a n n e r s  
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## Heritage Landscapes LLC, Project Experience

### **Bamboo Brook Landscape Restoration, Morristown, NJ**

Construction Cost: \$ 1.4 million

Service Provided: Water System Landscape Reconstruction

Project Size: 5 acres

Owner: Morris County Park Commission, PO Box 1295

Morristown, NJ 07962-1295 973-326-7600

Charles Zafonte, Head of Horticulture & Natural Resources, [czafonte@morrisparks.net](mailto:czafonte@morrisparks.net)

Date of Completion/ Percent Complete: 2008

### **Oldfields Estate Ravine Gardens Reconstruction, Indianapolis, IN**

Construction Cost: \$ 950,000

Service Provided: Research, Preliminary Design, Schematic Design, Design Documents, Construction Documents, Construction Administration Support

Project Size: 4 acres

Owner: Indianapolis Museum of Art, 1200 West 38th Street

Indianapolis, IN 46208-4196 317-923-1331

Mark Zelonis, Director of Oldfields

Date of Completion/ Percent Complete: 1998

Team Members Included RSA structural Engineers

### **Camden Garden Amphitheatre & Fauns Garden, Camden, ME**

Construction Cost: \$ 450,000

Service Provided: Research, Preliminary Design, Schematic Design, Design Documents, Construction Documents, Construction Administration Support

Project Size: Fauns Garden, 5000 sf.; Library, Gardens, Amphitheatre & Meadow, 3 acres

Owner: Camden Public Library, 55 Main Street

Camden, ME 04843 207-236-7014

David P. Jackson, Parks Director, [director@harborparks.org](mailto:director@harborparks.org)

Date of Completion/ Percent Complete: 2006

### **Druid Hill Park Palm House, Greenhouses & Interior Fountains, Baltimore, MD**

Construction Cost: \$ 4.2 million entire project

Service Provided: Interdisciplinary Team Leader

Project Size: less than one acre, fountains about 140 square feet, 3 fountains

Owner: Baltimore Department of Recreation and Parks, 2600 Madison Avenue

Baltimore, MD 21217 410-396-7948

Gennady Schwartz, Chief of Capital Projects, [gennady.schwartz@Baltimorecity.gov](mailto:gennady.schwartz@Baltimorecity.gov)

Date of Completion/ Percent Complete: 2003

### **Longue Vue House & Gardens, New Orleans, LA**

Construction Cost: \$ 250,000

Service Provided: Wild Garden and Pool Rehabilitation

Project Size: Overall property, 7 acres; Wild Garden, 4,000 sf

Owner: Longue Vue House & Gardens 7 Bamboo Road

New Orleans, LA 70124-1007 504-488-5488

Bonnie Goldblum, Executive Director, [bgoldblum@longuevue.com](mailto:bgoldblum@longuevue.com)

Date of Completion/ Percent Complete: 2002



## SELECTED PROJECTS

Heritage Landscapes is a small, high-quality, professional firm providing consulting in preservation landscape architecture and planning for historic projects of various types and scales. This selected project list is organized into two headings, Projects with Pools & Water Systems and Projects with Campuses & Institutions. In this listing the project and location are followed by the original design professionals and/or development period. In order to avoid repetition the role of Heritage Landscapes is assumed as project leader with subconsultants credited. When we serve as landscape preservation consultants for landscape architecture and planning, the project lead is listed and our role noted. Multiple projects for one historic landscape are noted by title and date.

### PROJECTS WITH POOLS & WATER SYSTEMS

**Bamboo Brook**, formerly Merchiston Farm, Morristown, NJ, Martha Brooks Hutcheson, 1911-1959; Hutcheson Water System Landscape Reconstruction, 2007-2008; Tennis Court masonry, 2006; Restoration of Coffee Terrace and Gardens, Walks and Walls, 2004; Bamboo Brook Historic Landscape Report, Treatment & Maintenance Plan, 2000; for Morris County Parks Commission, award-winning project.

**Mary Schenley Fountain & Landscape**, Schenley Park, Pittsburgh, PA; research, green redesign and access, construction plans, administration assistance, 2008; for Pittsburgh Parks Conservancy and Pittsburgh DPW.

**Longue Vue House and Gardens**, New Orleans, LA, property of Edith and Edgar Stern, Ellen Biddle Shipman, Landscape Architect, Caroline Dormon, native Plant Specialist 1936-1949; Longue Vue Landscape Renewal Plan, principal pro-bono contribution for Katrina Hurricane Recovery, with The Garden Conservancy, 2007; Wild Garden and Pool Rehabilitation; 1998; Tree Preservation Guidelines, 1997; Longue Vue Historic Landscape Report with Neil Odenwald, PhD. and Robin Karson, 1997; for Longue Vue Foundation and Waggonner & Ball Architects, award-winning project.

**Oldfields Estate**, Indianapolis Museum of Art, Indianapolis, IN, Olmsted Brothers, Percival Gallagher 1920-1927; Art & Nature Park, Oldfields integration for access and maintenance, for The Landscape Studio lead, 2007; Lilly House Landscape Rehabilitation, parallel to RMJM Hillier, 2002; Perimeter Brick Wall Reconstruction, 2000; Ravine Garden Reconstruction & Hillside Rambles Rehabilitation, with RSA structural engineers, 1998; Oldfields Plan, with HKP Landscape Architects and Bradley Brooks, 1998; Sculpture and Horticulture Study, with Jonathan Fairbanks, Curator, Museum of Fine Arts, Boston, 1997; Woodstock Drive Olmsted design consultation with Horticulture staff, 1996; for Indianapolis Museum of Art, award-winning project.

**Camden Public Library**, Garden Amphitheatre, Library Grounds, Meadow and Harbor Park, Camden, ME, Fletcher Steele, 1928-1931, Olmsted Brothers, 1930-1935; Fauns Garden Restoration, 2006; Camden Amphitheater Phase 1 Restoration & Harbor Park Rehabilitation, 2004; Community consensus consultant, Independent Commission on the Camden Library Grounds, 2002; Library Grounds & Meadow Rehabilitation, construction documents, 1999; Atlantic Avenue construction documents with Coffin Engineers, 1998; Historic Landscape Report and Preservation Treatment Plan, with Robin Karson and Charles E. Beveridge, PhD., landscape historians, 1997; for Camden Public Library Board and Camden Amphitheatre & Harbor Park Conservancy, award-winning project.

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## Heritage Landscapes LLC, Selected Projects List, Page 2

**Druid Hill Park Palm House, Greenhouses & Interior Fountains**, Baltimore, MD, Howard Daniels, 1860, Olmsted Brothers, 1910s; lead Druid Hill Conservatory & Greenhouses Interior Rehabilitation, with Sidhu Associates, Kann Associates, Carroll Engineering, 2003; for Baltimore Public Works, award-winning project.

**Highland Park**, Pittsburgh, PA, 1870s Reservoir, 1880s Public Park Edward M. Bigelow, Park Superintendent; Welcome Entry Fountain & Public Gardens Design and Construction 2004; for Pittsburgh Parks Conservancy, Highland Park Community Dev. Corp. and Pittsburgh DPW, award-winning project.

**Patterson Park Historic Lombard Street Fountain & Heart of the Park**, Baltimore, MD, historic public walk, Olmsted Brothers, extension 1910s; Extension Entry Rehabilitation Construction Documents, 2004; Fountain Rehabilitation & Heart of the Park interpretation with Mortar & Ink, 2003; Patterson Park Pagoda Landscape Rehabilitation, lead Kann Associates, 2001; for Baltimore Department of Recreation and Parks, Capital Projects.

**Eldridge R. Johnson Park**, Walt Whitman Cultural Arts Center, Camden, NJ, Karcher & Smith, Architects, 1920s; Fountain Rehabilitation & Sculpture Restoration Phase 1, 2000; Johnson Park Historic Landscape Report & Preservation Treatment Plan, with Rebecca Reynolds and Robert Shure, sculpture specialists, for Rutgers University, 1998; for the New Jersey Preservation Trust.

### PROJECTS FOR CAMPUSES & PUBLIC INSTITUTIONS

**West Virginia Capitol Complex**, Charleston, WV, Cass Gilbert, 1921-1934, Cass Gilbert Jr., 1934-circa 1955; landscape architecture and preservation team member for Capitol Complex Master Plan, team leaders Michael Baker Jr. Inc. and RMJM Hillier Preservation, 2009; for State of West Virginia General Services Division.

**Richardson Olmsted Complex**, Buffalo, NY, former Buffalo State Insane Asylum, Frederick Law Olmsted, Sr. and Calvert Vaux, Olmsted Vaux & Co. 1870, H. H. Richardson, Architect, 1870; Richardson Olmsted Complex Cultural Landscape Report, team lead Goody Clancy Associates, Historic Structures Report, with Francis R. Kowsky, Historian, and Martin Wachadlo, Historian, 2008; for Richardson Center Corporation.

**Virginia Capitol and Capitol Square**, Richmond, VA, Thomas Jefferson, Architect, 1782, Landscape Design by Godefroy 1818, Notman 1850, Browne, 1906; landscape preservation consultant for Restoration, Rehabilitation and Extension of Virginia Capitol & Capitol Square schematic design to construction support, lead RMJM Hillier, 2003-2007; for General Services, Commonwealth of Virginia, award-winning project.

**St. Elizabeths Hospital**, Washington, DC; Government Hospital for the Insane, Thomas U. Walter and Charles H. Nichols 1852-1877; St. Elizabeth's West Campus Cultural Landscape Report with Robinson & Associates, historians, 2007; Building, Landscape & Archeological Assessment Study for the Saint Elizabeths Hospital West Campus: Landscape Assessment Plan; team lead Farewell, Mills & Gatsch Architects, LLC with Hunter Research and Hanscomb Inc; 2005; for General Services Administration.

**Bronx Community College**, former New York University, McKim Mead & White Historic Complex, 1890s, Calvert Vaux and Olmsted Brothers, BCC Historic Core Cultural Landscape Report and conservation recommendations, Getty Historic Campus Conservation Grant 2005; lead Easton Architects, for CUNY.

**Dumbarton Oaks**, Georgetown, DC, Roberts Woods and Mildred Bliss, Landscape Architects Beatrix Jones Farrand, 1921-1944, Ruth Havey, Robert Patterson, Alden Hopkins, Ralph Griswold, Robert Zion, 1944 to 1966; landscape preservation consultant for Landscape Preservation Review of Proposed Research Library and Gardeners Court, lead Venturi Scott Brown Architects, James Urban, landscape architect, 2002-2003; West Campus Master Plan, lead Hartman Cox Architects, 2001; lead for Dumbarton Oaks Cultural Landscape Report Part I, with Lampl Associates, 2001; and Dumbarton Oaks Partial CLR Part II, 2001; for the Trustees of Harvard University.



## HIGHLAND PARK WELCOME ENTRY

Pittsburgh, Pennsylvania

Clients: Pittsburgh Parks Conservancy & Pittsburgh Dept. Public Works

Projects: Highland Park Welcome Entry Fountain, Gardens & Paving, 2004;  
Pittsburgh Regional Parks Master Plan: A New Ethic of Stewardship, preservation  
landscape architects, 2000

Project Credits: Heritage Landscapes lead with Grenald Waldron Lighting, RSA  
Structural Engineers and Roman Fountains Fountain Plumbing System, La  
Quatra Bonci/Michael Stern, lead for Master Plan

**Description:** Since 1998 Heritage Landscapes, preservation landscape architects, has collaborated with the Pittsburgh Parks Conservancy (PPC) and Pittsburgh Department of Public Works for planning, construction and volunteer projects addressing the four regional parks. Beginning with the Pittsburgh Regional Parks Master Plan, we addressed the history, character and decline of historic Frick, Highland, Riverview and Schenley Parks, totaling 1,700 acres. Following multi-disciplinary team comprehensive planning, Heritage Landscapes completed a series of implementation initiatives to include capital projects, lighting, bench, signage and wayfinding guidelines, management planning, staff initiatives and volunteer undertakings.

For the Highland Park Welcome Entry project, we designed a vibrant entry area drawing on the past. Gaining community consensus, project components were developed to suit funding opportunities. The rehabilitation of the grand 19th century entry fountain basin and 12,000 square feet of gardens was completed through five projects in one year. Respecting the 1930s spatial organization, historic copings were saved, conserved, and patched for reuse. Construction documents for fountain reconstruction were prepared with exposed aggregate concrete paving, asphalt walks, stone edged garden beds, custom soils and drip irrigation. Working over two 30 inch brick water lines from the adjacent Reservoir, an entirely new basin of high-quality dense concrete was positioned above these lines with carefully crafted details developed in collaboration with RSA engineers. These lines were tapped to use excess treated water and feed to a below grade equipment vault, detailed for filtering, recirculation and safe excess water disposal. A central fountain jet was designed to cycle at varying heights. Completion of the fountain with city funds was followed by garden bed preparation, excavation, stone edging, custom soil fill and planting with an array of bulbs, perennials and shrubs. Replica light poles and high fountain spotlights illuminate the area. Large planted urns replace those seen in historic views. The Highland Park Welcome Entry is a magnet for community use and serves as an informal gathering place as well as a setting for events. It is an award-winning project that is highly valued by Pittsburgh residents.

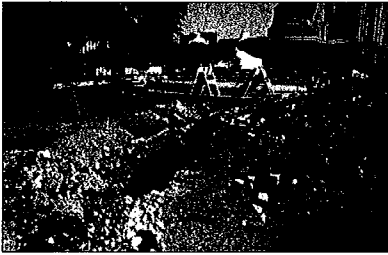


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## MARY SCHENLEY FOUNTAIN

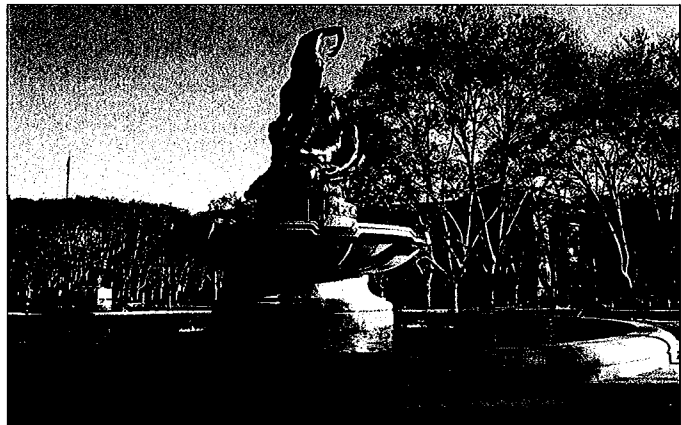
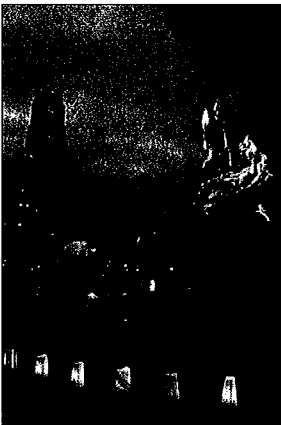
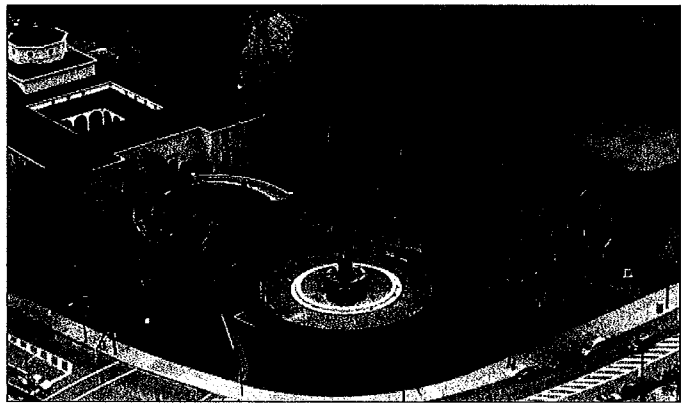
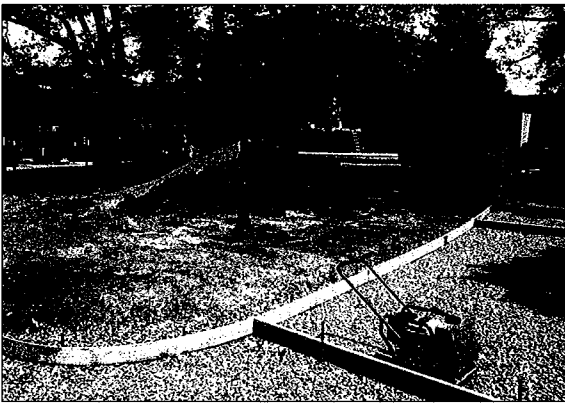
Schenley Park, Pittsburgh, PA

**Client:** Pittsburgh Parks Conservancy, with Pittsburgh DPW

**Project:** Fountain Repair & Conservation, Landscape Redesign for Walks, Grading, ADA Access and Connections

**Project Credits:** Heritage Landscapes, Preservation Landscape Architects & Planners, in collaboration with Phil Gruszka, PPC Project Manager

**Description:** Heritage Landscapes has completed a series of projects in collaboration with the Pittsburgh Parks Conservancy. For the Mary Schenley Fountain, a donor requested a return of this memorial fountain to full function and rethink the surrounding landscape in a short four-month timeframe. The competition designed sculpture, "A Song to Nature," memorializes Mary Schenley, land donor for the park. The bronze and granite fountain was dedicated in 1918 and depicts the earth god Pan reclining on a rock as a nymph serenades him with a lyre. Located on axis with the neo-gothic Cathedral of Learning, the fountain was somewhat obscured and disconnected from the vibrant community greenspace of Schenley Plaza. Heritage Landscapes saw an opportunity to connect, provide access and make a greener space around the fountain. For PPC and its partners Heritage Landscapes designed the new Mary Schenley Fountain landscape within the time and budget constraints. The new work is a simple, classic treatment that respects the evolved landscape of this area through study of landscape history, evolution and intent. It highlights the art of the fountain basin and sculpture as a timeless memorial; increases green space while decreasing impervious paving and enhancing stormwater infiltration; provides for ease of access and service, including American Disabilities Act compliance for handicapped access. Additionally, it reconnects the fountain area to Schenley Plaza with graceful, functional walk alignments and crosswalks; provides enhanced access to the University of Pittsburgh Frick Arts building; and improves relationships to the adjacent playing field. Rededicated in October 2008, use has already increased. The landscape redesign, fountain plumbing repair, and stone and bronze conservation is another important PPC milestone to enrich the Pittsburgh Parks.



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## PATTERSON PARK HISTORIC LOMBARD STREET FOUNTAIN & HEART OF THE PARK

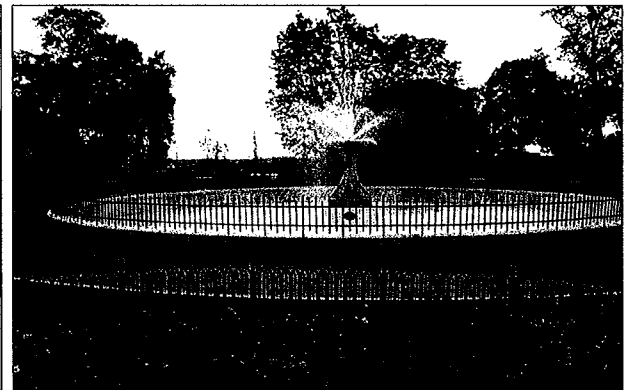
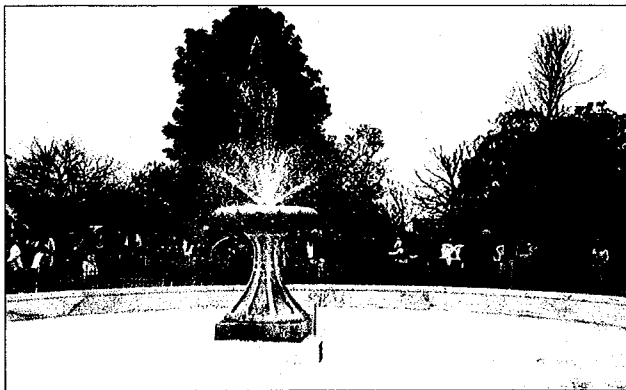
Baltimore, Maryland

Client: City of Baltimore, Department of Recreation & Parks

Project: Patterson Historic Fountain Reconstruction, Park Heart of the Park Interpretation

Project Credits: Heritage Landscapes, Preservation Landscape Architects & Planners with Mortar & Ink in collaboration with Baltimore Parks & Recreation Capitol Projects and the Friends of Patterson Park

**Description:** Heritage Landscapes worked with the Baltimore Department of Recreation & Parks and Baltimore community on several projects at Patterson Park. Each of the projects enhanced the character and functionality of the park landscape and ultimately improved the quality of life for city residents. In each project history, resource preservation and conservation, current needs, ongoing maintenance and management, and sustainability were addressed for holistic public landscape renewal. Individual projects addressed the Heart of the Park, the Lombard Street Fountain and the related park entry. The fountain project preserved and repaired the historic stone fountain pedestal and coping while replacing the failed basin. The Lombard Street Fountain sits on the center axis at the Lombard Street park entry and is a visually prominent feature. Heritage Landscapes worked with the City in the selective demolition of the historic marble fountain basin and central pedestal. Elements were cleaned, repaired and reset atop a newly constructed concrete basin bottom. The historic iron fence along the marble coping was restored and new plumbing and recirculation equipment installed. The surrounding fountain plaza was also restored. Circular paving at the fountain base was lined with benches and tree plantings beyond. Heritage Landscapes utilized their extensive knowledge of the Patterson Park history to rehabilitate walks at the perimeter of a newer portion of the park. Playing fields and perimeter walks accommodated contemporary activities without adversely impacting the historic design of the older portions of the park. For ease of use and maintenance, an inexpensive submersible pump was chosen for the fountain jet. The fountain setting was rehabilitated with realignment of walks and definition of new planting beds with replica iron hoop fencing installed for protection from foot traffic. Heritage Landscapes worked closely with Baltimore Recreation & Parks Capitol Projects on construction details. Heritage landscape collaborated with Mortar and Ink to develop wayfinding and interpretation for the earliest public walk, the Heart of the Park. Mile markers with tile made by local school children were incorporated as part of the project. Together, these projects enhance the character, use, and quality of the Patterson Park landscape.



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## ELDRIDGE R. JOHNSON PARK

Camden, New Jersey

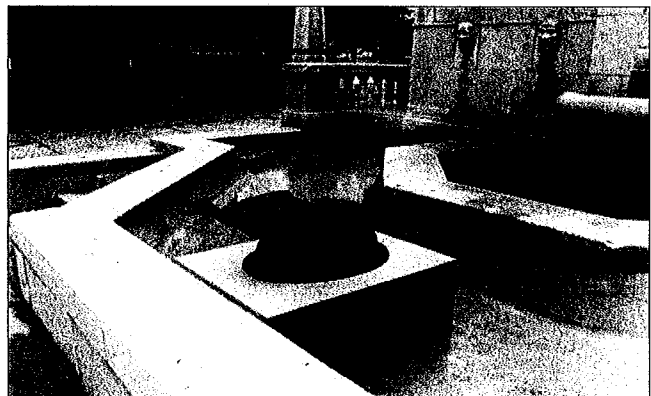
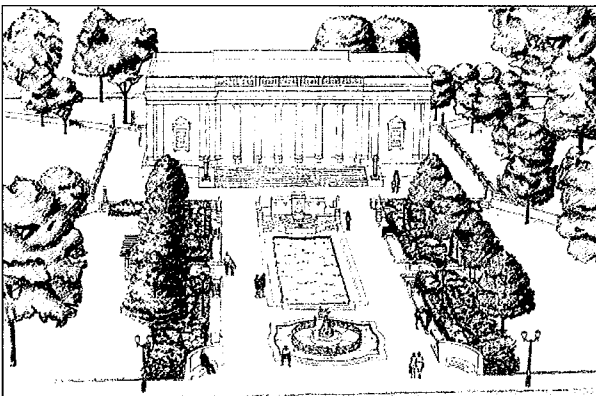
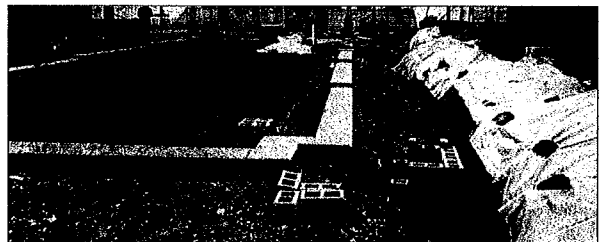
**Client:** Rutgers State University of New Jersey, New Brunswick, NJ

**Project:** Buddha Fountain, Walks & Decorative Tiles Rehabilitation; Preservation Plan for Johnson Park

**Project Credits:** Heritage Landscapes, Preservation Landscape Architects & Planners, with Jonathan Fairbanks and Rebecca Reynolds, sculpture specialists and Robert Shure, conservator.

**Description:** Given to the city in the 1910s by inventor Eldridge R. Johnson, this block-size park was designed as a gracious outdoor parlor surrounding a public library. Johnson's special interest in children can be seen in the sculptures and fountains representing characters in children's literature. The park was designed in the classical style with stone balustrades at each entry and around the library, a fountain and wading pool, changing pavilions, sculptures and fences with animals and nature themes, tiles illustrating nursery rhymes, and a large bronze sculpture of Peter Pan. The tree plantings created an educational arboretum. The library now functions as a performing arts center adjacent to the Rutgers University Camden campus and serves both the university and community. The park is marred by vandalism of its stone balustrades and the theft of some sculpture. Formal curving walks, balustrades and decorative ceramic tiles are in a deteriorated state. Park plantings diminished over time although stately trees remain. The preservation plan documented park history and existing conditions, assessed change and addressed treatment options setting forth a phased renewal, and served as a basis for phased implementation with grants from the New Jersey Preservation Trust.

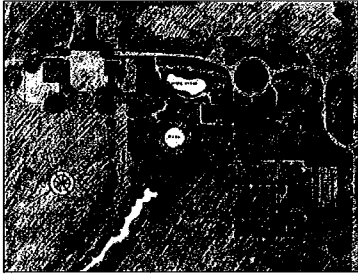
The first phase priority project was stonework and plumbing repair of the Buddha Fountain to include stone replacement in kind, dutchman patching and new plumbing supply and drain lines. Heritage Landscapes developed construction documents and details with new face carvings contributed by Rutgers art students. We collaborated with a sculpture conservator to repair and conserve valuable bronze sculptures. New sidewalks were cast in place with a small mixed aggregate surface finish that matched the original. Damaged decorative Arts and Crafts tiles were repaired with matching tiles. The plan and first priority project efforts enhanced the use and appearance of Eldridge R. Johnson Park. This work improved neighborhood quality and campus access to the park as well as providing momentum for related neighborhood stabilization and enhancement projects fostered by several local organizations.



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## BAMBOO BROOK LANDSCAPE RESTORATION

**Merchiston Farm, Morris County, New Jersey**

**Client:** Morris County Park Commission

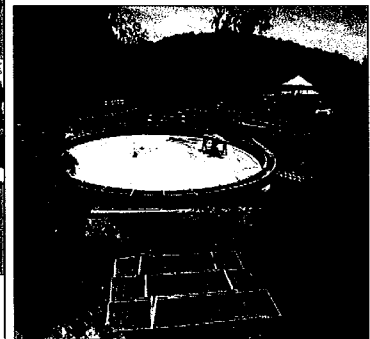
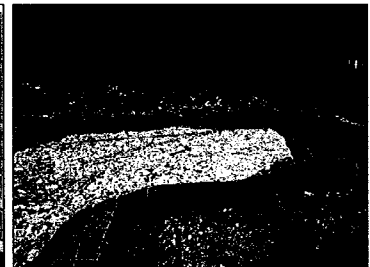
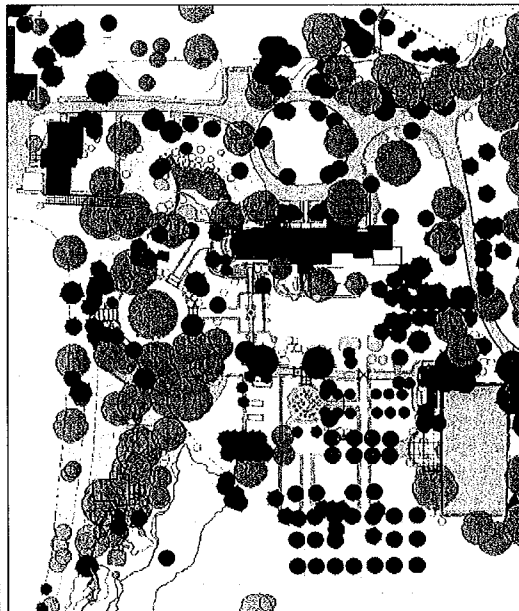
**Project:** Bamboo Brook Historic Landscape Water System, 2006-09; Coffee Terrace & Garden Restoration, 2002-04; Bamboo Brook Historic Landscape Preservation & Maintenance Plan, 2000

**Project Credits:** Heritage Landscapes, with LRV Associates, ecological assessment, Landmark Facilities Group, mechanical and electrical engineering

**Description:** The 100-acre Merchiston Farm, known today as Bamboo Brook, is the former home of Martha Brookes (Brown) Hutcheson, FASLA. Hutcheson is an important pioneer in the profession and holds a place among the first three women who pursued early training in landscape architecture in the United States. Applying the principles laid out in her book, *The Spirit of the Garden*, the farm landscape became a physical manifestation of Hutcheson's design skill and an expression of her garden-making principles from 1911 to the early 1950s.

The award-winning Bamboo Brook Historic Landscape Preservation and Maintenance Plan engaged Morris County staff and a diverse advisory committee in working sessions to reveal the landscape evolution, understand the gardens intricacy and innovations, communicate the degraded existing character and present the opportunity for recapture. Restoration was chosen as the most appropriate treatment for this well documented but altered master-work of an important early landscape architect.

Specific implementation projects to recapture the historic landscape character were presented in detail. Restoration of the Coffee Terrace, Armillary Sphere Garden and south house gardens, with extensive masonry repair and reconstruction, soil management and period plantings was completed in 2004. The complexity and significance of the water system of pools and a rock-edged stream and spillway, as designed and implemented by Hutcheson, stood out as one important focus of restoration efforts. An approach to implementation was identified following Hutcheson's innovative surface stormwater capture concept and using many of the remaining components of her surface and subsurface system. Added system elements included additional storage tanks for increased water harvesting and contemporary water lines with filtration and recirculation. New Jersey environmental compliance review was completed and approved. Reconstruction of Hutcheson's complex and unique system of scenic pools, stream and swimming tank is underway. The water system and features of the storage tanks, upper pond, swimming tank, watercress tank and stream will reflect the sky, and water music will flow through Hutcheson's gardens once again.



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## OLDFIELDS, RAVINE GARDEN RECONSTRUCTION

with Pools & Cascade, Indianapolis, Indiana

**Client:** Indianapolis Museum of Art

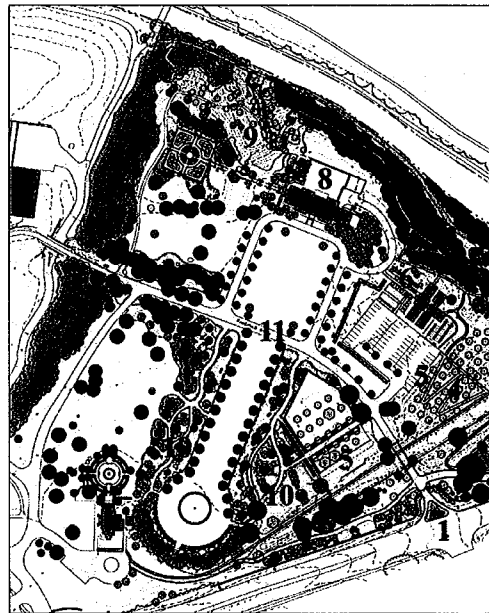
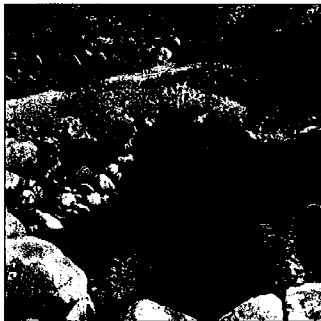
**Project:** Ravine Garden Reconstruction; Michigan Street Brick Wall Reconstruction; Lilly House landscape Rehabilitation, Art & Nature Park landscape preservation team member

**Project Credits:** Heritage Landscapes, RSA, Structural Engineers, Ravine Garden; RMJM Hillier, Lilly House; Landscape Studio Art/Nature Park

**Description:** Heritage Landscapes has completed a series of important planning and implementation projects at Oldfields, an Olmsted Brothers, Percival Gallagher estate landscape, which is now part of the Indianapolis Museum of Art. The 26-acre Oldfields property is significant as a surviving example of county-place era design in the Midwest. The Oldfields Landscape Planning Project addressed the history, existing conditions and future of Oldfields within the context of the 52-acre Indianapolis Museum of Art campus. In addition to recapturing historic landscape character at Oldfields, the plan addressed contemporary needs of vehicular and pedestrian circulation, wayfinding and interpretive signage, and defined landscape maintenance staffing, skills and level of effort. We contributed to the successful National Historic Landmark nomination.

Heritage Landscapes was responsible for planning, construction documents and administration of the Ravine Garden reconstruction. This informal, highly articulated garden with three pools, cascade, retaining walls, utility infrastructure and complex plantings, was completed in spring 1999. A complete reconstruction of the water system was informed by Olmsted Brothers plans. Invasive historic plants were substituted by character and form. Contemporary pumps, water filters and ionizing were installed. The systems of pools, falls and riffles activated the water providing oxygenation and pleasing sounds. Water is at the heart of this sloped garden adorned with period trees, shrubs, perennials and bulbs.

The rehabilitation of an extensive perimeter brick wall, with original capstones conserved and historic stone and iron gates repaired and replicated, was completed in 2001. The Lilly House was rehabilitated and opened in 2002. Heritage Landscapes designed a fully functional, aesthetically pleasing and historically compatible landscape around the building to recapture the character of selected areas and adapt others for public access and event use. A visitor welcome area functions for house and garden tour origination and interpretive exhibits. Heritage Landscapes consulted on access, integration and maintenance for the Art & Nature Park. Oldfields received the 2002 Midwest Construction project of the year award and other professional awards.



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## CAMDEN GARDEN AMPHITHEATRE & FAUNS GARDEN Camden Public Library Grounds, Camden, Maine

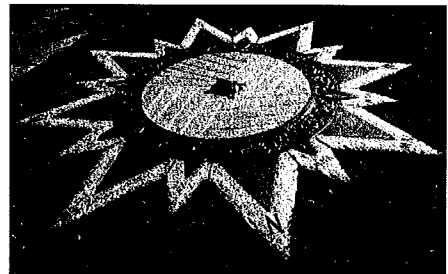
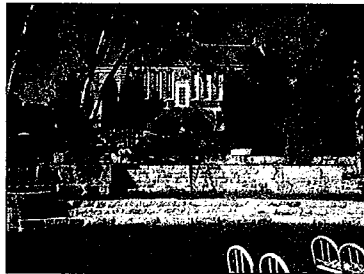
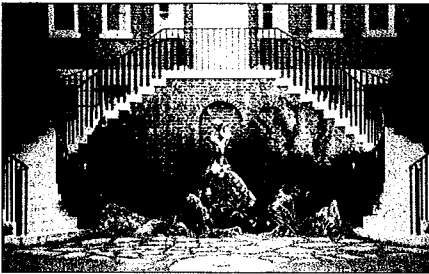
**Client:** Camden Public Library Board, Independent Commission, Citizens Advisory Committee, Camden Harbor Park & Amphitheater Conservancy

**Project:** Camden Garden Amphitheater & Fauns Garden Restoration, construction documents and administration, 2002-2006; Independent Commission technical assistance, 1999-2002; Historic Landscape Report, Preservation Treatment Plan for the Camden Public Library Project Committee, 1997.

**Project Credits:** Heritage Landscapes planning, Committee technical assistance, construction document, construction administration; Atlantic Avenue construction documents with Coffin Engineers, Historic Landscape Report, with Robin Karson and Charles E. Beveridge, PhD. landscape historians.

**Description:** Heritage Landscapes has completed important planning and implementation projects for the Camden Library Grounds and Garden Amphitheatre, designed by Fletcher Steele 1928-1931. This master work is recognized as the first modernist landscape in America. Funded by philanthropist Mary Curtis, it was Steele's only public commission. The Amphitheatre, located at the head of the Camden Harbor, is aligned on a bent axis focused on the harbor and framed by distant hills. Originally constructed to maximize local labor in the Depression Recovery era, the massive stonework walls with turf terraces are planted with native evergreen and deciduous trees. The Camden Amphitheatre is a character-defining community landscape, used heavily by both townspeople and tourists. Our comprehensive Historic Landscape Report and Preservation Treatment Plan was prompted in 1997 by library expansion that reduced the Amphitheatre area to accommodate a new library reading garden. The team documented history and existing conditions, assessed change and continuity, and recommended phased landscape rehabilitation and restoration interventions and ongoing management.

Steele's original plans for the Library Grounds & Meadow informed the rehabilitation completed in 2002. For Steele's Amphitheatre, phase 1 restoration addressed repair of masonry walls and steps, water supply and irrigation and selected replacement plantings. In 2006 the Fauns Garden bronze sculpture was conserved and repiped for water supply, the boulder-edged water basin was sealed with a new drain, lost historic arabesque beds were prepared and planted, and the cast bronze and granite Compass of the Winds was installed. At completion a detailed calendar was prepared for cyclic inspection and maintenance of paths, utilities, trees, shrubs, lawn, buildings, and signs. As non-original elements decline, further restoration efforts will be phased. The award-winning renewal of this significant historic landscape brings into more complete and satisfying use as a historic, scenic and recreational resource for the community and its visitors.



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**DRUID HILL PARK PALM HOUSE, GREENHOUSES & INTERIOR FOUNTAINS, Baltimore, Maryland**

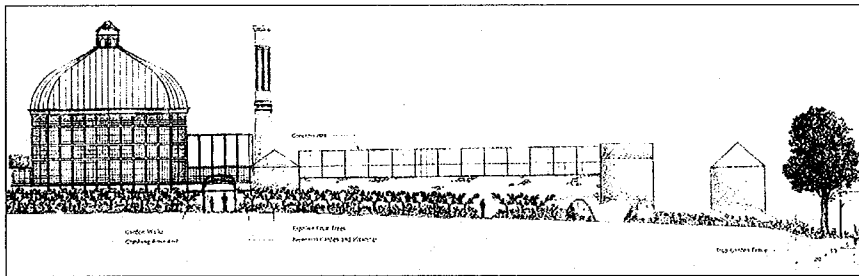
**Client:** Baltimore General Services & Recreation & Parks

**Project:** Palm House & Greenhouses Rehabilitation, 2000-2004

**Project Credits:** Team Lead Heritage Landscapes, Kann & Associates Architect, Sidhu Associates HVAC, Mortar & Ink Signs, Carroll Engineering, Structural with Rick Darke, Michael Owen, Longwood Gardens and W. Gary Smith, ASLA

**Description:** Completing the community-based master plan Renewing Druid Hill Park, in 1995, Heritage Landscapes led multi-disciplinary teams to plan and implement a series of projects from 1995-2004. This historic 745-acre park was designed by Howard Daniels in 1860 with contributions by the Olmsted Brothers in the 1910s. The 1890s Palm House was a philanthropic gift donated with a camellia collection. The three greenhouse ranges behind this conservatory served as propagation and holding space. From 2000-2004 Heritage Landscapes led a team through the design development, construction documents and administration of the Druid Hill Park Palm House and Greenhouses interior rehabilitation and expansion. This project thoroughly redesigned the interior spaces and collections of the Palm House, Orchid Room, Mediterranean, Desert and Tropical Rain Forest Houses. Plant health was enhanced with state-of-the-art tempered reverse-osmosis water and monitored heat, humidity, ventilation and air exchange. Three fountain features were included. In the Tropical house an irregular faux rock wall and basin was designed with cascading flows, plant pockets and aquatic plants on shelves. Matching the geometry of the Mediterranean House tile edges rectangular and square pools with small jets added water play and sound to the plant display.

For these unique, historic greenhouses the design intent was to present attractive, educational interior displays of indigenous, decorative, edible plants and herbs from several global climatic regions. An informative permanent sign system was designed and fabricated with five panels providing an overview of each climatic range accompanied by a highlighted map of the globe showing plant ranges, illustrating sample plants and communicating key facts. These collections and attractive signs serve as a springboard for school group lessons and urban-dweller engagement with horticulture, geography, history, nature and the climates of the world. The renewed Palm House complex has become a magnet for increased public use, enjoyment and education by families, school groups and organizations. The project won a Baltimore Heritage Preservation Award in 2005.



**Mild Mediterranean**

Approximately 25% of the world's population lives in the Mild Mediterranean climate zone. This zone is characterized by mild, wet winters and hot, dry summers. The climate is ideal for a wide variety of plants, including many of the plants found in the Palm House and Greenhouses. The Mild Mediterranean climate zone is found in the Mediterranean basin, California, and parts of South America and Australia.





## LONGUE VUE HOUSE & GARDENS

New Orleans, Louisiana

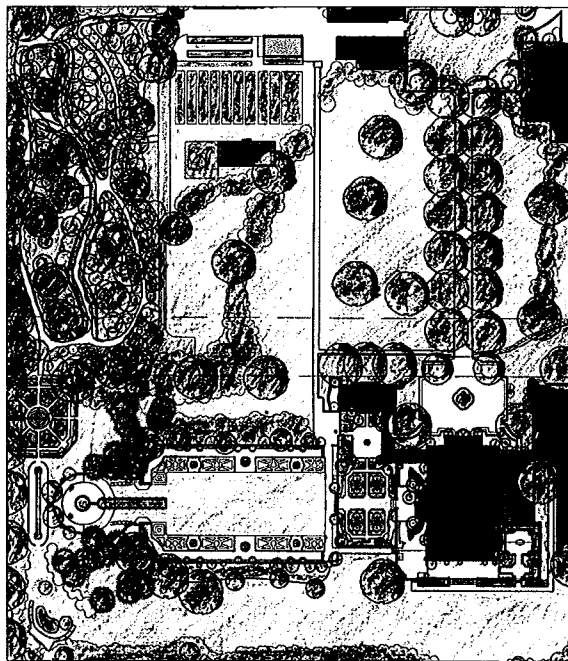
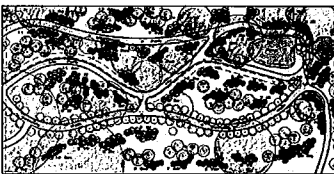
Client: Longue Vue Foundation

Projects: Historic Landscape Report, Tree Care Plan and Wild Garden Rehabilitation Implementation, 1998-2002; Landscape Renewal Plan, 2006-2007

Project Credits: Heritage Landscapes, Preservation Landscape Architects, with Garden Conservancy for Katrina Recovery, Robin Karson, landscape historian; Neil Odenwald, PhD, FASLA, advisor, collaboration with Waggonner and Ball, Architects, historic structures and master plan

**Description:** Principally the work of important landscape architect Ellen Biddle Shipman in collaboration with owners Edith and Edgar Stern and architects William and Geoffrey Platt, the 7-acre gardens at Longue Vue are a masterful design. Shipman's work at Longue Vue, dating from 1935 to 1950, is one of her most complete and effective projects. In 1997, Heritage Landscapes completed a Historic Landscape Report, with historic research, existing conditions documentation, and analysis. Landscape rehabilitation recommendations focused on enhancement of landscape character with sustainable effort addressing budgets and staffing. Heritage Landscapes' work proceeded with reconstruction of the Wild Garden and Pool to address water systems, pool, walks, soils and plantings. Restoration of the Azalea Walk, Vegetable and Herb Garden, and boxwood parterres was undertaken in accordance with the plan recommendations.

In 2005, the Longue Vue landscape suffered extensive damage from Hurricane Katrina with high winds, torrential rains, and flooding from the adjacent 17th Street Canal. As part of recovery efforts, Heritage Landscapes provided expertise and aided Longue Vue in estimating the damage and connecting the property with potential supporters. Heritage Landscapes also partnered with The Garden Conservancy in a multi-disciplinary collaborative planning process for the renewal of the landscape, which yielded the Longue Vue House & Gardens Landscape Renewal Plan. Longue Vue leadership and staff worked closely with Heritage Landscapes to focus the project on achievable near-term efforts and priorities within the long-term vision of the plan. The plan assessed the tree canopy to identify the condition of remaining vegetation and opportunities to replant vegetation lost in the hurricane. As a result, tree preservation and management guidelines were prepared for the grand collection of live oaks, other deciduous and evergreen canopy trees, and the flowering tree layer that are important to the Shipman design. Recovery efforts have moved forward with prioritized phases outlined in the plan, which have helped to recapture the lost character and replant important vegetation in the Shipman landscape.



# Heritage Landscapes LLC

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## RESUME PATRICIA M. O'DONNELL, FASLA, AICP

### EDUCATION

MASTER OF LANDSCAPE ARCHITECTURE, University of Illinois at Urbana Champaign, Concentration in the behavioral aspects of landscape architecture with emphasis on applied behavioral research, 1982.

MASTER OF URBAN PLANNING, University of Illinois at Urbana Champaign, Concentration in historic preservation with emphasis on the history, theories and practice of landscape preservation, 1985.

BACHELOR OF SCIENCE IN DESIGN, State University of New York College at Buffalo, Concentration in Environmental Design, 1978.

### PROFESSIONAL EXPERIENCE

- 1987-present, PRINCIPAL & FOUNDER, Heritage Landscapes, Preservation Landscape Architects & Planners. Cultural landscape preservation projects with attention to historic character, stakeholder and community engagement, sustainability, environmental quality, handicapped access, public education and interpretation. Implementation through construction documents, staff and volunteer initiatives and landscape management guidelines. Completed some 400 landscape preservation commissions for historic properties.
- 1983-87, ASSOCIATE, Walmsley & Company, Inc. Project Manager for Prospect Park, Emerald Necklace, City Hall Park, and urban design, waterfront, residential community and residential design.
- 1980-81, VISITING LECTURER, Department of Landscape Architecture RESEARCH ASSOCIATE, Housing Research and Development Program, University of Illinois at Urbana-Champaign.
- 1979-80, CONSULTANT, Houghton Park User Survey, Community Development, City of Buffalo and Survey of Buffalo Olmsted Parks System, Landmark Society of the Niagara Frontier and NYS OPRHP.
- 1977-78, DIRECTOR, US Youth Conservation Corps, Buffalo, city youth work/education program.

### SELECTED AWARDS & HONORS

- 2008 to 1987, 38 Projects Awards for Planning and Implementation from the American Society of Landscape Architects, national and chapter awards programs from Connecticut, Kentucky, Louisiana, Rhode Island, Vermont; Connecticut and Vermont Public Space Awards, New York State Preservation League Awards; Pittsburgh History and Landmarks Preservation Awards; Midwest Construction Award
- 2007 World Heritage Expert Meetings, Historic Urban Landscapes in the Americas, Olinda, Brazil, November, 2007, Integrity and Authenticity of Cultural Landscapes, Aranjuez, Spain, December, 2007.
- 2005-2007 US Technical Team for the Preservation of Finca Vigia, Hemingway Property, Havana, Cuba.
- 2005 International Federation of Landscape Architects, Western Region Delegate, World Heritage Meeting Architecture & the Historic Urban Landscape, Vienna, May, 2005
- 1999 Delegate, US/ICOMOS Cape Coast, Ghana Design and Planning Charette Team and Report.
- 1995 Elected Fellow of the American Society of Landscape Architects, for Executed Works
- 1993 USA Delegate, UNESCO World Heritage Centre, Cultural Landscapes Expert's Meeting, Germany
- 1991 National Endowment for the Arts, Design Arts Grant, landscape preservation case studies

### RECENT PRESENTATIONS & PAPERS

- Historic Urban Landscapes: Responsibilities & Opportunities, Preserving Spirit of Place & Partnering for the Future of Urban Heritage", Center for the Study of Architecture in the Arab World Petra University, Amman, Jordan Invited Keynote at CSAAR International Conference, November 2008
- "Landscape Documentation: Fostering Informed Stewardship & Enriching Interpretation" American Public Gardens Association, Planting Fields Arboretum, Invited Keynote, Oyster Bay, NY October 2008

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- "Urban Cultural Landscapes & the Spirit of Place" ICOMOS, 16th General Assembly and Scientific Symposium, Québec City, Québec, Canada, October 2008
- "Is this Preservation or Sustainability", As University, Oslo, Norway, invited lecture, April 2008.
- "Cultural Landscape Preservation & Sustainability", Shanghai, Beijing and Wuxi, China, symposium and university invited lectures, and international exchange symposium, October 2007.
- "Global Heritage Preservation & Historic Urban Landscapes", 1<sup>st</sup> IFLA Americas Region Conference 5<sup>th</sup> National Congress Landscape Architects Mexico, Mexico City, 24-27 May 2007
- "Overview of World Heritage Inscription Trends, 1972 to 2006", and "USA Issues for World Heritage Tentative List", IUCN/US & US/ICOMOS Briefing & Symposium on the US World Heritage Tentative List, Representing US/ICOMOS, 12 September 2006.
- "World Heritage Framework for Cultural & Natural Landscapes", Introductory presentation, Scientific Committee Chair, US/ICOMOS 7<sup>th</sup> Scientific Symposium, Natchitoches, LA, March, 2004.
- "Public Landscapes at the Intersection of Culture and Nature", Symposium Developing an Urban Ecology Ethic: Promoting Stewardship & Sustainability for Pittsburgh's Historic Parks, PPC, January 2004
- "Shaker Mount Lebanon, North Family Cultural Landscape Report: Cultural Landscape as Expression of Life Ways", APT Annual Meeting, Portland ME, September 2003

### RECENT PUBLICATIONS

- O'Donnell, Patricia M., Thirty Years of Landscape Rescue *VIEW* magazine, Library of American Landscape History, Summer 2008
- O'Donnell, Patricia M., "Preserving Designed Cultural Landscapes USA: understanding and preserving the designed landscape" *TOPOS* 56: Cultural Landscapes. Fall, 2006
- O'Donnell, Patricia M., "Learning from World Heritage: Lessons in the Preservation & Stewardship of Cultural and Ecological Landscapes", in *George Wright Forum*, September, 2004
- Schuyler, David and Patricia M. O'Donnell. "The History and Preservation of Historic Urban Parks and Cemeteries", in *Preserving Cultural Landscapes in America*. Alanen et al, John Hopkins Univ., 2000: 70-93

### PROFESSIONAL REGISTRATION, SERVICE & AFFILIATIONS

- Licensed Landscape Architect, CLARB professional examination 1987, Connecticut, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Virginia
- AICP, American Institute of Certified Planners, professional examination 1995
- American Society of Landscape Architects, 1995 Fellow for Executed Works, US/ICOMOS Board Ex-officio 2006-2009, HALS Co-chair 2000-2006, Historic Preservation Committee, Chair, leader, 1981-1991, Annual Meeting Papers, 1981-2002, 2004-2006, Symposia, 1987-1990, Mobile Workshop Lead 2003, 2006
- The Cultural Landscape Foundation, founding Board Member, 1998-Present
- IFLA Cultural Landscapes Committee. Chair, 2006-Present, IFLA CLC website creator, Organizer "Issues for Heritage Cities from Global to Local", lectures/mobile workshop ASLA/IFLA Meeting, Minneapolis, 2006, IFLA conference papers Mexico City, Mexico, 2007, Edinburgh, Scotland, 2005
- ICOMOS/IFLA International Scientific Committee Cultural Landscapes, Voting Member, 2006-2009, Working Session Host, 2008, Corresponding Member 2001-2005, World Heritage Desk Review, Batanes Cultural Landscape, Philippines, 2006; Meetings & Congresses 2002-2008
- ICOMOS, US/ICOMOS, Scientific Chair, 7<sup>th</sup> US/ICOMOS Symposium; Chair, US ICOMOS HGCL Committee, 2006-2008, 1997-2001, 1998-2001
- National Center for Preservation Technology & Training, Board, 2002-2006, Coalition for Preservation Technology 1990-5, US Congress Preservation Technology Transfer, Landscape Preservation Chair 1986
- Alliance for Historic Landscape Preservation, Member 1980 to present, Board 1988-98, conference papers
- National Association for Olmsted Parks, founding member 1979-80, board 1985-1988, conference papers
- Member: Association for Preservation Technology International, National Trust for Historic Preservation International Society of Arboriculture, Garden Conservancy, Connecticut Trust, Preservation League

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## RESUME PETER F. VITERETTO, ASLA

### EDUCATION

BACHELOR OF SCIENCE, LANDSCAPE DESIGN, University of Connecticut, Storrs, CT, 1982.

### PROFESSIONAL EXPERIENCE

- August 1993-present, SENIOR ASSOCIATE, Project Landscape Architect, Heritage Landscapes, Preservation Landscape Architects & Planners. Senior Associate-in-charge of Connecticut office. Project leader for preservation planning and implementation projects. Coordination of staffing tasks, field reconnaissance, ACAD plans, report and presentation preparation for preservation planning. Manager of design and construction documents, specifications and construction administration for implementation projects.
- February 1990-August 1993, ASSOCIATE, LANDSCAPE ARCHITECT, Balmori Associates, Inc., Landscape and Urban Design, New Haven, CT. Manager of both office design staff and design projects. Staff leader managing project schedules, staff assignments, project oversight, proposal preparation, design fee calculations and negotiations and project manager for projects addressing private residences and campus designs to large-scale corporate campuses and institutions.
- November 1984-February 1990, ASSOCIATE, LANDSCAPE ARCHITECT, Pelli Clarke Pelli, Architects, New Haven, CT. Project designer/design team leader, projects addressing pre-schematic, schematic, design development, construction documents, construction administration and coordination of landscape and architectural design.
- October 1983-November 1984, LANDSCAPE FOREMAN-DESIGNER, Designs by Lee Inc., Stamford, CT.
- March 1983-October 1983, LANDSCAPE FOREMAN, Pound Ridge Nurseries, Inc., Pound Ridge, NY.

### SELECTED EXPERIENCE AS PROJECT LANDSCAPE ARCHITECT

- Louis I. Kahn Bath House & Day Camp Landscape Assessment at the Ewing Senior & Community Center, team lead Farewell Mills Gatsch Architects, 2007-2008, Mercer County, Ewing Township, NJ
- Bamboo Brook Water System, Coffee Terrace & Garden Restoration, 2004-2008, Morris County Park Commission, NJ
- Valley Forge National Historical Park, Rehabilitate Support Facilities at Washington's Headquarters for Visitor Use, 2006-2008, National Park Service, PA
- Court Street Modernist Landscape Preservation, Management & Interpretation Plan, 2008, Court Street Association and Elm City Parks Conservancy, New Haven, CT
- Westchester County Park Master Plan, team lead Wilbur Smith Associates, 2008, Historic Hudson Valley, Lyndhurst, National Trust for Historic Preservation, Westchester County Department of Planning, NY
- Ardmore Avenue Corridor Expansion, 2007-2008, Public Works, Fort Wayne, IN
- Sunnyside Landscape Master Plan and ongoing implementation projects, 2002-2008, Historic Hudson Valley, NY
- Richardson Olmsted Complex Cultural Landscape Report, team lead Goody Clancy & Associates, 2008, Richardson Center Corporation, Buffalo, NY
- Franny Reese State Park Master Plan, team lead Pouder Design Group, 2007-2008, Scenic Hudson, Lloyd, NY
- President Lincoln and Soldiers' Home National Monument Visitor Education Center, team lead RMJM Hillier, 2006-2008, National Trust for Historic Preservation, Washington DC

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- Madison Lewis Woodlands Cultural Landscape Report, 2008, Village of Warwick, NY
- Mary Schenley Fountain Plaza Rehabilitation, 2008, Pittsburgh Parks Conservancy, PA
- Thomas Edison Menlo Park Museum Cultural Landscape Assessment, team lead Farewell Mills Gatsch Architects, 2007-2008, Edison Memorial Tower Corporation, Edison, NJ
- Renovation of the Virginia Capital and Capital Square, team lead RMJM Hillier, 2003-2007, Commonwealth of Virginia, Department of General Services, Richmond, VA
- Poplar Forest Historic Landscape Schematic Master Plan and Phase One Implementation, 2000-2002, The Corporation for Jefferson's Poplar Forest, VA
- Dumbarton Oaks Cultural Landscape Report, 2000, Trustees for Harvard University, Washington, DC
- Glenbrook Road Residential Property Landscape, 1984-current, Bethesda, MD
- Tirranna Landscape Master Plan and Residential Property Landscape, 2005-2006, New Canaan, CT
- Highland Park Welcome Entry, Fountain & Gardens Rehabilitation, 2001-2004, City of Pittsburgh, Highland Park Community Development Corporation, Pittsburgh Parks Conservancy, PA
- Renewing Druid Hill Park, A Comprehensive Plan and Phase I Implementation Conservatory & Gardens, 1994-2004, Baltimore General Services and Recreation & Parks, MD
- Oldfields Landscape Planning Project; Lilly House Landscape Restoration and Rehabilitation; Ravine Garden Reconstruction; Michigan Street Brick Wall Reconstruction; Sculpture & Horticulture Study, 1994-2002, Oldfields Estate, Indianapolis Museum of Art, IN
- Schenley Park Visitor Center, 2001, Pittsburgh Parks Conservancy, PA
- Mellon Park Historic Landscape Preservation & Management Plan and Phase I Implementation, 1999-2002, Western Pennsylvania Conservancy, Phipps Conservatory, PA
- Olmsted Linear Parks Alliance Implementation of Phase I Park Improvements, 1998- 2000, Olmsted Linear Parks Alliance, Druid Hills, Atlanta, GA
- Greenmanville Streetscape, 1995-97, Town of Stonington and Mystic Seaport Museum, CT
- Colonial Parkway Cultural Landscape Report Part 1, 1995-97, National Park Service, Yorktown, Williamsburg & Jamestown, VA
- Historic Landscape Report for Bush-Holley, Storehouse & Brush Properties and Implementation, 1995-2002, Historical Society of the Town of Greenwich, CT
- Washington National Airport, Landscape for the New Terminal, Balmori Associates, Inc., 1993, Washington DC
- Computer Center & Student Arts Building, Vassar College, Balmori Associates, Inc. with Ross and Moore Architects, 1993-1994, Poughkeepsie, NY
- Frances Lehman Loeb Art Center Sculpture Courtyard, Vassar College, Balmori Associates, Inc., 1992-1994, Poughkeepsie, NY
- Mathematics Building and Lecture Hall, Institute for Advanced Study, Balmori Associates, Inc., 1993, Princeton, NJ
- Worrell Professional Center for Law and Management, Wake Forest University, Balmori Associates Inc., 1992, Winston-Salem, NC
- Trinity College Mathematics, Engineering and Computing Sciences Building, Pelli Clarke Pelli, 1989, Hartford, CT
- Boyer Center for Molecular Medicine, Yale University, Pelli Clarke Pelli, 1988, New Haven, CT

#### **AWARDS, HONORS, MEMBERSHIPS**

- Registered Landscape Architect, Connecticut, License #565.
- Contributed to numerous award-winning projects for cultural landscape reports and implementation at Heritage Landscapes
- American Society of Landscape Architects Member
- City of Norwalk, CT Tree Advisory Committee Member



## RESUME CARRIE A. MARDORF, ASLA

### EDUCATION

BACHELOR OF LANDSCAPE ARCHITECTURE, Minor in Design Studies, Distinction, Iowa State University, Ames, IA, May 2005.

### PROFESSIONAL EXPERIENCE

- June 2005-present, PROJECT MANAGER and PROJECT STAFF, Heritage Landscapes, Charlotte, VT and Norwalk, CT. Project landscape planning, historic research, and preparation of graphic illustrations for cultural landscape preservation projects.
- January 2004-August 2004, INTERN LANDSCAPE ARCHITECT, National Park Service, Antietam National Battlefield, Sharpsburg, MD. Assisted in park landscape preservation planning and prepared graphic illustrations for cultural landscape reports, historic structures reports, and park preservation projects.
- May 2002-August 2002, INTERN LANDSCAPE ARCHITECT, Community Visioning Program, Landscape Architecture Extension, Iowa State University, Ames, IA and Shive-Hattery Inc., Cedar Rapids, IA. Design development team member for rural Iowa community planning projects.
- May 2001-August 2001, December 2001-January 2002, INTERN LANDSCAPE ARCHITECT, MMS Consultants, Inc., Iowa City, IA. Project assistant for schematic design, design development, construction documents, and presentation materials for clients and local regulatory authorities.

### SELECTED PROJECT EXPERIENCE

- Mellon Square Preservation, Interpretation, and Management Plan, 2008, Pittsburgh Parks Conservancy, PA
- Valley Forge Cultural Landscape Treatment Plan, 2007-2008, Valley Forge National Historical Park, PA
- Richardson Olmsted Complex Cultural Landscape Report, team lead Goody Clancy & Associates, 2008, Richardson Center Corporation, Buffalo, NY
- Camp Hill Cultural Landscape Report, 2008, Harpers Ferry National Historical Park, WV
- Mount Hope Cemetery Cultural Landscape Report, Tree Inventory & Management Plan, team lead Wendel Duchscherer, 2008, Friends of Mount Hope Cemetery and Rochester, NY
- Birmingham Civil Rights Potential World Heritage Nomination, 2008, Birmingham Historical Society, AL
- Louis I. Kahn Bath House & Day Camp Landscape Assessment at the Ewing Senior & Community Center, team lead FMG Architects, 2007-2008, Ewing Township, NJ
- Washington's Headquarters Cultural Landscape Report & Schematic Design, and Construction, 2006-2008, Valley Forge National Historical Park, PA
- St. Elizabeths West Campus Cultural Landscape Report & Cultural Landscape Assessment, team lead FMG Architects, 2005-2008, U.S. General Services Administration, Washington DC
- Formosa: Elizabeth Ney Museum Comprehensive Restoration Cultural Landscape Plan, 2007-2008, Austin, TX
- Shelburne Farms Welcome Entry Tree Allées, House Precinct Gardens & Landscape Stewardship Plan, South Entry Tree Allées Renewal Report, 2006-2008, Shelburne Farms, VT
- New York Botanical Garden Landscape History, 2005-2008, The New York Botanical Garden, Bronx, NY
- Graycliff Cultural Landscape Report & Treatment Plan, 2005-2008, Graycliff Conservancy, Derby, NY
- Franny Reese State Park Master Plan, team lead Pouder Design Group, 2007-2008, Scenic Hudson, NY
- Finca Vigia, Ernest Hemingway Property, 2005 and 2008, National Trust for Historic Preservation, the Hemingway Preservation Foundation, and Museo Finca Vigia, Havana, Cuba

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- Tregaron Cultural Landscape Report in collaboration with Miller Hull Architects, 2005-2008, Tregaron Limited Partnership and Tregaron Conservancy, Washington, DC
- Longue Vue House & Gardens Landscape Renewal Plan, Hurricane Katrina Recovery, with the Garden Conservancy, 2006-2007, Longue Vue House & Gardens, New Orleans, LA
- Downing Vaux Broadway Park Cultural Landscape Report, 2007, Newburgh, NY
- Parker Homestead Cultural Landscape Report, team lead FMG Architects, 2007, Little Silver, NJ
- Fort Wayne Parks & Boulevard Cultural Landscape Reports for Weisser, Foster, Shoaff, and McMillen Parks and Rudisill Boulevard, 2006-2007, City of Fort Wayne, IN
- Garretson Farm Cultural Landscape Report, team lead FMG Architects, 2006, Bergen County Parks, NJ
- Lockwood House Cultural Landscape Report, team lead GWWO Architects, 2005-2006, Harpers Ferry National Historical Park, WV
- Childs Park Cultural Landscape Report, team lead HNTB Architects, 2005, Delaware Water Gap National Recreation Area, PA
- Bronx Community College Core Campus Cultural Landscape Report & Conservation Treatment Plan, team lead Easton Architects, 2005, Bronx Community College, Bronx, NY
- Hopewell Township Guidelines for Historic Landscapes, team lead PDP Architects, 2005, Hopewell Township Historic Preservation Commission, NJ
- Mumma Farm Cultural Landscape Report, NPS intern landscape architect, 2004, Antietam National Battlefield, Sharpsburg, MD
- Roulette Springhouse Historic Structures Report, NPS intern landscape architect, 2004, Antietam National Battlefield, Sharpsburg, MD

#### **RECENT PRESENTATIONS & PAPERS**

- "Landscapes of Heritage Value: Applying Preservation & Sustainability Practices to Unique Places to Enhance Quality of Life & Tourism Experience," International Landscape Architecture Exchange Conference, Wuxi, China, October 2007.
- "History of Landscape Design," Certified Instructor, Landscape Design School, State of Maine Master Gardener Program, September 2007.

#### **PROFESSIONAL AFFILIATIONS**

- American Society of Landscape Architects, Vermont Chapter Secretary & Member
- US/International Council on Monuments & Sites, International Member & Cultural Landscapes Committee Member
- International Federation of Landscape Architects, Cultural Landscapes Committee, Assistant to Global Chair



## RESUME KIMBALL ERDMAN, ASLA

### EDUCATION

MASTER OF LANDSCAPE ARCHITECTURE, University of Oregon, Eugene, Oregon, Concentration in landscape architecture history, 1999.

BACHELOR OF LANDSCAPE ARCHITECTURE, Minor in History, Utah State University, Logan, Utah, 1997.

### PROFESSIONAL EXPERIENCE

- June 1999-May 2003, January 2009-present, PROJECT MANAGER, Heritage Landscapes, Charlotte, VT and Norwalk, CT. Project landscape planning, historic research, preparation of graphic illustrations, design and construction documentation for cultural landscape preservation projects.
- May 2003-December 2008, ASSOCIATE LANDSCAPE ARCHITECT, SE GROUP, Burlington, VT. Project manager and team member for a broad range of projects, from conceptual design through construction documentation and administration.
- September 1997-March 1999, INSTRUCTOR, University of Oregon, Eugene, OR. Developed course material and taught beginning and advanced courses in AutoCAD for landscape architects.
- June 1996-September 1997, LANDSCAPE DESIGNER, Land Design, Logan, UT. Design and installation of residential and commercial landscapes.
- December 1995-June 1996, ASSISTANT LANDSCAPE ARCHITECT, Campus Planning and Engineering, Utah State University, UT. Compiled campus historic survey, conducted pedestrian circulation studies.
- August 1989-October 1989, DRAFTSMAN, Brown & Caldwell Consulting Engineers, Portland, OR.

### SELECTED PROJECT EXPERIENCE

- West Virginia State Capitol Campus Master Plan, team lead Michael Baker Jr., Inc, 2009, Charleston, WV
- Robert Moses Parkway, South Segment, team lead Hatch Mott MacDonald, 2009, Niagara Falls, NY
- James M. Jeffords Hall, University of Vermont, SE GROUP, team lead Freeman French Freeman, Architects with Ellenzweig, design architect, 2005-2008, Burlington, VT
- The Ritz-Carlton Residences at Vail, SE GROUP, team lead 4240 Architecture, 2005-2008, Ritz-Carlton Residences, Vail, CO
- Base Area and Lodge Preliminary Design Study, SE GROUP, team lead BSA Architects, 2008, Mt. Spokane Ski & Snowboard Park, Mead, WA
- Adams House, Bixby House, Coolidge House, Spring House, Meeting House, Inn Plaza, Futures Golf Course for Jackson Gore at Okemo Mountain, SE GROUP, team with Truex Cullins, 2003-2008, Okemo Mountain Resort, Ludlow, VT
- Stowe Mountain Lodge Hotel and Spa, Village Plaza, Base Camp Base Lodge, Slopeside Condominiums, SE GROUP, team with BSA Architects, RDA Associates, 4240 Architecture, Zehren & Associates, Freeman French Freeman, Architects, 2003-2008, Spruce Peak at Stowe, Stowe, VT
- Davis Residence, SE GROUP, 2006-2008, Westport, NY
- Broughton Wildland Fire Damage Assessment, SE GROUP, 2008, Broughton Landing, Columbia River Gorge, Skamania County, WA
- Barron Mountain Conceptual Master Plan, SE GROUP, 2007, Barron Mountain Club, Thornton, NH
- Mountaineer Square, Crested Butte Town Center, SE GROUP, team lead BSA Architects, 2004-2007, Crested Butte, CO

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- Clay Brook and Base Lodge at Lincoln Peak Village, SE GROUP, team with Lemay+Youkel, 2003-2007, Sugarbush Resort, Warren, VT
- Ping Tian Mountain Resort Master Plan, SE GROUP, team lead with BSA Architects, 2006-2007, Ping Tian Mountain Resort, Xinjiang, China
- Tenney Mountain Conceptual Master Plan, SE GROUP, 2005, Tenney Mountain, Plymouth, NH
- Camden Public Library Amphitheater restoration & Harbor Park rehabilitation, 2002-2003, Camden, ME
- Fort Wayne Parks Cultural Landscape Reports for Swinney, Lakeside & Memorial Parks, 2002-2003, City of Fort Wayne, IN
- Bamboo Brook Historic Landscape Preservation and Maintenance Plan and Phase I Implementation, 2000-2003, Morris County Park Commission, NJ
- Shelburne Farms Landscape Stewardship Plan, 2002-2003, Shelburne Farms, Shelburne, VT
- Poplar Forest Historic Landscape Schematic Master Plan and Phase One Implementation, 1999-2002, The Corporation for Jefferson's Poplar Forest, VA
- Dumbarton Oaks Cultural Landscape Report, 2000, Trustees for Harvard University, Washington, DC
- Highland Park Welcome Entry, Fountain & Gardens Rehabilitation, 2001-2003, City of Pittsburgh, Highland Park Community Development Corporation, Pittsburgh Parks Conservancy, PA
- Schenley Park Visitor Center, 2001, Pittsburgh Parks Conservancy, PA
- Mellon Park Historic Landscape Preservation & Management Plan and Phase I Implementation, 1999- 2002, Western Pennsylvania Conservancy, Phipps Conservatory, PA

#### SELECTED ARTICLES, PRESENTATIONS & SERVICE

- “The Profession of Landscape Architecture”, guest lecture to PSS – 137 Landscape Design Fundamentals, University of Vermont, November, 2008
- “Looking Good”, paper concerning aesthetic, environmental and operational considerations of plantings at ski resorts, delivered at the Northeast Winter Sports Summit, Bretton Woods, New Hampshire. Published in *Ski Area Management*, Vol. 47, No. 3, May, 2008
- “Thomas Jefferson’s Poplar Forest: Planning for a Culturally Significant Landscape”, guest lecture to Department of Landscape Architecture and Environmental Planning, Utah State University, March, 2008
- Guest critic for studio review of PSS – 238 Ecological Landscape Design, University of Vermont, December, 2007
- Professional Advisory Committee Member to explore the feasibility on creating a landscape architecture graduate program at the University of Vermont, 2007-2008

#### AWARDS, HONORS, MEMBERSHIPS

- American Society of Landscape Architects Member
- Contributed to numerous award-winning projects for cultural landscape reports at Heritage Landscapes
- Johnson Traveling Scholarship to China, University of Oregon, Eugene, OR, 1998
- Berger Academic Scholarship & Graduate Teaching Fellowship, University of Oregon, Eugene, OR, 1997-98.
- Merit Award, Utah Chapter ASLA, Student Portfolio, 1997
- Outstanding Senior Award, College of Humanities, Arts, and Social Sciences, Utah State University, Logan, UT, 1997

**H e r i t a g e L a n d s c a p e s L L C**  
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## RESUME SARAH L. GRAULTY

### EDUCATION

MASTER OF SCIENCE IN HISTORIC PRESERVATION, University of Vermont, Burlington, VT, 2007  
BACHELOR OF ARTS IN ART HISTORY, Smith College, Northampton, MA, 2003

### PROFESSIONAL EXPERIENCE

- August 2008-present, PROJECT STAFF, Heritage Landscapes, Charlotte, VT and Norwalk, CT. Project landscape planning, historic research, and preparation of graphic illustrations for cultural landscape preservation projects.
- January 2008-August 2008, ARCHITECTURAL HISTORIAN & CULTURAL RESOURCES ASSISTANT, New Hampshire Department of Transportation, Concord, NH. Coordination of cultural resource investigations with an emphasis on the identification and evaluation of historic resources, including bridges, culverts, buildings, landscapes, and historic districts.
- May 2007-January 2008, ASSISTANT HISTORIC PRESERVATION CONSULTANT, Evans & Randolph Preservation Associates, Marshfield, VT. Historic research and photo-documentation for individual properties and historic districts, preparation of National Register nominations and Rehabilitation Investment Tax Credit applications.
- September 2000-January 2001, PROGRAM ASSISTANT, Save America's Treasures, Washington, DC. Assisted in project designation and program administration, served as liaison between the organization and its over 600 Official Projects.

### SELECTED PROJECT EXPERIENCE

- Mellon Square Preservation, Interpretation, and Management Plan, 2008, for Pittsburgh Parks Conservancy, PA
- Camp Hill Cultural Landscape Report, 2008, and Lockwood House Cultural Landscape Report, 2005-2006, Harpers Ferry National Historical Park, WV
- Mount Hope Cemetery Cultural Landscape Report, Tree Inventory & Management Plan, team lead Wendel Duchscherer, 2008, Friends of Mount Hope Cemetery and Rochester, NY
- Birmingham Civil Rights, Potential World Heritage Nomination, 2008, for Birmingham Historical Society, AL
- Fort Wayne Cultural Landscape Reports, Foster, McMillen, Weisser & Shoaff Parks & Rudisill Boulevard, 2006-2007, Fort Wayne Parks & Recreation Department, IN
- Historic Burlington Project: Depression Era Streetscapes, website examining the evolution of the historic environment in Burlington, VT, 2006, University of Vermont Historic Burlington Project, VT

### RECENT PRESENTATIONS & PAPERS

- "The Hinesburg Town Forest," investigation and National Register nomination presented at the Vermont Town Forest Project Summit, March 2008
- "The Electro-Pneumatic Block Signal System" and "Signal Aspects and Indications Within the Block Signal System," published in the Fall 2007 and Winter 2008 issues of the *Society for Industrial Archeology Newsletter*

### PROFESSIONAL AFFILIATIONS

- Member, National Trust or Historic Preservation
- Member, Society for Industrial Archaeology

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